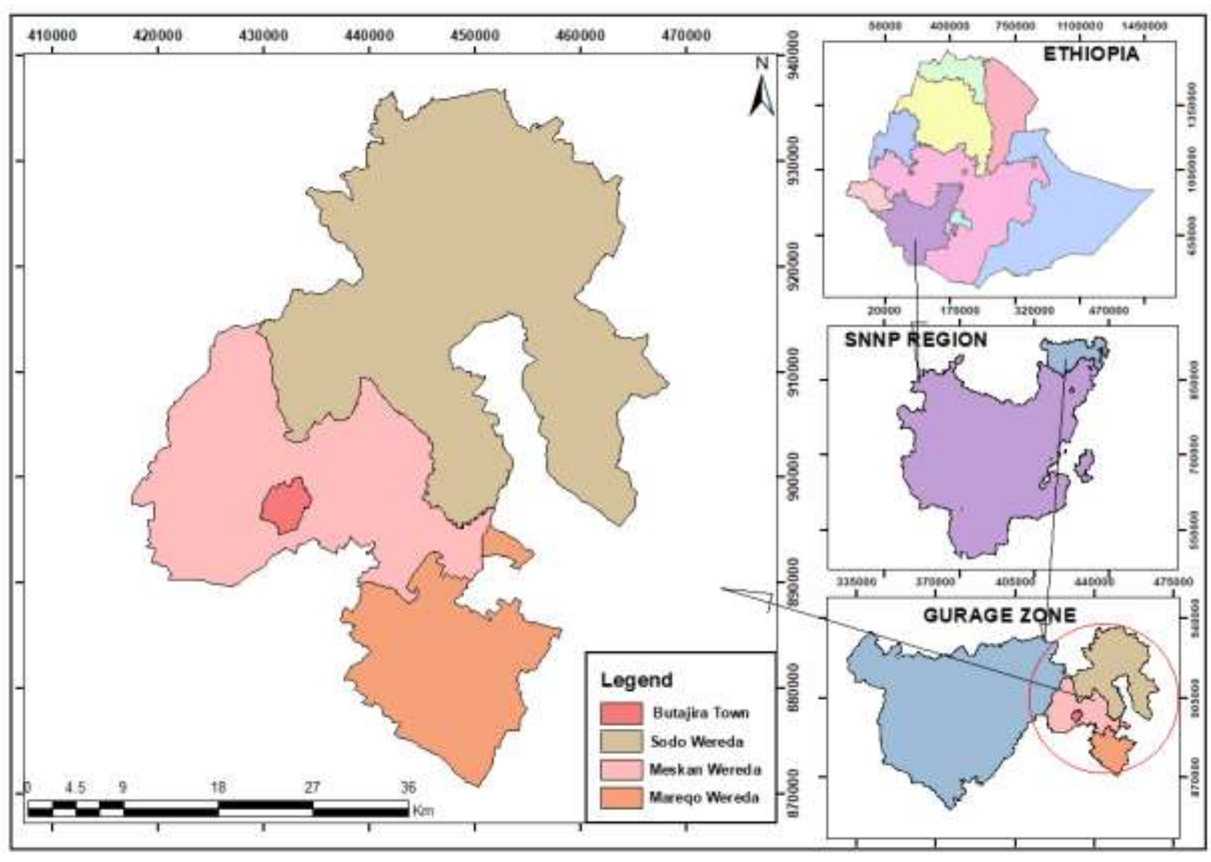
BRIEF PSYCHOLOGICAL INTERVENTION FOR BIPOLAR DISORDER IN INTEGRATED CARE SETTINGS IN RURAL ETHIOPIA

Mekdes Demissie



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BRIEF PSYCHOLOGICAL INTERVENTION FOR BIPOLAR DISORDER IN INTEGRATED CARE SETTINGS IN RURAL ETHIOPIA

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Mekdes Demissie

Primary Supervisor: Professor Abebaw Fekadu

Secondary Supervisor: Dr. Charlotte Hanlon

External supervisor: Dr. Rosie Mayston

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APPROVED BY THE EXAMINING BOARD

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Chairman, Examining Board   Date

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Supervisor (Primary)

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Supervisor (Secondary)

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External Examiner

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Internal Examiner

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LIST OF PAPERS PUBLISHED OR SUBMITTED FOR PUBLICATION

1. Demissie M, Hanlon C, Birhane R, Ng L, Medhin G, Fekadu A. **Psychological interventions for bipolar disorder in low-and middle-income countries: systematic review**. BJPsych Open. 2018 Sep;4 (5):375-84. DOI. 10.1192/bjo.2018.46 (Appendix -A)

2. Demissie M, Hanlon C, Ng L, Fekadu A, Mayston R. **Why doesn't God say "enough"? Experiences of living with bipolar disorder in rural Ethiopia.** Social Science & Medicine. 2021 Feb 1;270: 113625. DOI. 10.1016/j.socscimed.2020.113625 (Appendix -B)

3. Demissie M, Hanlon C, Ng L, Mayston R, Abayneh S, Fekadu A. **Development of a psychological intervention for people with bipolar disorder in rural Ethiopia.** BJPsych Open. 2021 Sep;7(5); 168, 1–11. DOI: 10.1192/bjo.2021.999 (Appendix -C)

4. Demissie M, Hanlon C, Ng L, Mayston R, Fekadu A. **Feasibility and acceptability of a contextualized brief psychological intervention for people with bipolar disorder in rural Ethiopia** [Under review, Appendex-D]. 2021

ACRONYMS AND ABBREVIATIONS

AAU	Addis Ababa University
AJOL	African Journal on Online
AMARI	African Mental Health Research Initiative
AMD	Adjusted Mean Difference
ASSIST	Alcohol, Smoking, and Substance Involvement Screening Test
BD	Bipolar Disorder
CBT	Cognitive Behavioral Therapy
CI	Confidence Interval
CIDI	Composite International Diagnostic Interview
CONSORT	Consolidated Standards of Reporting Trails
CSA	Central Statistics Agency
DALYs	Disability-Adjusted Life Years
DSM-V	Diagnostic and Statistical Manual of Mental Disorders, 5th Edition
DSS	Demographic Surveillance Site
ENACT	Enhancing Assessment of Common Therapeutic Factors
FDRE	Federal Democratic Republic of Ethiopia
FFT	Family Psychoeducation
FFT-EOY	Family-Focused Therapy for Early-Onset Youth and Young Adults
GAF Score	Global Assessment of Functioning Score
G-CBT	Group Cognitive Behavioral Therapy
G-FPE	Group Family Psychoeducation
GHQ	General Health Questionnaires
G-PE	Group Psychoeducation
HAQ	Helping Alliance Questionnaire
HDRS	Hamilton Depression Rating Scale
HDSS	Health and Demographic Surveillance Site
HEWs	Health Extension Workers
HIC	High Income Country
I-PE	Individual Psychoeducation
LILACS	Latin America and Caribbean Center on Health Science Literature
LMICS	Low- and Middle-Income Countries
MBCT	Mindfulness-Based Cognitive Therapy

mhGAP-IG	Mental health Gap Action Programme intervention guide
MRC	Medical Research Council’s
OSS	Oslo Social Support Scale
PBD	People with Bipolar Disorder
PE	Psychoeducation
PHC	Primary Health Care
PHQ-9	Patient Health Questionnaire-9
PSI	Psychological intervention
QoL	Quality of Life scale
RCT	Randomized controlled studies
S/S	Sign and Symptoms
SD	Standard Deviation
SE	Standard Error
SES	Standardized Effect Size
SMD	Severe Mental Disorder
SNNPR	Southern Nations, Nationalities and Peoples’ Region
SRD	Social Rhythm Disrupting
SRQ	Self -Reporting Questionnaire
TaSCS	Task-Sharing for the Care of SMD in a low-income country
TAU	Treatment as Usual
ToC	Theory of Change
WHO	World Health Organization
WHODAS	World Health Organization-Disability Assessment scale
YMRS	Young Mania Rating Scale

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ABSTRACT

Background

Bipolar disorder is a severe mental illness characterized by recurrent manic and depressive or mixed episodes. Bipolar disorder leads to a significant impairment in functioning, considerable stigma and premature mortality. The social disruption caused by acute episodes related to the illness often persists beyond clinical remission. Various factors affect the outcome of bipolar disorder such as distressing life events, substance use, poor coping mechanisms, sleep disturbance and treatment non-adherence. Complementing pharmacotherapy with psychological interventions has been shown to be more effective in preventing or delaying relapse and improving the course and outcome of the disorder compared to pharmacotherapy alone. In LMICs, there is very limited evidence on the adaptation, effectiveness and implementation of such psychological interventions. Furthermore, there is limited understanding of the particular risk factors and coping mechanisms relevant to LMICs that may be addressed with psychological interventions.

Objective

The objective of this thesis work was to develop and test a brief psychological intervention for bipolar disorder that can be delivered by non-specialist health workers in integrated health care settings in rural Ethiopia.

Methods

The study was carried out in the Butajira and Sodo districts in southern Ethiopia. We used the framework of the Medical Research Council (MRC) for the development and evaluation of complex interventions integrated with the Theory of Change (ToC) approach. Overall, the study was conducted in two phases. Phase-I involved development of intervention which included, (i) a systematic review, (ii) a qualitative study, (iii) a mental health expert workshop, and (iv) a series of ToC workshops. In the second phase, we conducted a feasibility study.

(i) **Intervention development phase:** In this phase, we first conducted a systematic review of studies that focus on the effectiveness of psychological intervention in LMICs to assist with the identification and adaptation of potential therapies that have been tested. We used PubMed, PsycINFO, Medline, EMBASE, Cochrane database for systematic review, Cochrane central register of controlled trials, LILACS, and AJOL databases with no restriction in language or year of publication. The methodological heterogeneity of studies precluded meta-analysis.

We also conducted a qualitative study using in-depth interviews with 27 individuals (15 people with bipolar disorder and 12 caregivers) in order to identify targets and opportunities of intervention. Interviews were carried out in Amharic, audio-recorded, transcribed, and then translated into English. Data was analyzed using thematic analysis informed by a phenomenological approach. Then, we carried out a mental health expert workshop to get experts' suggestions and recommendations on the content and delivery of the intervention. Finally, we also conducted five ToC workshops with: (i) people with bipolar disorder (n=8) and caregivers (n=11), (ii) male community and religious leaders (n=8), (iii) female community leaders (n=11), (iv) primary care workers (n=21), and (iv) all participants included in the first four workshops.

(ii) **Feasibility study:** A total of 12 euthymic people with bipolar disorder and five caregivers participated in five-weekly sessions of the PSI, in which each session was scheduled for 20 minutes. We used a mixed-method evaluation, including in-depth interviews, intervention fidelity assessment in 25% of randomly selected recorded intervention sessions, and recorded changes in symptom severity using the symptom severity assessment checklist. We used thematic analysis for qualitative data and descriptive analysis for quantitative data.

Results

Intervention development phase:

A total of 18 studies were identified in the systematic review which focused on: psychoeducation (n=14), family intervention (n=1), group cognitive behavioural therapy (CBT) (n=2), and group mindfulness based cognitive therapy (MBCT) (n=1). All studies were conducted in middle-income countries and used mental health specialists or experienced therapists to deliver the intervention. Psychoeducation to the client, family psychoeducation, CBT and MBCT were found to be effective in improving treatment adherence, knowledge, and attitude towards bipolar disorder, and quality of life, and led to a decrease in relapse rate, hospital admissions and emotional dysregulation.

In a qualitative study, three major themes emerged: expressions and experiences of illness, managing self and living with otherness, and the cost of affliction. People with bipolar disorder and caregivers were concerned about different forewarnings of the illness. Stigma and social exclusion were

entwined in a vicious cycle that shaped both the illness experience and the economic health and social life of the household. Nonetheless, People with bipolar disorder and caregivers learned from their experiences, developed coping strategies, and sought relief from trusted relationships, spirituality, and medication. Participants of the ToC workshops identified components of interventions and collaborated on the development of a ToC roadmap to achieve the shared goal of improving the quality of life of people with bipolar disorder and reducing family burden.

Finally, we developed a manualized psychological intervention that had five-sessions, each scheduled to last 20 minutes. The intervention manual included intervention components, implementation methods, and settings for delivery of intervention based on the recommendation and agreement of primary beneficiaries of this intervention (people with bipolar disorder and caregivers) and all stakeholders. The five treatment sessions were: Needs assessment and goal setting; psychoeducation about bipolar disorder, causes and influencing factors; treatment and ensuring treatment adherence; wellness promotion focused on sleep hygiene and problem-solving techniques; and behavioural techniques targeted anxiety and relapse prevention.

Feasibility study

Except for one caregiver, all participants completed all five-sessions. Intervention providers and recipients expressed satisfaction with the intervention. Intervention providers confirmed that the intervention can be provided in a PHC setting although 20-minutes was reported to be too short for effective delivery of the intervention. While participants acknowledged the importance of involving caregivers in the intervention, they also raised privacy concerns. Intervention providers' adherence to the manual was rated as moderate. Preliminary findings were reduction of depressive symptoms post-intervention and improvement in providers' perceived knowledge and skills.

Conclusion

This the extent our preliminary study on a manualized psychological intervention for bipolar disorder has shown its feasibility and acceptability in a primary care setting of a low-income country. This is an important advance for the care of people with this neglected mental disorder. However, further study is needed to evaluate its effectiveness, and to improve feasibility, before its wider implementation.

Recommendation

- There is a need for further improvement packages, especially around duration of intervention to improve its feasibility
- This intervention needs to be tested for effectiveness before scale it up and recommending it for day-to-day clinical use
- This psychological intervention should be integrated into the care of people with bipolar disorder

Key Words

Psychoeducation, behavioral intervention, relapse prevention, individual therapy, community engagement, Theory of Change approach, review, Low-and middle-income countries

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Bipolar disorder is a severe mental illness characterized by unusual mood shifts (1), primarily of manic nature alternating with depressive episodes (1, 2). Elated or irritable mood in combination with persistently increased activity or energy are the central features of manic episodes, whereas depressed or low mood, and loss of interest are core features of the depressive phases of the illness (1, 2). Bipolar disorder is a relapsing condition with varying severity of illness, ranging from mild episodes of depressive, manic or of mixed features to the most severe form of illness leading to hospital admission, and even death (1-3). Bipolar disorder affects people everywhere worldwide, its average age of onset is early twenties (4) and its incidence is higher in the age range of 10-14 years (5).

Prevalence for bipolar disorder globally ranges from 0.4%-2.4% (4). Bipolar disorder has a life-long risk of recurrence (6) and it affects the patients' day-to- day life (7, 8), physical health (9) and productivity (8). Globally, mental illness accounts for one-fourth of Disability-Adjusted Life Years (DALYs), and bipolar disorder is one of the top five mental disorders contributing to this disability (10). Moreover, it is associated with a high risk of suicidality (11, 12) and premature mortality (13, 14) mostly due to suicide, homicide, accident and various medical illness. The negative impact of bipolar disorder goes beyond the people affected with the disorder and it affects the life of caregivers' (15) and increases caregivers' burden (16, 17). Studies reported various factors that affect the course and outcome of bipolar disorder: treatment related factors such as non-adherence (18-21) and side-effect of medication (22), understanding about the illness and its treatment (23), social factors like stigma, discrimination (24) and stressful life events (25, 26), and substance use (27). These factors cannot be directly addressed by medication and therefore, it requires long- term treatment, care and support to improve the outcomes and to reduce its negative impact (28).

The treatment of bipolar disorder is aimed to control acute symptoms of bipolar disorder (the acute phase treatment), reduce recurrence and improve long-term prospects (maintenance phase treatment) (29, 30). Once people with bipolar disorder return to a stable mood, reducing prodromal symptoms and preventing relapse are the goal of treatment (29). Different guidelines recommend pharmacological treatment as first line treatment for bipolar disorder, particularly mood stabilizers

and atypical antipsychotics, during the acute and maintenance phase of the illness (31-34). However, mood stabilizers are not widely or sustainably available in many LMICs (33). For example, people with bipolar disorder in Ethiopia, especially in the rural setting, are treated with typical antipsychotic medications (35) and tricyclic antidepressants during depressive episodes, which increase the risk of rapid mood swings (22). Additionally, medications have only a moderate effect on relapse prevention (36, 37) and therefore, people with bipolar experience relapse despite taking evidence-based pharmacotherapy. These challenges highlight the need for holistic approaches to treatment, which includes a better understanding of people with bipolar disorder and the treatment options.

In a systematic review and meta-analysis that incorporated studies mainly from high income countries (HIC), adjunctive psychological intervention to pharmacotherapy was shown to be more effective in improving outcomes in people with bipolar disorder than pharmacotherapy alone (38).

There are various types of psychological interventions that have resulted in positive outcome. Some examples of these interventions include Cognitive Behavioral Therapy (CBT) (39), psychoeducation (40), family therapy (41), Mindfulness Based Cognitive Therapy (MBCT) (42, 43) and integrative cognitive and interpersonal therapy (44). However, these interventions have been developed in HICs and delivered by professionals who have formal training in psychology or psychotherapy (40-43). A review that included 24 psychological intervention trials also reported that in all intervention providers in the included studies were professionals (45). Implementation of these interventions in LMICs could be less feasible and acceptable due to two main reasons: due to scarcity of specialized mental health professionals to deliver the intervention (46, 47) and the intervention needs adaptation to fit cultural and social context (48, 49).

To overcome the challenges related to the scarcity of specialized mental health professionals, the World Health Organization (WHO) recommends task sharing delivery of mental health care with available and affordable non-specialist health professionals (50), and integrating the service into primary health care (PHC) (51). There are also efforts by the Ethiopian ministry of health to scale up access to mental health care through integration of services into PHC. In LMICs, there is also evidence of the positive effect of psychological intervention delivered by non-specialist health workers (50, 52), but the evidence is limited for bipolar disorder in LMICs. In Ethiopia, the national mental health care strategy 2012-2026, recommends integrating mental health care into primary health care (53).

Studies also showed that adaptation of psychological intervention to the targeted participants' culture and social context is likely to improve the feasibility, acceptability, and effectiveness of the intervention (48, 49, 54) . However, in LMICs, including Ethiopia, there is no contextualized psychological intervention for bipolar disorder (48, 55). Therefore, the aim of this PhD project was to adapt an adjunctive psychological intervention for bipolar disorder for use by non-specialists in a rural primary care setting in Ethiopia and evaluate its feasibility, acceptability, and potential utility.

1.2 Statement of the problem

Mental and substance use disorders were the fifth leading cause of disabilities (56). The global Disability-Adjusted Life Years (DALYs) for bipolar disorder reached 9.29 million in 2017, up by 54.4% from 6.02 million in in 1990 (5). People with bipolar disorder aged 20–44 years contributed the most to the number of DALYs (5). In sub-Saharan Africa, mental disorders were the third leading cause of the non-communicable disease burden, contributing to 13.6 million DALYs or 9% of the Non-Communicable Disease (NCD) burden in 2017. Among these, bipolar disorder accounted for 1.11 million DALYs (57). In Ethiopia, mental illness accounted for 11% of the total burden of disease, with bipolar disorder being among the main contributors (53). The life expectancy of people with bipolar disorder was also shorter compared to the general population (58). The premature mortality in bipolar disorder was due to medical comorbidities, suicide, homicide, and accidents (14, 59). In Ethiopia, a ten-year population-based cohort study showed that premature mortality among people with bipolar disorder was double that of the general population and the Years of Life Lost (YLL) per person for people with bipolar disorder was nearly three decades (60).

Several studies have also shown the association of bipolar disorder with suicidality (60-64) and how this disorder accounts for 3.4-14% of all suicide deaths (65). Several factors, such as stressful life events (66), illness related factors such as experiencing mixed episodes and severity of illness (63), comorbid mental and medical disorders (62, 63) and family history of mental illness (66) were associated with suicidality among people with bipolar disorder. Studies also reported that bipolar disorder has poor clinical and functional outcomes (35, 67-70) and a negative economic impact (71, 72) despite pharmacological treatments. Bipolar disorder is also characterized by a high relapse rate (71) and experience of clinical recovery without functional recovery (26), which is critical for returning to regular life.

People with bipolar disorder experience social problems (25, 26, 73-75), which also affect other members of the family, which, in turn, undermines social support (7) and exacerbates the social difficulties of their family members (76, 77). Studies have reported several factors that negatively affect the clinical and functional outcomes of bipolar disorder, such as treatment related factors (18-21), substance use (78-82), illness related factors (83, 84), patients' knowledge of the disorder (85), and coping mechanisms for stressful life events (86-88).

Despite the high burden of bipolar disorder, access to mental health care in developing countries, including Ethiopia, is very low (71, 89, 90). Even for those patients who access care, the first line drugs for bipolar disorder are not widely available or reliably sustainable (91). In LMICs, the shortage of specialized mental health professionals to deliver evidence-based interventions (46, 47) and low resource allocation for mental health care (92) are additional bottlenecks in the treatment of mental illness in general. According to a 2011 WHO report, the median expenditure on medication for mental and behavioral disorders in HICs was approximately 340 times higher than the median expenditures in LMICs care (92). In order to overcome the challenges related to the shortage of specialized mental health professionals and improve access to mental health care, task sharing to PHC workers by providing mhGAP intervention has been implemented in LMICs, including Ethiopia (93). However, challenges related to mental health care costs are still a challenge. In Ethiopia, despite the government's commitment to decentralize the mental health service, there is no culturally appropriate and contextualized psychological intervention for bipolar disorder that can be delivered by PHC workers.

1.3 Rationale and significance of the study

Bipolar disorder is treatable and complete recovery between episodes is part of the illness history (94). However, given the relapsing nature of the illness and the role of various psychosocial factors, it is crucial to understand how patients' try to manage stress, and to understand the unmet needs and concerns of service users in order to formulate an appropriate treatment plan. Thus, interventions geared towards reducing psychosocial stressors or helping the patients and their caregivers cope with the illness need to be included as components of treatment (29).

There is a clear treatment gap related to the availability and sustainability of medication, and the knowledge/ understanding of the types of psychosocial interventions that could complement pharmacotherapy in LMICs, including Ethiopia (71, 90, 92). Thus, it is essential to identify and adapt evidence-based, feasible and acceptable psychosocial interventions that could potentially improve the clinical and functional outcomes for bipolar disorder treatment while decreasing the burden on caregivers. So far, psychosocial interventions have received little attention in LMICs, which is reflected by the fact that treatment for bipolar disorder is mostly limited to pharmacotherapy.

Developing a feasible and acceptable psychosocial intervention through this study would:

- Allow us to gain insight into the experiences of people with bipolar disorder and their caregivers; identify unmet needs related to the illness and treatment, and understand the effects of the illness on patients and their caregivers/families
- Help fill the existing gap in knowledge about which type of psychosocial intervention can be used to complement pharmacotherapy.
- Contribute to the scale-up of the mental health care access strategy, specifically in relation to access to psychological interventions for bipolar disorder in primary care settings in Ethiopia.
- Offer lessons for adaptation and use of other similar interventions for other mental disorders.
- Contributing to the scholarship in the mental health field in LMICs, especially in Ethiopia, and laying the groundwork for further studies in the area that evaluate the effectiveness and impact of this intervention in different parts of the country.

1.4 Thesis structure

This thesis is organized into six chapters

1. The first chapter is an introduction which is presented above. The chapter includes background information about bipolar disorder, a statement of the problems, and the role of psychological intervention for bipolar disorder, and finally, the rationale of the study.
2. The second chapter includes; the foundation of the adapted psychosocial intervention, methods and the results of a scoping review of psychological interventions for bipolar disorder. This

chapter concludes with a description of the conceptual framework developed based on the review.

3. Chapter three describes research questions and objectives
4. Chapter four presents the methods used to address the research questions along with the rationale for why these methods were selected. This chapter also describes the study setting, design, study populations, sample selection, data collection methods, data processing and management, analysis, ethical considerations, and plans for disseminating findings.
5. Chapter five provides a detailed summary of the results.
6. Chapter six is the final chapter where the study findings are discussed in the context of existing literature. This chapter also highlights the implications of the findings for research, policy, and practice. Finally, the limitations and strengths of the thesis are presented, alongside recommendations for future research on psychological interventions for bipolar disorder.

CHAPTER TWO: LITERATURE REVIEW

The literature review here focused on the global literature and has two sections. The first section described the methods and findings of reviews on the prevalence of bipolar disorder and factors influencing the course and outcome of bipolar disorder. The second section focused on the methods and findings of an umbrella review on the effectiveness of psychological interventions for bipolar disorder.

2.1 Prevalence of bipolar disorder and factors affecting the course and outcomes of bipolar disorder

2.1.1 Methods for reviewing prevalence and factors affecting the course and outcomes of bipolar disorder

Search of Databases: We conducted a systematic search of three databases: PsycINFO, Medline, and EMBASE from January 2000 to May 2021 and with restriction to studies reported in English.

Search terms: The search terms that we used for bipolar disorder were: Bipolar OR Mania OR Manic Disorder OR Manic State OR Manic-Depressive Psychosis. For the outcome: Prevalence OR Magnitude OR outcome OR course OR adherence OR compliance OR coping OR social support OR life events OR Sleep problems OR sleep disturbance. Then, we combined the term used for bipolar disorder and for outcomes with “AND”. All the retrieved articles were exported to the reference manager, EndNoteX7.

Inclusion criteria

1. Study Language: English
2. Study populations: Patients with bipolar disorder aged 15 and above
3. Type of study review: (1) peer-reviewed observational studies, systematic reviews and meta-analyses.
4. Outcome: prevalence, and any psychosocial factors affecting the course and outcome of bipolar disorders. These include life events, social support, adherence, substance use, comorbidities

Quality assessment: we used a checklist called Appraisal tool for Cross-Sectional Studies (AXIS) for the assessment for assessing the risk of bias and reporting quality of cross-sectional studies. The tool has 20- items that assess that used to assess the quality of reporting and study design, and risk of biases. Each item was rated as 'yes', 'No' or I don't know (95).

Data extraction: We extracted data using a data extraction format that included the following items: authors' name and publication dates, setting, study design, sample size, outcomes measured in the paper, and the key findings.

2.1.2 Findings of reviews on the prevalence and factors affecting the course and outcomes of bipolar disorder

2.1.2.1 Search results

A total of 49 studies that reported the prevalence, factors affecting the course and outcomes of bipolar disorder identified. Among them, nine studies reported prevalence (4 reviews and 5 primary studies) and 40 studies reported factors affecting the course and outcomes of bipolar disorder.

2.1.2.2 Summary of the quality assessment result of studies

All eligible studies clearly stated their study aims and they used appropriate study design to achieve the stated objectives. With the exception of two studies (1, 2), all studies reported their sample size and justified how their sample size was determined. Regarding the target population, all but two studies clearly defined their target population. About half of the studies (47.3%) used an inappropriate sampling frame and 56.5% of the studies employed a sample selection technique which is likely to be non-representative.

The majority of the studies (91.6%) used validated and reliable instruments to measure their key outcome variables, and all of the studies clearly provided statistical significance and/ or precision estimates of the outcome and the independent variables. A study conducted by Aksoy in 2016 did not describe the methods section sufficiently to enable others to repeat their findings. All of the studies described their findings adequately and consistently, and they reported findings that corresponded to the analyses described in their methods section of the papers. All studies interpreted their results, made conclusions based on their findings and discussed their limitations. Non-response

bias was not a critical concern for most of the studies (86.96%) and 66.7% of the studies provided information about non-response. All except two studies (3, 4) did clearly declare funding sources or conflicts of interest that may affect the authors' interpretation of the results. All studies clearly reported that they obtained ethical approval and consent from study participants. We computed a summary score weighing all 20 items equally for use in the meta-regression analysis, with a higher score indicating the better quality of a study.

2.1.2.3 Findings on prevalence and associated factors

(i) Prevalence of bipolar disorder

The prevalence of bipolar disorder extracted from both community and facility-based epidemiological studies is summarized in *Table 1*. Overall, the prevalence of bipolar disorder varied by subtype of disorder. The lifetime prevalence of Bipolar-I disorders, characterized by mania alternating with major depressive disorder, was between 0.6- 1.1% (4, 96). Whereas, the lifetime prevalence of Bipolar-II, characterized by hypomania alternating with major depressive disorder, was between 0.4- 1.6% (4, 96) and the prevalence of bipolar spectrum, characterized by bipolar and related symptoms that do not meet the full criteria for any of the bipolar was 1.4 % (4).

In LMICs, there is limited published evidence on the prevalence of bipolar disorder. A systematic review of studies conducted in Africa reported that the prevalence of bipolar disorder ranged from 0.1% to 1.83% in community-based surveys (97). In Ethiopia, there is no national-level estimate for the prevalence of bipolar disorder based on scientific research. However, the prevalence ranged from 0.1% to 1.8% in studies conducted in different parts of the country (79, 98). One of the few largest (n=68,378) community-based studies in sub-Saharan Africa was the Butajira population-based study, carried out with validated diagnostic tools. The prevalence of bipolar disorder in this was 0.5% (35).

Studies conducted in PHC settings reported a higher prevalence of bipolar disorder as compared to community-based studies. For example, in a systematic review that included 15 studies, the prevalence ranged from 0.5% to 4.3% using a diagnostic instrument (99) and in another systematic review, it ranged from 3.4%–9% among people with depression and other mental illnesses who attend a PHC setting (100). In Africa, a 9% prevalence of bipolar disorder was reported among attendees of the PHC setting (101).

Table 1: Prevalence of bipolar disorder

Authors	Country	Sample size	Case identification	Prevalence
Systematic reviews and meta-analysis				
Clemente, 2015(96)	Global literature	25 studies	DSM-III or DSM-IV	BD-I = 1.06 % BD-II = 1.57 %
Cerimele, 2014 (99)	PHC Studies	12 studies	Structured interviews	0.5–4.3%
		3 studies	Screening measure	7.6 - 9.8%
Cerimele, 2013 (100)	Studies conducted at PHC	7 studies	Clinical interviews	3.4%–9%
			screening measures	20.9%–30.8%
Esan, 2016 (97)	Studies done in Africa	18 studies	CIDI, SCAN	0.1-1.8%
Community survey				
Merikangas, 2011(4)	Cross-country (Americas, Europe, & Asia)	61,392	CIDI	BD-I = 0.6 % BD-II = 0.4% PBSD = 1.4%
Rao, 2014 (102)	India	3033	M.I.N.I. Plus	0.54%
Kebede, 2006 (35)	Butajira, Ethiopia	68,378	SCAN	0.5%
Fekadu, 2004 (98)	Zeway island, Ethiopia	1691	CIDI, SCAN,	1.83%
Kebede, 1999 (103)	Addis Ababa, Ethiopia	1420	CIDI	0.3%
Beyero, 2004 (79)	Borana, Ethiopia	1,854	CIDI	0.1%
Facility-based study				
Aillon, 2014 (101)	Kenya	300	M.I.N.I. Plus	9 %

** Mood Disorder Questionnaire (MDQ), Composite International Diagnostic Interview (CIDI), Diagnostic and Statistical Manual (DSM), Mini-International Neuropsychiatric Interview (M.I.N.I.), Schedules for Clinical Assessment in Neuropsychiatry (SCAN), Bipolar Spectrum (BPS)*

(ii) Factors affecting the course and outcome of bipolar disorder

Several factors, such as life events, social support, sleep disturbance, coping, and treatment adherence, are reported to affect the course and outcome of bipolar disorder (***Table 2***).

Life events: are factors that play a significant role in the onset, course, and outcome of bipolar disorder. People with bipolar disorder experience more negative life events prior to mood episodes (104, 105), and 20% of bipolar relapses are preceded by a severe life event (106). A meta-analysis of 42 studies found that bipolar patients who were episodic experienced significantly more life

events before an acute episode compared to their euthymic counterparts and even more life events than people with physical illness, though the difference is not statistically different. However, in this paper, there was no significant difference in exposure to stress between people with BD and schizophrenia as well as people with BD and unipolar depression (107). There is also evidence that people with BD more significantly affirm exposure to stressful life events and lifetime DSM-IV criteria for post-traumatic stress disorder compared to people with unipolar depression (108). There are also studies that highlight the severity and significant association of a number of events with a higher relapse rate (25, 104, 109, 110). This included both positive and negative life events (25, 111). The risk of relapse is increased fourfold among patients that faced the highest level of stress (112). There is also evidence that strengthens the finding that stressful life events, especially events that disrupt the social rhythm, are more likely to precipitate manic episodes in bipolar disorder (113). Stressful life events lead to sleep disturbance among people with bipolar spectrum disorder compared to healthy individuals (114)

Sleep disturbance: is a common problem among young people, which has been demonstrated to have a principal role in the bipolarity of mood onset (115) and is associated with stressful life events (116). Sleep disturbance is one of the criteria for the diagnosis of both depressive and manic episodes of bipolar disorder (1, 2) as well as the most common triggering factor for illness episodes (117). Sleep disturbance is also one of the most common prodromal symptoms and is identified by one-fourth to three-fourths of patients as early warning symptoms of relapse (118). People with BD who are in remission have poor sleep quality compared to healthy individuals, which is associated with residual mood symptoms (119) and increases the risk of recurrence in euthymic bipolar patients (120).

Treatment adherence is defined as *"the extent to which a person's behavior of taking medication, following a diet, and/or executing lifestyle changes corresponds with agreed recommendations from a healthcare provider"(21).* Treatment adherence is a highly prevalent issue in bipolar disorder, and it is a complex phenomenon that appears to be influenced by a number of factors (121). A systematic review conducted to assess medication adherence and its associated factors among people with schizophrenia and bipolar disorder reported that treatment adherence ranged from 34% to 80%, with a mean rate of 42% (122). Studies conducted among people with BD found that one-third to three-fourth of people with BD did not comply with drug treatment (123-125). Studies identified various patient-related, treatment and illness related factors, social factors and intervention providers related

factors with treatment adherence (122, 126, 127). Among those factors, having awareness about the illness and benefit of treatment, social support, family involvement in treatment (122), good relationships between patients and providers (122, 126, 128), accessibility of medication, (126), and being educated (129) were associated with better treatment adherence. On the contrary, early onset of illness, short duration of episodes, low level of education, economic problems to cover the treatment related costs, (122), fear of side-effects of medication, younger age (122, 127-129), patient who are substance abusers or dependent (128, 130), and history of suicidality (130), depressive symptoms/ episodes, and anxiety symptoms (131) were factors associated with poor treatment adherence. Studies have also reported that treatment adherence is associated with the clinical and functional outcomes of bipolar disorder. A study conducted among 303 people with BD in Spain reported that poor treatment adherence was associated with severity of illness and poor functioning (125). Another study that assessed 12 weeks of treatment adherence and the clinical outcomes among 273 people with BD-I and BD-II reported that patients who were non-adherent spent considerably more time in non-euthymic mood than adherent patients (132). Therefore, treatment adherence is one of the areas that needs to be considered to improve the outcomes of bipolar disorder.

Table 2: Summary of evidence factors influencing the course and outcomes of bipolar disorder.

Authors	Setting	Design	Findings
Smedler 2020 (111)	Sweden	7-years prospective cohort study N=204	• 44% of participants could report an external factor triggering manic episodes that includes sleep disturbance, medication, substance use, family-related problems, and work-related issue • Ten percent of them reported positive life events as a triggering factor
Sam 2019 (105)	India	Cross-sectional N=128	Experience of pre-onset stressful life events • Total 69.5% (89/128) • Mania 50 (56.2%) had mania • Depressive 39 (43.8%) • Bipolar relapse score was significantly high in subjects with pre-onset stressful life events (*P* = 0.02).
Lex, 2017 (107)	Studies conducted globally	Meta-analysis N=42 studies	Life events and relapse in [ES/ Hedges' g; 95% CI] • Episodic BD Vs, euthymic BD 0.13 (0.3, 0.8) • BD Vs Health individuals 0.6 (0.3, 0.8) • BD Vs People with physical 0.7 (-0,1, 1.5) • BD Vs Schizophrenia 0.2 (-0,1, 0.5) • BD Vs unipolar depression -0.16 (-0,36, 0,08)
McCraw 2017 (108)	Sydney	Comparative study N=747 (bipolar =334 & depression=413)	• Exposure to extremely stressful event in BD Vx unipolar depression = (45% vs. 36%) • Lifetime PTSD for BD Vs unipolar depression was 26.3% Vs.14.5%

Simhandl 2015 (109)	Austria	4-year prospective cohort N=222	Effect of number of life events on relapse after the index episode (HR; 95% CI) • All relapses 1.2 (0.99, 1.33) • Manic relapses 0.8 (0.5, 1.15) • Depressive relapses 1.33 (1.12, 1.58)
Koenders 2014 (25)	Netherland	2-year prospective cohort N=176	Negative life events [B(BE); 95% CI] • Mania - 0.16 (0.05); P =0.003 • Depression 0.08 (0.03); P = 0.012 • Functioning 0.16 (0.04); P < 0.001 Positive life events • Mania -0.24 (0.06); P = 0.001 • Depressions -0.01(0.03); P < 0.5 • Functioning 0.04 (0.04); P = 0.3
Malkoff-Schwartz 2000 (113)	Pittsburgh	Cross-sectional comparative study Purely Manic = 21 Purely depressed=21 Cycling =24 Recurrent unipolar depression =44	At 8 weeks pre-onset period • The rates of subjects with at least one SRD event were greater for bipolar manic subjects compared to other groups 20- weeks pre-onset period • The rates of subjects with at least one SRD event were greater for manic subjects compared with depression and rapid cyclic patients • The rates of subjects with at least one severe event were greater for manic subjects compared with depression and rapid cyclic patients
Lewis 2017 (117)	UK	Nested cross-sectional N = 3140	• There is an association between bipolar disorder and self-reports of sleep loss triggering episodes of high mood [$X^2(2)$ =98.189; P<0.001] • In depressive episodes, females report sleep loss triggering episodes of depression 1.5 times greater than men [OR = 1.4; 95% CI (1.2, 1.8)] • In multivariate analysis, hypomania or mania triggered by sleep loss [OR= 2.8; 95% CI (2.2, 3.5)]
Sylvia 2012 (120)	22 sites in the United States	Multi-center, 2-years, Longitudinal study Bipolar euthymic N=483	• Sleep disturbance significantly associated with a greater risk for recurrence [Kaplan–Meier log-rank p < 0.05]
Jackson 2003 (118)	Studies conducted globally	Review N=17	The majority of participants identified sleep disturbance as early signs of relapse. • In manic prodromes = 77% participants • Depressive prodromes = 24%
Cretu 2016 (119)	22 sites in United States	Recovered BD = 89 HC = 56	Recovered PBD Vs. Health control [M (SD); 95%CI] • Poor sleep quality among PBD 4.8 (2.7) Vs. 2.8 (1.5); F (1,110) = 12.6; P<0.001] Poor sleep is associated with residual symptoms of mood • Objective assessment (Pearson r =0.36; R^2= 0.1; P<0.005 • Subjectively assessment (Pearson r =0.28, R^2 =0.08; P<0.008)
Saunders 2013 (116)	Michigan, US	Retrospective cohort BD N= 119) and HC =136)	Poor sleep quality in euthymic people with BD was associated with • stressful events (β = 0.20, P =0 .02). • Rapid cycling (β = 0.20; P = 0.03)
**Bipolar disorder (BD), people with bipolar disorder (PBD), Healthy control (HC), Confidence Intervale (CI), Hazard Ratio (HR), Odds Ratio (OR), Mean (M), Standard Deviation (SD), social rhythm disruption (SRD)*			

Coping with stress: Coping with stress is the use of different cognitive and behavioral strategies for reducing psychological distress and physiological reactions induced by stressful life events (133, 134). People with BD use various coping mechanisms to cope with stressful life events and prodromal symptoms. The studies that reported that reported the coping mechanisms among people with BD are summarized in ***Table 3***.

A study conducted in a mental hospital in Korea reported that bipolar patients with psychotic and non-psychotic features experience different prodromal symptoms and also use different coping mechanisms to manage those symptoms. For example, fear of going crazy and hearing hallucinations were common prodromal symptoms among patients with psychotic symptoms, whereas feeling energetic was reported more in non-psychotic bipolar patients than in patients who had psychotic symptoms (135). Regarding coping styles, bipolar patients who had psychotic features denied the symptoms, ignored them as if nothing happened, or blamed others for coping with prodromal symptoms more than non-psychotic features (135). Other studies also identified various coping mechanisms, such as: less adaptive and risk-taking behavior (136), not active in solving problems, using more avoidant coping and being more introverted in expressing emotions (137), substance use, extra-marital affairs, stealing, and beating as a coping mechanism for stress (138) compared with the general population/ healthy control group. A study conducted to assess the relationship between mood, self-esteem and coping reported that a higher level of risk-taking was associated with both depression and mania ($P < 0.001$). Additionally, a higher level of rumination and adaptive coping were found to be associated with depression ($P < 0.001$) (139).

The studies also compared coping styles among the subtypes of bipolar disorder (136) and with unipolar depression (140). The findings showed that people with bipolar-I use problem-directed coping and professional help-seeking more than patients with bipolar-II (136). A study that compared people with BD and with unipolar depression reported that people with BD use more adaptive coping, such as seeking social support, planning, sharing feelings with family and friends, and are less uncomfortable with socialization compared to people with unipolar or depression (140).

Table 3: Summary of evidences on coping mechanisms among people with bipolar disorder.

Authors	Country	Study design	Instrument used	Patient status	Key findings
Goossens, 2008 (137)	Netherland [HIC]	CS with comparative group N=157	Utrecht Coping List (UCL)	-Euthymic PBD -Male and female Dutch population	• People with BD use more avoidance coping, had lower expression of emotions and more passive compared to control group
Ryu 2012 (135)	Mental hospital in Korea	Cross sectional N= 83	CIPM	Euthymic PBD	• Denial or blame in bipolar patients with psychotic symptoms (t =−2.27, P = 0.03).
Fletcher, 2013 (136)	Australia	CS with comparative group N= 417	-CIPM, RSQ, RPAQ, CERQ	-BD-I & II -Unipolar depression -Healthy control	• BD Vs. Unipolar ▪ Bipolar use emotion focused and self-focused rumination of positive affect (p<0.05) ▪ People with BD engaged in risk taking behavior (p<0.05)
Carissa, 2013 (140)	Australia	CS with comparative group N= 173	COPE inventory	-PBD =77 -Unipolar =96	PBD use more adaptive coping compared to unipolar (M, SD, P) ▪Able to talk about feelings (2.8, 1.3; P<0.001] ▪Socialization (2.5, 1.4; P<0.04] ▪Shy or uncomfortable with people (2.4, 1.2; P<0.02] ▪Contact with outside family members (91.5%, P<0.01]
Moon, 2014 (138)	Korea	CS with comparative group N= 206	53-items survey questionnaire	PBD and Healthy control	• PBD using less socializations for example socialization with friends, going to movies, dating to cope with stressful life events compared to healthy control (All P value < 0.05) • PBD engage more in maladaptive stress-coping strategies such as using substance, stealing and beating and extra-marital affairs compared to HC (All P value < 0.05
Pavlickova, 2013 (139)	UK [HIC]	Longitudinal N= 48	*Revised version of NHRSQ*	Bipolar patients -In remission -Depressed -Hypomanic	• Rumination, risk taking behavior and adaptive coping were associated with mood symptoms (P<0.001)

*** Brief Cope (BC), Responses to Positive Affect questionnaire (RPAQ), Response Styles Questionnaire (RSQ), the Coping Inventory for Prodromes of Mania (CIPM), and Cognitive Emotion Regulation Questionnaire (CERQ), Family Coping Questionnaire (FCQ), Responses to Positive Affect (RPA), revised version of Nolen-Hoeksema's Response Style Questionnaire (NHRSQ), Cross-sectional study (CS)*

2.2 Effectiveness of psychological intervention for bipolar disorder: Umbrella review

2.2.1 Methods of review effectiveness of PSI

Search Database: We conducted an umbrella review by systematically and comprehensively searching PsycINFO, Medline, EMBASE, and Cochrane Library from inception to June 2020 using terms for bipolar disorder, psychological intervention, and review.

Search terms: Terms used for psychosocial intervention: “Psychosocial intervention” OR “psychological intervention” OR “Psychosocial therapy” OR “Cognitive behavioural therapy” OR “Cognitive Therapy” OR “Behavior Therapy” OR “Family-focused intervention” OR “Family intervention” OR “Family therapy” OR Psychoeducation OR “Interpersonal and social rhythm therapy” OR “Social rhythm therapy” OR “Interpersonal therapy” OR “Mindfulness-based cognitive therapy” OR psychotherapy OR “Individual therapy” OR “group therapy”.

The search terms used for bipolar disorder include: “bipolar disorder” OR “Affective disorder OR Mania OR Manic Disorder OR Manic State. For reviews: review OR “systematic review” OR “Meta-analysis OR Network Meta-analysis were used. Then, the three- pillars of the above search terms were combined with “AND”. All the retrieved articles were exported to the reference manager, EndNoteX7. The process employed in the selection of the papers and documents is presented in Figure 1.

Inclusion criteria

1. *Study Language:* English
2. *Study populations*: Patients with bipolar disorder
3. *Type of study review*: (1) peer-reviewed systematic reviews and meta-analyses of RCTs, observational studies, case-controlled or other quasi-experimental studies. Comparison groups could include treatment, as usual, waiting list control, or another standard psychosocial intervention. Investigating the effect of any type of psychological intervention on bipolar disorder. The intervention could be delivered in an individual, family, or group format. Reviews that didn’t include clear search strategies, methods, and narrative reviews were excluded.
4. *Outcome:* Relapse or recurrence, severity of mood or anxiety symptoms, suicidality, functioning, quality of life (QOL), and treatment adherence, and delivered in individual or group format.

Data extraction: Data was extracted using a data extraction format that included the following items: number of included studies, publication dates, purpose of the review, outcomes measured, study inclusion criteria of the review, and limitations of each review. Data extraction was expected to be checked and extracted by two reviewers, but in this review, it was conducted by a single individual (candidate).

Quality assessment: The methodological quality of the systematic review/meta-analysis was evaluated using the Assessment of Multiple Systematic Reviews (AMSTAR). AMSART has eleven items rated as “Yes”, “No”, “Can’t answer”, or “Not applicable.” The total score is calculated by adding one point for ‘yes’ and no point for others, resulting in a summary score of 0-11 (141). In order to rate the quality of systematic reviews/ meta-analysis, the following three categories were applied: a score of 0–4 is classified as low quality, 5–8 indicates moderate quality, and 9–11 as high-quality based on other studies (142, 143). The quality of included studies was expected to be checked against AMSTAR by two reviewers, but in this review, it was done by a single person (candidate).

2.2.2 Findings of the review from scoping review

2.2.2.1 Search results and characteristics of the included reviews

The initial search resulted in 1231 paper, of which 248 articles were excluded due to being duplicate and 940 during title and abstract screening. An additional 27 articles were excluded during a full text review. Finally, 16 papers met the inclusion criteria and included in this review (Figure 1). The sixteen included papers were: Nine meta-analysis, five systematic review, one each Network meta-analysis and component network meta-analysis. Among the 16 papers, eight papers reviewed the mixed types of psychological interventions (45, 144-151), two each on Mindfulness-based cognitive therapy (MBCT) (42, 152) and group psychological intervention (153, 154), Cognitive Behavioral Therapy (CBT) (155), the psychological intervention focused on caregivers (156), and earliest stage of bipolar disorder (157) each reviewed separately one paper. Regarding outcomes reported, 10 reviews reported relapse, seven on the severity of symptoms, three on anxiety, three on functioning, three on treatment adherence, and one paper on Knowledge and caregivers’ burden.

2.2.2.2 Summary of the quality assessment result of the included reviews

Of the 16 evaluated systematic reviews, two-thirds of them rated were as moderate to high quality (AMSTAR score 9-11) and three papers were moderate (AMSTAR score 5-8). and only 2 reviews were categorized as low quality (AMSTAR score 1-4). The results of methodological quality assessment according to each item of the AMSTAR are presented in Table-4.

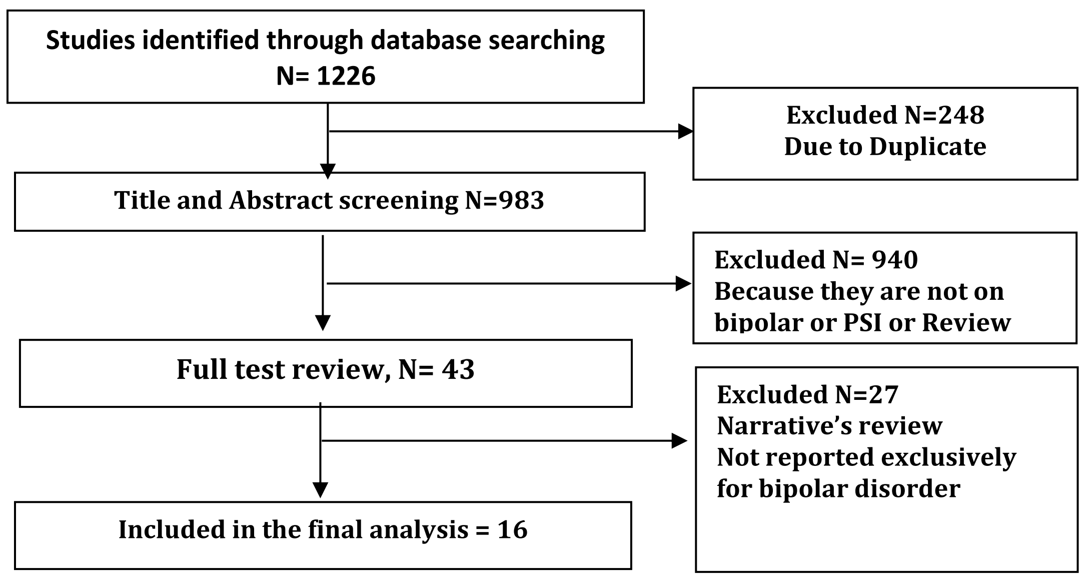


Figure 1: PRISMA flow diagram of the study selection process

Table 4: Methodological quality of systematic reviews or meta-analyses using AMSTAR.

Authors and year	AMSTAR Quality items											AMSTAR score
	1	2	3	4	5	6	7	8	9	10	11	
Seeberg 2021	Y	Y	Y	Y	Y	Y	CA	Y	Y	Y	Y	10
Miklowitz 2020	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	11
Xuan 2020	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	10
Janis 2020	Y	Y	N	N	Y	Y	Y	N	Y	Y	N	8
Lovas 2018	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	9
Baruch 2018	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	9
Chatterton 2017	Y	y	Y	CA	Y	Y	Y	Y	y	N	Y	11
Chiang 2017	N	Y	Y	CA	N	Y	Y	Y	Y	Y	Y	9
Macheiner 2017	Y	N	Y	Y	N	N	N	Y	Y	N	Y	11
Oud 2016	Y	N	N	Y	N	N	N	N	NA	N	Y	4
MacDonald 2016	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	9
Miziou 2015	Y	CA	Y	CA	Y	Y	Y	Y	CA	N	Y	7
Vallarino 2015	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	10
Bond 2015	Y	Y	Y	Y	CA	Y	N	Y	Y	Y	Y	9
Lam, 2009	Y	CA	Y	Y	Y	Y	N	CA	Y	N	Y	7
Beynon, 2008	Y	Y	Y	Y	Y	Y	CA	CA	Y	Y	Y	9
Scott J 2007	y	CA	CA	CA	N	N	N	CA	Y	Y	NA	3

*** Yes (Y), No (N), Not applicable (NA), Can't answer (CA)**

2.2.2.3 Effect of psychological intervention in outcomes

(i) Effect of psychological intervention in relapse/ recurrence prevention among people with BD

The effectiveness of six types of psychological intervention in individual and group reported: Psychoeducation (PE), Cognitive Behavioural Review (CBT), Family or Carer-focused (FFT), and Interpersonal and Social Rhythm Therapy (IPSRT). The findings are summarized in ***Table 5***.

Psychoeducation: is tested in individual, family, and group formats. It was tested in almost a single group before-after intervention trial and a controlled trial. All comparative PE trials were compared with the Treatment as Usual (TAU) or waitlist control (WLC) groups. In general, the majority of the reviews reported a medium effect of PE in preventing relapse, with a Relative Risk (RR) ranging from 0.3 -0.8 compared to TAU/ WLC. The findings also showed, the group PE was more effective in preventing relapse compared to unstructured group meetings, though the effect was small (RR=0.16) (149). Few also reported the long-lasting effect of PE in preventing relapse (147). One review reported that group PE is effective in preventing any relapse/manic relapse, but not depressive relapse (40). The review found brief psychoeducation with fewer than six sessions was linked to a reduced attrition rate than PE with more sessions (144). One systematic review reported that whatever the underlying theoretical model used in the type of psychological intervention trial, most interventions incorporate PE, problem solving, symptom-management or relapse prevention strategies, and some advice on sleep, social rhythms, and cognitive regulation (157). Although the PE mechanism of action remains unknown, it is believed that the beneficial effect is mediated by the enhancement of treatment adherence, promoting normal routines and regular sleep habits, and early detection of early signs of relapse (147).

Cognitive Behavioural Therapy (CBT): in almost all reviews, CBT was compared with the TAU group. Most of the reviews showed that CBT has a medium effect on reducing the risk of relapse in post-assessment and 6 to 18 months post-intervention assessment compared to the TAU or WLC groups. In one meta-analysis, combined CBT and PE were shown to be associated with a reduced risk of relapse compared to TAU, though the difference was not significant (145). Likewise, CBT was not significantly different in relapse prevention compared to supportive therapy (147). One review mentioned that CBT was more effective in relapse prevention when PBD are euthymic during recruitment and had fewer than twelve previous episodes (150). On the contrary, another review of a meta-regression of six studies using the number of episodes as a predictor variable found no

relationship between the number of episodes and the number of relapses. This review also didn't find a difference in terms of survival rate between patients who had less than and greater than twelve previous episodes (148).

Family focused Therapy (FFT): The effectiveness of FFT was compared with TAU, individual psychological intervention, and crisis management. The findings were mixed, in which some studies reported significant improvement in reducing relapse/recurrence compared to TAU (144-146). Whereas other reviews reported a non-significant reduction in the risk of relapse among the FFT group compared to the TAU/ or active comparison group (146). One review assessed the effect of PSI on the earliest stage of bipolar disorder. The review reported that young people who were at risk of developing bipolar disorder and assigned to the FFT experienced faster recovery and a longer period of remission and were less likely to meet the bipolar disorder criteria during follow-up (157).

Interpersonal and Social Rhythm Therapy (IPSRT): findings in the identified review didn't support the benefit of IPSRT in relapse prevention (150).

A component network meta-analysis identified eighteen components of intervention and among them family format, and encouraging patients to monitor prodromal symptoms were significantly associated with a lower recurrence rate (144). Additionally, PE with skill development, practice and self-monitoring delivered in a family or group format (152) and individual, structured psychological intervention, were more effective at reducing the rate of recurrence (146).

Table 5: Effect of psychological intervention in relapse/ recurrence prevention among PBD

Reference	Type of analysis	Summary of the findings
Miklowitz 2021(144)	39 studies conducted until 2019 Component network meta-analysis	Relapse prevention ▪ The pooled OR from 20, two-group trials showed a lower rate of recurrence among the PSI group than control (OR, 0.56; 95%CI, 0.43-0.74). ▪ PSI effective in reducing relapse compared to TAU (OR, 95% CI) • Family or conjoint therapy 0.30 (0.17, 0.53) • CBT 0.52 (0.34, 0.79) • Standard psychoeducation 0.52 (0.32, 0.84) • Brief psychoeducation 0.34 (0.16, 0.74) ▪ Components of intervention associated with lower recurrence rates • Family format 0.16 (0.02, 1.22) • Monitor prodromal symptoms 0.22 (0.04, 1.35) • PE with skill development and practice 0.12 (0.02-0.94) Acceptability ▪ Factors associated with acceptability /high retention rate of PSI (incremental OR, 95% CI) • Family or conjoint therapy 0.46 (0.26, 0.82)

		• Brief PE (<6 sessions) 0.44 (0.23, 0.85)
Chatterton 2017 (145)	Forty-five studies are done until 2016 Network meta-analysis	▪ Effect PSI in relapse prevention compared to TAU (RR, 95% CI) • Carer-focused 0.6 (0.44, 0.86) • FFT 0.8 (0.54, 1.15) • Psychoeducation 0.8 (0.65, 1.06) • CBT 0.9 (0.68, 1.17) • PE+CBT 1.12 (0.58, 2.18) • Attention control 1.19 (0.85, 1.67)
Macheiner 2017 (153)	Twenty-three trials (2003- 2015) Meta-analysis	▪ Group PSI plus medication effective in reducing the risk of relapse compared to medication alone (RR, 95% CI) • PE 0.65 (0.6, 0.8) • CBT 0.68 (0.5, 0.9) • FFT 0.78 (0.6, 1.1) • IPSRT 0.97 (0.5, 1.8) • All PSI 0.7 (0.62, 0.8)
Chiang 2017 (155)	Ten trials conducted until 2016 Meta-analysis	▪ CBT reduce relapse compared to TAU/WLC/PE (pooled OR = 0.5; 95% CI = 0.3−0.9)
Oud 2016 (146)	48 studies conducted from 1984- 2014 Meta-analysis	PSI Vs TAU in prevention of any relapse (RR, 95% CI) **Post-intervention** / **Follow-up** • Individual PSI 0.66 (0.48, 0.92) / 0.74 (0.63, 0.87) • Group PSI 0.48 (0.22, 1.04) / 0.86 (0.61, 1.20) • Collaborative care 0.99 (0.84, 1.17) / ---- • FFT ----- / 0.52 (0.32 to 0.84) PSI Vs Active control (supportive therapy) in the prevention of any relapse (RR, 95% CI) **Post-intervention** / **Follow-up** • FFT 0.89 (0.52, 1.54) / 0.67 (0.34, 1.30) • CBT 0.60 (0.34, 1.05) / 1.13 (0.81 to 1.58) • IPSRT 1.55 (0.63, 3.84) / -----
Miziou 2015 (147)	78 RCT conducted from 1998-2015 Systematic review	Among 78 included CBT, PE, ISRT, FT, and MBCT studies. PE Vs. TAU • The review showed that only PE has a long-lasting prophylactic effect especially the prevention of manic relapse IPSRT • Overall, the findings are not supporting the usefulness of IPSRT during the maintenance phase of BD. However, some data suggesting that IPSRT might prolong the time to relapse during the acute phase
Lam, 2009 (148)	Ten studies Systematic review	CBT Vs. TAU among cases less than and greater than 12 previous episodes • No difference in survival rate between groups [HR = 0.56, 95% CI: 0.32–1.17, p = 0.134). • Among cases with more than 12 previous episodes, CBT group had significantly better survival rate (HR = 0.31, 95% CI: 0.12–0.79, p = 0.014) • From 10 studies, the overall RR of relapse 0.74 [95% CI: 0.64, 0.85] • No relationship found between number of previous episodes and relapse • [log OR = 0.01, 95% CI: (0.05–0.03)]

Vallarino 2015 (157)	8 completed RCTs Systematic review	People with a high risk of BD • FFT group experienced less mood symptoms, faster recovery from mood symptoms, and longer periods of remission, and less likely to meet the criteria for a bipolar spectrum disorder. People with early-onset BD • IPSRT resulted in less mood symptoms and improved interpersonal functioning • CBT reduced anxiety symptoms and improved and modification of beliefs about the self People first onset BD • IPSRT and FFT result in negative results in people with first onset BD
Bond 2015	Nine studies Meta-analysis	Compared participants who didn't relapse among PE and TAU/placebo group • Higher number of patients who didn't experience any relapse/ manic relapse in PE group compared to TAU • Any relapse [OR=1.98; CI: 1.09, 3.58] • Manic relapse [OR= 1.68; CI:0.99,2.85] • Depressive relapse [OR= 1.39; CI: 0.78, 2.48] Goop PE [OR=2.8; CI=1.63,4.82] was effective, but individual PE was not different from TAU/placebo [0.89; CI=0.45,1.76]
Scott 2007 (150)	Nine trials conducted from 2000-2005 Meta-analysis	PSI had a positive effect on relapse prevention compared to TAU/WLC (OR, 95% CI) • Psychoeducation 0.41 (0.2, 0.86) • CBT 0.5 (0.36, 0.77) • FFT 0.46 (0.19, 1.11) • IPSRT 1.8 (0.7, 4.5) • All studies 0.54 (0.37, 0.73)
Beynon, 2008 (149)	Twelve RCT conducted until 2005 Meta-analysis	Effect of PSI in the prevention of any relapse from authors' and admission (OR, 95%CI) Authors' report / Admission • CBT vs. TAU — 0.24 (0.12, 0.51) — 0.30 (0.05, 1.91) • FFT vs. Crisis management — 0.46 (0.19, 1.11) — ---- • FFT vs. I-PSI — 0.80 (0.27, 2.36 — 0.60 (0.19, 1.89) • G-PE vs. Group meeting — 0.16 (0.07–0.40) — 0.42 (0.21, 0.86) • I-PE vs. TAU — ------ — 0.76 (0.29, 2.02) • Care management v. TAU — ----- — 0.75 (0.35, 1.61) • Integrated group therapy v. TAU — ---- — 0.86 (0.26, 2.85) Effect of PSI in manic and depressive relapse authors' report (OR, 95%CI) Manic relapse / Depressive relapse • CBT Vs. TAU — 0.48 (0.21, 1.13) — 0.32 (0.13, 0.74) • FFT vs. Crisis management — 0.93 (0.31, 2.82) — 0.41 (0.15, 1.12) • Group-PE vs. Group meeting — 0.27 (0.14–0.53) — 0.24 (0.12, 0.45)

*** Group meeting was unstructured group meeting, Individual psychosocial intervention (I-PSI), Odds Ratio (OR), Risk Ratio (RR), Standardized Mean Difference (SMD), Confidence Interval (CI), Intensive clinical Management (ICM), Psychoeducation (PE), Family Focused Therapy (FFT), Cognitive Behavioural Therapy (CBT) and Interpersonal Psychosocial Rhythm therapy (IPSRT), Global Assessment of Functioning (GAF) Personalized Real-time Intervention for Stabilizing Mood (PRISM), Waitlist Control (WLC), Treatment as usual (TAU), Integrated cognitive and interpersonal therapy (ICIT), Integrated group therapy (IGT)*

(ii) Effect of psychological intervention and severity of mood symptoms

Five types of psychological interventions have been reported on the effectiveness of PSI to control or reduce mood symptom severity: family-focused therapy, CBT, PE, MBCT, and IPSRT. Additionally, there are reviews that have reported the effectiveness of group and individual PSI included in the above types of interventions. Details of the studies and the findings are summarized in ***Table 6***.

Psychoeducation (PE): The findings show that PE had beneficial effect in reducing both depressive and manic symptoms. However, it was found to be most effective in reducing manic symptoms severity, with a large effect (SMD > 0.8) compared with TAU and active control groups (supportive therapy) (145, 146, 158), whereas the effect on depressive symptoms was not significantly different from the control group.

Cognitive Behavioural Therapy: the majority of the included papers assessed the effect of CBT on symptom severity. In almost all studies, CBT resulted in a significant medium effect on reducing depressive mood symptoms compared to the TAU or active control group in the post and follow-up assessment (144, 155), and a non-significant reduction in manic symptoms. However, a combination of PE and CBT had a significant, large effect on reducing manic symptoms (145). One review reported a small to medium positive effect of supportive therapy on reducing depressive symptoms compared to CBT (146).

Family-focused intervention (FFT): Findings showed FFT had some effect on reducing mood symptoms. However, the difference was not statistically significant (144-146).

Mindfulness-Based cognitive therapy (MBCT): one meta-analysis that included 10 studies conducted on MBCT in bipolar disorder was identified (152). The findings showed MBCT had no significant effect in reducing mood symptoms compared to the waitlist or TAU groups. However, uncontrolled studies showed promising results on reducing depressive symptoms in the post and three-month post-intervention assessment (152).

Inter-Personal and Social Rhythm Therapy (IPSRT): two reviews reported the effect of MBCT on symptom severity, and both reviews reported negative effect on symptom severity (144, 146).

Group vs. individual intervention: Regardless of the type of intervention (PE, CBT…), the effect of delivering the intervention in group and individual format was also evaluated in the reviews (145, 146). The group PSI had no significant effect on reducing mood symptoms compared to TAU (145,

146, 154). Whereas, individual PSI had a significant lower effect on reducing depressive symptoms compared to TAU at post-assessment, and had a significant, medium effect on reducing manic symptoms compared to both TAU and supportive therapy during follow-up time (146).

Regarding factors that have a role in mood symptoms, one component meta-analysis, intervention components such as cognitive restructuring, regulating daily rhythms, and communication training were found to have a significant, greater effect on reducing the severity of mood symptoms (144). Another meta-analysis that used a meta-regression to examine factors that might affect intervention efficacy found that studies with longer follow-up data collection had larger effect sizes than those collecting data only in the short term (145).

Table 6: Effect of psychological intervention in mood symptom severity.

Reference	Type of review	Summary of the findings
Miklowitz 2021(144)	39 studies conducted until 2019 Component network meta-analysis	Post assessment compared with TAU for mood symptom severity (SMD, 95% CI) **Depressive** / **Manic** • Cognitive behavioral therapy: -0.32 (-0.64, -0.01) / -0.32 (-0.65, 0.01) • Family or conjoint therapy: -0.46 (-1.01, 0.08) / - 0.35 (-0.8 to 0.2) • IPSRT: -0.46 (-1.07, 0.15) • Psychoeducation: ---- / - 0.31 (-0.7, 0.08) Components that are potent in reducing mood symptom severity (iSMD, 95% CI) **Depressive** / **Manic** • Cognitive restructuring: -1.26 (-2.1, - 0.4) / -1.0 (-2.2, 0.2) • Regulating daily rhythms: -0.78 (-1.3, -0.24) / -0.4 (-1.1, 0.3) • Communication training: -0.84 (-1.8, 0.23)
Janis 2021 (154)	9-trials (1990-2018) Meta-analysis	The pooled estimate from five studies- Group-PSI Vs. TAU group (Hedges G. 95% CI) • Post intervention assessment: 0.69 (0.18, 1.21) • Long-term follow-up time points: 0.61 (0.30, 0.93)
Xuan, 2020 (152)	10 trials Conducted until 2020 Meta-analysis	MBCT Vs. control group (TAU/Waitlist) (SMD, 95% CI) • Post- assessment MBCT reduced depressive symptoms [0.3 (-0.05, 0.6)] **7/10 were uncontrolled, before-after MBCT intervention, (SMD, 95% CI)** **Mania** / **Depression** • Post assessment: -0.26 (-1.4, 0.9) / 0.37 (0.1, 0.6) • 3-months post intervention: -0.04 (-1.3, 1.3) / 0.46 (0.1, 0.8) • 12-moths post intervention: 1.6 (0.3, 2.9) / 0.04 (-0.3, 0.4)
Chiang 2017 (155)	10- CBT trials done until 2016 Meta-analysis	▪ CBT/ CT compared to TAU/WLC/PE (Hedges G., 95% CI) • Depressive symptoms severity: - 0.5 (- 0.9, -0.03) ▪ Manic symptom severity: - 0.6 (-1.12, -0.04)

Lovas, 2018(42)	13 MBCT trials done until 2018 Systematic review	**Effect on manic symptoms** • In all included studies, PBD were enrolled during remission from manic/ mixed/ hypomanic episodes. Therefore, is no significant change in manic symptoms. • 2/3 trials (One RCT and one-open-label trial) found a significant positive effect in reducing depressive symptoms
Chatterton 2017 (145)	Forty-five Studies are done until 2016 Network Meta-analysis	▪ **Effect of PSI on mood symptom severity compared to TAU (SMD, 95% CI)** **Depressive** / **Manic** • PE + CBT: -0.58 (-2.4, 1.3) / - 0.95 (-1.5, -0.4) • Group drug counselling: -0.17 (-0.7, 0.4) / 0.24 (-0.3, 0.8) • Psychoeducation: -0.14 (-1.3, 1.01) / -0.22 (-0.6, 0.2) • CBT: 0.14 (-0.6, 0.9) / -0.17 (-0.8, 0.4) • PE+PRISM: 0.6 (0.1, 1.1) / 0.33 (-0.2, 0.9) • FFT: -0.26 (-0.7, 0.2) ▪ **Factors related to PSI efficacy** at the longest follow-up assessment • Studies with longer follow-up data collection period Vs. Shorter follow-up t (18) = 2.63, P= 0.02, adjusted R2 = 25.8%]
Oud 2016 (146)	48 studies conducted from 1984-2014 Meta-analysis	**Post assessment compared with TAU for mood symptom severity (SMD, 95% CI)** **Depressive** / **Manic** • Individual PSI: -0.2(-0.41, -0.05) / 0.05 (-0.35, 0.25) • Group PSI_: -0.2(-0.6, 0.2) / - 0.08 (- 0.33, 0.16) • Family PE: -0.7 (-1.4, -0.1) / - 0.66 (- 1.28, -0.04) • Collaborative care: -0.2 (-0.6, 0.2) / - 0.07 (- 0.47, 0.32) • ICIT: -0.6 (-1.2, -0.1) / - 0.10 (- 0.30, 0.10) **Follow-up assessment compared with TAU for mood symptom severity (SMD, 95% CI)** **Depressive** / **Manic** • Individual PSI_: -0.21 (-0.4, 0.01) / -0.4(-0.7, -0.04) • Group PSI__: 0.22 (-0.05, 0.5) / 0.2 (-0.1,0.4) • Family PE___: -0.15 (-0.7, 0.4) / -0.8 (-1.3, -0.2) • Collaborative care: -0.6 (-1.1, -0.1) / -0.10 (-0.59 to 0.38) **Post assessment compared with supportive therapy for mood symptom severity (SMD, 95% CI)** **Depressive** / **Manic** • FFT: -0.4 (-0.8, 0.0) / 0.00 (-0.4, 0.4) • CBT: 0.4 (0.1, 0.7) / 0.20 (-0.1, 0.5) • IGT: -0.35 (-0.8, 0.2) / -0.2 (-0.7, 0.3) • IPSRT: 0.44 (-0.3, 1.2) **Follow-up assessment compared with supportive therapy for mood symptom severity (SMD, 95% CI)** **Depressive** / **Manic** • FFT: -0.1 (-0.6, 0.4) / -0.3 (-0.7, 0.1) • CBT: 0.5 (0.04, 0.9) / --------- • Integrated group therapy: 0.1 (-0.4, 0.6) / -0.5 (-1.05, -0.02)

*** Group meeting was unstructured group meeting, Individual psychosocial intervention (I-PSI), Odds Ratio (OR), Risk Ratio (RR), Standardized Mean Difference (SMD), Confidence Interval (CI), Intensive clinical Management (ICM), Psychoeducation (PE), Family Focused Therapy (FFT), Cognitive Behavioural Therapy (CBT) and Interpersonal Psychosocial Rhythm therapy (IPSRT), Global Assessment of Functioning (GAF) Personalized Real-time Intervention for Stabilizing Mood (PRISM), Waitlist Control (WLC), Treatment as usual (TAU), Integrated cognitive and interpersonal therapy (ICIT), Integrated group therapy (IGT)*

(iii) Effect of psychological intervention on anxiety symptoms among people with BD

The effect of PSI was reported in two systematic reviews and one-meta-analysis papers (42, 152, 159). Among the three, two of them reviewed exclusively MBCT trials in improving outcomes of bipolar disorder (42, 152), whereas the third looked at the effect of PSI on anxiety symptoms in bipolar disorder (159). The included types of interventions were MBCT and CBT. The findings from these reviews are summarized in ***Table 7***.

Mindfulness-based cognitive therapy: one of the three reviews reported the pooled effect size (152) and in two papers they provide the summary without providing the effect size (42, 159). Findings showed that MBCT had a significant effect in reducing or preventing anxiety symptoms, stress, and emotional dysregulation compared to the baseline (152, 159). In one of the reviews, the findings from RCT were not significantly different from the control group, however, it mentioned that the interventions in the negative trials were all less specific and less modified for bipolar disorders (42).

Cognitive behavioural therapy (CBT): is the second type of PSI reported and findings showed a positive effect in favor of mindfulness-based cognitive behavioural improving the anxiety symptoms among patients with bipolar disorder(159).

Table 7: **Effect of psychological interventions on anxiety symptoms of bipolar disorder.**

Reference	Type of review	Summary of the findings
Seeberg, 2021 (159)	Conducted till 2020 Systematic review	▪ Five CBT RCTs that compared with TAU and one with PE in post-assessment and at least 6-months follow-up reported • The findings showed a positive effect of CBT in reducing residual symptoms of anxiety in self-rated, clinician-rated or both ▪ Three MBCT controlled trials compared TAU • MBCT improved anxiety in remitted PBD compared to TAU in two studies and one study within-group reduction in anxiety symptoms.
Xuan, 2020 (152)	10 MBCT trials done till 2020 Meta-analysis	**7/10 trials are uncontrolled, Before-after intervention studies** (Hedges G. 95, 95% CI) **Post-assessment / 3-months / 12-months** • Anxiety: 0.45 (0.2, 0.7) / 0.57 (0.2, 0.9) / 0.17(-0.2, 0.5) • Stress: 0.39 (0.1, 0.7) • Mindfulness ability: 0.63 (0.4,0.9) • and emotion regulation: 0.62 (0.1, 1.1) MBCT more effective in reducing anxiety symptoms compared to TAU/waitlist (SMD, 95% CI) = 0.51 (-0.2, 1.2)

Lovas, 2018 (42)	13 trials of MBCT done until 2018 Systematic review	• 7 (3 RCT and 4 open trials) assessed the effect of MBCT in anxiety symptoms. • All three RCTs found positive effects of MBCT in improving or preventing worsening of anxiety symptoms compared to the waitlist control group. • Only one of the four open-trial reported significant improvement in anxiety that was maintained at 3-months follow-up.

(iv) Effect of psychological intervention on functioning among people with BD

As the results summarized in **Table *8*** show, the impact of PSI on the functional status of people with BD was reported in two reviews. The first review reported five interventions, and except for one trial on CBT, four trials included PE given to PBD or caregivers only (carer-focused), or combined with CBT. The finding showed a large effect of combined PE and CBT intervention on GAF compared to TAU (145). The second review pooled the effect sizes from seven trials. Among them, four of them compared CT or CBT with TAU/WLC, and two trials compared CBT with standard care and PE, and the seventh trial compared intensive psychosocial treatment with collaborative care. The results indicated that CBT had a medium effect on improving psychosocial functioning in people with BD (155). In the first review, the sample included both people with bipolar type I and type -II, and studies with a shorter duration of follow-up data collection had a smaller effect size than those studies collecting data for a longer duration and included people with bipolar type-I.

(v) Effect of psychological intervention on treatment adherence among people with BD

There are two meta-analyses that synthesized evidence on the effectiveness of psychological intervention in improving treatment adherence among people with bipolar disorder (45, 145). The first review showed that PE alone or in combination with CBT has a positive effect on reducing non-adherence compared to the TAU group (145). The second review also reported the positive effect of psychological intervention on improvement of treatment adherence. Additionally, this review found that a brief intervention focused specifically on adherence was more effective in improving adherence than an intervention with a longer duration (45)(see **Table *8***).

Table 8: Effectiveness of psychological intervention on functioning and treatment adherence

Reference	No.& type of analysis	Summary of the findings
Chatterton 2017 (145)	Forty-five studies conducted until 2016 Network MA	▪ PSI Vs. TAU (g: 95% CI) • PE+PRISM -0.11 (-0.65, 0.44) • PE = 0.20 (-0.17, 0.58) • CBT 0.22 (-0.15, 0.59) • Carer-focused 0.62 (-0.63, 1.87) • PE + CBT 2.55 (1.69, 3.40) ▪ Factors related to intervention efficacy PSI • Long data collection time Vs. Shorter GAF= t (15) =5.19, P<0.01 • Sample with B-I and B-II Vs. B-I only = t (15) =73.03, P= 0.01 ▪ Treatment non-adherence [RR, 95% CI] • PE + CBT Vs. TAU (RR = 0.14; CI 0.02–0.85) • FFT vs. TAU [RR =0.17; CI=0.03,1.04] • PE Vs. TAU [RR = 0.27, CI= 0.14, 0.53] • CBT Vs. TAU [RR= 0.69; CI = 0.43,1.1]
Chiang 2017 (155)	Ten CBT trials did until 2016 Meta-analysis	▪ Pooled seven RCT on CBT/ CT that compared with TAU/WLC/PE (Hedges G., 95% CI) • Psychosocial functioning (g = 0.457; 95% CI = 0.1 ± 0.8).
MacDonald 2016 (45)	▪24 trials conducted till 2014 Meta-analysis in 18 /24 studies	• Meta-analysis was conducted in 18/24 studies and the findings showed the positive effect of PSI in improving adherent (OR=0.27 (95%CI=1.45–3.56)
*** Standardized Mean Difference (SMD), Confidence Interval (CI), Psychoeducation (PE), Family Focused Therapy (FFT), Cognitive Behavioural Therapy (CBT) Global Assessment of Functioning (GAF), Treatment as usual (TAU, Odds Ratio (OR), Risk Ratio (RR)*		

(vi) Summary of literature review

Overall, the life time prevalence of bipolar disorder or any type of disorder was 0.1% to 1.8% and the prevalence is higher in primary health care settings. There are various factors that affect the course and outcome of bipolar disorder. Among them, social factors such as social support, stressful life events, treatment related factors like treatment adherence, sleep problems, and coping strategies for stress were reported.

Overall, PSIs were found to be effective in improving the outcomes of bipolar disorder compared to treatment as usual or waiting list control. Specifically, PE, CBT, and FFT had a positive effect on reducing relapse and mood symptoms. However, PE is more effective at reducing manic relapses and manic symptoms. The reviews also showed that individual structured intervention, family-focused intervention, and intervention components that encouraged patients to monitor prodromal symptoms, focused on skill development, practice, and self-monitoring were more effective at reducing the rate of recurrence/relapse. Whereas, intervention that had components of cognitive restructuring, regulating daily rhythms, and communication training were associated with lower severity of mood symptoms. Both CBT and MBCT were found to be effective in reducing anxiety symptoms. Regarding the effect of PSI on improving functioning, combined PE and CBT intervention had a large effect on improving functioning compared to TAU. PE alone or in combination with CBT has a positive effect on reducing non-adherence and improving function compared to the TAU group. Brief PE (less than six sessions) was found to be beneficial at reducing attrition and non-adherence compared to six sessions.

CHAPTER THREE: RESEARCH QUESTIONS AND OBJECTIVE

3.1 Research questions

We assessed the following four research questions in this dissertation:

1. What is the evidence on the effectiveness of psychological interventions for bipolar disorder in Low-and Middle-Income Countries (LMICs)?
2. What is the lived experience of people with bipolar disroder in rural Ethiopia?
3. What adaptations are required to make existing psychological interventions for bipolar disorder feasible and acceptable for use in integrated care settings in rural Ethiopia?
4. What is the acceptability, feasibility, fidelity and potential impact of the new contextualized psychological intervention for bipolar disorder in rural Ethiopia?

3.2 Objective

3.2.1 General objective

In this PhD dissertation, we addressed two major objectives:

1. Develop a manualized psychological intervention for bipolar disorder that can be delivered by non-specialist health workers in a PHC setting in rural Ethiopia.
2. Test the feasibility, acceptability and potential benefits of the developed intervention in a PHC setting in rural Ethiopia.

3.2.2 Specific objective

The following four specific objectives are addressed in this PhD dissertation:

1. Synthesize the evidence base for the efficacy of adjunctive psychological interventions in improving clinical and functional outcomes in people with bipolar disorder in LMIC;
2. Explore experiences, unmet needs, and impact of bipolar disorder on people with bipolar disorder and their caregivers in rural Ethiopia;
3. Adapt/Develop a manualized culturally and contextually appropriate psychological intervention that can be delivered by non-specialist health workers for bipolar disorder in rural Ethiopia;
4. Test the feasibility, acceptability, and fidelity of the developed psychological intervention to be delivered by non-specialist health workers in integrated primary health care settings in rural Ethiopia.

CHAPTER FOUR: RESEARCH METHODS

4.1 Political and Health System Context of Ethiopia

Ethiopia follows a federal administrative structure. During the conduct of the study, there were 10 regional states (Tigray, Amhara, Oromia, Southern Nations Nationalities and Peoples region, Sidama, Benishanguel-Gumuz, Gambella, Harari, Afar, and Somali) and two city administrations (Addis Ababa and Dire-Dawa). Each region is further structured into Zones and each Zone is structured into woredas (district). The woredas are the lowest budget center of the government and are subdivided into Kebeles (sub-districts).

Ethiopia's healthcare system consists of three levels: tertiary level healthcare provided by specialized hospital, secondary level healthcare provided by general hospitals, and primary level healthcare provided by primary hospitals, health centers and health posts. Health centers are staffed with health officers, nurses and midwives (160). Health posts are staffed with Health Extension Workers (HEWs) who are high school graduates with one-year of training in disease prevention and health promotion at community level (161). Health centers supervise a cluster of health posts around their catchment area.

The Federal Ministry of Health (MOH) developed the first National Mental Health Strategy in 2012 marking an important milestone towards the delivery of a comprehensive and integrated program to address mental health needs of Ethiopians. The National Mental Health Strategy 2012-2026 mandated that mental health be integrated into the primary healthcare system through scaling up implementation of WHOs mental health Gap Action Programme (mhGAP). The 2020 annual report by all regions, 26 percent of health facilities to have integrated mental health service into their general service (1040 facilities /3650 functional health centers+ 400 hospitals) (53). According to MoH National Health Work Update 2019, mental health professionals constitute 0.26% of the national health workforce in Ethiopia. There were 111 practicing general psychiatrists; 46 Clinical psychologists with MSc; 10 social workers; 165 Mental Health professionals with MSc; 320 Psychiatry professionals with BSc and 111 Psychiatry professionals with advanced Diploma in the country. There were only one Forensic, one Addiction and two Child and Adolescent Psychiatrists in the country (53).

4.2 Study setting

This study was conducted in Butajira town and three rural Woredas\districts (Meskan, Mareko and Sodo) of the Gurage Zone, Southern Nations, Nationalities and People's Regional State (SNNPR) of Ethiopia (Figure 2). According to the 2007 Population and Housing Census, the literacy rate for the Gurage zone was 77% in urban and 45% in rural settings (162). Rain-fed agriculture is the main economic activity of the people in the Gurage zone. The zone has two relatively discrete rainy seasons and three climate zones called Gurage lowland zone (Locally called Kola), Gurage midland (Locally called Woina-dega), and Gurage highland Zone (Locally called Dega) (163).

Sodo woreda: This woreda, located 100km south of the capital city, Addis Ababa, is predominantly rural. It extends from lowland to highland of the Gurage zone. The woreda has 58 *Kebeles* (sub-districts) and Buei is its capital town. 91% of the population speaks Guragigna as their mother tongue; while 5.2% speaks Afan Oromo and 2.5 % speaks Amharic as their mother tongue. Amharic language serves as the official language of the region and is understood by most people. Most of the people in the woreda are followers of Coptic Orthodox Christianity (97%), and 2.3%. are Muslim. The health delivery system within the Sodo woreda comprises an administrative woreda health office, one primary hospital, eight health centers and one health post in each of the 54 rural Kebeles.

Meskan woreda and Mareko woreda: These two woredas are adjacent woredas. They were under one Woreda administration called Meskanena-Mareko woreda until 2002/2003 with Butajira town as its capital (90, 164). The name Butajira woreda (Butajira district) was also used to refer to the whole woreda and many previously published mental health researchers used this name (164, 165). However, the woreda was divided into two woreda administrations (i.e., Meskan woreda and Mareko wereda) and Butajira town administration in 2004. Hence, in this thesis, "Butajira district" implies Meskan woreda, Mareko woreda and the Butajira town unless specified.

Butajira is located around 130km away from Addis Ababa, the capital city of Ethiopia. According to the 2017 population projection, the district has a population of 350, 296 (166) and the detailed summary is presented in ***Table 9***. Majority of the population are rural dwellers engaged in agriculture. Muslim followed by Orthodox Christianity. Within the Butajira district, there is one district hospital located in Butajira town and 13 health centers (161). Butajira town is the center of a health and demographic surveillance site (HDSS), since 1987 (167).

Table 9: Residence and sex stratified population of the study woredas projected for the year 2017

Name of woreda in the study settings	Projected population size for the year 2017				
	Urban		Rural		Total
	Female	Male	Female	Male	
Sodo woreda	15,126	14,062	72,252	71,745	173,185
Mesekan Woreda	11,689	12,469	88,176	83,711	196,045
Mareko Woreda	7,106	7,493	33,999	34,608	83,206
Butajira town	36,532	34,513	-	-	71,045

The study sites were selected for the following reasons:

I. Mental healthcare service is integrated into Primary Health Care (PHC) setting in these Woredas (161, 168). Sodo district hosted the PRogramme for Improving Mental health carE (PRIME) project (169), a multi-country research consortium involving five countries (India, Nepal, South Africa, Uganda and Ethiopia), which aimed to develop evidence for the integration of mental healthcare into Primary Health Care (PHC) setting (169). Butajira district was the host of the Butajira study on severe mental disorders (SMD) and subsequently for the Task-Sharing for the Care of Severe mental Disorder in a low-income country (TaSCS) project. TaSCS aimed to test the effectiveness and cost-effectiveness of task sharing care of people with SMD within the PHC setting (161).

II. PHC workers in these woredas are trained with mhGAP intervention guide and deliver mental healthcare services (161, 168).

III. A pool of people living with SMD, including bipolar disorder, were identified (170) and given care. The community-based SMD cohort in the Butajira district, in particular, was established 20 years ago (170, 171) and the course and outcome of SMD has been well described (60, 67, 71, 172).

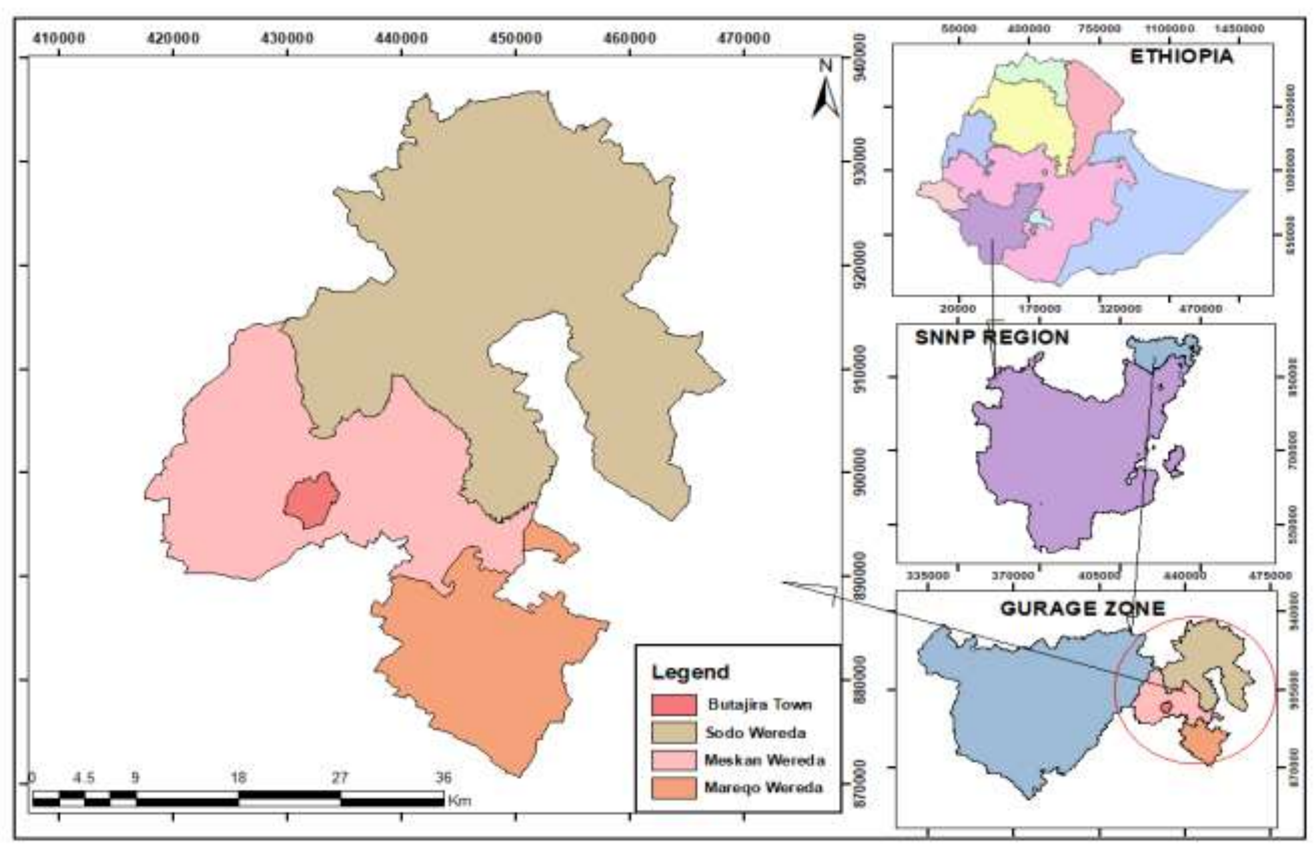


Figure 2: Map of the study setting

4.3 Study design

The study is guided by the Medical Research Council (MRC) framework for the development and evaluation of complex interventions, supplemented with a participatory Theory of Change (ToC) approach (173).

The MRC framework is a framework used to guide the development and evaluation of complex interventions (174). This framework was first developed in the year 2000 and later updated in 2006 and 2019 (175). It has four phases that are expected to take place as an iterative process rather than as a linear process: intervention development, feasibility and piloting, evaluation, and implementation. However, the MRC framework does not include theory-driven approaches to evaluation of intervention (176) or provide guidance on how to incorporate theory driven approaches into the designing and evaluating of complex interventions (174). Additionally, the framework does not provide a clear explanation of the mechanisms of change through which the intervention leads to real-world impact, and for not examining how the intervention interacts with context (177). To

address these limitations, researchers have used MRC framework integrating the Theory of Change (ToC) approach (173, 178).

ToC is a theory driven, participatory approach recommended to understand how and why a particular intervention or program works (179, 180). It was hypothesized that this approach will ensure incorporation of a theory-driven approach to the development, evaluation and implementation of complex interventions. The MRC framework explains the anticipated causal pathway through which the proposed intervention will likely be effective. ToC is built through stakeholders' consensus and an iterative method which allows the intervention to be modified throughout the intervention development and evaluation process through serious of workshops and an 'ongoing process of reflection to explore change and how it occurs. Therefore, it uses the experience and expertise of various stakeholders which helps to ensure the interventions appropriateness and relevance of the intervention, as well as to facilitate its implementation as a result of early buy-in. Stakeholders are also expected to work on ToC map, which is a graphic representation of the causal pathways through which an intervention is expected to achieve its impact within the constraints of the setting in which it is implemented (179). The ToC map includes four key components: (i) Assumptions which are an external condition beyond the control of the project that must exist for the outcome to be achieved, (ii) Intervention which includes different components of the complex intervention (iii) Rationale which are key beliefs that underlie why one outcome is an outcome for the next, and why you must do certain activities to produce the desired outcome, and (iv) Indicators which help in the assessment of the progress of various program components. ToC can be incorporated into, and provide practical guidance for, the different phases of the MRC framework (173). The approach was used to develop, implement and evaluate mental health interventions and mental healthcare plans in some LMICs, including Ethiopia (168, 178, 181-183).

Based on the above descriptions, we integrated the ToC approach into the MRC framework and used it for intervention development and planning and conduct of feasibility phases and illustrated in Figure 3 below.

Feasibility/Piloting
1. Testing procedures
2. Estimating recruitment/retention
3. Determining sample size

ToC Strengthening
1. Identifies formative research questions by highlighting knowledge gap
2. Highlights barriers to implementation early on and helps develop strategies to overcome them.
3. Improves piloting by providing evidence of links between early project activities and short-term outcomes to refine the intervention design

Development phase
1. Identification of evidence base
2. Identifying/developing theory
3. Modeling process and outcome

ToC strengthening
1. Improve intervention design though:
   a. Mental health expert workshop and qualitative study
   b. Consensus building with stakeholders
   c. Designing interventions that aim to cause real-world change
   d. Embedding intervention within the context
   e. Providing a frame "Theory"
2. Creates realistic expectations of impact of the intervention as stakeholders have to compromise on what outcomes are possible within the context and resources.

Evaluation
1. Assessing effectiveness
2. Understanding change process
3. Assessing cost-effectiveness

ToC Strengthening
1. Allows for multiple pre-specified outcomes
2. Combines process and effectiveness evaluations
3. Helps disentangle which intervention components are most effective by explicitly measuring the impact of each intervention pathway

Implementation
1. Dissemination
2. Surveillance and monitoring
3. Long term follow-up

ToC Strengthening
1. Improves dissemination of results with a powerful visual, common sense tool which can be used throughout the project with a diverse range of stakeholders
   a. Intervention description
   b. Local buy-in and adoption of results
   c. Illustrates adaption "active ingredients" of intervention to facilitate adaptation in new context

Figure 3: Theory of Change' within the MRC's framework on complex interventions. (Adapted from De Silva et al, 2015)

This PhD study was carried out in two phases, intervention development and feasibility phases, in line with the first two phases of the MRC framework. Therefore, it is organizer under two main subheadings that reflect the key steps we followed during: (a) Intervention development and (b) feasibility assessment of the developed intervention. The methods employed in each phase of the study are summarized in Figure 4, with details described subsequently.

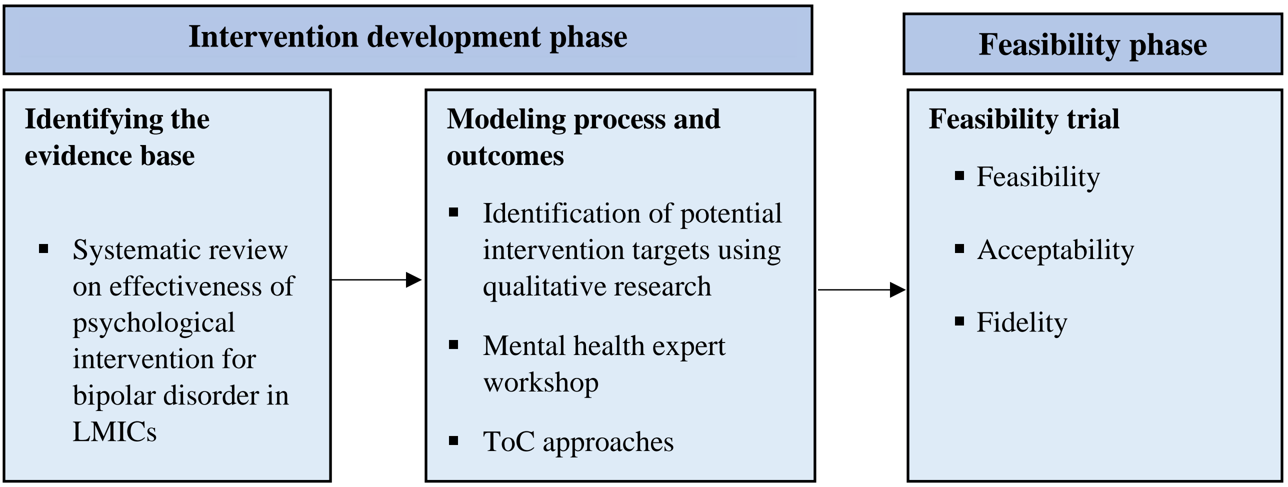


Figure 4: Summary of methods conducted in each phase of the studies

4.4 Intervention development phase

This phase study included collection and synthesis of evidence on effectiveness of psychological interventions from LMICs, understanding the experience of people with bipolar disorder and their caregivers, defining key elements of relevant interventions and acceptability of the interventions. Prioritization of impactful paths within the planned intervention was also done through ToC.

4.4.1 Collating evidence on effectiveness of interventions from LMICs

The MRC framework recommends using existing recent, and high-quality systematic review that is relevant to the context or to conduct a systematic review if one is not available. Therefore, we conducted a systematic review on effectiveness of psychological intervention for bipolar disorder in LMICs because no high-quality systematic reviews were available.

Study design: We used systematic review of existing evidence. We reviewed studies that examined the effectiveness of any type of psychological intervention in terms of improving outcomes of

bipolar disorder, including prevention of relapse or recurrence and hospital admissions; treatment adherence, biological rhythm, quality of life and knowledge and attitude about bipolar disorder among people with bipolar disorder.

Outcomes of interest: The main measures of effectiveness of psychosocial intervention included: number of relapses or recurrence of the illness, severity of mood symptoms, treatment adherence, quality of life, functional status, number of hospital admissions, knowledge and attitudes about bipolar disorder, and stigma and biological rhythm. The review protocol was registered in PROSPERO database (CRD42017054572) (184).

Eligibility criteria: Eligible articles were assessed against the following inclusion criteria:

1. Age: Participants of all ages were included in the study;
2. Diagnosis: Bipolar disorder I or II in any phase of the illness (depressive/manic/mixed episode or in remission);
3. Study Setting: Studies conducted in a LMIC according to the World Bank classification at the time of the study (185);
4. Type of study: (i) Randomized controlled studies (RCT), and (ii) controlled before-and-after studies conducted from LMICs;
5. Comparison groups: Usual care, waiting list control, or an active adjunctive psychosocial intervention;
6. Type of intervention: Any psychosocial intervention delivered either face-to-face (individual or group format) or online;
7. Language: No Language restriction;
8. Year of publication: Primary studies published since the establishment of the respective databases until 2nd week of May 2017 are included in the published paper. ***(Because this systematic review was published in 2018, we included papers published after May 2017 in the thesis's literature review section.)***

Search strategies: We searched PubMed, PsycINFO, EMBASE, Medline, Cochrane database for systematic review, Cochrane central register of controlled trials, Latin America and Caribbean Center on Health Science Literature (LILACs) and African Journal of Online (AJOL) databases since the inception of the respective databases until the second week of May, 2017 with no language restriction. The following terms were used to identify psychosocial interventions: "Psychosocial

intervention” OR “Psychological intervention” OR “Psychosocial therapy” OR “Cognitive behavioral therapy” OR “Cognitive Therapy” OR “Behavior Therapy” OR “Family focused intervention” OR “Family intervention” OR “Family therapy” OR Psychoeducation OR “Interpersonal and social rhythm therapy” OR “Social rhythm therapy” OR “Interpersonal therapy” OR “Mindfulness based cognitive therapy” OR Psychotherapy OR “Expressed emotion” OR “Individual therapy” OR “Group therapy”. The search terms used for bipolar disorder were: “bipolar disorder” OR “Bipolar and related disorders” OR Bipolar OR Mania OR “Major affective disorder”. We used the World Bank definition and list of countries to identify LMICs. The search terms for intervention, bipolar disorder and LMICs were combined with the Boolean term “AND”.

Screening of the identified studies and eligibility: After conducting the search for articles on the databases, the title and abstract were imported to a reference manager (EndNote). Then, duplicates were removed before starting screening. The PhD candidate and one other researcher (RB) did title and abstract screening on 20% of the total article based on the inclusion and exclusion criteria. After discussing on the included and excluded of these 20% of articles and reached on consensus, the PhD candidate did the screening for the remaining. Once the abstracts were screened, the full papers that were included in the abstract were assessed for eligibility. All papers excluded during full text screening and reasons for exclusions were discussed with supervisors (AF and CH) and documented.

Data extraction: First, the data extraction format was adapted from the Cochrane data collection form and piloted. The form included the authors and publication date, study setting, study design, sample size in each arm, outcome and outcome measures, type of intervention, mode of intervention, number and frequency of sessions, duration of follow-up, and intervention providers. Then, for each paper, the PhD candidate and another researcher (RB) did the data extraction independently. Any discrepancies were reconciled on a round table discussion.

Quality assessment: The Consolidated Standards of Reporting Trails (CONSORT)(186) and the Cochrane assessment of risk of bias (187) were used to assess the quality of the studies. The CONSORT checklist has 25 items on the quality of reporting of each section of the trial, including funding sources. Each item was assessed as a reported, partially reported and not reported (186). Whereas, in the Cochrane assessment of risk of bias for randomized controlled trials checklist, the bias is assessed as a judgment (high, low or unclear) for individual elements from five domains:

selection bias (systematic differences between baseline characteristics of the groups that are compared), performance bias (systematic differences between the intervention and control group other than intervention), attrition bias, detection bias (how outcomes were determined), and reporting bias (187). The quality of studies was assessed independently by two researchers (PhD candidate and one research assistant) and any differences were reconciled by involving supervisor (AF). Assessment of quality of the included studies was not used to exclude studies, but to inform interpretation of the findings.

Method of analysis: The key findings were evaluated and summarized narratively in relation to the review equations in figures, tables and text. The original plan was to conduct a meta-analysis and produce summary effect sizes of intervention. However, this was not conducted due to the heterogeneity of the included studies in terms of: type of intervention, number of intervention sessions, length of follow up, format of intervention delivery and qualifications of the persons delivering the intervention.

4.4.2 Modeling process and outcome:

Modeling focuses on identification of potential targets for intervention, the components of the intervention, and the underlying mechanisms by which the interventions will influence outcomes, and predict how they relate to and interact with each other based on the information gathered through the evidence base. First, we conducted a qualitative study by involving people with bipolar disorder and their caregivers in order to understand these potential targets of interventions. Then, we used mental health expert workshop and ToC workshops. A ToC roadmap, which was amenable to change throughout the intervention development and evaluation process, was developed by incorporating feedback from stakeholders.

4.4.2.1 Qualitative study for identification of potential intervention targets

Study design: The study used a qualitative study design to explore experiences of people with bipolar disorder and their caregivers. This includes experience of illness, modifiable psychosocial and treatment related influencing factors for relapse, priority problems that the service users need to be addressed, patients' coping mechanisms with stressful life events and impact of illness on the patients and the family members.

Study population: People diagnosed with bipolar disorder who are receiving mental health care at the health facility or people who were on treatment but who have discontinued taking medications during the data collection time are included in this qualitative study. Additionally, caregivers of people with bipolar disorders have participated in the study. Participants were selected with the following eligibility criteria:

1. Adult people with bipolar disorder who are receiving treatment through the integrated service of PRIME project in Sodo district or receiving care from healthcare setting found in Butajira district;
2. People who are determined to have sufficiently stable mental state to participate in the qualitative study by clinicians who treat them;
3. Able to communicate in Amharic language; and
4. Those who were willing to participate and able to give consent;

Sample size and sampling: A total of 31 participants were approached by field coordinators and 27 (15 people with bipolar disorder and 12 caregivers) agreed and participated in the study. Four participants did not attend at the scheduled interview time because of social obligations: three caregivers were absent because of the death of someone in their village and one PBD could not attend because of an ill relative. Out of 27 participants, 20 were service-user-family caregiver pairs (i.e.,10 caregivers and 10 PBD). Seven participants were unpaired, from seven different families (five PBD and two caregivers). Based on previous studies that reported the role of socio-demographic factors such as age, gender, educational, occupational, and marital status were associated with clinical/functional outcomes of mental illness (35, 188), we selected participants purposively based on these key characteristics. The sample was determined based on data saturation.

Data collection:

We used in-depth interview for people with bipolar disorder and caregivers. First, topic guides for service users and caregivers were developed (Appendix -E). The topic guides cover the following themes: understanding the early signs and symptoms of relapse, priority concerns of people with bipolar disorder and their caregivers, factors that influence the illness outcomes, strategies they use to manage their illness and the impact of illness on people with bipolar disorders and their families. Then, topic guides were translated into Amharic and piloted by interviewing one person with bipolar

disorder and one caregiver to check its clarity and acceptability. Based on the pilot findings, some probes and clarification were made. Finally, pilot interviews were integrated into the main dataset.

Before the data collection, the aim of the study was discussed with primary health care clinicians who were treating the participants in a regular follow-up. The clinicians, then, made the initial assessment of the eligibility of potential participants, particularly concerning the person's current mental health and capacity to participate in the study. Field coordinators then approached all potential participants, informed them about the purpose of the study, and gauged their willingness to participate. All participants from Sodo district were interviewed in their respective health centers in which the participants were getting regular mental health service. Whereas, participants from Butajira district were interviewed at the mental health research project office. All interviews were conducted face-to-face by the PhD candidate in Amharic. Interviews lasted between 40 and 90 min. All interviews were audio-recorded and field notes were taken simultaneously. Data collection was a two-stage process; in the first stage, 21 interviews were completed, transcribed, coded, and analyzed. After discussing these results with co-authors, it was decided to conduct further interviews with the participants in order to fully explore coping strategies. Six further interviews were conducted in this second stage of data collection.

Data analysis: We used thematic analysis, which was conducted in three stages (189) and was influenced by interpretative phenomenological analysis (190). First, during familiarization and coding, all the first stage interviews were transcribed, translated to English, and imported into Open Code 4.03 software for analysis. The PhD candidate and her supervisor (CH) independently carried out line-by-line coding of three randomly selected transcripts. Whenever a new concept appeared in the text, the coders assigned codes and wrote a code definition. They met to refine codes, developing a common codebook through discussion of individual code definitions and assignment. The PhD candidate coded the remaining transcripts based on the codebook, developing and defining new codes where necessary. The second stage involved using OpenCode to facilitate data retrieval and comparison of concepts within each code before grouping of similar or related codes together into clusters to capture the essence of particular themes. Themes were then reviewed to check if they were a credible distillation of experience. In addition, themes were checked to see whether they were clearly and concisely defined with an informative name. Finally, quotes from a range of participants were selected to illustrate themes, and the themes that were not well-represented were dropped.

4.4.2.2 Mental health expert workshop

Study participants: Twelve mental health experts and health professionals from diverse professional backgrounds (two psychiatrists, two public health professionals, four clinical psychologists, one pharmacist, and one social worker) took part in the expert workshop. These experts were selected purposively based on their research, and clinical experience especially in the study area.

Procedures: Three steps were followed to get suggestions and recommendations on the possible culturally appropriate psychological intervention component. First, the PhD candidate presented the key findings from the systematic review and the qualitative study for mental health experts. The qualitative study findings included in the presentation were experience of people with bipolar disorder, priority concerns, factors that have helped them to feel well and factors that have aggravated their illness, strategies they use to cope with stressful life events, and perceived impact of illness. Then, mental health experts discussed on the findings and list modifiable psychosocial factors, illness and treatment related factors. Second, findings from a systematic review that focused on the type of psychological intervention, components of intervention in each intervention, number and frequency of sessions, effectiveness and intervention providers and settings were presented. Then, mental health experts discussed the components on intervention identified through systematic review and suggested components of intervention that can be feasible as well as helpful to address the factors identified in the qualitative study. They also discussed and evaluated the proposed intervention components from the service users and intervention providers' side. From service users' side factors such as time, literacy, social and cultural factors, distance, transportation and other factors were considered. Likewise, from the proposed intervention providers' side, the expected time to cover each component of the interventions, work burden, deliverability or how much the components are easy to deliver, and acceptability of the intervention were discussed. The workshop was held in Addis Ababa. The discussion was facilitated by the candidate and the three-hour discussion which was conducted in a mix of Amharic and English language was facilitated by the First Advisor (AF). Additionally, Mental health experts discussed and suggested number and frequency of sessions, duration of session, implementation techniques, format, and possible intervention providers.

Data collection: The discussion took three hours and it was audio recorded. Minutes was also taken on the key discussion points and final agreement of the experts as well as reasons to reach on

consensus in each topic. Finally, the minutes was checked for completeness against the recorded audio-file.

4.4.2.3 Theory of Change workshops

Participants: Five separate ToC workshops were conducted with various stakeholders: (i) People with bipolar disorder and caregivers, (ii) Women community leaders, (iii) Community and religious leaders (all male), and (iv) PHC workers and district level of government office personnel (manager, mental health focal person, social affairs office) and (v) All participants from the previous four ToC workshops to ensure the views of participants had been incorporated and also to discuss some issues that needed consensus. We carried out a separate workshop for these group of participants in order to avoid power imbalance.

A total of 59 ToC participants from both Sodo and Butajira districts were purposively selected based on their experience in mental health care service delivery, or their roles in traditional/social associations like Idir (traditional burial association) or their use of mental health service. Additionally, PHC workers who had training in mhGAP intervention guide and providing mental health care service were selected for ToC workshops. The first four ToC workshops were conducted in Sodo district and the last ToC workshop was held in Butajira town.

Procedures: All ToC workshops except the final one had two sections: (i) Exploring the feasibility and acceptability of psychological intervention from the community, service users and caregivers, and health care professionals' perspectives, and (ii) Production of a ToC map that indicated the causal pathway through which the proposed psychological intervention was expected to be effective, identification of preconditions, possible barriers and facilitators, and indicators of success in the short, medium, and long term.

First section: This section focused on the feasibility and acceptability of psychological intervention. All the ToC workshops started by introducing the project and aim of the workshops to the participants, and why and how they are selected for discussion and their expected role were discussed. Then, findings from the systematic review, qualitative study and mental health expert workshop were presented. After the presentation, participants in all groups discussed the findings, the potential benefits of psychological intervention, and the feasibility and acceptability of this approach. Likewise, participants were asked to propose intervention providers, when and where the

intervention can be delivered, and the duration and frequently of sessions, as well as intervention components that need to be added or dropped from components suggested by mental health experts. Additionally, some specific discussion points also raised for each participant groups. For example, during workshop with professionals, the possible facilitators and barriers to provide the interventions, what type of care people with bipolar disorder and caregivers need mostly from them, what do they do when they get a patient who need psychological support, what type of training and support they need to provide psychological intervention. Additionally, participants were asked about where did the community members get this kind of support/service and the reasons and what could be the possible facilitators and barriers to get psychological intervention in the health facility.

During community leaders and service users' workshops, the presentations were prepared in Amharic language using Ethiopian alphabet on Power Point Slides. Whereas, in the workshop with PHC workers and district level personnel's, the Slides were in English language. However, the discussions with all group of participants were held in Amharic language. During the discussion, participants were asked to consider anticipated or experienced responses to the intervention in relation to the culture and religion of the society, health system resources, the impact of the socio-economic status of service users and the community, transportation availability, affordability, and accessibility, the PHC workers' time, and any other relevant considerations.

Second section: This step was intended for co-production of ToC map. First, the ideas and procedures of ToC was clarified using metaphors that are commonly used in rural communities. We used farming metaphors to frame some of the questions that were important to describe the key components of ToC map. For example, asking what the farmer wants to see in the long term, what is the right time for farming? What does the farmer need to have before he starts farming? What do farmers do to prepare the land for farming? Which activities should be done first and last, and why? How do the farmers know whether they have the right seed or not? Finally, how do the farmers measure their product? What does it mean in terms of quality and quantity of the product? All their answers were written on a flip chart and then the facilitator explained why he asked the questions about farming and why this approach is needed for the ToC map. Then, the facilitator explained just like in farming, there are activities that should be available to give psychological intervention for people with bipolar disorder and their caregivers. There should be a person who gives the intervention like that of the farmer, the intervention itself can be considered as a seed.

Anytime/season is not appropriate for farming so there may also be an optimal period for a person with bipolar disorder to get psychological intervention. In addition, the facilitator described the need to start the procedure from the long-term impact “what farmers want to see in the long term” and then work backwards.

The actual ToC then started by asking the participants what they want to see in the long run for people with bipolar disorder. Short-term, medium and long-term outcomes and wider impact were agreed, and then the pathways, interventions, preconditions, assumptions and indicators of success were mapped using sticky notes posted on the wall. The sticky notes were rearranged as the discussions proceeded on how one outcome leads to the next or a certain intervention brings a particular outcome. Then, the first ToC map was drafted by reviewing the ToC maps conducted in four workshops, minutes, and the recorded discussions. The goal of the fifth and final ToC workshop was to bring all stakeholder groups to consensus on the content, timing, frequency, duration and number of sessions of the intervention, in the context of broader care for people with bipolar disorder. In an initial presentation, the shared and divergent ideas from the preceding workshops were summarized and used to priority discussion points.

Data collection: All the ToC workshops were facilitated by two PhD candidates and one of them had previous experience in facilitating ToC in the study setting. All ToCs workshops were conducted in Amharic and lasted for an average of five hours. The facilitators moderated the discussion, accepting all ideas and linking back to the themes when new ideas were raised. In the ToC workshops, we drew on the facilitators’ experience in ensuring all participants had an opportunity to express their views and avoiding technical words. The first facilitator also encouraged all participants to give their opinions, identify challenges, and suggest possible solutions for each topic area, summarizing what they discussed, and asking for confirmation. The second facilitator wrote the points raised on flip chart. For each of the ToC workshops, the discussions were audio recorded and minutes were taken by clinical psychologist who was living in the study setting and who has previous experience in other mental health related ToC workshops. Finally, the workshop minutes, drafted ToC maps, and the recorded ToC workshops were reviewed to refine the ToC map and finalize the ToC map and prepare the developed psychological intervention manual ready for pilot testing.

Analysis: All the audio recordings were transcribed verbatim in Amharic and translated to English. The transcripts were imported to Open Code 4.03 to facilitate data management and assist analysis. We used thematic analysis procedures (191). First, MD conducted line-by-line coding of all five ToC workshops' transcripts and shared them with the second author (CH) for review. MD and CH mapped codes onto themes deductively based on key components of the ToC map, including key tasks, intervention, preconditions, assumptions, and indicators, as well as acceptability and feasibility. Finally, we summarized the findings in tables and text and identified illustrative quotes. In each ToC workshop, four draft ToC maps were co-produced through discussion and consensus, then combined by the authors to co-produce a single ToC map. Finally, this final draft ToC map was refined and approved in the fifth ToC workshop with all ToC participants' groups.

Rigor: We triangulated the findings with different information sources to increase trustworthiness. Furthermore, MD and SA were engaged for an extended time in the field (192). Involvement of co-authors with multidisciplinary backgrounds improved data interpretation.

4.5 Feasibility Phase

Feasibility and acceptability of developed intervention

This phase of the study looked in to the feasibility of the developed intervention focused on describing detailed methods for determining the feasibility and acceptability. This phase also included methods used to access the fidelity and competency of intervention providers.

4.5.1 Study design

We used a mixed-methods approach to investigate the feasibility, acceptability, fidelity, and change in symptom severity and perceived utility of the intervention.

4.5.2 Participants

Intervention providers/facilitators: Health professionals were eligible to participate in the feasibility study if they were previously trained on the World Health Organization mental health Gap Action Programme Intervention Guide (mhGAP-IG) which seeks to equip primary care workers with skills to provide frontline care for people with priority mental health conditions, including bipolar disorder. To be eligible, health workers also needed to be actively treating people with mental

illness in their out-patient clinics, able to attend all the training sessions, and to express an interest in taking part in the feasibility study. Seven intervention providers and two supervisors participated in a two-week-long training course on the intervention manual. The training was facilitated by the candidate and a clinical psychologist. In the first week, the professionals took theoretical training and in the second week they practiced applying aspects of the intervention in their clinics. Only four PHC workers and two supervisors were selected for further delivery of the intervention based on their engagement in treating people with mental illness during routine services, completing both the theoretical and practical training, and being able to participate in the intervention during the study period. The providers were supported by weekly supervision and as-needed consultations from the trainers

Intervention recipients: The target sample size was 12 people with BD to allow in-depth exploration of acceptability and feasibility in this pilot study. To explore the acceptability of providing the intervention for people with BD with or without their caregivers involved in the sessions, six of the twelve people with BD received the intervention alone and the remaining6 people with BD received the intervention with their caregivers.

Participants were selected purposively based on gender, socio-economic status, residence and age. First, potential participants were identified by PHC workers from people with BD attending for their regular follow-up in the health center. Then, research field workers approached these potential participants, informed them about the study, and asked for their permission to participate. Those who provided informed consent were linked to the intervention providers. All those who were approached agreed to participate in the study. The sample size for the study was decided in consultation with senior supervisors taking different practical issues into consideration. The eligibility criteria are summarized in **Table *10***.

Table 10: Eligibility criteria for study participants

Participants	Eligibility criteria
People with BD	• Age 18 or above • Diagnosed with BD and on treatment during the study period, • Willing to attend five consecutive weekly sessions. • Psychiatric nurses conducted a clinical assessment to confirm the person's ability to give informed consent and participate in the study.
Caregivers	• Age 18 or above

	• Immediate caregivers of patients with BD • Willing to attend five consecutive weekly sessions.

4.5.3 Outcome and outcome measures

The outcomes measured were feasibility, acceptability, fidelity, and potential benefit of the developed intervention (**Table 11**).

Table 11: Primary and secondary outcomes measured.

Outcomes		Outcomes measures
Primary outcome	Feasibility	Number of People with BD ▪ Participants approached and willing to participate ▪ Dropped out before finishing the intervention ▪ Intervention completion rate
	Acceptability	Satisfaction of intervention providers and service recipients
	Fidelity	Expert review of 25% of the recorded intervention sessions using a fidelity measure created for this project
Secondary outcome	Change in knowledge and skill of intervention providers	Pre- and post-training assessment of perceived knowledge and skills
	Change in symptom severity	Before and after intervention assessment using Patient Health Questionnaire-9 and Young Mania Rating Scale for mania symptoms

1. Feasibility of intervention: We recorded the number of people with BD and caregivers who were approached and agreed to participate. We also recorded the number of sessions completed by participants.

2. Acceptability of intervention: We developed a topic guide and used semi-structured interviews with people with bipolar disorder, caregivers, and intervention providers to explore satisfaction with the intervention, understandability of the content, challenges they experienced during the intervention process and their perceptions of the benefits or any harms of the interventions (Appendix-G and H). All interviews were conducted in Amharic by two experienced researchers who were not involved in the training or delivery of the intervention. Participants were interviewed in a private room, either in the facilities where they received the intervention or in the project office, based on their preference. The interviews were conducted one week after completion of the intervention. Interviews lasted from 20 to 40 minutes and all were audio recorded.

3. Fidelity: A recommended approach to assessing intervention fidelity is to compare the content of 20-40% of recorded intervention sessions to a pre-specified criterion such as a treatment manual (193, 194). All intervention sessions were audio-recorded which resulted in a total of 60 audio records from 12 participants.

A fidelity checklist was developed based on the manual and piloted before starting the intervention study (Appendix-I). The fidelity checklist had two sections: the first section included three items used to assess the general skill of the intervention providers. The second section included specific items for each session, as follows: session-one =2 items, session-two = 3 items, session-three = 4 items, session-four = 3 items and session-five = 2 items. Each item rated in Likert scale ranged from 1 (very poor) to 5 (excellent). Rating of 1 and 2 indicate a lack of adherence and rating of 3 to 5 indicate that the providers were adherent to the intervention manual.

Two MA level clinical psychologists who were not part of the research team carried out the ratings of intervention fidelity. In order to understand the intervention fidelity of each session, they randomly selected three records from each of the five-session which resulted 25% (15/60) of the total records. Then, each of them listened to the selected recorded interventions and rated them independently using the fidelity checklist. For any differences in ratings, the two raters listened again to the session that was rated differently and reconciled their ratings through discussion. Additionally, when providing a score for each session, they also documented their observations on the quality of the intervention delivery and identified any areas that indicated the need for further training.

4. Change in knowledge and skill: We used self-administered pre- and post-training assessment questionnaires to investigate changes in the knowledge and skills of intervention providers. The questionnaires had eight knowledge-related items and eight items linked to skill (Appendix -J). Each item was rated on a Likert scale that ranges from 1 (very poor) to 5 (excellent). The items focused on symptoms and causes of BD (3 items), treatment (3-items), knowledge about how to promote wellness and manage anxiety (1-item), and core skills in the psychological intervention (2 item).

5. Change in symptom severity: We used pre-and post-intervention assessments. We used the Young Mania Rating Scale (YMRS) (195) for manic symptoms and Patient Health Questionnaire-9 (PHQ-9) for depressive symptoms (196) (Appendix -K and L). Both instruments were previously used in Ethiopia (71, 197). The questionnaires were administered by PHC workers who had been trained in the mhGAP intervention guide and the intervention manual. These healthcare workers

were not involved in the direct provision of psychological intervention. Participant information such as age, gender, education, job, duration of illness, and number of previous relapses was also collected at baseline.

4.5.4 Analysis

For the qualitative data, we used thematic analysis. First, interviews were transcribed verbatim, and then translated to English and imported into Open Code 4.03 (198). The first authors carried out line-by-line coding of two randomly selected transcripts, discussed the codes, and developed a codebook. MD coded the remaining transcripts based on the codebook, developing and defining new codes when necessary. In the second stage, we grouped similar or related codes into clusters to capture the essence of particular themes, assisted by Nvivo-12.

For the fidelity assessment, the consensus scores obtained from the two raters for each item within a session were averaged to get mean score for the session. We obtained the overall fidelity measure across all the sections by calculating the mean score of all items across the five sessions (n=15). To understand the changes obtained in symptom severity and knowledge of intervention providers, we used simple descriptive summary measures, and we reported the median score with a minimum and maximum because of the small sample size.

4.6 Data quality assurance

Qualitative study and ToC workshops: The PhD candidate conducted all the in-depth interviews. The ToC workshops were facilitated by the candidate and other PhD candidate who has previous experience in facilitating ToCs with various group in the study site.

Feasibility study: First, a two-weeks training (one week theoretical and one week practical) on the intervention manual was delivered to the intervention providers. Trained psychiatric nurses and PHC workers who have been trained in mhGAP intervention guide conducted the structured interviews before and after the feasibility study. These professionals took training with intervention providers and one additional session on how to administer the tools like Young Mania Rating Scale (YMRS) and PHQ-9. The PhD candidate checked all the collected data for clarity, completeness, and consistency while the interviewers were on the data collection site. The primary reason was to minimize the difficulty of re-interviewing the patients after sending them back to their home which is usually far from the health center. During the intervention delivery period, the candidate was in

the field to collect all the recorded intervention sessions immidiately after the session and transfer them to computer. The data then were deleted from the recorder and to make the recorder ready for use for the next sessions.

4.7 Ethical considerations

This study was carried out with strict adherence to human subject research ethics, such as the Helsinki Declaration (233). First, the study was approved by the Institutional Review Board of the College of Health Sciences of Addis Ababa University (Reference Number 043/17/Psy). Moreover, the following ethical issues were addressed throughout the study.

Informed consent: Information sheet that explains the purpose of the study/intervention, possible risks and benefits of participating in the study, voluntary participation, confidentiality, duration of the intervention, number of sessions, place of intervention, how they are chosen to participate and whom to contact for any question and concern were explained to the potential study participants. Additionally, participants were told they can withdraw from the study any time they want. A copy of information sheet and informed consent are included in as annex (Appendix M and N). After providing the information, written informed consent was obtained from participants who can read and write. For participants who can't read and write, the intervention providers read the information sheet in front of a witness who confirms that full and accurate information was read for potential study participants. Consenting illiterate participants signed with fingerprint and signature from the witness was obtained before engaging them in the study.

Potential risks and benefits:

Potential risks: The risks associated with this research project were expected to be minimal. The potential risks were reduced by ensuring that participants were informed of all potential risks and benefits prior to their decision to voluntary participation. The potential risks and the strategies used for minimizing them are discussed as follows. Psychological distress during in-depth interview and feasibility studies may find discussing personal and community issues distressing. We used skilled and experienced interviewers who could establish good rapport with the participants. These risks were minimized by establishing good rapport with the participants prior to and during the interviews. People with bipolar disorder and caregivers were advised to contact PHC professionals who provide mental health care if they experienced psychological distress following an in-depth interview or ToC

workshop. Each participant (people with bipolar disoder and caregivers) was getting time compensation payment of 100 Ethiopian birr which is around 3 USD.

Potential benefits: This research project was expected to have potential benefits to various stakeholders. People with bipolar disorder and caregivers could benefit from participating in ToC workshop which enable to share their experience and suggest what strategies possibly work related to the intervention provision. Additionally, they would benefit from the contextualized psychological intervention developed. Likewise, clinicians would benefit from the findings and intervention manual.

Privacy and Confidentiality: Privacy of patient was respected and patient's information was kept confidential throughout the research process using the following mechanism; all in-depth interviews and psychosocial intervention were conducted in a quiet place that is suitable to keep the privacy of both the participants and intervention providers/ interviewer. Anonymity of the study participants was maintained by codifying all the questionnaires and interviews. In addition, all the file names or personal identifiers were kept separate from the participants' responses. All the audio files recorded during in-depth interview, ToC workshop and feasibility studies were kept confidential and stored in a password protected computer accessed only by the principal investigator.

4.8 Dissemination of findings

Three manuscripts were published in reputable journals in order to disseminate the findings and to enable the findings to be replicated in other similar settings by clearly describing the methods. The findings were also presented in different international conferences: African Mental Health Research Initiative (AMARI) annual grantees meeting, DELTAS Africa annual grantees meeting and Global Mental Health Conference 2021 (online platform) using oral and poster presentations. The findings on the first three objectives are published in reputable journal. We have also planned in the near future to share the generated evidence through the feasibility study and the developed intervention manual in order to add the knowledge into existing knowledge base, inform policy and practice and to ensure replication of the study findings or support further exploration of the issue by other scholars.

CHAPTER FIVE: RESULTS

In this section we report the findings of the whole PhD work organized in line with the MRC framework following the order in which the evidences were generated. First, we report the findings of the intervention development phase: (i) existing evidence on effective interventions in LMICs; and (ii) modeling process and outcome, which included qualitative study to understand the lived experience of people with bipolar disorder and caregivers, findings from a mental health expert workshop and ToC. Finally, results from the feasibility study of the developed intervention are reported. This includes the feasibility and acceptability of interventions delivered by PHC workers in a rural setting.

5.1 Results of the intervention development phase

5.1.1 Results of identifying the evidence on psychological interventions for bipolar disorder in LMICs: Systematic review

Search results and screening: A total of 7987 articles were identified from the primary search. Of these, 532 were duplicates and were excluded. An additional 7213 were excluded because they were not related to bipolar disorder or to psychosocial interventions during the title screen and a further 162 during the abstract screen. Of the 80 studies included in full text review, 62 were excluded because they were not from LMICs or were not related to bipolar disorder. This resulted in a total of 18 intervention studies for final analysis (Figure 5). Four types of psychosocial intervention were identified: psychoeducation, family psychoeducation, cognitive behavioral therapy (CBT) and mindfulness based cognitive therapy (MBCT) (
Table 12).

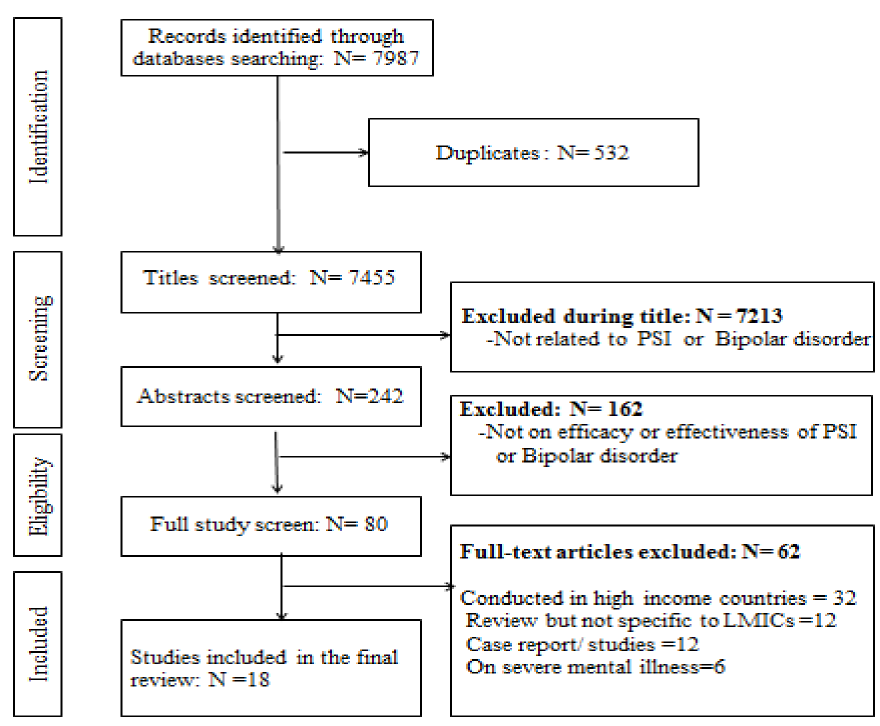


Figure 5: PRISMA flow diagram of the study selection process

Description of studies included in the review: All studies were conducted in upper middle-income countries except one, which was conducted in a middle-income country. There was only one study from Africa (South Africa). All of the 18 studies were published between 2003 and 2017 and were conducted in six countries. Brazil *(199-203)* , Turkey *(204-208)* and Iran *(209-213)* each contributed five studies, and India *(214)*, South Africa*(215)*, and Pakistan*(216)* each contributing only one study. Fifteen studies examined psychoeducation (five individuals, nine groups, and one family intervention); two studies were of group cognitive behavioral therapy; and one study was group mindfulness-based cognitive therapy. All studies were randomized controlled trials, and in all, except two studies, compared adjunctive psychosocial interventions against treatment as usual. The nature of 'treatment as usual' or the type of medication, was not specified in all these studies. the two studies that used an intervention comparison group, had used an equal number of session of relaxation and informal conversation*(201)*, or non-specific support*(211)*. The total number of participants in each study ranged from 26 *(209)* to 59 *(212)* . Overall follow-up time after the end of intervention ranged from 0 to 18 months (

Table 12).

Content and provider of the interventions: Providers of the intervention were specified in the 15 out of the 18 studies and they were included mental health specialists or practitioners (BSc psychiatric nurse (204-206), MSc psychiatric nurse(213), clinical psychologist(202, 211, 216), MSc research psychology students(200), undergraduate psychologist(199), psychiatrists or psychiatric residents (201, 210, 212)), and therapists or persons with some form of clinical experience (203, 208, 214). Although only half of the studies indicated how the interventions were developed or adapted, most of the studies described the core content of the interventions. In most of the intervention's component was educational: education about bipolar disorder, symptoms of mania, depression, mixed and hypomanic episodes, cause and prognosis of bipolar disorder, treatment adherence and side effects of medication, early identification of symptoms of relapse, triggering factors and substance, behavioral strategies such as sleep hygiene and relaxation training, problem solving techniques and relapse prevention strategies.

Case identification and definition of outcomes: In all of the studies participants were aged at least 18 years of age. Most of the study participants were recruited from the outpatient setting of a teaching or university hospital or from a public hospital, they were in remission during recruitment and they were receiving pharmacotherapy and follow-up from psychiatrists. In the majority of the studies, the Young Mania Rating scale (MRS) was used to measure manic symptom severity either as a categorical scale with an average cutoff of nine(201-204, 209, 211, 213-216)or as a continuous scale (199, 200). Similarly, in the majority of the studies, the Hamilton Depression Rating Scale (HDRS) was used to measure depressive symptom severity either as a categorical scale with an average cutoff point of eight (201, 203, 204, 209-211, 213, 214) or as continuous measure (199, 200). Five studies included people with bipolar I or II disorder, three studies recruited only bipolar I cases and two studies recruited only people with bipolar II disorder; the remaining eight studies did not specify the type of bipolar disorder. In sixteen studies, the Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV) was used as the diagnostic tool, with psychiatrist-confirmed diagnoses in eleven studies. Two studies did not describe who confirmed the diagnosis.(206, 214).

Quality of the studies included in the review: The overall quality of reporting of the studies was not satisfactory as per the CONSORT checklist. Only three of the studies were registered in a registration database. Although all studies clearly reported the objective of the study. Only 55 % of the studies reported how the sample size was determined. Source of funding and role of funders

were reported in only two-thirds of the studies. The risk of bias assessed with the Cochrane assessment tool was moderately high. Although randomization was carried out in all the studies, the method of randomization was unclear in 40% of studies and allocation concealment was unclear in 80% of the studies. Fifteen studies were rated as unclear and three studies had high risk of detection bias. One-third of the studies were rated as having high attrition bias due to unequal dropouts in the randomized groups or different reasons for dropout or due to attrition greater than 10%. One-third of studies were rated as high risk of reporting bias because they did not report the mean and standard deviation of mood severity symptoms, between group differences for selected outcomes, and number of participants who had relapse/recurrence

Table 12: Summary of studies, interventions and patient characteristics for included studies

Authors	Sample size at Baseline (I/C)	Intervention / control	Mode of intervention	Number of sessions	Duration (weeks)	Duration of follow-up (months)
Faria. et al, 2014 (Brazil)	32/29	PE/TAU	Individual	6	6	Pre-post
Husain. et al, 2017(Pakistan)	18/16	PE/TAU	Individual	12	12	Pre-post
Eker & Harkin, 2012(Turkey)	36/35	PE/TAU	Group	6	6	Pre-post
Cuhadar. et al, 2014(Turkey)	32/31	PE/TAU	Group	7	7	Pre-post
Rahmani. et al, 2016(Iran)	38/38	PE/TAU	Group	10	5	Pre-post
Dogan. et al, 2003(Turkey)	16/16	PE/TAU	Individual	3	3	3
George. et al, 2013(India)	30/30	PE/TAU	Group	4	16	3
Kurdal. et al, 2014(Turkey)	40/40	PE/TAU	Group	21	11	3
Faridhosseini. et al, 2017 (Iran)	13/13	PE/TAU	Group	8	4	6
Cardoso. et al, 2014 (Brazil)	32/29	PE/TAU	Group	6	6	6
Bahredar. et al, 2013(Iran)	15/15/ 15	PE/TAU/placebo	Group	9	9	6
de Barros. et al, 2012 (Brazil)	32/23	PE/ placebo	Group	16	16	12
Gumus. et al, 2015(Turkey)	41/41	PE/TAU	Individual	4	4	12
Javadpour. et al, 2013 (Iran)	54/54	PE/TAU	Individual	8	8	18
Bordbar. et al, 2009(Iran)	29/30	FPE/TAU	Group	1	1	12
Costa. et al, 2012(Brazil)	27/14	CBT/TAU	Group	14	14	6
Gomes. et al, 2011(Brazil)	23/27	CBT/TAU	Group	18	22	12
Ives-Deliperi. et al, 2013 (South Africa)	16/7/ 10	MBCT/TAU	Group	8	8	Pre-post

*** Psychoeducation (PE), Cognitive Behavioral Therapy (CBT), Family Psychoeducation (FFT) And Mindfulness Cognitive Behavioral Therapy (MBCT), Intervention versus control (I/C)*

Effectiveness of interventions

Prevention of relapse /recurrence: Six studies (four psychoeducation, one family psychoeducation and one CBT) examined the impact of the psychosocial intervention on prevention of relapse or recurrence (***Table 13***). Psychoeducation was effective in reducing relapse rate (204, 209, 210, 212), as well as increasing mean time to first relapse (212). However, one study showed that psychoeducation was not effective in people who had multiple previous relapses (201). Cognitive behavioral therapy was ineffective in decreasing the number of relapses, but was effective in prolonging the median time to first relapse compared to treatment as usual (203).

Table 13: Effectiveness of psychosocial intervention for prevention of relapse/recurrence

Authors	Intervention group	Sample size during final analysis(I/C)	Outcome measured	Proportion with outcome		Test statistics & p-value
				IG	CG	
de Barros, 2012 (Brazil)	G-PE Vs placebo	28/18	Depressive relapse	-	-	P = 0.18
			Manic relapse	-	-	P = 0.09
Gomes, 2011 (Brazil)	G-CBT Vs TAU	22/25	Relapse	14/23	14/27	$X^2 = 0.28$; P= 0.590
			Time to first relapse (Median & range in weeks)	31 & 66	11.5 & 48	Z = -2.554; P= 0.011
Gumus, 2015 (Turkey)	I-PE Vs TAU	37/41	Recurrence	7/37	14/41	$X^2 = 1.583$; P = 0.21
			Patients experienced more than one recurrence	2	8	$X^2 = 0.36$; P = 0.221
Faridhosseini, 2017 (Iran)	G-PE Vs TAU	12/12	Recurrence	1/13	9/13	P=0.001
			Patients experienced more than one relapse	0	2	
Javadpour, 2013 (Iran)	I-PE Vs TAU	45/41	Average number of recurrences	0.77	2.02	P < 0.001
Bordbar, 2009 (Iran)	G-FPE Vs TAU	29/28	Total no. of relapse	4 /29	9/28	P = 0.006
			Patients experienced more than one recurrence	1	2	
			Mean time to first relapse in month	6	4.8	

** Group Psychoeducation (G-PE), Individual Psychoeducation (I-PE), Group Cognitive Behavioral Therapy (G-CBT), Treatment as Usual (TAU), Group Family Psychoeducation (G-FPE), Intervention versus control (I/C)*

Reduction in symptom severity: Nine studies (seven psychoeducation, one CBT and one MBCT) assessed the effectiveness of psychosocial intervention in reducing symptom severity. One study reported change in mood symptom severity within each of the randomized groups (207) (***Table 14***). Studies reported significant reduction in general psychiatric symptom severity(207), depressive symptom severity (200, 210, 216) and manic symptom severity(199, 200, 209, 210,

216), immediately post-intervention, and during follow-up. However, in one study where 60% of total participants had more than 10 previous bipolar episodes, there was worsening of depressive symptoms in both groups and there was significant change and between group difference in manic symptoms(201). CBT was effective in reducing depressive and anxiety symptoms compared to treatment as usual (202) . MBCT was associated with significant improvement in anxiety symptoms, emotional dysregulation and mindfulness, but did not reduce depressive symptoms, among intervention groups compared to the waiting list bipolar patients (215).

Table 14: Effectiveness of psychosocial intervention for reducing symptom severity.

Authors	Sample size (I/C)	Intervention	Assessment time (month)	Test statistics & p-value	Measure of effect
Mood symptom severity					
Dogan. 2003	14/12	I-PE Vs TAU	3	I-PE; Z=2.41; P < 0.01⁺	
				TAU; Z=1.05; P>0.05 ⁺	
Depressive symptom					
Faria, 2014	19/26	I-PE Vs TAU	Post-intervention	P = 0.40	AMD = -1.86 (-6.34, 2.61)
Husain, 2017	16/11	I-PE Vs TAU	3	Z=3.21; P= 0.001	AMD = -10.3 (-16.8, -4.5); SES=-1.17
Javadpour, 2013	45/41	I-PE Vs TAU	18	P < 0.001	
Faridhosseini, 2017	12/12	G-PE Vs TAU	Post-intervention	P =0.58	M= 1.0; SE=1.78
Cardoso, 2014	19/26	G-PE Vs TAU	Post-intervention	F = 0.66; P= 0.81	
			6	F = 0.99; P= 0.324	
de Barros, 2012	28/18	G-PE Vs Placebo	12	P = 0.820	ES=0.007
Costa, 2012	25/12	G-CBT Vs TAU	6	P < 0.05	
Ives-Deliperi, 2013	16/7/ 10	G-MBCT Vs TAU	Post-intervention	P >0.05	
Manic symptom					
Faria, 2014	19/26	I-PE Vs TAU	Post-intervention	P = 0.06	AMD = -5.93 (-0.28; -12.15)
Husain, 2017	16/11	I-PE Vs TAU	3	Z=4.67; P < 0.001	AMD = -6.0 (-8.7,3.7); SES = -1.18
Javadpour, 2013	45/41	I-PE Vs TAU	18	P < 0.001	
Faridhosseini, 2017	12/12	G-PE Vs TAU	Post-intervention	P = 0.04	M=1.91; SE=0.88
Cardoso, 2014	19/26	G-PE Vs TAU	Post-intervention	F = 2.16; P= 0.15	
			6	F= 2.94; P= 0.09	
de Barros, 2012	28/18	G-PE Vs Placebo	12	P= 0.72	ES =0.02
Costa, 2012	25/12	G-CBT Vs TAU	6	P >0.05	
Anxiety symptoms					
Ives-Deliperi, 2013	16/7/ 10	G-MBCT Vs TAU	Post-intervention	t-test = 2.3, P=0.05	
Costa. et al, 2012	25/12	G-CBT Vs TAU	6	P= 0.02	R^2 = 0.9
Emotional dysregulation					
Ives-Deliperi, 2013	16/7/ 10	G-MBCT Vs TAU	Post-intervention	t-test = 4.1, P=0.01	

** Individual Psychoeducation (I-PE); Group Psychoeducation (G-PE); Group Cognitive Behavioral Therapy (G-CBT); Mindfulness Cognitive Behavioral Therapy (MBCT); Mean (M); Standard Error (SE); Adjusted Mean Difference (AMD); The comparison was made within arm and the reported result for the treatment group (+); Standardized Effect Size (SES); squared value of correlation coefficient or the proportion of explained variation(R2), Intervention versus control (I/C)*

Improvement in biological rhythms: Only one study(199) from Brazil assessed the effectiveness of six sessions of complementary psychoeducation in improving biological rhythm (sleep, activity, patterns of habitual daily behavior (social rhythm) and eating pattern) among patients with bipolar disorder, 80% of whom had more than six previous bipolar episodes. The study reported significant improvement in the control rather than the intervention group (Adjusted Mean Difference = -10.84; 95% CI= -20.6, -1.07; P = 0.03)(199).

Improvement in knowledge, attitude and internalized stigma: Among the four psychoeducation studies identified (206, 207, 214, 216), three studies assessed the effectiveness of psychoeducation in improving knowledge and attitudes about bipolar disorder, and one trial assessed the effectiveness of psychoeducation in reducing internalized stigma. Two of the four studies reported within group difference by comparing post-intervention against baseline scores in each group(206, 207). Generally, the findings showed a positive effect of psychoeducation in improving knowledge and attitudes about bipolar disorder and internalized stigma.

Improvement in treatment adherence: A total of nine studies, eight psychoeducation and one family focused intervention, reported short-and long-term improvements treatment adherence compared to treatment as usual (207-214, 216) (***Table 15***).

Reduction in hospital admissions: A total of five RCTs that assessed the effectiveness of individual, group or family psychoeducation in reducing hospital admission were identified. Generally, the studies showed that fewer people with bipolar disorder were admitted to hospital in the intervention group compared to the control group (204, 209, 210, 212).

Table 15: Effectiveness of psychosocial intervention to improve adherence.

Authors	Sample size (I/C)	Measurement	Follow-up after Post-intervention (month)	Group	Assessment time point (M±SD/M/%)		Test statistics & p-value	Measure of effect
					Baseline Assessment	End-line Assessment		
Adherence to Medications								
Husain, 2017 (Pakistan)	16/11	MMRS	-	I-PE	1.7± 1.7	0.9±1.4	Z= 2.37; P =0.018	AMD= -1.22 (-2.18, .14); SES= 0.81
				TAU	1.3 ± 1.7	2.1± 1.5		
Rahmani, 2016 (Iran)	36/36	MARS	-	G-PE	6.8 ± 1.9	9.4 ±2.4	t-test=0.29; P< 0.001	AMD = 2.3 (2.21, 2.14)
				TAU	6.6 ± 1.4	7.1 ±2.2		
		Total score in medicine adherence check list	-	PE	10.6 ±2.5)	17.8 ± 3.7	t-test = 0.35; P<0.001	AMD = 7.7 (7.20, 9.50)
				TAU	9.8 ± 2.2	10.1 ± 2.3		
Javadpour, 2013 (Iran)	45/41	MARS	18	I-PE	-	7.91	P=0.008	
				TAU	-	3.73		
Bahredar, 2013 (Iran)	15/15/ 15	MARS	6	G-PE	6.27±0.88	7.92± 1.38	F(2,31)=55.1; P<0.001	
				TAU	6.53±0.64	4.33± 0.49		
				Placebo	6.47±0.52	4.36± 0.67		
Bordbar, 2009 (Iran)	29/28	Duration of Continuing medication in month	3	G-FFT	-	2.46 ± 0.46	t-test = 1.23; P = 0.227	
				TAU	-	2.67 ± 0.48		
			6	G-FFT	-	5.76 ± 0.51	t-test = 4.36; P <0.001	
				TAU	-	5.00 ± 0.77		
			9	G-FFT	-	8.48 ± 0.95	t-test = 4.88; P <0.001	
				TAU	-	7.04 ± 1.26		
			12	G-FFT		11.41±1.02-	t-test = 6.88; P <0.001	
				TAU		9.14± 1.43		
Dogan.,2003 (Turkey)	14/12	Proportion of user of Lithium regularly	-	I-PE	35.7 %	85.7 %	P= 0.008	
				TAU	50%	41.7%		
		Proportion of Normal Serum lithium level	-	I-PE	57.1%	100%	P= 0.016	
				TAU	58.3%	58.3%		
Eker & Harkin, 2012 (Turkey)	30/33	MARS	-	G-PE	40%	86.7%	x^2=24.649; P < 0.01	
				TAU	38.9%	24.2%		
George, 2013 (India)	24/26	patient's diary & Counting tablets		G-PE	-	100%	P=0.111	
				TAU	-	84.6%		
Adherence to psychiatric visit								
Bordbar, 2009 (Iran)	29/28	Number of psychiatric visits	3	G-FFT	-	2.76 ± 0.43	t-test = 1.38; P< 0.017	
				TAU	-	2.57 ± 0.57		
			6	G-FFT	-	5.34 ± 0.81	t-test =3.72; P< 0.001	
				TAU	-	4.46 ± 0.96		
			9	G-FFT	-	7.72 ± 1.36	t-test = 3.98; P< 0.001	
				TAU	-	6.21 ± 1.50		
			12	G-FFT	-	10.34 ± 1.54	t-test =5.52; P< 0.001	
				TAU	-	7.86 ± 1.84		
Faridhosseini, 2017 (Iran)	12/12	Service users report	6	G-PE	-	3.25 + 0.69	P = 0.02	
				TAU	-	1.41 + 1.67		

*** Treatment as Usual (TAU); Individual Psychoeducation (I-PE); Group Psychoeducation (G-PE); Mean (M); Standard Deviation (SD); Adjusted Mean Difference (AMD); Standardized Mean Difference (SMD); squared value of correlation coefficient or the proportion of explained variation(R^2), sample size during the final analysis in the Intervention versus control (I/C)*

Improvement in quality of life (QoL) and functional status

A total of 10 of the 18 studies, nine psychoeducation and one CBT, assessed the effectiveness of the intervention in improving functional status and QOL and the findings were mixed (***Table 16***). Half of the studies reported, significant improvement in various domains of quality of life in the intervention compared with the control groups: functioning (205, 207, 211), general health (207), physical, social (207, 210), environmental and mental health domains of quality of life (210) and in the overall quality of life (216). In one study, there was significant improvement in all domains of quality of life except the mental health domain in those receiving CBT compared to treatment as usual(202). The rest of the studies didn't report significant difference between groups (200, 201, 206, 209).

Table 16: Effectiveness of psychosocial intervention to improve quality of life and functioning.

Reference	Sample size (I/C)	Intervention	Follow-up (month)	Outcome	Test statistics & p-value	Measure of effect
Husain, 2017 (Pakistan)	16/11	I-PE Vs TAU	3	Overall QOL in EQ-5D index	Z=2.47; P=0.01	AMD =0.24 (0.1, 0.5); SES=0.88
				Overall QOL in EQ-5D VAS	Z=3.65; P<0.001	AMD =26.8 (12.2,41.8); SES=1.14
Dogan, 2003 (Turkey)	14/12	I-PE Vs TAU	3	General health domain	Z=2.56; $P < 0.01^{+}$	
				Physical aspect	Z=2.67; $P < 0.01^{+}$	
				Psychological	Z=1.58; $P > 0.05^{+}$	
				Social aspects	Z=2.10; $P < 0.05^{+}$	
				Environmental	Z=1.38; $P > 0.05^{+}$	
Javadpour, 2013 (Iran)	45/41	I-PE Vs TAU	18	Physical aspect	P< 0.001	
				Mental health	P< 0.001	
				Social aspects	P< 0.001	
				Environmental	P< 0.001	
Faridhosseini 2017 (Iran)	**12/12**	G-PE Vs TAU	-	Overall QOL	P=0.196	M=3.12; SE=2.34
Cuhadar, 2014 (Turkey)	24/23	G-PE Vs TAU	-	Emotional functioning	Z= -0.21; $P=0.08^{+}$	
				Mental functioning	Z= -1.93; $P=0.05^{+}$	
				Sexual functioning	Z= -0.34; $P=0.73^{+}$	
				Feelings of stigmatization	Z= -0.95; $P=0.34^{+}$	
				Introversion	Z= -1.50; $P=0.13^{+}$	
				Domestic relationships	Z= -2.18; **$P=0.03^{+}$**	
				Relations with friends	Z= -1.59; $P=0.11^{+}$	
				Participating in social activities	Z= -1.80; $P=0.07^{+}$	
				Daily and recreational activities	Z= -0.15; $P=0.88^{+}$	
				Taking initiative & using one's potential	Z= -0.00; $P=1.00^{+}$	
				Work	Z= -0.54; $P=0.59^{+}$	
	40/40	G-PE Vs TAU	3	Emotional functioning	t-test = 4.04; P< 0.001	
				Intellectual functioning	t-test = 7.46; P< 0.001	
				Sexual functioning	t-test = 1.87; P> 0.050	
				Feelings of stigmatization	t-test = 7.84; P< 0.001	

Kurdal, 2014 (Turkey)				Social withdrawal	t-test = 7.00; P< 0.001	
				Household relations	t-test = 7.84; P< 0.001	
				Relations with friends	t-test = 3.46; P< 0.001	
				Participating in social activities	t-test = 3.66; P< 0.001	
				Daily and recreational activities	t-test = 3.11; P< 0.005	
				Taking initiative & self-sufficiency	t-test = 3.61; P< 0.001	
				Occupation	t-test = 2.01; P< 0.050	
Bahredar, 2013 (Iran)	15/15/15	G-PE Vs Placebo & TAU	6	GAF score	F (2,31) = 90.93; P< 0.001	
Cardoso, 2014 (Brazil)	19/26	G-PE Vs TAU	6	Functional capacity	F=0.08; P= 0.78	
				Pain	F=1.98; P= 0.17	
				General health status	F=0.04; P= 0.84	
				Vitality	F=0.39; P= 0.54	
				Social aspects	F=0.62; P= 0.44	
				Emotional aspects	F=0.24; P= 0.63	
				Mental health	F=1.19; P= 0.28	
de Barros, 2012 (Brazil)	28/18	G-PE Vs Placebo	12	Social domain	P=0.42	ES=0.42
				Environmental domain	P=0.82	
				Functioning	P=0.59	ES=0.03
				Clinical improvement patient view	**P=0.02**	ES=0.35
				Clinical improvement clinician view	P=0.57	ES=0.04
Costa, 2012 (Brazil)	25/12	G-CBT Vs TAU	6	Functional capacity	P = 0.007	R^2 = 0.65
				Pain	P =0.020	R^2 = 0.60
				General health status	P = 0.002	R^2 = 0.77
				Vitality	P = 0.036	R^2 = 0.46
				Social aspects	P =0.044	R^2 = 0.41
				Emotional aspects	P = 0.001	R^2 = 0.56
				Mental health	**P = 0.081**	R^2 = 0.46

**Individual Psychoeducation (I-PE); Group Psychoeducation (G-PE); Group Cognitive Behavioral Therapy (G-CBT); Global Assessment of Functioning Score (GAF Score), Mean (M); Standard Error (SE); Adjusted Mean Difference (AMD); Standardized Mean Difference (SMD); the comparison was made within arm and the reported result for the treatment group (+); squared value of correlation coefficient or the proportion of explained variation(R2); Sample size during final analysis in Intervention (I) versus control (C) = (I/C).

5.1.2 Result from modeling process and outcomes

(i) Findings of qualitative study on potential intervention targets

A total of 27 participants were interviewed (15 people with bipolar disorder and 12 caregivers). Among participants, nearly half of them (12/27) were female, two-thirds (18/27) were married, about a third were farmers (n=10) and illiterate (n=11). Seven out of 12 caregivers interviewed were the spouse (wife/husband) of the people with bipolar disorder. Findings are organized into three main themes: expressions and experiences of illness, managing self and living with otherness, the costs of affliction which included sub-themes, as described in Figure 6.

KEY

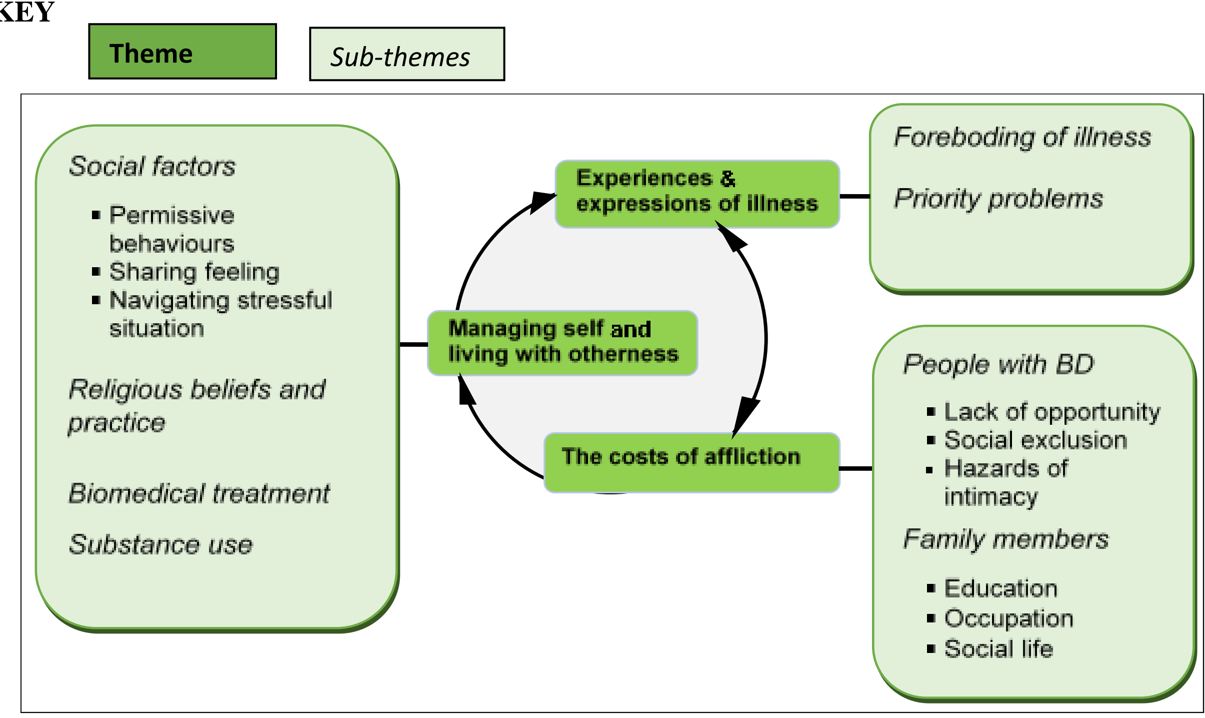


Figure 6: Themes and subthemes for experience of people with bipolar disorder

Experiences and expressions of illness

Forebodings of illness

Most caregivers described increased irritability, aggression, loss of respect for others, disturbed sleep, carelessness about what the people with bipolar disorder said or how they dressed, and laughing or talking to themselves as common signs that the people with bipolar disorder was beginning to experience an illness episode. These signs triggered worry for caregivers. One caregiver described the problems as

> *"…every time when he starts to insult us, and quarrel with other people for irrational reasons as well as when he talks to himself, I will be aware of his situation and conscious about his illness. He doesn't violate others' rights when he is normal. So, I feel worried when he starts to argue with people and becomes aggressive" 25-year, Female-Caregiver ID014, Butajira*

While some people with bipolar disorder also identified sleep disturbance and irritability as common forewarnings of upcoming illness episodes, they also noticed other signs, including heavy-headedness and lack of interest in activities or, alternatively, feeling unusually energetic and excessive talking. Recognition of these signs often induced anxiety and sometimes triggered actions from the people with bipolar disorder designed to contain or treat the illness:

"I feel heavy headed (ጭንቅላቴን ክብድ ይለኛል) …. there is a time that I become disinterested to do something that I planned to do. Then I realize that I'm going to get sick" 23-year, Male-PBD, ID20, Sodo-district

"At the beginning, I increase talking and my mind gets occupied with something and I feel anxious...umm… I talk too much and say things that are culturally inappropriate, I know that I'm going to have illness, so I tell them [family members] to chain me…." 30-year, Male-PBD ID23, Butajira

Differing priorities of people with bipolar disorder and their family members

Sleep disturbance and aggressive behavior were the biggest concerns for caregivers, associated with threats to the safety and health of others:

> *"… During his illness, he was not sleeping the whole night. At that time, I was worried that he might slit the throat of one of my children; so, we were not sleeping, we were suffering a lot ... we don't need anything else than to get him sleeping well. When he sleeps well, all the family members feel well and the children start to gain weight…above all lack of sleep is very much difficult…" 35-year, Female-caregiver ID013, Butajira*

However, people with bipolar disorder were mostly concerned about the incurable nature of the illness, related problems like feeling of inferiority because of having mental illness and worried about why they had been singled out for this affliction. They were also troubled by the need for long-term medication and their experiences of medication-related problems. Some other participants reported that they always ask God for how long they take medication and given answer for their questions.

> *"…. I'm always asking myself 'how long am I going to take medication?'; I ask God how long I live with this illness? why doesn't God take this illness off from me? Why doesn't God say enough? Is it as long as I live? Am I taking medication until I die? People always considered me as mentally ill who can't think and do things by myself, aggressive, and insulative. I'm always crying and praying in front of God. I don't know why, God made me inferior than other people. I don't know when he would say enough [participant distressed and tearful]" 27-year, Female-PBD ID005, Butajira*

Managing self and living with otherness

Quarrels and sharing feelings- the role of social relationships in shaping illness experience

Participants reported that periods of illness would occur after a period of wellness. They described how longstanding animosities formed the backdrop to particular incidents which were seen as turning points, precipitating transition into illness.

Permissible behaviors- making sense of conflict and disagreement

Most participants described a circular relationship between social factors and the intensity of the illness. Negative social interactions had the effect of triggering illness; concurrently, the illness had the effect of worsening social conflict people with bipolar disorder explained that ongoing disagreements and conflict were a major cause for the origin of their illness, a trigger during a period of wellness and an exacerbate during an illness episode.

> *"My half-brother always speaks to me as if the house and place/land that I'm living currently does not belong to my father. He even threatened me to get me to leave… so this makes my illness worse…when my illness was back last time, he was accusing me of being a thief…he insulted me as a thief" 34-year, Male-PBD ID018, Sodo-district*

Labelling of the person with bipolar disorder as mentally unwell aggravated social interactions, providing a rationale for grievances from community members whilst causing frustration for the person with bipolar disorder and caregivers alike: people with bipolar disorder get frustrated because of their illness label, any disagreement is perceived as being due to their illness. Not being allowed to express "normal" response to the disagreements is perceived to have a negative effect, making the patient angrier, and potentially triggering or worsening their illness.

> *'…there can be disagreement among people but, when we quarrel with anyone, they say "go to Amanuel hospital [mental hospital] if you finish your medication" ...they don't take it as a normal behavior of people, which is very annoying for him [patient], even for me.' 25-year, Female-Caregiver ID014, Butajira*

Concomitantly, caregivers perceived that the PBD was sensitive to minor day-to-day disagreements which were seen to trigger their illness.

> *"Every normal individual may have some issue when they are living in marriage…. For him [patient] minor disagreement is enough to bring his illness back, despite taking medication properly…" 22-year, Male-caregiver ID021, Butajira.*

The dilemmas of 'Sharing feelings'

Participants expressed different perceptions regarding sharing their feelings with others; some people with bipolar disorder shared their feelings with families and friends because they felt that they received an appropriate response, a sense of solidarity and support that made them feel better.

> *"I share my feeling to my sisters, brothers and friends too and it helps me a lot. They let me know that I am not the only person who has a problem; it can happen to anyone …they tell me that they even sometimes experience similar problem, but they tried to tolerate and let the challenges pass. Thus, they advise me not to give up and so on" 23-year, Male-PBD ID20, Sodo-district*

Some other people with bipolar disorder stated that, although they recognized the value of sharing their feelings with others and noted the damaging effects of not doing so, they felt unable to discuss with others due to their belief that no one wanted to hear them. Alternatively, they lacked a confidante whom they trusted sufficiently not to divulge personal information to others.

> *"I don't share my feeling to other people because loving people is possible but, trusting all is difficult. No one is able to put aside their own problems to help me or they may even say she said this and that, and I don't want to be a topic of discussion in my neighborhood coffee ceremony ...I keep everything to myself and I know that not sharing my internal feeling harms me". 27-year, Female-PBD ID002, Butajira*

However, some caregivers believed that the person with bipolar disorder did not want to, or was incapable of, discussing their problems in such a way that would allow them to meaningfully address them. Rather, caregivers complained about destructive behavior, irresponsibility and a lack of engagement in problem-solving.

> *"He does nothing; rather he gets angry and insults people around him or breaks anything he finds near to him without taking consequences into consideration, rather than looking for a solution". 42-year, Female-Caregiver ID027, Sodo-district*

Other caregivers reported that people with bipolar disorder do nothing to solve their problem or ask people to help them.

> *"He doesn't know how to solve problems with planning… umm… there is no discussion; he just keeps asking God to do something miraculous for him" 35-year, Female-caregiver ID013, Butajira*

"I leave the place and go somewhere to console myself"- navigating stressful situations

Most participants spoke of trying to avoid troublesome social experiences which they associated with the beginning of illness as being more helpful than getting help after they had become unwell. Some PBD preferred to avoid social events of situations which they perceived to be stressful:

> *"I believe that there is problem related to this. I don't feel good when there is crying/ shouting when someone die because the shouting makes me emotional and I absorb the sorrow. People with mental illness are like a sieve, all the sorrow goes through his body and hurts him a lot (የአእምሮ ህመም ያለበት ሰው እንደወንፊት ነው ሀዘኑ ሁሉ ወደ ሰውነቱ ይገባና በጣም ይጎዳዋል) ...so I will see my condition and If I feel unwell, I leave it" 48-year, Male-PBD ID 003, Meskan-Woreda*

Caregivers explained that by understanding the factors which exacerbated illness, they could modify their interactions with the PBD to reduce provocation in an effort to decrease the potential for return of illness:

> *"When he [patient] talks loud because of anger, we don't respond to him, I keep quiet… so that he becomes calm…umm…if someone gets angry and talks loudly, it is good to be*

quiet, otherwise it makes the person more angry and brings the illness back" 25-year, Female-Caregiver ID014, Butajira

Some PBD reported taking actions to change their surroundings; for example, chatting with friends or leaving a situation in order to neutralize their bad feeling.

> *"In order to forget a situation that makes me worried, I leave the place and go somewhere in order to console myself ...I know the things that make my illness worse, so I try to control them" 30-year, Male-PBD ID017, Butajira*

Managing symptoms "avoiding and using substance"

Participants take lesson from their illness experience to avoid or use substance in order to manage their symptoms. Some participants reported a positive role of alcohol use and Khat, to improve their sleep and medicate their illness symptoms

> *"Sometimes, he [he patient] has sleep problem so, he disturbs the families wake-up from his sleep and going here and there. Thus, he drinks alcohol to sleep well so that he doesn't disturb anyone." 63-year, Male-Caregiver ID012, Sodo-district*

On the contrary, most participants agree that avoiding substance use like Khat and alcohol was helpful to improve sleep and relationships with others, whilst also reducing the risk of directly triggering or worsening their illness.

> *"... I was chewing a lot so it has worsened my illness. Now, I stopped chewing for the last eight years because of my religious convictions. It [stopping chewing] has helped me a lot. For example, now, I sleep well, I have good relationship with others, I spend my time with my wife and children and I'm not irritable as before, I also eat well..." 30-year, Male-PBD ID017, Butajira*

Strength and healing- the role of religious beliefs and practices

There was a broad agreement among participants that religious practices such as praying, going to holy water (holy water is water that has been sanctified by a priest for the purpose of baptism, the blessing of persons, places, and objects, or as a means of repelling evil and treatment of illness) and listening to religious song were a positive influence upon the person's emotions, helping them to feel calm and encouraged when they experienced personal or interpersonal problems.

> *"I read the bible and listen to religious songs on Sunday. When I read the bible, it helps me to feel hope, for example, the bible says, "blessed is the man that endures temptation..." So, it reassures me and helps me to be strong. It indicates how common it is for people to face several problems and how much we should be strong. Everything written in the bible is true, so it gives me energy and helps me not to think too much" 23-year, Male-PBD ID20, Sodo-district*

Some participants reported that things happened according to the will of God. Therefore, they came to accept problems that could not be reversed or changed and found this acceptance calming:

My illness started because of grief related to the death of my brother and became worse when my mother and my children died… I realized that I couldn't return things that are already lost. Everything happened in the will of God, he created us and we will pass, our time is already known by him so now I stopped worrying about them. I thank God and tell him to keep the rest of the children safe. 27-year, Female-PBD ID002, Butajira.

However, some participants noted that there were difficulties in using spiritual treatment in the form of holy water and biomedical treatment (medication) simultaneously. For some, this was a matter of creating confusion about which treatment had been effective, while for others, the two paradigms were more fundamentally incompatible because they believed that dependence on holy water necessitated abandoning biomedical treatment as it required a demonstration of faith.

"…. she was not taking medication when we were in the holy water site because people told us it is not right to use holy water and medication simultaneously. Because this will make it difficult to know which bring the change, I mean the medication or the holy water" 50-year, Male-Caregiver ID011, Sodo district

"Nothing helps him other than medication"- the role of biomedical services

Both PBD and caregivers emphasized the power of biomedical treatment in alleviating symptoms of illness:

"…the only thing that helped him to feel better is medication especially the injection. Nothing helps him other than medication" 32-year, Female-Caregiver ID015, Sodo-district

All participants agreed that treatment discontinuation was a major problem which could trigger the patients' illness after remission and worsen the illness once it had returned. However, most participants explained that treatment-related issues such as increased weight, feeling sleepy during the day time and being unable to wake-up in the morning were common reason to stop taking their medication.

"I'm taking the medication at night-time. I always feel sleepy in the morning even though I slept for a long time in the night…. Every morning, our neighbor asked me whether I slept well or not…Thus, I sometime stopped taking it not to be sleepy or to be fully awake" 30-year, Male-PBD ID23, Butajira

Some people with bipolar disorder adjusted their dosage and/or took medication breaks according to their perceptions of their illness status: increasing their dose when symptoms persisted and reducing/stopping when they felt better. Without the involvement of healthcare professionals, this sometimes-had adverse consequences, leading to a return to illness:

"he [patient] doesn't take medication when he is well … they [health professionals] are also have not informed us to take medication while he is feeling well…. if he is normal, he doesn't take medication" 25-year, Female-Caregiver ID014, Butajira

Other participants reported that they stopped their medication because they perceived that medication was not curative.

> *"The medication didn't cure them fully but it gives her sleep and made her patient....so some people advised her to stop taking it for a week and try to see how she felt without medication and she stopped… then she got seriously sick and came…" 50-year, Male-Caregiver ID011, Sodo district*

Fear of stigma and of side-effects of medication during pregnancy were also commonly described as reasons to discontinue treatment. Participants reported feeling negative judgments from the community related to frequent visits to the health facility, which sometimes prevented visits to the clinic, despite recognition by the person living with bipolar disorder that they were unwell.

> *"…I feel as if people saying to me that I am frequently going to hospital because of getting treatment free rather than being unwell. So, I didn't go to hospital immediately after feeling unwell…" 36-year, Female-PBD ID025, Sodo-district*

Whereas, some caregivers described patients' unwillingness to take their medication as a reason for non-adherence

> *"…. There is a time that he refuses to take his medication. Because of that, in such times we will give him the medication without letting him know, we dilute the medication with the tea or coffee or milk and give it to him" 35-year, Female-Caregiver ID 013, Butajira*

The costs of affliction

Lost opportunities

Some people with bipolar disorder and caregivers described that during younger ages, dropout from school was one of the main negative consequences of illness, leading to early curtailment of education:

> *". when I was a student, I couldn't attend properly and I couldn't write using pen and book like my friends. I was quarreling with the school community unless I missed the class…so I stopped because of fear of worsening of symptoms at that time…." 30-year, Male-PBD ID 017, Butajira*

Participants explained that ill-advised decisions made during the illness period played a role in the economic problems they were experiencing.

> *"…previously, I had assets like sheep, goats and chickens and I was trying to do different things. But, after I got sick, I felt as if they were not important and I sold them when I felt annoyed. I think I decided to sell them because of the illness because previously I was not planning to sell them…" 23-year, Male-PBD ID020, Sodo-district*

Others reported the negative consequence of illness upon their ability to work and acquire assets compared to other members of the community.

"Sometimes he [PBD] gets sick during harvesting time, he may not be able to hold a sickle …umm… no one helps him… when he tried to harvest, he feels tired and his hand couldn't hold the sickle properly so the time passes before we gather the crop" 32-year, Female-Caregiver ID015, Sodo-district

Participants described the direct and indirect cumulative effects of the illness on the affected person and the household economy over time, starting from a young age; some participants stated that they sold their assets to cover the treatment and other related costs:

"At the beginning, we sold my grandmother's land for transportation and different costs to go to different holy water places... during the illness period my grandmother asked people for help and to take me to Addis Ababa Amanuel hospital" 27-year, Female-PBD ID005, Butajira

"I'm not happy. I feel shame" – living with social exclusion

PBD and caregivers were concerned about direct or indirect social exclusion of PBD due to their illness, for example, some reported that people excluded them from social participation and behaved towards them in ways that would never normally be acceptable:

Last time, my cattle entered another person's farm and were grazing there; because of that, the owner of the farm was hitting my cattle. My son [person with BD] asked him why he hit the cattle and he [owner of the farm] tried to hit him with an axe but he ran away & escaped. If the cattle were belonging to another person, they may not have tried to hit that person. 63-year, Male-Caregiver ID012, Sodo-district

Additionally, other participants reported that stigma shaped their interactions with members of the community, as well as restricting the social roles they were allowed to play:

"I don't know why but people, including my family members, change their direction when they see me on the street, not to talk to me as if they didn't see me…. I feel isolated when they react to me in this way… people were calling me crazy and were not wanting to communicate with me" 48-year, Male-PBD ID 003, Meskan-Woreda

The stigma and misunderstanding of people with bipolar disorder were also mentioned as barrier to express their feelings and get help, leading to feelings of loneliness.

"…everybody at home says to me 'you don't feel shame when you always say I'm feeling unwell'…One day, my husband said to me 'I wish your illness to be real'…so I get angry and feel alone, I also don't tell them when I feel unwell or I don't go to the health facility unless it is serious" 32-year, Female-PBD ID025, Sodo-district

Many people with bipolar disorder and caregivers described the compounding effects of exclusion upon social isolation: with exclusion causing people with bipolar disorder to avoid socialization due to feeling less confident, inferior and ashamed about living with a mental illness.

"Previously, I didn't have fear to talk with people but now I'm not happy, I feel shame, I'm not motivated to talk and I don't want my voice to be heard so I don't talk during social gathering, I just sit and hear what they are saying because people around me think that I am dangerous (both men and women talk as if I'm dangerous)" 50-year, Female-PBD ID09, Sodo-district

Some other participants reported that culturally, people chew Khat in group during the social and cultural ceremony. Therefore, they use to chew Khat with other community member as a mechanism to improve social integration

*"Previously people were calling me **'Ebid** '(crazy) ...I was isolated from others, so Khat created an opportunity for me to socialize, to share my ideas with other people. The more we get together, the better we know and understand each other so they don't stigmatize me. So, Khat is a good solution for me" 48-year, Male-PBD ID 003, Meskan-Woreda*

The hazards of intimacy

Participants described the difficulties they had regarding establishing sexual relationships, getting married and maintaining spousal relationships:

"Previously, when I planned to marry, people said he is mentally ill..., many of them were not willing to have marital relationship with me because of my mental illness….my former wife also went abroad without my consent/consulting me." 30-year, male-PBD ID17, Butajira

Other participants explained their experience of divorce and community interference in their relationships.

"I have been divorced for nine years. my neighbors and community members were supporting him [her husband]- everybody said, he has to get married to another woman and lead his own life… they decided that I had to leave the house with my children, so he took all of the assets, the land and house and got married to another woman" 27-year, Female-PBD ID002, Butajira

Other participants described that they were scared to establish sexual relationships, anticipating divorce due to having mental illness

"Previously, I stayed without getting married because my illness came back every time so I feared that it may work as a cause for disagreement and divorce…" 27-year, Female-PBD ID005, Butajira

Caregivers described negative impacts of their relatives' illness on their children's education, relative's work and social lives. These negative impacts arose from caregiving responsibilities, for example, trying to prevent or manage difficult behaviors, including threats of harm to self or others:

"If he got sick, I look after him and caring for him is my responsibility, I couldn't do anything and I also sit with him. We spent the night without sleep too but he is alert in the next day also so how can I work? I was sitting and waiting him day and night" 35-year, Female-Caregiver ID13, Sodo-district

(ii) Result of mental health expert workshop

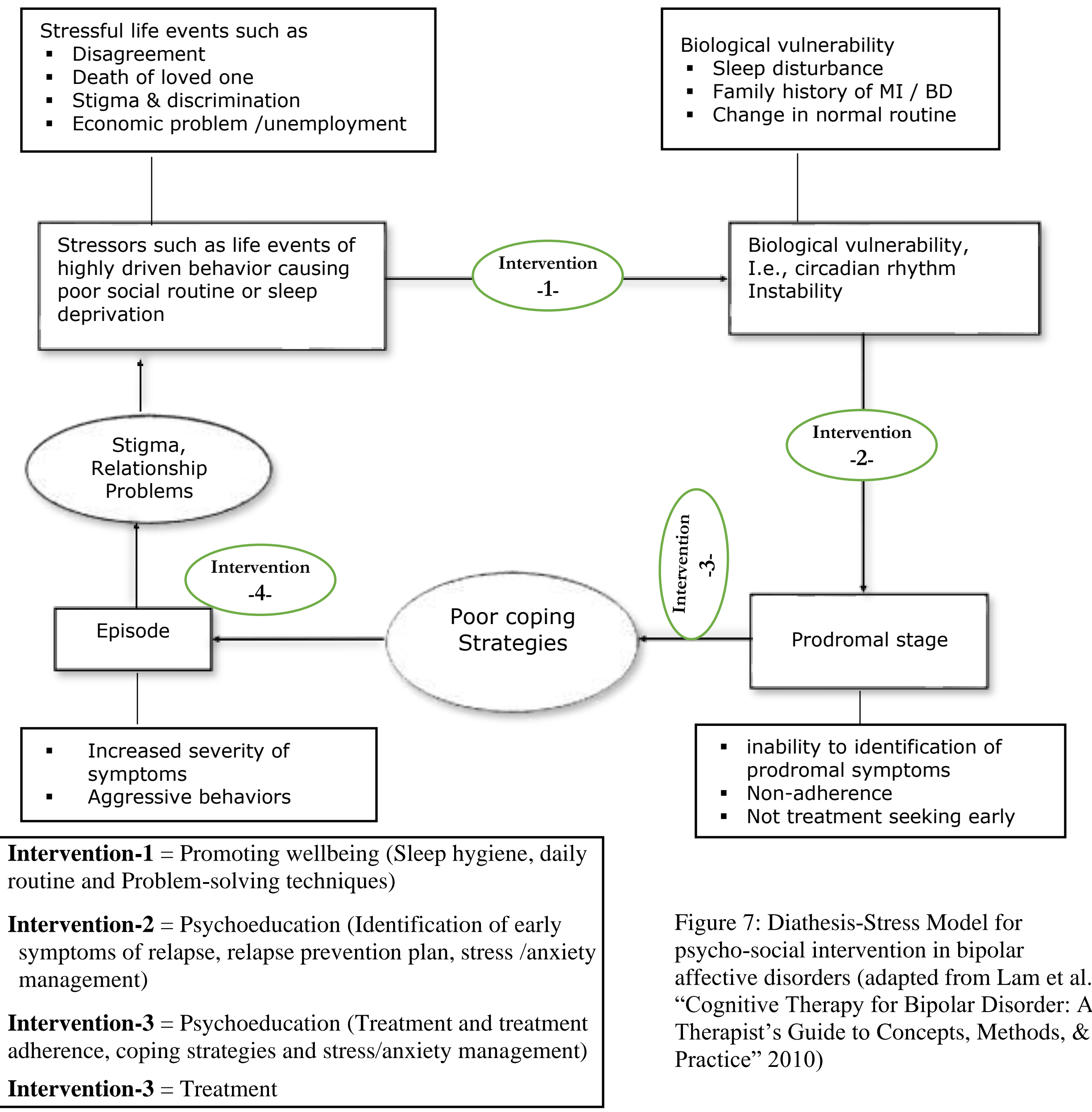
As described in the method sections, this workshop was organized with the aim of getting mental health experts' feedback on the components of intervention that can be feasible and acceptable in Ethiopian rural community. First, the participants discussed the findings of qualitative study: the service users' major concern, precipitating and alleviating factors and their coping mechanisms. Second, the participants discussed about the components on intervention identified through systematic review and focused on the components that can be feasible as well as helpful to address the factors identified in the qualitative study.

Then, participants suggested two major intervention components: (i) components that could be used to improve the PHC workers' skills in establishing therapeutic rapport, (ii) "active ingredients" of the intervention such as psychoeducation, behavioral techniques such as muscle relaxation and breathing exercises, problem solving skill, and relapse prevention plans. Experts recommended four 20 minutes intervention sessions for the following reasons: (i) in our systematic review, most of the included studies reported 3-8 number of sessions (217), (ii) previously, 4-8 sessions of interpersonal therapy for common mental disorders were proposed for a PHC setting in Ethiopia (218), and (iii) the proposed components of intervention could be covered in four-sessions. They also suggested that PHC workers be selected based on their being trained on the mental health Action Programme Gap (mhGAP) intervention guide and having experience of treating people with severe mental illness should deliver the intervention. However, they were concerned about the potential work burden on PHC workers.

Regarding the format, experts recommended an individual format to simplify the challenge of having groups at a set time due to transportation problems in rural settings and other factors. They also recommended that caregivers be involved in the intervention considering the socio-cultural context in which family members accompany patients when attending the facility. They reasoned that caregivers' involvement in the intervention could help to create awareness about the illness in the wider family as well as support their ability to help their family members. Nonetheless, they emphasized that people with BD should decide whether their family members should be involved. Finally, to facilitate intervention provision and create awareness for people with BD and their

caregivers, they suggested the development of an illustrated information leaflet that explains the causes, symptoms, and treatment of BD.

Based on the systematic review, qualitative study, and expert workshop, we adapted the Diathesis-Stress model (Figure 7) for psycho-social intervention in bipolar affective disorders to understand how the selected components of intervention address the psychosocial factors.



Intervention-1 = Promoting wellbeing (Sleep hygiene, daily routine and Problem-solving techniques)

Intervention-2 = Psychoeducation (Identification of early symptoms of relapse, relapse prevention plan, stress /anxiety management)

Intervention-3 = Psychoeducation (Treatment and treatment adherence, coping strategies and stress/anxiety management)

Intervention-3 = Treatment

Figure 7: Diathesis-Stress Model for psycho-social intervention in bipolar affective disorders (adapted from Lam et al. "Cognitive Therapy for Bipolar Disorder: A Therapist's Guide to Concepts, Methods, & Practice" 2010)

(iii) Result of the Theory of Change workshops

Four independent ToC workshops and one ToC workshop that included all participants were conducted, with a total of 59 participants (***Table 17***).

Table 17: Theory of Change workshop participants

Stakeholder Group	Female	Male	Total
ToC with service users			
People with BD	4	4	8
Caregivers	6	5	11
ToC with male community leaders	-	8	8
ToC with female community leaders	11	-	11
ToC with professionals			
PHC Workers	5	11	16
District level government office representative	0	5	5
Final ToC workshop participants	26	33	59

*PHC - Primary health care and BD – bipolar disorder

Feasibility and acceptability of psychological intervention

Participants perceived that PSI was needed for people with BD. However, they also argued that the developed intervention must be feasible and acceptable to be implemented. The group that included people with BD and their caregivers described the varying nature and intensity of symptoms over time. Due to the episodic nature of the illness, BD was perceived by many people with BD and their caregivers to be caused by evil spirits or other supernatural acts, leading them to try various religious or traditional treatments. They also noted the chronicity of the illness and the need for long-term support: "*…Mental illness is not like tuberculosis, which gets cured just by giving medication. Mental illness requires long-term support and effort from doctors, caregivers, and the surrounding societies…".*

People with BD and caregivers reported that people with BD are sensitive; simple stressors can be enough to trigger their illness. When other people speak of their own social affairs, they may be suspicious and assume that they are the focus of discussion which may hurt them psychologically. Community leaders also noted that medications are important to people with BD and they believe that caregivers had a responsibility to support access. People with BD and their caregivers reported experiencing stigma because of having a mental illness or having a relative with mental illness.

One caregiver said *"...At the coffee shop, at a wedding, there are people who treat [the person with BD] as if she is a different person. In such situations, there are times that she would return to home because her feelings get hurt….."* The intervention was perceived as important because it would provide information about BD, its causes, and treatments and would decrease misconceptions. One participant said "…*People take patients to different traditional places because of lack of awareness. As long as society is well informed about the intervention and where they can access it, they will go to the health facility as soon as they feel sick. For instance, if someone gets malaria the society is well informed about where to get treatment and the same is true in this case"*.

The health professionals also expected that the intervention would be acceptable for PHC workers because it would help them develop their skills and would improve the acceptability of the service. This, in turn, was predicted to improve the mental health knowledge of people with BD, their families, and the community, while increasing treatment adherence and improving outcomes. Health professionals reflected that, often, people with BD visit health facilities only after the illness become severe. They emphasized that early detection of relapse should be addressed in the intervention.

Participants in all groups considered the health center as the ideal place for the intervention because this is where people with BD receive their regular follow-up and fill their prescriptions. Additionally, a quiet and private place was preferred, but without segregating people with BD from other health center attendees, to avoid stigma and discrimination. Some participants from the community and health professionals suggested that the intervention should be located at the health post to increase accessibility, and it should be delivered by the health center staff as part of outreach activity. Finally, participants in the final ToC agreed that the intervention should be delivered at the health center by PHC workers because (i) PHC clinicians are in a better position to know the mental health history and current health status of the person with BD, and (ii) this will improve trust because the clinician is likely to be known to them from their routine care. Participants also mentioned the importance of HEWs' creating awareness in the community, in the form of a campaign or through another mechanism, as an important supportive activity.

The participants came to a consensus that a one-to-one consultation format would be better than a group format. Among the reasons, people with BD may not want to talk about their social, economic, and personal lives in front of others. Furthermore, in rural areas, people may struggle

to attend group interventions at a specific time. Similar to the mental health experts, participants also suggested the option of a common session for people with BD and their caregivers as long as the patients are willing and don't interfere with their privacy. *"People do not come alone and will have someone with them, those that came will also get an education on the subject that they will later transfer to other family members and improve the support they provide to the patient".*

Regarding the session, people with BD and their caregivers and community groups suggested that the number, duration, and frequency of intervention sessions should be determined based on the content and advice of professionals. Additionally, they underlined the importance of aligning the monthly intervention sessions with regular appointment dates to encourage attendance by minimizing transportation costs and time. Primary health care workers provided different suggestions for the duration of session (from 20-45 minutes). Finally, considering the PHC workers' workload, they reached a consensus to reduce the intervention content per session to be covered in a maximum of 20 minutes and to increase the number of sessions from four to five. They also suggested working in collaboration with HEWs, especially to help people with BD with their treatment adherence. The PHC workers raised the issue of workload and expressed concerns about people with BD and their caregivers being made to wait for a long time while they delivered the intervention. All participants agreed on the importance of preparing an information leaflet to facilitate the sessions and encouraging the participants to share the information with their entire families and neighbours. The key findings and contributions of various methods to the development of the intervention is summarised in **Table *18***.

Table 18: **Summary on contribution of various methods in the development of psychological intervention manual**

Methods	Findings	Contribution to the psychological intervention development
Systematic review	▪ Identified psychological intervention: psychoeducation, family therapy, cognitive behavioral therapy and mindfulness-based cognitive therapy ▪ The number of sessions ranged from 1 to 18 sessions ▪ The content of the intervention includes education about signs and symptoms of bipolar disorder (BD), the causes and prognosis of BD, treatment adherence, and side-effects of medication, early identification of symptoms of relapse, triggering factors, substance use and regular habits and management plans or prevention strategies. ▪ Intervention providers were mental health specialists or practitioners.	▪ Defined the type of intervention ▪ Defined the intervention content ▪ The studies were used to identify the intervention manual
Qualitative study	▪ People with BD and their caregivers reported perceiving early signs and symptoms of relapse ▪ A major concern for people with BD and their caregivers related to the patients' illness being identified ▪ Perceived factors that precipitate or worsen the illness were explored ▪ Coping mechanisms used by people with BD to cope with stressful life events were explored ▪ BD has a negative effect on the social, functional and economic status of people with BD and their families	▪ Define problems from the people with BD and caregivers' lived experience ▪ Identify psychosocial factors that could be addressed in the current psychological intervention
Mental health expert workshop	▪ Possible components of the intervention were suggested to address the concerns of people with BD and improve their health and treatment outcome	▪ Experts suggested intervention components based on their clinical and research experience as well as findings of qualitative and systematic review
ToCs	▪ Stigma and financial problems ▪ Need for psychological intervention ▪ The necessary condition for improving the acceptability and feasibility of psychological intervention ▪ Developed ToC map ▪ Need for training in communication skills for intervention providers ▪ Need to improve community awareness	▪ Explored the feasibility and acceptability of psychological intervention ▪ Defined the necessary resources to give the intervention ▪ Support the patients to use the existing supporting platforms like the safety net program. ▪ Suggested the intervention content, frequency of sessions, format, and providers ▪ Defined the desired outcome ▪ Defined indicators for success

Theory of Change: ToC Map

Factors identified as necessary to the development and implementation of a psychological intervention for people with BD are summarized in the ToC map (Figure 8) and described below.

Outcomes and impact: People with BD and their caregivers mentioned improved social and psychological well-being and reduced family burden, hospital admission and school dropout as the desired long-term outcomes of the intervention, with reduced mortality as a potential broader impact of the intervention. Community leaders focused on stigma reduction and improved physical, social, and functional well-being as the preferred long-term outcome. PHC workers and district health office managers emphasized the improved quality of life of people with BD and reduced family burden as a long-term outcome. Participants also mentioned reduced mortality and disability related to the illness as a desired impact but recognized that these require multi-sectoral changes and are not expected to be achieved just through the psychological intervention alone. In the final ToC, participants discussed the feasibility of the identified long-term outcomes and reached a consensus that reduced hospital admissions, reduced caregivers' burden, and improved quality of life would serve as the long-term outcomes. Participants also discussed and agreed that the reduction of mortality and school dropouts needs the involvement of various stakeholders beyond the delivery of psychological intervention. As a result, they reached a consensus that reduced mortality and school dropout would serve as an impact.

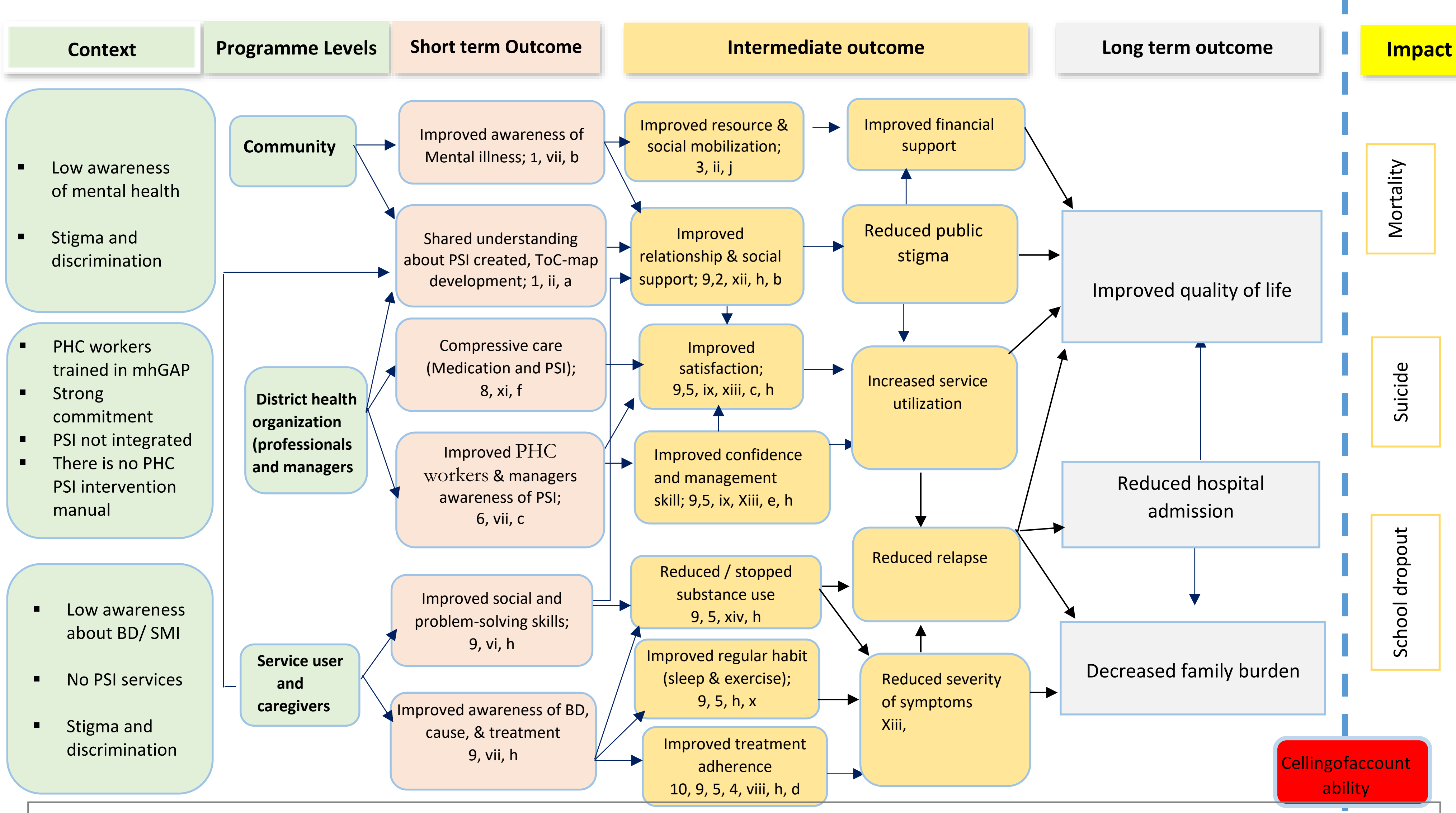


Figure 8: ToC map for the development of a psychological intervention for bipolar disorder in rural Ethiopia:
Example of assumptions: *willingness and motivation to (1) be involved in ToC workshop, (2) work with PHC workers, (3) mobilize resources, (4) deliver PSI as per manual, (5) give compassionate and respectful care, (6) undergo theoretical and practical training on PSI, (7) Supervise, monitor and support PHC worker, (8) make PSI manual available at health facility, (9) PBD/CG receive all components of PSI, (10) offer community and family support.* ***Examples of indicators:*** *Number of stakeholders involved in (i) awareness creation program, (ii) ToC workshop, (iii) resource mobilization, (iv) type and amount of resource mobilized, (v) number of PHC Workers attended PSI training, (vi) Number of caregivers/ PBD attended 1 session and 4 session, (vii) 80% increase in awareness, (viii) decreased severity of S/S using YMRS and PHQ, (ix), number of participants satisfied with treatment assessed using in-depth interview, (x) Number of patients who has regular habit, (xi) Number of health facility that made the PSI manual, (xii) social inclusion, (xiii) Number of professionals satisfied, (xiv) Reduced substance using ASSIST.* ***Example interventions:*** *(a) conduct ToC workshop, (b) create mental health awareness creation PRogramme (c) offer theoretical and practical PSI training for PHC Workers & managers (d) engage PBD and caregivers in treatment planning, (e) ensure medication availability at the health centers, (f) make PSI manual available at the health centers, (g) support patients in adhering to treatment, (h) deliver psychological intervention for PBD and caregivers, (i) evaluate the intervention, (j) mobilize resources*

Preconditions for Intervention

Participants were asked to list the interventions needed, preconditions, assumptions, and indicators. Participants mentioned that there should be interventions for people with BD and their caregivers, implemented at the community and health facility level. Likewise, the preconditions, assumptions and indicators were also identified to achieve an agreed-upon outcome were also identified, as illustrated in **Table *19***.

Health Facility (primary health care/ workers) level interventions

To facilitate the intervention and bring about change, participants identified various other interventions that would be needed at the health facility level. PHC workers mentioned training on mental health Gap (mhGAP) intervention guide as part of the integration of mental health service into PHC as a good opportunity; however, they felt that they needed additional training on bipolar disorder. Beyond this they expressed a need for theoretical and practical training on psychological interventions as current care models were more focused on diagnosis and medication.

People with bipolar disorder and caregivers spoke of problems in terms of availability and sustainability of medication and unaffordability for some patients. They suggested the mental health services should be free of charge and available all the time *"Because of not getting treatment here [Butajira], I'm going every time to Addis Ababa, Amanuel hospital and I face a problem to cover the transportation and medication cost …I wish the government would start free treatment here in Butajira…".* Interventions to ensure availability of medication and psychological intervention manuals at the health centers, supporting people with bipolar disorder to adhere to treatment, and evaluating the effectiveness of the intervention were recommended.

Community-level interventions

At the community level, participants emphasized that lack of awareness about mental illness in general among the community members is a major obstacle for uptake of care and an important driver of the widespread stigmatization of people with bipolar disorder. The community members described misperceptions of the behaviors of people with bipolar disorder that lead them to label them as 'Ibid' ['crazy']. *When any person is referred to as 'crazy,' this word deeply hurts the person…It is because of the lack of awareness that some people try to hurt the feelings of mentally ill patients. Let us inform them to be thoughtful".* Community members also acknowledged the

importance of resource mobilization to support people with mental illness in general by raising their previous experience of similar activities for orphans and internally displaced people. During discussion with PHC workers and district level government officials the participants reported on the ongoing roll-out of Community Based Health insurance (CBHI) which covers the treatment cost for people who can't afford to pay. People with mental illness in Sodo district should be included in this CBHI system. However, there was little in the way of social and economic support systems in the area. Multi-method stigma reduction campaigns and awareness creation, for example, by preparing and distributing a leaflet to the community, were raised as necessary to reduce stigma against people with mental illness and their caregivers *"...I would surprise and ask them how people could call me crazy…sometimes, I would refuse to take the medication saying that I am crazy, so I shall sleep like a crazy person…these problems get fixed by creating community awareness...".* Participants mentioned community awareness as the necessary precondition for social and resource mobilization to support people with bipolar disorder and their families.

Service user and caregiver level interventions

The ToC workshop participants identified various activities that could be done at the service user and caregiver level. Among the identified activities, engaging people with bipolar disorder and caregivers in treatment planning was emphasized as this would help to increase their interested and motivation to achieve the goals that they set for themselves. The ToC workshop participants again emphasized the need to improve awareness about the illness, cause of illness and treatment for people with bipolar disorder and increase the support from family members *"mental illness is not like malaria that gets cured just by giving medication. To get a mentally ill person treated, it requires care and support from professionals, caregivers' and the societies…".* Moreover, the ToC participants stated the need to identify and teach recreational activities and exercise to help people with bipolar disorder to feel better, control their weight, and also to reduce the risk of having another chronic disease. Finally, the participants also articulated the pre-conditions to be achieved at this level to reach the intended long-term outcome.

Key assumptions, evidence, and indicators: The ToC participants put various assumptions thought to be in place for the outcomes to be achieved, and indicators of achievement.

Table 19: Summary of level of key tasks, intervention, preconditions, Assumptions and Indicators.

Levels of intervention	Key tasks	Intervention	Preconditions	Assumptions	Indicators
Patients with BD	▪ Identify early sign and symptoms of their illness ▪ Actively engage in their own treatment plan ▪ Practice having a regular a habit (e.g sleep) ▪ Use behavioural techniques such as breathing exercises and muscle relaxation ▪ Practice problem-solving skills in their daily lives ▪ Prepare a relapse-prevention plan	▪ Psychoeducation ▪ Teaching behavioural techniques ▪ Teaching problem-solving techniques ▪ Awareness of regular habit ▪ Involvement in the development of psychological-intervention ToC map	People with bipolar disorder ▪ Improved awareness about the illness, cause, & treatment ▪ Learned & practiced behavioural techniques ▪ improved adherent to psychological intervention and for medication ▪ Practiced regular habit ▪ Improved health-seeking behaviour ▪ Improved awareness of a relapse-prevention plan	▪ The intervention is feasible and acceptable ▪ People with bipolar disorder • Are able to attend all sessions • Discuss and practice what they have learned in the training • Motivated to take an assignment	▪ Number of service users attending the first and all sessions ▪ Duration of each session ▪ Number of service user's adherent to treatment ▪ None/mild mood symptoms based on YMRS and PHQ ▪ 80% increase in awareness of BD and its causes, treatment, and prevention plan ▪ Number of participants satisfied with the intervention ▪ Number of patients with a regular habit compared to baseline ▪ Level of social support received measured using OSLO
Caregiver/ Family	▪ Care for and support to patients ▪ Understand the patients' conditions ▪ Identify early sign & symptoms of the patients' illness ▪ Encourage patients to engage in social activities ▪ Encourage patients to use behavioural techniques ▪ Help patients have regular habits	▪ Psychoeducation ▪ Teaching behavioural techniques ▪ Training on problem-solving techniques and regular habit ▪ Involvement in PSI ToC map development ▪ Active participation in treatment & relapse prevention plan & help PBD	Caregivers ▪ Improved their awareness about the illness, and its cause, and treatment ▪ Improved involvement in the patients' treatment plan ▪ Improved practice in supporting PBD	▪ The intervention is feasible and acceptable ▪ Caregivers • Able to attend all sessions • willing & motivated to help PBD • Willing to work with PHC workers • Non-stigmatized and non-stigmatizing to patients	▪ Number of service users attending first and all sessions ▪ Duration of each session ▪ 80% increase in caregiver awareness of BD, its cause, and treatment ▪ Number of caregivers satisfied with intervention ▪ Level of social support received as measured using OSLO
Community	▪ Mobilization resources ▪ Support patients & caregivers ▪ Care for and love for patients & caregivers ▪ Helping patients with social-integration	▪ Working with the community and religious leaders & HEWs ▪ Awareness creation about mental illness in general and BD in particular	▪ Improved community awareness about BD, and its causes and treatments ▪ Improved communication among service users, caregivers, & intervention providers ▪ Community non-stigmatizing attitudes and support ▪ Improved collaboration of community stakeholders	▪ Religious and community leaders are willing to work together toward stigma reduction ▪ The community engages in resource mobilization to support people with mental illness ▪ The community does not stigmatize service users	▪ Number of community members getting awareness on BD, its causes & treatment ▪ Number of community members participating in resource mobilization to support people with mental illness
Health facility (Service provider/ manager)	▪ Avail psychological intervention service with a required quality ▪ Compassionate and respectful care for BD patients ▪ Involve service users in treatment planning ▪ PHC workers and services users prioritize problems for the service users need to solve.	▪ Giving both theoretical and practical training on PSI for PHCWs ▪ Engaging BD patients and their caregivers in treatment planning for the patients ▪ Ensuring medication availability for BD at the health centers ▪ Adhering to intervention manual	▪ Improved knowledge of and skills in PSI ▪ Improved confidence to giving psychological intervention ▪ Intervention provided as per the manual ▪ Improved medication availability ▪ PHCWs' having encouraged service users to get involved in the treatment planning of BD patients	▪ There is a newly developed, feasible and acceptable PSI available for use ▪ Professionals are trained on the PSI manual ▪ PHC workers are trained in mhGAP intervention guide ▪ Health facility managers support PHC Workers when needed ▪ PHC workers are motivated to give the PSI	▪ Number of PHC workers in the facility who are trained to give psychological intervention ▪ Quality of therapeutic relationship between patients and PHC workers measured by HAQ ▪ Level of adherence to manual measure as ENACT ▪ Presence of the newly developed PSI manual with PHC workers

** Oslo Social Support Scale (OSS), General Health Questionnaires (GHQ), The Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST), Young Mania Rating Scale (YMRS), World Health Organization-Disability Assessment scale (WHODAS)-12 versions, Enhancing Assessment of Common Therapeutic factors (ENACT), Therapeutic alliance will be measured using Helping Alliance Questionnaire (HAQ), People with Bipolar Disorder (PBD), Sign and Symptoms (S/S), **People with Bipolar Disorder (PBD), Sign and Symptoms (S/S), Psychological interventions.*

Description of the newly developed intervention manual

The findings from the formative qualitative study and ToC workshops were triangulated to identify the unmet needs and priorities of people with BD. These inputs were then used to select the intervention components and to decide on the number, frequency, and duration of sessions, as well as the facility where the intervention should be provided. During the design of the intervention, the identified needs and priorities were linked to the components of the intervention (**Table *20***).

In general, the intervention manual was structured in five sessions: (i) needs assessment and goal setting; (ii) psychoeducation about bipolar disorder, its causes and influencing factors; (iii) treatment and treatment adherence; (iv) sleep hygiene and problem-solving techniques to promote well-being and; and (iv) behavioral techniques to target anxiety and relapse prevention, and closing (**Table *20***). Each session was intended to last for 20 minutes and to be delivered every month, aligned with the person's attendance for routine care. The intervention was designed to be given by PHC workers who had been trained in the mhGAP intervention guide and who had received one week of theoretical and one week of practical training.

The manuals and leaflets were translated into Amharic by two clinical psychologists with experience of working with people with mental illness and annexed (Appendix P, Q and R). Mental-health experts and PHC workers involved in the ToC workshop reviewed the translated manual and gave feedback that helped to simplify the manual's structure and readability. They recommended that illustrations in the manual and leaflet to be prepared based on local realities: for example, to include false banana trees, which are very common in the study area, as well as pictures representing people from different religions and genders. Case stories were also prepared and annexed to enable PHC workers to engage better and use them as illustrations as needed.

Table 20: Intervention components and expected outcomes

Session	Unmet needs/priorities of PBD identified in qualitative study ToC and mental health expert workshops	Sessions	Contents included in session	Reference manual
	▪ Therapeutic techniques		Therapeutic skills in psychological intervention	Where There Is No Psychiatrist (219)
Session one	▪ Need assessment and goal setting	Needs assessment and goal-setting	Introduction and checklist • Need assessment • Goal setting	
Session two	▪ Low awareness of BD and its causes ▪ PBD are concerned about the long-term nature of the illness ▪ Substance use	▪What do I need to know about my illness?	Psychoeducation • Sign and Symptoms of BD • Identification of early symptoms of relapse • Cause and influencing factors	Clinicians Treatment Manual: For Family-Focused Therapy for Early-Onset Youth and Young Adults (220)
Session three	▪ Misperception about treatment (e.g expecting cure with medication) ▪ PBD are concerned about the long duration of treatment ▪ Treatment non-adherence ▪ Caregivers are concerned about aggressive behaviors during relapse	▪ How can the treatment help me to get well?	Psychoeducation • Treatment • Treatment adherence Problem solving techniques • Non-adherent PBD	Psychoeducation Manual for Bipolar Disorder (221)
Session four	▪ Caregivers are concerned about sleep problems ▪ PBD use various negative coping mechanisms such as using substances to feel well and improve their socialization ▪ PBD and caregivers identified social, treatment related and substance use issues as triggering factors for the person's illness ▪ Social and relationship problems • Self and public stigma • Disagreement & lack of social support	▪What kind of techniques & activities help me to improve my health?	Promoting wellbeing • Sleep hygiene and daily routine • Problem solving techniques	Cognitive Therapy for Bipolar Disorder: A Therapist's Guide to Concepts, Methods, and Practice (222).
Session five	▪ PBD identified anxiety symptoms as early sign of relapse • Heavy-headedness • Anxiety • Irritability ▪ Some PBD and caregivers identified early symptoms of relapse	▪What helps me to feel well when I feel anxious or stressed? ▪What can I do when I identify early symptoms of illness?	▪ Behavioral techniques • Muscle relaxation • Breathing exercise ▪ Relapse prevention plan	

* People with bipolar disorder (PBD), bipolar disorder (BD)

5.2 Findings of feasibility phase

Socio-demographic characteristics of the participants

A total of 12 people with bipolar disorder and, five caregivers, and four health professionals participated in this feasibility study. Most of the people with bipolar disorder had formal education and half of them were married. Additionally, most had more than a three-years history of illness and have had more than one history of relapse since diagnosed. Among the five caregivers, four of them cared for female patients and all participated in the intervention with their relatives (***Table 21***). All intervention providers were male health professionals who have more than three years of clinical experience. All the intervention providers were trained on mhGAP intervention guide and see people with mental illness in OPD.

Table 21: Socio-demographic and clinical characteristics of the study participants.

Socio-demographic variables		Number
People with bipolar disorder		
Age in year	Mean (SD)	32.6 (11.1)
Sex	Female	7
	Male	5
Educational status	Illiterate	2
	Primary	5
	Secondary or tertiary	5
Marital status	Single	6
	Married	6
Number of relapses since the onset	No relapse	2
	1-2 relapse	4
	3-5 relapse	4
	> 5 times	2
Duration of illness	< 2 years	3
	2-5 years	4
	>5 years	5
Caregivers of patients with bipolar disorder		
Age in year	Mean (SD)	41.2 (8.7)
Sex	Female	2
	Male	3

Feasibility of the intervention

All twelve people with bipolar disorder who were invited to participate in the intervention and half of them were also asked to come with their caregivers. Therefore, a total of 12 people with bipolar disorder and 6 caregivers attended the first session. All participants except one caregiver completed all five sessions. A caregiver dropped out after the second session, because of a scheduling conflict

with his new job. The rating of scores of recorded intervention session length showed that additional 5-20 minutes were needed to complete each session. (***Table 22***)

Table 22: Participants' attendance and duration of each session.

Outcomes		
The number of people with bipolar disorder attended the session	First session	12
	Completed the session	12
Number of caregivers who attended the session	First session	6
	Completed the session	5
The average duration of intervention session in minutes	Session-one	25'
	Session-two	33'
	Session three	39'
	Session-four	40'
	Session-five	35'

In the qualitative interviews, participants mentioned various reasons why they were not able to complete within the specified time. Among them, practical sessions, having a long conversation with the participants, taking more time to review the previous session before beginning the day's session. Intervention providers mentioned that the sessions, especially sessions four and five took more time since these sections have a practice like problem-solving techniques, muscle relaxation and breathing exercises which make the sessions relatively longer than other sessions. Additionally, they mentioned the duration of intervention can vary based on the participants' understanding of the content of the intervention.

> *The duration of sessions varies based on the patients' understanding of the topic. Some patients ask more questions and need to discuss more whereas, some patients need shorter time. In general, session three and session four take up to 40 minutes. Hence, the time allocated for the delivery of these sessions needs to be revised [provider 02].*

Another intervention provider mentioned that patients want to share their life experiences during the intervention which is impossible to let them stop in order to better understand the participants as well as maintaining their therapeutic relationship.

> *Patients want to speak more; they want to share with you their personal experiences, and they want to be listened to. Sometimes, they might cry when they recall their previous experiences. Thus, discussing those issues takes time, and it is not always possible to do all of within 20 minutes.*

Professionals who rated the recorded intervention sessions confirmed that intervention providers spent more time in revising the previous sessions before starting the day's session, contributing the longer duration of intervention. However, the participants mentioned that the intervention was delivered at a time that is convenient for them. Additionally, sessions were scheduled convenience of the

participants allowing them not to worry about the length of the intervention session and increased attendance.

> *I came here after I have finished all the household work and make coffee. I also informed my families that I have intervention and get permission from them. The was about 30 or 40 minutes but, I was not worried about the work I had when I get back home. So, I'm okay with the time.*

In the discussion with intervention providers, they suggested, making all sessions 30 minutes and splitting the last two sessions into three sessions within the time frame. This will increase the number of sessions from five to six

Acceptability of the intervention

Participants with bipolar disorder and their caregivers mentioned that they were ready to participate in the intervention due to perceived benefit. One caregiver stated how he was motivated and was ready to take part in the intervention as follows:

> *Of course, if people are not convinced, sitting for 10 minutes could be difficult. But, if they understand that the treatment is their own benefit, an hour could be tolerable. You have given us this education to improve the health of my wife. How could I feel tired to hear what has been said? How could I feel bored? …if they [health professionals] are not burdened. It will be very helpful if they could give us such kind of education every two or three months.*

People with bipolar disorder also mentioned his readies to take the intervention as follows.

> *Although I came here [to health facility] after traveling for an hour and I paid 20 birrs for round trip transportation, I do not feel tired, … I know that medication is my life but, this education is an additional treatment prescribed for me. Therefore, I wish if this education program could continue.*

Participants also mentioned that they found the intervention useful, and supported their coping efforts, though the most important session is different depending on their priority problems. Some participants said that education about illness and treatment is most helpful because it has helped them to improve their knowledge about their own or their relative's illness and treatment: one people with bipolar disorder said:

> *I have learned a lot about my illness and the treatment. I learned that the medication will help me to feel calm and have a good relationship with my family. I have also learned why I need to take medication for a long time and the negative effect of stopping it on my health.*

Caregivers also acknowledged the usefulness of the session that describes treatment and they described their satisfaction as follows:

> *In general, the medication session was the most important one. It (medication) is very helpful for her [patient]to stay well, it helps her to live a normal life with the family, neighbors, and with the community. It is also important for us as a family because if one person gets unwell in the household, the whole family gets affected.*

Other participants mentioned the content that covers "how to improve sleep" as most important. They mentioned that sleep problem is one of the major challenges for people with bipolar disorder and they believe that it helps them to improve their sleep pattern. People with bipolar disorder described the importance of the sessions as follows:

> *I am happy because I have learned how to improve my sleep. Now, I know the importance of sleeping at a regular time and waking up at the same time. He [the provider] told me to practice it and after some time, it will be a habit. Following his advice. I am trying to bring that practice. I also stopped drinking coffee at night.*

Regarding anxiety management techniques (muscle relaxation and breathing exercise), participants reported different experiences. Some found it hard and need more practice, others found the exercise easy to practice and they liked it most. So, they used it as entertainment and to relax themselves, whereas, some mentioned the need for more practice to master the exercise.

> *I like the exercise most because it teaches us how to reduce our tension by using the exercise. The Inhaling and exhaling part of the exercise is very entertaining to me.*

Intervention providers also reported that participants were happy during the intervention sessions, despite the fact that they noticed different levels of understanding among participants. As a result, the same topic may take different times for different patients. One intervention provider explained the situation as follows:

> *"Participants were happy during the intervention sessions but, they have a different level of understanding. They understand most of them but not all…especially illiterate patients need more time."*

One patient also reported the following:

> *I have a BSc degree and currently working in …. for the last two years. I like the intervention because many people have a wrong perception about the cause of the illness. I have experienced it in my first illness. My family had been discussing to take me to holy water because they believed that my illness is something to do with an evil spirit. Hence, I have a plan to join the MSc program in psychology after I get five years of work experience. Then I want to treat people who experience mental illness like me, and I want to get engaged in public health research and community education.*

Intervention format: we used two types of formats: individual format for People with bipolar disorder and the format that included People with bipolar disorder and their caregiver together. Participants highlighted the importance of engaging caregivers in the intervention. People with bipolar disorder whose family members took part in the intervention were pleased with their caregiver's involvement because caregivers learned more about their illness and started to understand them better than before.

> *My husband started to understand my illness after he took the education. Now, he even tells the children not to disturb me, he advises me to prepare food for the children early, wash my*

hands and legs and sleep early. Now, he has starting to understand me because he has learned about my illness… previously, he did not understand me when I told him to take his medication and sleep early; instead, he made me angry by describing how a person sleeps early.

Intervention providers, on the other hand, identified the difficulties of discussing family-related issues with People with bipolar disorder in the presence of their caregiver or vice versa, despite believing that involving caregivers in the intervention a has great role in the care and treatment of patients.

Sometimes, there are family-related issues like disagreement that they [Patients] believe as a cause of their illness. But they feel discomfort talking about it or other family-related issues in the presence of their family. For example, the patient and caregiver may be spouses so there may be an issue that makes them common, and sometimes the wife needs to discuss it alone. So, it is good to consider both sides.

Perception of intervention providers about manual preparation and training on the manual

Intervention providers liked the way the training material was prepared, like the color printing and the instruction given to intervention providers. They also mentioned preparation of a manual with the local language helped them to understand and deliver easily.

Since we had an extensive discussion during the training, the translation and some of the words in the manual were greatly improved. I do appreciate the manual preparation. There are terms written in bold, normal, and italic. Each of them expresses a different massage for intervention providers to administer exactly as it is written in the manual or maybe it serves as guide. Similarly, there are some instructions in the manual that we use in all of the sessions.

The intervention providers described that the providers' leaflet was helpful, especially to quickly review the content of the intervention during intervention provision. However, the preparation was not comfortable to use due to the font size and printed back and forth.

The leaflet was useful because it has summarized what is needed to be said during the intervention. The intention was to put it underneath the mirror on the table or just posted on the table. However, the font was too thin to read and printed back and forth which made it difficult to fold it into three like a regular leaflet. Most of them, on the other hand, were self-explanatory, and you can explain them easily.

All of the intervention providers mentioned that the contents covered in the manual are enough to provide the training. They also specifically, mentioned the content that describes communication skill was most useful because of its applicability for any patients with physical or mental illness.

Communication skill was one of the sessions that received a lot of attention during the training. Since we are not mental health experts, we had a communication gap. Previously we were relying more on medicine than psychological intervention. This section is useful for other patients as well. It helps the clinician in a thorough understanding of the problem of the patient.

Another intervention provider mentioned the importance of communication skills as follows.

We have discussed how to create trust, which is a great idea. One example was about how we talk about an important topic such as suicide. We do not always inquire about issues that are

not clearly described by the patient. For example, we do not usually check if patients have had a history of suicidal attempts or have suicidal ideation. As a result, the skill we got from the current intervention training, we talked about these topics. Moreover, we were involved in the manual development process from the beginning which helped us to acquire very helpful skills.

Regarding the training approach, professionals mentioned the discussion made using the case stories, role play, and experience sharing makes the training interested and helped them to

During the training, we were discussing about the hypothetical case based on our previous experience. For example, we were saying what if the participant possibly asks this and that question and how we can provide an answer for them and the like… which was really helped us to understand the topic

Findings from pre-post knowledge assessment.

Compared to the pre-training assessment results, in post-training assessment, there was an improvement in perceived knowledge and skills of the providers in four domains of in the psychological intervention: symptoms and causes of BD, treatment, techniques used to improve wellness, and core skills (***Table 23***).

Table 23: Change in providers' knowledge and self-reported skills (n=9)

Domain of interest from the intervention	Items used as a measurement	Pre-training Median (Min, Max)	Post-training Median (Min, Max)
Symptoms of BD	Perceived knowledge on symptoms	11 (9, 14)	15 (12, 15)
	Psychoeducation delivery skills	9 (7, 15)	15 (12,15)
Treatment of the BD	Knowledge about treatments of BD	13 (12, 15)	15 (14, 15)
	Skill to education for PBD and caregivers	11 (8, 13)	15 (13, 15)
Techniques used to improve wellness (PST, sleep hygiene, & anxiety management)	Perceived knowledge of techniques	3 (3, 5)	4 (4, 5)
	Skill to education PBD & caregivers	3 (2, 5)	4 (4,5)
Core skills in psychological intervention	Perceived knowledge	4 (3,5)	4 (4,5)
	Skill in treating patients	7 (5, 10)	8 (8, 10)

*Minimum= Min, Maximum= Max, People with Bipolar Disorder = PBD

Fidelity of intervention delivery

With the exception of the fourth session, the intervention provider's level of adherence to all components of the intervention manual was high (Figure 9). Adherence varied from 58% to 98% (2.8/5 to 4.9/5). Overall mean adherence to intervention content for all five sessions was 78%. The fourth session had a lower mean score (2.8/5) and the third session had the highest mean score (4.9/5). For

the three items that were used to assess the competency of intervention providers in explaining the aim of the session (beginning the session with general questions, and managing time effectively), the mean competency score varied from 60% (3/5) in the fourth session to 80% (4/5) in the third session. The overall mean competency score for all the sessions was 70%.

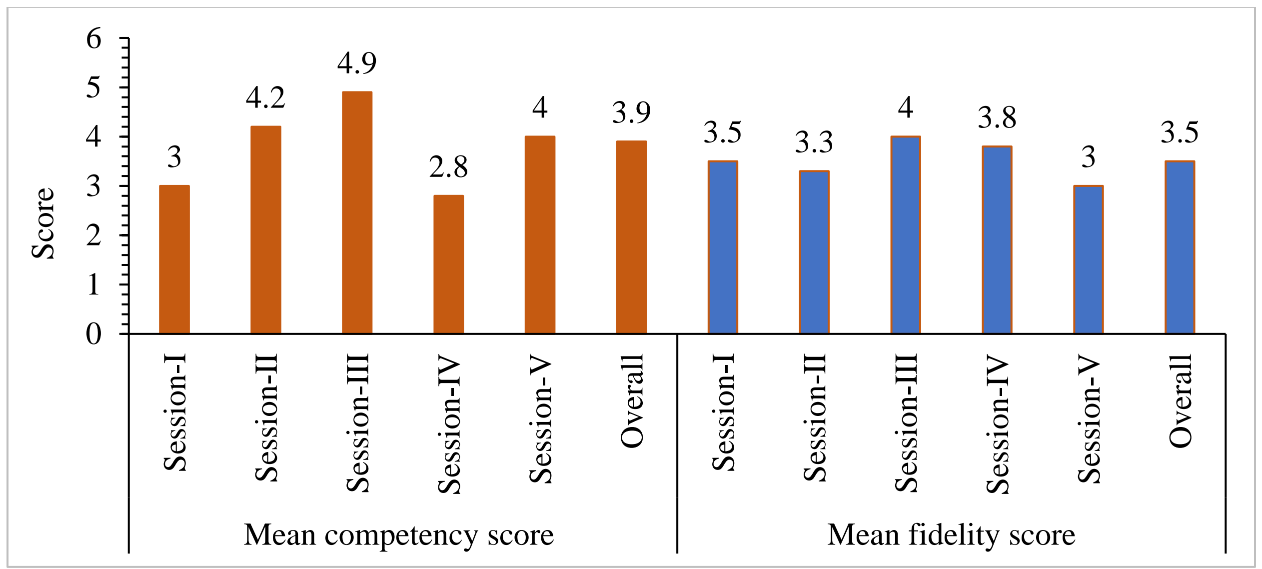


Figure 9: Mean intervention fidelity and providers' competency scores

The impact of the intervention on symptom severity

The median score of depressive and mania symptom severity scores before and after delivering the intervention are summarized in ***Table* 24**. There was a reduction in depressive symptoms after the intervention compared to the pre-intervention results. However, the reduction in mania symptoms score was not different from pre-intervention.

Table 24: Depressive and mania symptom severity score before and after intervention (n=12).

Symptoms of interest	Instruments used to measure the outcomes	Pre-intervention Median score (Min, Max)	Post-intervention Median score (Min, Max)
Depressive symptom severity	PHQ-9	4 (0,9)	1.5 (0,6)
Manic symptom severity	YMRS	1.5 (0,5)	1.5 (0,4)

**Minimum= Min, Maximum= Max, PHQ-9: Patient Health Questionnaire (PHQ)-9; YMRS: Young Mania Rating Scale;*

CHAPTER SIX: GENERAL DISCUSSION AND CONCLUSION

The primary aim of the Ph.D. thesis research was to develop and test feasibility and acceptability of a psychological intervention for bipolar disorder that could be delivered by non-specialist health workers in rural Ethiopia. After four years of intensive work, it was possible to develop an intervention which is feasible be delivered by non-specialist health workers and acceptable by target patients. In this section of the PhD thesis, we first provided key findings based on each phase of the research work, followed by a discussion of those key findings. We then present the overall strengths and limitations of the study. Finally, we report the overall implications of our findings and recommendations for policy makers, for practitioners, and direction for future research will be addressed. The section is concluded by providing overall conclusions

6.1 Summary of key findings

6.1.1 Intervention development phase

Identifying the evidence base: we synthesized evidence on the effectiveness of psychological interventions for bipolar disorder in LMICs.

In this systematic review, eighteen studies identified and evaluated: individual, group, and family psychoeducation, CBT, and MBCT. In most of the studies, the sessions range from 1-8 sessions and the intervention's components were psychoeducation, relapse prevention techniques, behavioral and problem-solving techniques. The findings suggested that psychoeducation improved treatment adherence, knowledge of and attitudes towards bipolar disorder and quality of life, and led to decreased relapse rates and hospital admissions. Family psychoeducation prevented relapse, decreased hospital admissions, and improved medication adherence. CBT reduced both depressive and manic symptoms. The MBCT has been shown to be effective in reducing emotional dysregulation.

Modeling process and outcomes: in this stage we first identified potential targets of psychological intervention through a qualitative study. In a qualitative study, most people with bipolar disorder and their caregivers described common early symptoms of relapse, priority concerns, and factors that trigger, worsen or improve the patients' illness and the perceived impact of the illness. Among the early symptoms of relapse, irritability, loss of respect for others, sleep disturbance, carelessness, heavy-headedness, and feeling unusually energetic were commonly reported. Additionally, people with bipolar disorder were more worried about having an incurable illness that requires long-term

treatment, whereas, caregivers emphasized the negative impact of patients' aggressive behavior and sleep disturbances on the social, physical, and psychological, and day-to-day lives of the patients and their family members. Social factors such as social support, stigma, stressful life events, like the death of relatives; religious believes and practices; biomedical treatment, and substance use were among the factors that affected the illness. Public stigma, social exclusion, dropping out of school and a lack of employment opportunities were the major reported negative impacts of the illness.

In the second stage of the modeling, findings from a systematic review and qualitative studies were used as the basis for the development of the intervention manual. The systematic review findings were used as primary sources to identify components of the intervention that could potentially work in an Ethiopian context, whereas the qualitative study explored the unmet needs of the target groups and also brought lessons from factors that trigger or improve the illness that needs to be considered during intervention development. Using mental health experts' workshops and ToC workshops, we identified the components of interventions to achieve the desired outcome. The workshop participants also commented on when, how, by whom, and where the intervention should be delivered to make the intervention feasible and acceptable. ToC workshop participants also co-produced a ToC map that showed the anticipated pathways for achieving the intended outcome. Finally, we developed a five-session psychosocial intervention, each session scheduled for 20 minutes, that can be delivered in the PHC setting.

6.1.1 Feasibility/ pilot phase

This phase of the study aimed testing the feasibility and acceptability of the developed intervention, delivered by PHC workers in the study setting. The intervention was delivered weekly for 12 people with bipolar disorder and six caregivers. The findings show that the intervention was feasible to be delivered at PHC by non-specialist health workers and acceptable by both providers and receivers. Preliminary findings indicate a reduction in depressive symptoms post-intervention and improvement in providers' perceived knowledge and skills. Intervention providers' adherence to the manual was moderate. However, the allotted 20-minutes for each session was considered too short. Additionally, while participants acknowledged the importance of involving caregivers in the intervention, they also raised privacy concerns.

6.2 General discussion

In this section, we will discuss the key findings presented above with relevant literature conducted globally in a sub-section based on the phase of studies.

6.2.1 Intervention development phase

Majority of the identified studies assessed the effectiveness of psychoeducation. Few two CBT and one MBCT which also have psychoeducation component identified. This in line with the previous reviews that focused on people with high risk and early-onset bipolar disorder (157). The WHO mhGAP intervention guideline also endorses routine psychoeducation for people with bipolar disorders(223) though it does not provide detailed guidance on the number of sessions, content, and delivery of the psychoeducation. Our review shows that 3-12 sessions of psychoeducation were effective in reducing relapse, hospital admissions, and illness severity of both depression and mania. The number of sessions is aligned with previous reviews that reported 2-21 sessions of PE (150, 153, 156). Despite the lack of mental health specialists is one of the major challenges in LMICs (46, 47), the psychosocial interventions in the included studies were delivered by mental health specialists in all included studies. However, task sharing to non-specialists health professionals has been suggested and tried to deliver psychological intervention for other mental disorders (50, 52). Studies also highlighted the importance of adapting the intervention to the target groups to improve the effectiveness of intervention (54), feasibility, and acceptability (48, 49). However, the majority of the studies didn't mention the intervention adaptation or development. In one paper, just one session with 120 minutes of family psychoeducation improved outcomes on multiple domains: treatment adherence, relapse rate, and hospital admission (212). This finding was similar to another review that reported 2-18 sessions, with a duration ranging from 45-150 minutes of family psychoeducation reduced caregivers' burden and improved knowledge about the illness among caregivers (156). Given the family orientation of care in LMICs, brief family psychoeducation is a promising intervention that could be tested in the general healthcare context. One study included in our review reported that psychological intervention is less effective for people with bipolar disorder who had more than 12 previous relapses (201). However, a meta-regression of six studies using the number of episodes as a predictor variable found no relationship between the number of episodes and the number of relapses and no difference in survival rate between cases with less than and greater than twelve previous episodes (148). In general, our review showed the promising effects of psychological intervention for improving the outcome of bipolar disorder which is aligned with previous studies reported in high-

income countries (19, 20, 44, 224, 225). The findings of this review used to identify the components of the intervention, the modalities, number of sessions, and duration of sessions that need to be considered in the intervention development phase

In a qualitative study, the findings demonstrated that people with BD and caregivers were able to identify early warning signs of relapse, which is one of the key factors to take action before the illness gets worsened (226). Caregivers also reported changes in behavior and sleep disturbance as early signs and symptoms which was perceived to be important for patients in order to get feedback and monitor mood (227). In line with findings of previous qualitative studies (228, 229), people with BD in the current study are more concerned about the chronicity of the illness and medication-related problems; whereas, caregivers reported sleep disturbance and disruptive behavior are most worrisome for them which is similar finding with the study done in New Zealand (230). This indicates that understanding and addressing patients' and their caregivers' concerns related to the illness is an important factor to prevent triggering of the illness and improve patients' wellness.
The most significant consequences of illness for the people with bipolar disorder was social, Lost income generation opportunities, and social exclusion, for example, were felt by the whole family. Our findings suggest the need to address the social aspects living with bipolar disorder. A study conducted in United-states supports this findings where people with bipolar disorder identified several helpful behaviors that enabled them better cope with illness and also allowing them to feel more socially connected (231). For example, listening and encouraging people with BD to value themselves, and their contributions, expressing love, and supporting them to access health services were among the identified helpful behavior (231). Disrupted relationships with families and other members of the community were also seen as both a consequence and a cause of illness by participants of this study, which, in turn, led to broader socioeconomic impacts (e.g stigma, lack of work opportunity). Participants described the vicious cycle that resulted from fractious social encounters and antagonistic relationships that triggered and intensified the illness, in turn, leading to a worsening of relationship problems, social exclusion, stigma, and lack of support, and often hostility, from the community. Findings from other studies have described similar experiences of people with bipolar disorder in which they reported feeling misunderstood by their community and as being to blame for their illness (75), leading to poor interpersonal and marital relationships (232, 233). This lack of social support lead to further alienation, internalization of their "spoilt identity", and a sense of inferiority leading to low motivation to disclose their feelings (234). Consequences of the illness were found to be

pervasive among study participants, affecting not just the people with bipolar disorder and their primary caregivers but stigmatizing the whole household/family. This findings was also found to be the case in a similar study (76). Participants described the negative consequences of illness on children's education and family member's ability to work, leading to impoverishment (75, 235).

In our study, participants who visited religious places or traditional healers for their illness did so because: they believed their illness was caused or activated by a supernatural power, or, they preferred to visit religious places because they believed engaging in religious activities helps to combat stigma (236) and improve wellness (237). Studies conducted in sub-Saharan countries highlighted those supernatural explanatory models and stigma can prevent patients from seeking biomedical services, and lead patient to opt for traditional treatment (238, 239). This is an indication of the need for collaborative work with culturally recognized healers to improve health-seeking behavior and utilization (238, 239).

In this study, there are contradictions in the explanation of substance use as a coping mechanism. For example, some participants mentioned that they engage in substance use to improve their social involvement and sleep, while others stopped substance use because of the perceived negative effect on their health and triggering effect on their illness. This finding is in accord with findings from a previous study from the same setting on the important role of khat in facilitating social, cultural, and religious activities (240). While in rural Ethiopia, findings suggest substance use is perceived as a way of bridging social gaps, research from northwest England described how people with bipolar disorder used drugs and alcohol to manage their mood and anxiety symptoms (241).

Participants of this study also practiced a range of self-management strategies, and where necessary, sought help from more informal healing services. Some of these informal providers include holy water sites and traditional healers. People with bipolar disorder and their caregivers have accumulated knowledge over time and use this knowledge to inform their behaviors. For example, people with bipolar disorder avoided situations they knew to be stressful and sought help from biomedical services when they recognized they were unwell. It has been suggested that self-care strategies improve knowledge and skills by empowering and helping people with BD to take responsibility for their illness (242, 243). Understanding life with bipolar disorder, particularly knowledge of warning signs and factors which aggravate or exacerbate illness, may help people with bipolar disorder to accept their diagnosis and treatment, as well as encourage them to be proactive regarding early signs of illness and reducing the risk of relapse (226, 231, 244). The results of our qualitative study are consistent with

findings from our systematic review, which suggested that health education may be effective in improving self-care (217). We found stigma to be inescapable and debilitating in participants' lives, limiting the extent to which they felt comfortable sharing their feelings or participating in social events. This will need to be addressed if group therapy or peer support, where sharing of knowledge may be helpful, is to be considered. This study has added knowledge about the experience of people with BD. The findings were also used as input for the next step in the progress, which was identifying components which need to be included in the intervention manual; drawing lessons from both positive and negative experiences and unmet needs.

Mental health expert and ToC workshop: The development of the psychological intervention was done in accordance with the MRC framework integrated with the ToC approach(173). The first two steps (i.e systematic review and qualitative study) informed the intervention development through creating an understanding of the unmet needs and priorities of people with BD and their caregivers that can potentially be addressed by psychological interventions. The systematic review was used to identify the types of interventions that have been tried and shown to be effective in LMIC settings. The mental health expert workshop and ToC workshops were used to identify components of the intervention and assess the feasibility and acceptability in the local context. Therefore, the ToC worked as a bridge between the evidence and the local context, helping to ensure ownership, acceptability, and support for the intervention which is key for implementation (245), and to build trust, encouraging the pooling of resources and knowledge (246).

In our study, stakeholders were positive and shown an open for cooperative work because the setting was unusual in Ethiopia, where biomedical care was available and accessed in a community mental health care service was integrated (161, 168) . Additionally, extensive mental health researches had been undertaken (60, 67, 71, 170-172). Our results, therefore, represent the experiences of illness, use of mental health care service, or understanding of mental illness and its impact in a context where there is arguably greater awareness of "mental health" and more therapeutic options available than would be the case in most rural Ethiopian communities.

In our mental health expert and ToC workshops, psychoeducation about BD, its cause, treatment, and the course of illness were considered as the key components of the intervention being developed. These components of the intervention were identified through the systematic review (247) and seen to play a central role in improving service users' knowledge and attitudes about bipolar disorder and its treatment (217, 226, 231, 248). In our study setting, where the level of literacy, access to formal

education internet penetration is low, it will be critical to integrate psychoeducation that is consistent, relevant, and evidence-based into the intervention. Participants of the workshops also recommended that training on problem-solving and anxiety management techniques be included as part of the intervention, to equip patients and caregivers with necessary skills to help them with day-to-day stressors related to their illness (249).

The key components of the ToC used to identify the necessary intervention including where, when, and by whom the intervention would be done, preconditions, indicators of success in order to improve the feasibility and acceptability of the intervention. The ToC participants highlighted the importance of caregivers' support and endorsed the importance of involving them in the intervention because, in LMICs, caregivers are the primary source for the physical, psychological, and treatment-related support for patients (23). The positive impact of family interventions on clinical and functional outcomes of people with BD (250), may be are even greater in this setting. Although the participants were concerned about the possible work burden for PHC workers, they also reached the consensus that the intervention to be delivered by PHC who treat the patients in their regular follow-up visit. This was in line with the WHO recommendation of integrating mental health services within PHC settings to address unmet mental health needs (251). With regards to intervention delivery format, group intervention was noted to be less feasible for this rural setting where there is inadequate local transportation and thus, it is difficult to identify a convenient time for group intervention (252).

The ToC approaches helped to identify perspectives of various stakeholders' groups for improving long-term outcomes. Service users emphasized the importance of social and functional outcomes, including impact on children's education, stigma (249), and productivity (249, 253). Similarly, community leaders acknowledged the difficulties of social engagement related to public stigma and emphasized stigma reduction as a long term-outcome (254). Whereas health professionals identified improved quality of life of people with BD and reduced caregivers' burden as long-term outcomes. These different perspectives pointed to the need for a multi-layered intervention package beyond a health facility-based intervention to address multi-dimensional needs. Further development work to address these multi-sectoral and multi-dimensional issues is essential. However, the identified components of the intervention were believed to address the priority problems of service users explored through qualitative stud (249) and anticipated long-term impact of the intervention. Several systematic reviews and meta-analyses were also reported that intervention that incorporated psychoeducation, problem-solving and anxiety management reduced relapse(144, 145, 147-149, 157),

manic, depressive, and anxiety symptoms (144-146, 155, 158), and contributed to the improvement of functioning TAU (145, 155) which indirectly contribute for the improvement of economic status and reduced stigma among people with bipolar disorder and their family (255).

6.2.2 Feasibility test

The findings of the feasibility trial showed that the intervention was well-received by people with BD, caregivers, and providers and led to perceived benefits. The providers' knowledge about bipolar disorder, its treatment, and techniques used to improve wellness and anxiety management improved after the training. The intervention implementation fidelity score was moderate. In our study there was high attendance, all except one caregiver attended all sessions, which indicates the acceptability of the intervention (256). This finding is comparable with a pilot study conducted in Pakistan that reported a 100% attendance rate in 12 sessions of psychoeducation for people with BD (257) and is lower than the levels of drop-out reported in studies that tested the feasibility of 16-20 sessions of cognitive-behavioral therapy for bipolar disorder (23-40% drop-out) (258, 259). The high attendance rate or acceptability of the intervention in the current study could be due to a lower number of sessions, in which sessions less than six was linked to less attrition rate (144), development of the intervention, involving all stakeholders (260, 261), and the efforts made to ensure that it would fit into the local context (48, 49). With psychological interventions, difficulty finding a convenient time for sessions is a common barrier to attendance (262).

In our study, participants reported that they had acquired knowledge and skills related to BD, which is in line with a previous study that showed psychological intervention enhance understanding of patients' and help them to acquire skills used to cope with challenges (263) and to maintain their psychosocial wellbeing (264). However, the degree of importance of each session was different for each participant, indicating a need for the providers to personalize the focus of the intervention. People with BD have various needs related to symptoms of illness, treatment, quality of life, and their family relationships which need different approaches (265). Likewise, caregivers and people with BD may also have different priorities (266). Although the sample size was very small, it is encouraging that depressive symptoms were reduced which is in line with the findings of systematic reviews (44, 217). The first review included studies were from LMICs, and the sessions ranged from 3 to 18, but, most of the intervention providers were mental health experts (217) and the second review (44) included studies conducted mainly in high income countries. This may indicate that a non-specialist can deliver mental health interventions that have positive effects on depression (50).

In the current study, the overall mean level of adherence to the intervention content and providers' competency in delivering the intervention were moderate. This result is lower than the previous feasibility studies conducted in high-income countries, which found high fidelity in a family-focused intervention for schizophrenia (267) and youth at risk of bipolar (268). However, the difference might be because of the difference in qualification and year of experience in providing PSI. PHC workers delivered the intervention for the first time in our study, while in the previous studies (267, 268), providers were second degree or higher level psychologists.

Almost all sessions took longer than the proposed 20 minutes. Intervention providers reported that the content was important and should not be reduced, instead suggesting that the last two sessions could be made into three sessions and that 30 minutes was a more realistic timeframe for each session. Our systematic review reported 3-12 individual sessions and the duration of each session ranged from 45-60 minutes (217) which is much higher than that allocated for each session in the current study. Therefore, taking the feasibility of time into account, we have shortened sessions to be 30 minutes in the revised manual. Regarding the inclusion of caregivers in the intervention, intervention providers observed incidences of hesitation to freely discuss family-related issues both from people with BD and caregivers. Thus, understanding confidentiality issues and how family conflicts can be managed needs to be considered (269). In group therapy, having one session with each member of the group before the actual group therapy is recommended as an important skill to understand the needs of each participant (270). In the current feasibility study, intervention providers also suggested that there should be flexibility to allow providers to meet with the person with BD and caregiver individually whenever they find it to be necessary.

6.3 Strengths and limitations

This thesis has several strengths.

First, we used a well-recognized framework for complex intervention development integrated with ToC participatory approaches (173);

Secondly, we triangulated various methodologies and sources to develop and pilot the intervention; Specifically, the intervention development work involved; (i) a comprehensive literature search in low-resource settings to synthesize evidence on the effectiveness of psychological intervention for bipolar disorder, and (ii) qualitative study to understand the lived experience and unmet needs of people with BD and caregivers. We involved diverse stakeholder groups from an expert, PHC workers,

community representatives, and service users that can ensure the intervention's local appropriateness through stakeholder buy-in and direct inputs. During the qualitative study, both patients who are on follow-up and taking medication and those who stopped their treatment were involved in the study to understand their experience of service use and challenges related to it. This intervention was tested in a routine clinical setting where the intervention was planned to be delivered which enable us to identify what works or does not work on the ground. Additionally, we used a mixed assessment method to understand the feasibility and acceptability of developed intervention. Recording the intervention's sessions and checking for the fidelity of intervention implementation was also helped us to identify areas that need further modification before testing effectiveness.

Thirdly we adhered to the various reporting standards (i.e. GUIDED checklist (271) and PRISMA Guidelines (272), to ensure quality and transparency reporting.

There are also a number of limitations that should be considered. In the qualitative study, we did not carry out member checking. However, during interviews, we tried to ensure participants' meanings by summarizing and repeating back to them that they had said. During the ToC workshops, we conducted separate workshops with different groups of stakeholders to reduce the impact of power imbalance. However, the residual power differentials (e.g., Between caregivers and people with BD) may still have affected the content of what participants felt comfortable expressing. The skilled facilitator sought to address this by actively seeking out the views of people with BD. Additionally, people with BD and caregivers were not involved in reviewing the manual. However, in the final ToC workshop, the content of the intervention, and the number and frequency of sessions were discussed and approved by all ToC participants including people with BD and their caregivers. The intervention is tested in a small sample size especially for caregivers and we used a single group intervention due to the small sample size, and limited resources. Additionally, we did not quantify the change in knowledge and skill of intervention people with BD and caregivers.

6.4 Implications of the findings and recommendations

Findings from any scientific research designed with a clear objective of addressing a public health issue are expected to inform various stakeholders with various degrees including policymakers, program implementers, professionals that work at a point of care, and researchers interested to advance the study area or to carry out similar research by addressing the limitation of the study. We have now

summarized below the potential implications of the findings from the Ph.D. work for policymakers, clinical practice, and future research.

6.4.1 Policy implications and recommendations

Integration of mental health services into PHC in LMICs is recommended to improve access to care. This policy direction is also reflected in the Ethiopian National Mental Health Strategy. The MoH intends to increase the provision of basic and integrated mental health and psychosocial services in 70% of the health centers by the year 2025. Given this political commitment and national effort to expand quality mental health services, including psychosocial support, the findings from this study will have a significant positive impact on the type of services that will be available for people with bipolar disorder and caregivers. Utilization of the intervention that we developed and described within this Ph.D. thesis will contribute significantly to ensuring the quality-of-care provision.

The lessons learned in the process of intervention development and feasibility trial could be used to inform how best to develop psychosocial interventions for various mental and physical illnesses that can be given in an integrated health care setting. This will help policymakers to incorporate directives within the mental health policy during its revision of the need for developing/adopting psychosocial interventions for other conditions for various segments of the population that is appropriate in a different geographical setting

6.4.2 Implications of the findings and recommendations for practitioners

Our review showed that psychological intervention can be feasibly and acceptably delivered by non-specialist health workers. This intervention can benefit people with BD and it is worth considering for integration into primary healthcare in rural Ethiopia. The intervention packages that we have developed will help to integrate psychosocial interventions into the PHC service and it clearly describes the components of the intervention to be included. The review of existing literature that we did show us that 3-8 sessions of intervention were found to be effective in most of the studies This suggests that intervention delivered within this number of sessions could also be feasible.

Participants reported that all of the intervention components were relevant with some degree of variability depending on the priority problems. This implies that the intervention providers need to understand the participants' priority problems during the need assessment which is the first session of

the intervention. This is a significant impact on the success of the intervention as it encourages adherence to the intervention

6.4.3 Implications for research and recommendations

Although our review suggests the beneficial effect of psychological intervention in improving the outcome of bipolar disorder, about three-fourths of studies that were included in the review used pre-post assessment or they were of a short duration of follow-up (

Table 12). This limitation should be addressed in future research by investigating the long-term outcome of psychological intervention in LMICs. During our review, we did not find studies from low-income countries and this is a critical gap that future research needs to address. Though the development of the intervention was done to fit the local context in such a way that it becomes feasible and acceptable, the majority of the previous studies did not report how the intervention was developed or adapted allowing future researchers to be able to use the same methodology. Future researchers in a similar area should report the intervention development or adaptation process, allowing other researchers to learn from and replicate the findings, as well as transfer the findings to similar settings. Our current study has provided the whole process that we followed in the development and feasibility test of the intervention which we think is a good practice that other researchers should follow.

Results from the feasibility trial inform us about the feasibility and acceptability of the intervention. However, it is worthwhile to continue and test clinical and cost-effectiveness using RCT. During our intervention development, both service providers and intervention recipients provided detailed feedback on the areas of the new intervention that need improvements and the components that they feel are very important. For example, they commented the information leaflets should be printed in a manageable way, and the intervention manual should have flexibility in using separate sessions for patients and caregivers when necessary and the duration of sessions should be increased from 20 to 30 minutes. For future research, all of these feedbacks will be useful and informative in evaluating the performance of the intervention.

The PHC workers reported their satisfaction with the training and the skills they acquired from the training were transferable to management of other mental and physical illnesses. Their adherence to the intervention manual and competency was moderate with weekly supportive supervision. This may

imply that training and supervision are the keys to the successful implementation of the intervention. More research is needed to determine how the training and supervision can be sustainable and how best it can be integrated with other services. The participants, especially the people with BD and caregivers, were selected purposively which has introduced a selection bias to the findings. Therefore, it is worth considering the random selection of participants in future studies.

6.5 Conclusion

To our knowledge, this study is the first in the LMIC setting that developed manualized psychological intervention manual and tested for bipolar disorder in primary care. We followed a series of steps while developing the intervention and we were guided by the Medical Research Council (MRC) framework and integrated it into a participatory Theory of Change (ToC) approach. The development work started with evidence-based on effective psychological intervention for bipolar disorder in LMICs. The review identified eighteen studies on psychoeducation, CBT, and MBCT. Psychoeducation was tested in different delivery modalities: individual, group, and family-focused. No study was found from low-income countries and only two studies were from middle-income countries. The findings of the review suggest that psychological intervention was effective for a range of outcomes. The findings were useful in identifying components and the format of the intervention, as well as in recommending the number of sessions. The findings of the qualitative study showed us both aggravating and relieving factors of BD and how people with BD try to cope with challenges they face because of their illness. These findings were indicative to identify potential targets of psychological intervention. Findings from these two studies (Systematic review and qualitative study), opened a room for discussion about feasibility and acceptability issues among experts and ToC workshop participants. The findings also enabled these stakeholders to provide their suggestions, comments, recommendations for intervention from their professional experts, lived experience, and roles and responsibilities. The ToC workshop participants co-produced the ToC map, which includes an intervention component, underlining assumptions and preconditions for the effective implementation of the intervention. Findings from feasibility study showed that the intervention is feasible to implement in the primary care setting and acceptable by both PHC workers, people with BD, and caregivers. This is an important advance for the care of people with this neglected mental disorder. Using this as a springboard, this intervention needs to be tested for effectiveness before recommending it for day-to-day clinical use

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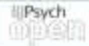
APPENDICES

Appendix-A: Psychological interventions for bipolar disorder in LMICs: systematic review.



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Review

Psychological interventions for bipolar disorder in low- and middle-income countries: systematic review

Mekdes Demissie, Charlotte Hanlon, Rahel Birhane, Lauren Ng, Girmay Medhin and Abebaw Fekadu

Background

Adjunctive psychological interventions for bipolar disorder have demonstrated better efficacy in preventing or delaying relapse and improving outcomes compared with pharmacotherapy alone.

Aims

To evaluate the efficacy of psychological interventions for bipolar disorder in low- and middle-income countries.

Method

A systematic review was conducted using PubMed, PsycINFO, Medline, EMBASE, Cochrane database for systematic review, Cochrane central register of controlled trials, Latin America and Caribbean Center on Health Science Literature and African Journals Online databases with no restriction of language or year of publication. Methodological heterogeneity of studies precluded meta-analysis.

Results

A total of 18 adjunctive studies were identified: psychoeducation ($n = 14$), family intervention ($n = 1$), group cognitive–behavioural therapy (CBT) ($n = 2$) and group mindfulness-based cognitive therapy (MBCT) ($n = 1$). In total, 16 of the 18 studies were from upper-middle-income countries and none from low-income countries. All used mental health specialists or experienced therapists to deliver the intervention. Most of the studies have moderately high risk of bias. Psychoeducation improved treatment adherence, knowledge of and attitudes towards bipolar disorder and quality of life, and led to decreased relapse rates and hospital admissions. Family psychoeducation prevented relapse, decreased hospital admissions and improved medication adherence. CBT reduced both depressive and manic symptoms. MBCT reduced emotional dysregulation.

Conclusions

Adjunctive psychological interventions alongside pharmacotherapy appear to improve the clinical outcome and quality of life of people with bipolar disorder in middle-income countries. Further studies are required to investigate contextual adaptation and the role of non-specialists in the provision of psychological interventions to ensure scalability and the efficacy of these interventions in low-income country settings.

Declaration of interest

None.

Keywords

Psychosocial interventions; bipolar affective disorders; low- and middle-income countries.

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Bipolar disorder is a severe mental illness characterised by recurrent depressive and manic episodes and associated with high levels of disability and premature mortality.[1–3] Although there are limited data from low- and middle-income countries (LMICs), the burden of bipolar disorder may be even higher in these settings because of the high treatment gap.[1] As few as 10% of people with bipolar disorder receive care in some LMICs.[4,5] Even those who receive care may have limited access to evidence-based interventions, including mood stabilisers and psychosocial interventions.[5,6] In a cohort study of 312 community-ascertained people with bipolar disorder in Ethiopia, over 60% relapsed and only 5% remained continuously in remission over 2.5 years of follow-up,[5] which appears much lower than what has been reported in high-income countries.[7] Patients in low-income countries also appear to have substantially increased rates of mortality with nearly three decades of life lost because of premature death.[2]

Mood stabilisers, such as lithium and sodium valproate, and atypical antipsychotics such as olanzapine, quetiapine and risperidone are the recommended evidence-based treatments for bipolar disorder.[8] However, these medications are not widely available in many LMICs.[4,9] As a result, people with bipolar disorder in LMICs are often treated with first-generation antipsychotics during the maintenance phase.[5,6] First-generation antipsychotic medications are recommended in the latest version of the intervention guide of the Mental Health Gap Action Programme (mhGAP) in the absence of other options.[10] However, they have extrapyramidal side-effects, especially when taken in high doses for an extended period of time[11] and have poor evidence of efficacy as a maintenance treatment. Psychological treatments may play a crucial role in improving the outcome of bipolar disorder in LMICs where first-line treatments are not available for the majority of the population.

There is evidence from high-income countries that complementing pharmacotherapy with psychoeducation, family therapy or cognitive–behavioural therapy (CBT) for people with bipolar disorder is more effective at preventing relapse, improving medication adherence and overall disease outcome than pharmacotherapy alone.[12–14] The mhGAP intervention guideline recommends psychological intervention, especially psychoeducation to be delivered routinely for individuals with bipolar disorders.[15] However, to date there has been no published synthesis of the evidence on the efficacy of adjunctive psychological interventions for bipolar disorder in LMIC settings. In this systematic review we aimed to synthesise the evidence base for the efficacy of adjunctive psychological interventions in improving clinical and functional outcomes in people with bipolar disorder in LMICs.

Method

Scope of review

We reviewed studies that aimed to examine the efficacy of any psychological intervention in improving clinical and functional outcomes, including prevention of relapse or recurrence and hospital admissions; treatment adherence, biological rhythms, quality of life (QoL) and knowledge and attitude about bipolar disorder among people with bipolar disorder.

Search strategies

We searched Medline, PsycINFO, EMBASE, PubMed, Cochrane database for systematic review, Cochrane central register of controlled trials, Latin America and Caribbean Center on Health Science Literature and African Journal of Online databases since the inception of the respective databases until the second week of May 2017 with no language restriction. The following terms were used to identify psychological interventions: 'Psychosocial intervention' OR 'Psychological intervention' OR 'Psychosocial therapy' OR 'Cognitive behavioral therapy' OR 'Cognitive Therapy' OR 'Behavior Therapy' OR 'Family focused intervention' OR 'Family intervention' OR 'Family therapy' OR Psychoeducation OR 'Interpersonal and social rhythm therapy' OR 'Social rhythm therapy' OR 'Interpersonal therapy' OR 'Mindfulness based cognitive therapy' OR Psychotherapy OR 'Expressed emotion' OR 'Individual therapy' OR 'Group therapy'). The search terms used for bipolar disorder were: 'Bipolar disorder' OR 'Bipolar and related disorders' OR Bipolar OR Mania OR 'Major affective disorder'. We used the World Bank definition and list of countries to identify LMICs. The search terms for intervention, bipolar disorder and LMICs were combined with the Boolean term 'AND'.

Outcomes of interest

The main measures of efficacy of psychological interventions included: number of relapses or recurrence, severity of mood symptoms, treatment adherence, QoL, functional status, number of hospital admissions, knowledge and attitudes about bipolar disorder, and stigma and biological rhythms. The review protocol was registered in the PROSPERO database (CRD42017054572).[16]

Inclusion criteria

Eligible articles were assessed against the following inclusion criteria:

(a) age: all ages were included;
(b) diagnosis: bipolar disorder I or II in any phase of the illness (depressive/manic/mixed episode or in remission);
(c) study setting: conducted in a LMIC according to the World Bank classification at the time of the study;[17]
(d) type of study: (i) randomised controlled studies (RCT), or (ii) controlled before-and-after study;
(e) comparison groups: usual care, waiting list control or an active adjunctive psychological intervention;
(f) type of intervention: any psychological intervention delivered either face to face (individual or group format) or online.

Data extraction

Studies were first screened based on of their titles and abstracts, with the full texts obtained for those fulfilling the inclusion criteria. Two researchers (M.D. and R.B.) screened and extracted data independently using a customised data extraction form, which was piloted before the main data extraction. Any discrepancies were reconciled through discussions. Excluded articles and reasons for exclusion were documented.

Quality assessment

The consolidated standards of reporting studies (CONSORT)[18] and the Cochrane assessment of risk of bias[19] were used to assess the quality of the studies. The CONSORT checklist has 25 items on the quality of reporting of each section of the study including funding sources. The Cochrane assessment of risk of bias measures selection bias, performance bias, detection bias, attrition bias and reporting bias. The quality of studies was assessed independently by two researchers (M.D. and R.B.) and any differences were reconciled by a third researcher (A.F.). Assessment of the quality of the included studies was not used to exclude studies, but, to inform interpretation of the findings.

Method of analysis

Key findings were summarised in the form of figures, tables and text. Although the original plan was to conduct a meta-analysis and generate summary effect sizes of interventions, this was not possible because of the heterogeneity of the included studies in terms of: type of intervention, number of intervention sessions, duration of follow-up, format of intervention delivery and qualifications of the individuals delivering the intervention.

Results

A total of 7987 articles were identified from the primary search. Of these, 532 were duplicates and were excluded. An additional 7213 were excluded because they were not related to bipolar disorder or to psychological interventions during the title screen and a further 162 during the abstract screen. Of the 80 studies included in full-text review, 62 were excluded because they were not from LMICs or were not related to bipolar disorder. This resulted in a total of 18 intervention studies for final analysis (Fig. 1). Four types of psychological intervention were identified: psychoeducation, family psychoeducation, CBT and mindfulness-based cognitive therapy (MBCT) (Table 1).

Included studies

All studies were conducted in upper-middle-income countries except two, which was conducted in middle-income countries. There was only one study from Africa (South Africa). All of the 18 studies were published between 2003 and 2017 and were conducted in six countries. Brazil,[20–24] Turkey[25–29] and Iran[30–34] each contributed five studies, and India,[35] South Africa[36] and Pakistan[37] each contributing only one study. Fifteen studies examined psychoeducation (five individual, nine groups, and one family intervention); two studies were of group CBT; and one study was group MBCT. All studies were RCTs, and all but two studies compared adjunctive psychological interventions with treatment as usual. The nature of 'treatment as usual' or the type of medication, was not specified in all these studies. the two studies that used an intervention comparison group, had used an equal number of sessions of relaxation and informal conversation,[22] or non-specific support.[32] The total number of participants in each study ranged from 26[30] to 59.[33] Overall follow-up time after the end of intervention ranged from 0 to 18 months (Table 1).

Intervention content and intervention provider

Providers of the intervention were specified in 15 of the 18 studies and included mental health specialists or practitioners (BSc

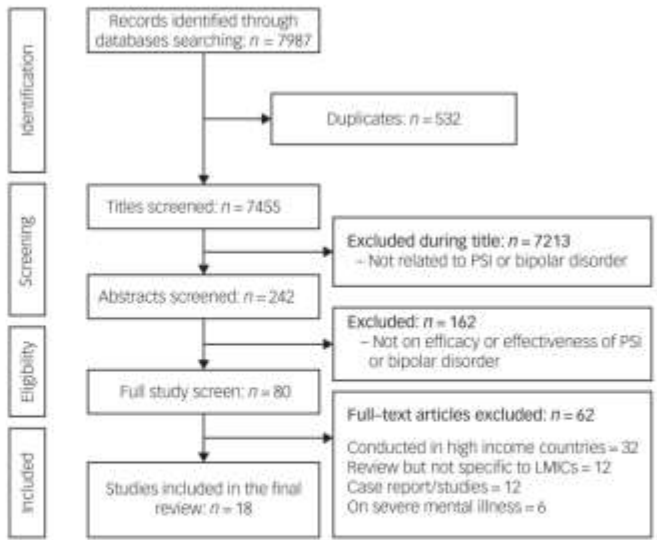

Fig. 1 PRISMA flow diagram of the study selection process.

PSI, Psychological intervention; LMICs, low- and middle-income countries.

psychiatric nurses,[23–27] MSc psychiatric nurses,[34] clinical psychologists,[21,32,37] MSc research psychology students,[21] undergraduate psychologists[20] psychiatrists or psychiatric residents[22,31,33]) and therapists or people with some form of clinical experience.[24,29,35] Although the majority of the studies did not indicated how the interventions were developed or adapted, most of the studies

Table 1 Summary of studies, interventions and patient characteristics for included studies

Authors	Baseline, n (intervention/control)	Type of treatment intervention/control	Mode of intervention	Sessions, n	Duration of intervention (weeks)	Duration of follow-up (months)
Faria *et al* 2014 (Brazil)[20]	32/29	PE/TAU	Individual	6	6	Pre–post
Husain *et al* 2017 (Pakistan)[27]	18/16	PE/TAU	Individual	12	12	Pre–post
Eker & Harkin 2012 (Turkey)[28]	36/35	PE/TAU	Group	6	6	Pre–post
Cuhadar *et al* 2014 (Turkey)[17]	32/31	PE/TAU	Group	7	7	Pre–post
Rahmani *et al* 2016 (Iran)[34]	38/38	PE/TAU	Group	10	5	Pre–post
Dogan & Sabanciogullari 2003 (Turkey)[18]	16/16	PE/TAU	Individual	3	3	3
George *et al* 2013 (India)[35]	30/30	PE/TAU	Group	4	16	3
Kurdal *et al* 2014 (Turkey)[19]	40/40	PE/TAU	Group	21	11	3
Faridhosseini *et al* 2017 (Iran)[36]	13/13	PE/TAU	Group	8	4	6
Cardoso *et al* 2014 (Brazil)[21]	32/29	PE/TAU	Group	6	6	6
Bahredar *et al* 2014 (Iran)[12]	15/15/15	PE/TAU/placebo	Group	9	9	6
de Barros *et al* 2013 (Brazil)[22]	32/23	PE/placebo	Group	16	16	12
Gumus *et al* 2015 (Turkey)[25]	41/41	PE/TAU	Individual	4	4	12
Javadpour *et al* 2013 (Iran)[31]	54/54	PE/TAU	Individual	8	8	18
Bordbar *et al* 2009 (Iran)[33]	29/30	FPE/TAU	Group	1	1	12
Costa *et al* 2012 (Brazil)[37]	27/14	CBT/TAU	Group	14	14	6
Gomes *et al* 2011 (Brazil)[24]	23/27	CBT/TAU	Group	18	22	12
Ives-Deliperi *et al* 2013 (South Africa)[38]	16/7/10	MBCT/TAU/HC	Group	8	8	Pre–post

PE, psychoeducation; TAU, treatment as usual; FPE, family psychoeducation; CBT, cognitive–behavioural therapy; MBCT, mindfulness-based cognitive therapy; HC, Healthy control.

Table 2 Psychological interventions for prevention of relapse/recurrence

Authors	Intervention group	Final analysis, *n* (intervention/ control)	Outcome measured	Proportion with outcome		χ^2	*Z*	*P*
				Intervention group	Control group			
de Barros *et al* 2013 (Brazil)[22]	G-PE *v.* placebo	28/18	Depressive relapse	–	–	–	–	0.18
			Manic relapse	–	–	–	–	0.09
Gomes *et al* 2011 (Brazil)[24]	G-CBT *v.* TAU	22/25	Relapse, *n*	14/23	14/27	0.28		0.590
			Time to first relapse, median (range) weeks	31 (66)	11.5 (48)		−2.554	0.011
Gumus *et al* 2015 (Turkey)[17]	I-PE *v.* TAU	37/41	Recurrence, *n*	7/37	14/41	1.583	–	0.21
			Experienced more than one recurrence, *n*	2	8	0.36	–	0.221
Faridhosseini *et al* 2017 (Iran)[34]	G-PE *v.* TAU	12/12	Recurrence, *n*	1/13	9/13	–	–	0.001
			Patients experienced more than one relapse, *n*	0	2	–	–	
Javadpour *et al* 2013 (Iran)[31]	I-PE *v.* TAU	45/41	Average number of recurrences	0.77	2.02	–	–	<0.001
Bordbar *et al* 2009 (Iran)[33]	G-FPE *v.* TAU	29/28	Total relapse, *n*	4/29	9/28	–	–	0.006
			Experienced more than one recurrence, *n*	1	2	–	–	–
			Time to first relapse in months, mean	6	4.8	–	–	–

G-PE, group psychoeducation; G-CBT, group cognitive–behavioural therapy; TAU, treatment as usual; I-PE, individual psychoeducation; G-FPE, group family psychoeducation.

described the core content of the interventions. The content in most of the interventions was educational: education about bipolar disorder, symptoms of mania, depression, mixed and hypomanic episodes, causes and prognosis of bipolar disorder, treatment adherence and side-effects of medication, early identification of symptoms of relapse, triggering factors, substance use and regular habits and management plans or prevention strategies.

Participant recruitment and outcome measures

The study participants were aged at least 18 years in all of the studies. Most of the participants were in remission during recruitment to the study and were recruited from the out-patient setting of a teaching or university hospital or from a public hospital. Most were receiving pharmacotherapy and follow-up from psychiatrists. In the majority of studies the Young Mania Rating Scale was used to measure manic symptom severity either as a categorical scale with an average cut-off of nine[22–25,30,32,34–37] or as a continuous scale.[20,21] Similarly, in the majority of the studies, the Hamilton Rating Scale for Depression was used to measure depressive symptom severity either as a categorical scale with an average cut-off point of eight[22,24,25,30–32,34,35] or as a continuous measure.[20,21] Five studies included people with bipolar I or II disorder, three studies recruited only individuals with bipolar I disorder and two studies recruited only those with bipolar II disorder; the remaining eight studies did not specify the type of bipolar disorder. In 16 studies, the DSM-IV was used as the diagnostic tool, with psychiatrist-confirmed diagnoses in 11 studies. Two studies did not describe who confirmed the diagnosis.[27,35] Details of other outcome measures are provided in supplementary file 1 available at https://doi.org/10.1192/bjo.2018.46.

Quality of included studies

The overall quality of reporting of the studies was not satisfactory as per the CONSORT checklist. Only three of the studies were registered in a registration database. Although all studies clearly reported the objective of the study. Only 55% of the studies reported how the sample size was determined. Sources of funding and the role of funders were reported in only two-thirds of the studies. The risk of bias assessed with the Cochrane assessment tool was moderately high. Although randomisation was carried out in all the studies, the method of randomisation was unclear in 40% of studies and allocation concealment was unclear in 80% of studies. Fifteen studies were rated as unclear and three studies had a high risk of detection bias. One-third of the studies were rated as having high attrition bias because of unequal numbers of people dropping out in the randomised groups or different reasons for drop-out or because of attrition greater than 10%. One-third of studies were rated as being at high risk of reporting bias because they did not report the mean and standard deviation of mood severity symptoms, between-group differences for selected outcomes, and number of participants who had a relapsed/recurrence (see supplementary files 2–4).

Efficacy of interventions

Prevention of relapse/recurrence

Six studies (four psychoeducation, one family psychoeducation and one CBT) examined the impact of the psychological intervention on prevention of relapse or recurrence (Table 2). Psychoeducation was effective in reducing the relapse rate,[25,30,31,33] as well as increasing mean time to first relapse.[33] However, one study showed that psychoeducation was not effective in people who had multiple previous relapses.[22] CBT was ineffective in decreasing the number of relapses but was effective in prolonging the median time to first relapse compared with treatment as usual.[24]

Reduction in symptom severity

Nine studies (seven psychoeducation, one CBT and one MBCT) assessed the efficacy of psychological intervention in reducing symptom severity. One study reported change in mood-only symptom severity within each of the randomised groups[28] (Table 3).

Studies reported significant reduction in general psychiatric symptom severity,[28] depressive symptom severity[21,31,37] and manic symptom severity,[20,21,30,31,37] immediately post-intervention and during follow-up. However, in one study where 60% of total participants had more than ten previous bipolar episodes, there was worsening of depressive symptoms in both groups and there was significant change and between-group difference in manic symptoms.[22] CBT was effective in reducing depressive and anxiety symptoms compared with treatment as usual.[25] MBCT was associated with significant improvement in anxiety symptoms, emotional dysregulation and mindfulness, but did not reduce

Table 3 Psychological intervention for reducing symptom severity

Authors	Final analysis, *n* (intervention/control)	Intervention	Assessment time (month)	Test statistics and *P*	Measure of effect
Mood symptom severity					
Dogan & Sabanciogullari (2003)[28]	14/12	I-PE *v.* TAU	3	I-PE: $Z = 2.41$; $P < 0.01^a$	–
				TAU: $Z = 1.05$; $P > 0.05^a$	–
Depressive symptoms					
Faria *et al* (2014)[20]	19/26	I-PE *v.* TAU	Post-intervention	$P = 0.40$	AMD = −1.86 (95% CI −6.34 to 2.61)
Husain *et al* (2017)[37]	16/11	I-PE *v.* TAU	3	$Z = 3.21$; $P = 0.001$	AMD = −10.3 (95% CI −16.8 to −4.5); SES = −1.17
Javadpour *et al* (2013)[31]	45/41	I-PE *v.* TAU	18	$P < 0.001$	–
Faridhosseini et *al* (2017)[30]	12/12	G-PE *v.* TAU	Post-intervention	$P = 0.58$	Mean 1.0 (s.e. = 1.78)
Cardoso *et al* (2014)[21]	19/26	G-PE *v.* TAU	Post-intervention	$F = 0.66$, $P = 0.81$	–
			6	$F = 0.99$, $P = 0.324$	–
de Barros *et al* (2013)[22]	28/18	G-PE *v.* placebo	12	$P = 0.820$	ES = 0.007
Costa *et al* (2012)[23]	25/12	G-CBT *v.* TAU	6	$P < 0.05$	–
Ives-Deliperi *et al* (2013)[36]	16/7	G-MBCT *v.* TAU	Post-intervention	$P > 0.05$	–
Manic symptoms					
Faria *et al* 2014[20]	19/26	I-PE *v.* TAU	Post-intervention	$P = 0.06$	AMD = −5.93 (95% CI −0.28 to −12.15)
Husain *et al* 2017[37]	16/11	I-PE *v.* TAU	3	$Z = 4.67$, $P < 0.001$	AMD = −6.0 (95% CI −8.7 to 3.7), SES = −1.18
Javadpour *et al* 2013[31]	45/41	I-PE *v.* TAU	18	$P < 0.001$	–
Faridhosseini et *al* 2017[30]	12/12	G-PE *v.* TAU	Post-intervention	$P = 0.04$	Mean 1.91 (s.e.) 0.88
Cardoso *et al* (2014)[21]	19/26	G-PE *v.* TAU	Post-intervention	$F = 2.16$, $P = 0.15$	–
			6	$F = 2.94$, $P = 0.09$	–
de Barros *et al* (2012)[22]	28/18	G-PE *v.* placebo	12	$P = 0.72$	ES = 0.02
Costa *et al* (2012)[23]	25/12	G-CBT *v.* TAU	6	$P > 0.05$	–
Anxiety symptoms					
Ives-Deliperi *et al* (2013)[36]	16/7	G-MBCT *v.* TAU	Post-intervention	$t = 2.3$, $P = 0.05$	–
Costa *et al* (2012)[23]	25/12	G-CBT *v.* TAU	6	$P = 0.02$	$R^2 = 0.9$
Emotional dysregulation					
Ives-Deliperi *et al* (2013)[36]	16/7	G-MBCT *v.* TAU	Post-intervention	$t = 4.1$, $P = 0.01$	–

I-PE, individual psychoeducation; TAU, treatment as usual; AMD, adjusted mean difference; SES, standardised effect size; G-PE, group psychoeducation; ES, effect size; G-CBT, group cognitive–behavioural therapy; G-MBCT, group mindfulness-based cognitive therapy; R^2, squared value of correlation coefficient or the proportion of explained variation.
a. The comparison was made within arm and the reported result for the treatment group.

depressive symptoms among intervention groups compared with the patients with bipolar disorder on the waiting list.[36]

Improvement in biological rhythms

Only one study[20] from Brazil assessed the efficacy of six sessions of complementary psychoeducation in improving biological rhythms (sleep, activity, patterns of habitual daily behaviour (social rhythm) and eating pattern) among patients with bipolar disorder, 80% of whom had more than six previous bipolar episodes. The study reported significant improvement in the control rather than the intervention group (adjusted mean difference −10.84, 95% CI −20.6 to −1.07, $P = 0.03$).[20]

Improvement in knowledge, attitude and internalised stigma

Four psychoeducation studies were identified.[27,28,31,37] Three of the four studies assessed the efficacy of psychoeducation in improving knowledge and attitudes about bipolar disorder, and one trial assessed the efficacy of psychoeducation in reducing internalised stigma. Two of the four studies reported within-group difference by comparing post-intervention against baseline scores in each group.[27,28] Generally, the findings showed a positive effect of psychoeducation in improving knowledge and attitudes about bipolar disorder and internalised stigma (see supplementary file 5).

Improvement in treatment adherence

A total of nine studies, eight psychoeducation and one family-focused intervention, reported short- and long-term improvements in treatment adherence compared with treatment as usual[28–35,37] (Table 4).

Reduction in hospital admissions

A total of five RCTs that assessed the efficacy of individual, group or family psychoeducation in reducing hospital admissions were identified (see supplementary file 6). Generally, the studies showed that fewer people with bipolar disorder were admitted to hospital in the intervention group compared with the control group.[25,30,31,33]

Improvement in QoL and functional status

A total of 10 of the 18 studies (9 psychoeducation and 1 CBT) assessed the efficacy of improving functional status and QoL (Table 5). The findings were mixed. Half of the studies reported, significant improvement in various domains of QoL in the intervention compared with the control groups: functioning,[26,28,32] general health,[28] physical, social,[28,31] environmental and mental health domains of QoL[31] and in the overall QoL.[37] In one study, there was significant improvement in all domains of QoL except the mental health domain in those receiving CBT compared with

Table 4 Psychological intervention to improve adherence

Authors	Final analysis, n (intervention/control)	Measurement	Follow-up duration after post-intervention (months)	Group	Assessment time point, mean (s.d.)/mean/%		Test statistics, P	Measure of effect
					Baseline assessment	End-line assessment		
Adherence to medications								
Husain et al 2017 (Pakistan)	16/11	MMAS	–	I-PE	1.7 (1.7)	0.9 (1.4)	Z = 2.37,	AMD = −1.22 (95% CI −2.18
				TAU	1.3 (1.7)	2.1 (1.5)	P = 0.018	to 0.14), SES = 0.81
Rahmani et al 2016 (Iran)	36/36	MARS	–	G-PE	6.8 (1.9)	9.4 (2.4)	t = 0.29,	AMD = 2.3 (95% CI 2.21 to
				TAU	6.6 (1.4)	7.1 (2.2)	P < 0.001	2.14)
		Total score, MAC	–	PE	10.6 (2.5)	17.8 (3.7)	t = 0.35,	AMD = 7.7 (95% CI 7.20 to
				TAU	9.8 (2.2)	10.1 (2.3)	P < 0.001	9.50)
Javadpour et al 2013 (Iran)	45/41	MARS	18	I-PE	–	7.91	P = 0.008	–
				TAU	–	3.73		
Bahredar et al 2014 (Iran)	15/15/15	MARS	6	G-PE	6.27 (0.88)	7.92 (1.38)	F(2,31) = 55.1,	–
				TAU	6.53 (0.64)	4.33 (0.49)	P < 0.001	
				Placebo	6.47 (0.52)	4.36 (0.67)		
Bordbar et al 2009 (Iran)	29/28	Duration of continuing medication in month	3	G-FPE	–	2.46 (0.44)	t = 1.23,	–
				TAU	–	2.67 (0.48)	P = 0.227	
			6	G-FPE	–	5.76 (0.51)	t = 4.36,	–
				TAU	–	5.00 (0.77)	P < 0.001	
			9	G-FPE	–	8.48 (0.95)	t = 4.88,	–
				TAU	–	7.04 (1.26)	P < 0.001	
			12	G-FPE	–	11.41 (1.02)	t = 6.88,	–
				TAU	–	9.14 (1.43)	P < 0.001	
Dogan & Sabanciogullari 2003 (Turkey)	14/12	Proportion of patients who use lithium regularly	–	I-PE	35.7%	85.7%	P = 0.008	–
				TAU	50%	41.7%		
		Proportion of patients with normal serum lithium level	–	I-PE	57.1%	100%	P = 0.016	–
				TAU	58.3%	58.3%		
Eker & Harkin 2012 (Turkey)	30/33	MARS	–	G-PE	40%	86.7%	χ^2 = 24.649,	–
				TAU	38.9%	24.2%	P < 0.01	
George et al 2013 (India)	24/26	Patient's diary and counting tablets	3	G-PE	–	100%	P = 0.111	–
				TAU	–	84.6%		
Adherence to psychiatric visit								
Bordbar et al 2009 (Iran)	29/28	Number of psychiatric visit	3	G-FPE	–	2.76 (0.43)	t = 1.38,	–
				TAU	–	2.57 (0.57)	P < 0.017	
			6	G-FPE	–	5.38 (0.87)	t = 3.72,	–
			–	TAU	–	4.46 (0.96)	P < 0.001	
			9	G-FPE	–	7.72 (1.36)	t = 3.98,	–
			–	TAU	–	6.21 (1.50)	P < 0.001	
			12	G-FPE	–	10.34 (1.54)	t = 5.52,	–
			–	TAU	–	7.86 (1.84)	P < 0.001	
Faridhosseini et al 2017 (Iran)	12/12	Patient and family report	6	G-PE	–	3.25 (0.69)	P = 0.02	–
				TAU	–	1.41 (1.67)		

MMAS, Morisky Medication Adherence Scale; I-PE, individual psychoeducation; TAU, treatment as usual; AMD, adjusted mean difference; SES, standardised effect size; MARS, Medication Adherence Rating Scale; G-PE, group psychoeducation; MAC, Medicine Adherence Checklist; PE, psychoeducation; G-FPE, group family psychoeducation.

Table 3 Psychological intervention to improve quality of life and functioning

Reference	Final analysis, *n* (intervention/control)	Intervention	Follow-up duration after post-intervention (month)	Outcome	Test statistics and *P*	Measure of effect
Husain *et al* 2017 (Pakistan)[illegible]	16/11	I-PE *v.* TAU	3	Overall QoL in EQ-5D index	$Z = 2.47, P = 0.01$	AMD = 0.24 (95% CI 0.1–0.5), SES = 0.88
				Overall QoL in EQ-5D VAS	$Z = 3.65, P = 0.001$	AMD = 26.8 (95% CI 12.2–41.8), SES = 1.14
Dogan & Sabanciogullari 2003 (Turkey)[illegible]	14/12	I-PE *v.* TAU	3	General health domain	$Z = 2.56, P = 0.01^a$	
				Physical aspect	$Z = 2.67, P = 0.01^a$	
				Psychological	$Z = 1.38, P > 0.05^a$	
				Social aspects	$Z = 2.10, P = 0.05^a$	
				Environmental	$Z = 1.38, P = 0.05^a$	
Javadpour *et al* 2013 (Iran)[illegible]	45/41	I-PE *v.* TAU	18	Physical aspect	$P < 0.001$	
				Mental health	$P < 0.001$	
				Social aspects	$P < 0.001$	
				Environmental	$P < 0.001$	
Faridhosseini *et al* 2017 (Iran)[illegible]	12/12	G-PE *v.* TAU	–	Overall QoL	$P = 0.196$	Mean 3.13 (s.d. = 2.36)
Cuhadar *et al* 2014 (Turkey)[illegible]	24/23	G-PE *v.* TAU	–	Emotional functioning	$Z = -0.21, P = 0.08^a$	
				Mental functioning	$Z = -1.93, P = 0.05^a$	
				Sexual functioning	$Z = -0.34, P = 0.73^a$	
				Feelings of stigmatisation	$Z = -0.95, P = 0.34^a$	
				Introversion	$Z = -1.50, P = 0.13^a$	
				Domestic relationships	$Z = -2.16, P = 0.03^a$	
				Relations with friends	$Z = -1.59, P = 0.11^a$	
				Participating in social activities	$Z = -1.80, P = 0.07^a$	
				Daily and recreational activities	$Z = -0.15, P = 0.88^a$	
				Taking initiative and using one's potential	$Z = -0.00, P = 1.00^a$	
				Work	$Z = -0.54, P = 0.59^a$	
Kurdal *et al* 2014 (Turkey)[illegible]	40/40	G-PE *v.* TAU	3	Emotional functioning	$t = 4.04, P = 0.001$	
				Intellectual functioning	$t = 7.46, P < 0.001$	
				Sexual functioning	$t = 1.97, P > 0.050$	
				Feelings of stigmatisation	$t = 7.84, P = 0.001$	
				Social withdrawal	$t = 7.00, P = 0.001$	
				Household relations	$t = 7.84, P = 0.001$	
				Relations with friends	$t = 5.46, P = 0.001$	
				Participating in social activities	$t = 3.66, P = 0.001$	
				Daily and recreational activities	$t = 3.11, P < 0.008$	
				Taking initiative and self-sufficiency	$t = 3.61, P < 0.001$	
				Occupation	$t = 2.01, P = 0.050$	
Bahredar *et al* 2014 (Iran)[illegible]	15/15/15	G-PE *v.* placebo and TAU	6	GAF score	$F(2,31) = 90.93, P < 0.001$	

(Continued)

Table 5 (Continued)

Reference	Final analysis, n (intervention/control)	Intervention	Follow-up duration after post-intervention (months)	Outcome	Test statistics and P	Measure of effect
Cardoso 2014 (Brazil)[71]	19/26	G-PE v. TAU	6	Functional capacity	F = 0.08, P = 0.78	
				Pain	F = 1.98, P = 0.17	
				General health status	F = 0.04, P = 0.84	
				Vitality	F = 0.28, P = 0.58	
				Social aspects	F = 0.62, P = 0.44	
				Emotional aspects	F = 0.24, P = 0.63	
				Mental health	F = 1.19, P = 0.28	
de Barros et al 2012 (Brazil)[illegible]	28/18	G-PE v. placebo	12	Social domain	P = 0.42	ES = 0.42
				Environmental domain	P = 0.82	
				Functioning	P = 0.59	ES = 0.03
				Clinical improvement patient view	P = 0.02	ES = 0.36
				Clinical improvement clinician view	P = 0.57	ES = 0.04
Costa et al 2012 (Brazil)[illegible]	25/12	G-CBT v. TAU	4	Functional capacity	P = 0.007	R^2 = 0.65
				Pain	P = 0.020	R^2 = 0.60
				General health status	P = 0.002	R^2 = 0.77
				Vitality	P = 0.036	R^2 = 0.46
				Social aspects	P = 0.044	R^2 = 0.41
				Emotional aspects	P = 0.001	R^2 = 0.56
				Mental health	P = 0.081	R^2 = 0.46

IPE, individual psychoeducation; TAU, treatment as usual; AMD, adjusted mean difference; SES, standardised effect size; VAS, visual analogue scale; G-PE, group psychoeducation; QoL, quality of life; GAF, Global Assessment of Functioning; ES, effect size; G-CBT, group cognitive–behavioural therapy; R^2, squared value of correlation coefficient or the proportion of explained variation.
a. The comparison was made within arm and the reported result for the treatment group.

treatment as usual.[25] The rest of the studies did not reported significant differences between groups.[21,22,27,30]

Discussion

This is the first systematic review synthesising the full range of psychological intervention studies that have been conducted among people with bipolar disorder in LMICs. In all studies reviewed, psychological interventions were given as adjuncts to treatment as usual, although the treatment as usual may have varied depending on drug licensing and treatment guidelines in each country. Nearly all of the included studies were conducted in upper-middle-income countries and none of the studies were from low-income countries compromising ability for direct generalisation of findings to low-income country settings. Absence of such studies in low-income countries may be linked to the broader lack of attention to bipolar disorder globally as well as in LMICs. The scarcity of clinician researchers[38] coupled with the poor funding environment may explain the scarcity of data on psychopathology, incidence, prevalence and course of bipolar disorder in LMICs.[39] However, even if focusing on upper-middle-income countries, these studies are important bridges to the broader LMIC setting than studies conducted in high-income countries. Additionally, the core principles of treatment were shared among the studies. For example, psychoeducation included in all the studies, is naturally consistent across settings. Most of the studies were tested in teaching or public hospitals with no intervention adaptations to the local context, which adds to the challenge of transferring these interventions. Nonetheless, identifying interventions of proven efficacy that have at least been tested outside of a high-income setting is a good starting point for adapting psychological intervention for LMICs. Therefore, they can be considered as potential candidates for further adaptation. Such an approach was taken when adapting psychological interventions for perinatal common mental disorders in LMICs with some success.[40] In general, the findings suggest the need for rigorous studies in LMICs.

Overall, the reviewed studies demonstrate the efficacy of adjunctive psychological interventions for bipolar disorder in terms of improving both depressive and manic symptoms, reducing relapse, hospital admissions and internalised stigma, improving QoL, treatment adherence and knowledge and attitudes about bipolar disorder

The majority of the studies assessed the efficacy of psychoeducation and all studies included a psychoeducation component. This is in line with the World Health Organization mhGAP intervention guideline, which endorses routine psychoeducation for people with bipolar disorders.[13] However, the mhGAP does not provide guidance on the number of sessions, content and delivery of the psychoeducation. In this review, 3 to 12 sessions of group, individual and family psychoeducation were effective in reducing relapse, hospital admissions and illness severity for both depression and mania. Therefore, a minimum of three sessions of psychoeducation may be required although a lower number of sessions may have to be tested. Furthermore, the mhGAP guideline is designed to be used by general health workers. However, in this review, most psychological interventions were delivered by mental health specialists and there was no evidence in relation to task-sharing with general health workers. This implies that there is no evidence to support psychoeducation provided by general health workers and calls for further evidence on this from LMICs.

It was also of interest to note that just one session of family psychoeducation improved outcomes on multiple domains: treatment adherence, relapse rates and hospital admissions.[33] Given the family orientation of care in LMICs, brief family psychoeducation is a promising intervention that could be tested in the general healthcare context. Although this review confirms the benefits of psychological interventions as reported in high-income countries,[41,42] caution may be required in patients with a long duration of illness and multiple relapses. One of the reports where most of the participants had experienced multiple relapses and a long duration of illness (an average of 19 years), depressive symptoms worsened in both the treatment and control groups.[22] This may indicate that psychological interventions may be more effective for people with bipolar disorder who have experienced fewer relapses and have a short disease duration.[12,42] Findings related to CBT were consistent with those from high-income countries.[41,42]

Limitations

The review was comprehensive in terms of databases searched and types of psychological interventions and study designs. However, a meta-analysis was not possible because of the heterogeneity of the included studies in terms of the type of interventions, number of sessions and duration of follow-up time and format of intervention delivery. Second, studies with negative findings might not have been published. Additionally, two of the papers[27,28] carried out within-group comparisons with post-assessment against baseline. Non-availability of the raw data precluded re-analysis. Third, since nearly all the studies were from upper-middle-income countries, the findings may not be directly generalisable to low-income country settings (see supplementary file 7 for a list of countries by income group).

Implications

The reviewed literature showed promising results relating to the efficacy of adjunctive psychological interventions on a broad range of clinical and QoL parameters in LMICs. However, virtually all studies identified in this comprehensive review were from upper-middle-income countries and none involved general health workers. Contextually appropriate adaptation of interventions for low-income settings and for task-shifted care as well as larger-scale studies are important next steps.

Mekdes Demissie, BSc, MSc, Lecturer, College of Health Sciences, Department of Psychiatry, Addis Ababa University, Ethiopia; **Charlotte Hanlon**, BMBS, MSc, MRCPsych, PhD, Associate Professor, College of Health Sciences, Department of Psychiatry, Addis Ababa University, Ethiopia and Centre for Global Mental Health, Institute of Psychiatry, Psychology and Neuroscience, Health Services and Population Research, King's College London, UK; **Rahel Birhane**, BSc, MSc, Research Assistant, College of Health Sciences, Department of Psychiatry, Addis Ababa University, Ethiopia; **Lauren Ng**, BA, MA, PhD, Assistant Professor, School of Medicine, Boston University, USA; **Girmay Medhin**, BSc, MSc, PhD, Associate Professor, Aklilu Lemma Institute of Pathobiology, Addis Ababa University, Ethiopia; **Abebaw Fekadu**, MD, MSc, MRCPsych, PhD, Associate Professor, College of Health Sciences, Department of Psychiatry and Centre for Innovative Drug Development and Therapeutic Studies for Africa (CDT-Africa), College of Health Science, Addis Ababa University, Ethiopia and Department of Global Health and Infection, Brighton and Sussex Medical School, University of Sussex and Center for Affective Disorders, Institute of Psychiatry, Psychology and Neuroscience, Department of Psychological Medicine, King's College London, UK

Correspondence: Mekdes Demissie, College of Health Sciences, Department of Psychiatry, Addis Ababa University, PO BOX 9086, Addis Ababa, Ethiopia
Email: [illegible]

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Supplementary material

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Appendix-B: Why doesn't God say "enough"? Experiences of living with bipolar disorder in rural Ethiopia

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Why doesn't God say "enough"? Experiences of living with bipolar disorder in rural Ethiopia

Mekdes Demissie[a,b,*], Charlotte Hanlon[a,c], Lauren Ng[d], Abebaw Fekadu[a,e,f,g], Rosie Mayston[h]

[a] Department of Psychiatry, Addis Ababa University, Ethiopia
[b] School of Nursing and Midwifery, College of Health and medical Sciences, Haramaya University, Ethiopia
[c] Centre for Global Mental Health, Institute of Psychiatry, Psychology and Neuroscience, Health Services and Population Research, King's College London, UK
[d] Department of Psychology, University of California, Los Angeles, Los Angeles, CA, USA
[e] Centre for Innovative Drug Development and Therapeutic Studies for Africa (CDT-Africa), Addis Ababa University, Addis Ababa, Ethiopia
[f] Department of Global Health and Infection, Brighton and Sussex Medical School, Brighton, UK
[g] Center for Affective Disorders, Institute of Psychiatry, Psychology and Neuroscience, Department of Psychological Medicine, King's College London, UK
[h] Global Health & Social Medicine/King's Global Health Institute, King's College London, NE Wing Bush House, 30 Aldwych, London WC2B 4BJ, UK

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ABSTRACT

Rationale: Little is known about the specific experience people living with bipolar disorder in rural, low resource settings, where conditions that disrupt normal social interactions are often highly stigmatized and evidence-based treatments are rare.

Objective: To explore illness experience, coping strategies, help-seeking practices, and consequences of illness among people with bipolar disorder (PBD) and their family members in rural Ethiopia as an initial step for developing psychosocial intervention grounded by the experiences of PBD.

Method: A qualitative methods using in-depth interviews were carried out with 27 individuals (15 PBD and 12 caregivers). The participants were identified on the basis of previous community-based research among people with severe mental illness. Interviews were carried out in Amharic, audio-recorded, transcribed, and translated into English. Data were analyzed using thematic analysis. Our approach was informed by phenomenological theory.

Result: Three major themes emerged: expressions and experiences of illness, managing self and living with otherness, and the costs of affliction. PBD and caregivers were concerned by different forewarnings of illness. Stigma and social exclusion were entwined in a vicious cycle that shaped both illness experience and the economic health and social life of the household. Nonetheless, PBD and caregivers learned from their experiences, developed coping strategies, and sought relief from trusted relationships, spirituality, and medication.

Conclusion: Our findings suggest that psychosocial intervention could be used to strengthen existing resources, in order to improve the lives of PBD and their family members. However, pervasive stigma may be a barrier to group and peer support approaches.

1. Introduction

Bipolar disorder (BD) is a type of mood disorder that comes and goes over an individual's lifetime. The Diagnostics and Statistical Manual of Mental Disorders (DSM-V) and the International Classification of Disease (ICD) defined BD as a disease that includes manic and depressive episodes which alternate or coincide, with the occurrence of mania the defining feature of the disorder (APA, 2013; WHO, 2004). During depressive episodes, people with bipolar disorder (PBD) experience depressed or low mood, and loss of interest, whereas elated or irritable is the central feature of manic episodes. According to a 2013 report on global burden of disease, the prevalence of BD has increased by 49.1% from 1990 to 2013 (Ferrari et al., 2016). In Ethiopia, the prevalence ranges from 0.5% to 1.8% (Fekadu et al., 2004; Negash et al., 2005). Research from high-income countries (HIC) suggests that living with symptoms of BD is often fraught with difficulties for affected individuals and their families. Little is known about the experience of living with BD in low and middle-income countries (LMICs) settings. However, poverty

* Corresponding author. Department of Psychiatry, College of Health Sciences, Addis Ababa University, PO BOX 9086, Addis Ababa, Ethiopia.
E-mail address: mekdesdemissie2016@gmail.com (M. Demissie).

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and inadequate mental health services arguably heighten the adverse social consequences of illness, while culture inevitably shapes understandings, experience, and responses. Findings from research conducted in the global South are needed to address this important gap in the global evidence-base.

Social cohesion and social support have positive impact on reducing illness experience (Ruiz et al., 2019; Wang et al., 2019) and improve physical and behavioural outcome (Shelton et al., 2019). However, relationship problems, stigma, and unemployment are commonly ascribed to illness by PBD and their family members (Dore and Romans, 2001; Ganguly et al., 2010). PBD are often misunderstood by the communities in which they live and blamed for their illness (Ganguly et al., 2010), frequently develop a negative view of self, and sometimes hide their illness due to experience and expectation of negative reactions from others (Hormazabal-Salgado and Poblete-Troncoso, 2020; Tjoflåt and Ramvi, 2013). The stigma attached to illness is not limited to the PBD, but affects other members of the family, which, in turn, undermines social support and exacerbate social difficulties for all family members (September and Beytell, 2019).

So far, qualitative work from sub-Saharan Africa (SSA) has focused mainly on perceptions and illness experience among people understood to be living with "serious mental illness". For many living in the region, the biomedical model is not the primary means of understanding and categorizing distress (Mayston et al., 2020). Distinction by disorder is therefore uncommon. Nonetheless, it might be expected that different patterns of expressions of illness within the category of "madness" might lead to variation in experience, perception, and knowledge. The experiences of people living with BD in SSA have not yet been explored.

The World Health Organization (WHO) identified BD as a priority condition for intervention in the mental health Gap Action Programme (mhGAP): because of the severe impact of the illness upon individuals, associations with violations of human rights, and the existence of evidence-based treatments (Dua et al., 2011; WHO, 2016). Authors have suggested that the impact of BD may be particularly pronounced in LMICs where the treatment gap for evidence-based care is high, and where stigma and economic impacts are known to be prominent (Fekadu et al., 2006; Zergew et al., 2008). The results of population-based study from rural Ethiopia suggest that PBD experience a high relapse rate (66%) and low continuous remission (5%) (Fekadu et al., 2006).

Existing evidence, mainly from HIC, indicates that the right kind of psychological, social, and spiritual actions can improve the course of disease (Oud et al., 2016; Speed et al., 2020). For example, showing understanding and providing a space to listen to the concerns of a person with BD (Billsborough et al., 2014), helping the person to come to terms with the diagnosis and treatment (Doherty and MacGeorge, 2013), and promotion of self-care and self-management (Lean et al., 2019; Morton et al., 2018) can lead to better outcomes for PBD. Involvement in religious practices and sharing feelings with other people has been shown to combat isolation (Lan et al., 2018) and improve wellness (Speed et al., 2020).

Our recent review of psychosocial interventions for BD in LMICs, showed that psychological interventions can be successful in low-resource settings: improving social support, enhancing self-management in the context of stressful life events, and reducing relapse rates, symptom severity and hospital admission (Demissie et al., 2018). Understanding modifiable psychosocial factors and how they influence the course of illness is crucial to developing interventions that improve the lives of people living with BD.

Collection and analysis of illness narratives of PBD is necessary to understand the context in which BD emerges, the way in which illness is understood, perceived, and managed, and the consequences of living with illness for PBD and their families. This data will be critical to the design and development of interventions that seek to bolster and support family and community resources to help PBD and their families to live better lives. Our study used in-depth qualitative interviews to explore experiences, beliefs, and understandings of PBD and their family members in rural Ethiopia in a community where mental healthcare is available and participants in our research had some experience of accessing treatment.

2. Methods

Design: The study design was qualitative and informed by phenomenological theory. We wanted our work to articulate the experiences of PBD in rural Ethiopia, whose voices are absent from the academic literature. We anticipated that participants' realities would be embodied in social experience. We therefore selected a research approach that allowed our data to be grounded in the experiences of those living with BD and their family members. Our aim was to provide a rich description of how different participants experienced and described the meaning of living with BD, to build a composite description of the essence of the experience for individuals living with this condition in this community. Our description consists of "what" individuals experienced and "how" they experienced it (Creswell, 2007).

Context: This study was conducted in adjacent sites: Butajira and Sodo district, both are in the Gurage Zone, Southern Nations, Nationalities and Peoples' region (SNNPR), Ethiopia. Most of the population in this area speak Guragigna as their mother tongue, but Amharic serves as the official language of the region and is generally well understood. The area is predominantly rural, with an economy based upon subsistence farming and small trade, characteristic of the majority of Ethiopia. Butajira district is located 130 km from Addis Ababa, the capital of Ethiopia. The total population of the districts is estimated to be 321,056 (CSA, 2013). The majority of the population are Muslim, and Butajira town is the center of a health and demographic surveillance site (HDSS), which has been functioning since 1987 (Moucheraud et al., 2015). Sodo district is adjacent to Butajira, located about 100 km south of Addis Ababa, the capital of Ethiopia. The district has 58 *kebeles* (sub-districts) and a total population of 161, 097 (CSA, 2013). In Sodo district, most of the population are Ethiopian Orthodox Christian (97%).

The sites selected for this study are atypical in terms of the availability of mental health services compared to other districts in Ethiopia. In Sodo district, as part of the PRIME project, all primary health care workers were trained to provide mental health care for selected priority mental disorders based on the WHO's mhGAP (WHO, 2016), whereas mental health research activities have been carried out in the Butajira area for the last 20 years, which also supported mental healthcare provision.

Researcher positionality: The research team in Ethiopia is based in a clinical department in a university, with most investigators working as mental health professionals. We acknowledge that this context has influenced the framing of the study, the lead author's interaction with study participants and our interpretations of the data (Cresswell, 1998). Nonetheless, it was the lead author's intention to support participants to "tell their story", as much as possible minimizing her influence upon narratives. To facilitate this, questions were asked to elicit spontaneous descriptions of experiences, for example: "can you tell me about some of the problems you have experienced", probing to encourage participants to elaborate, and, where appropriate, asking for detail about what they described. Where she was unsure of meaning, MD sought clarification by reflecting back to participants what she thought they had said, using their own terms and expressions and checking that she had an accurate understanding. MD tracked how her position as a female biomedical researcher from Addis Ababa University influenced the research process and findings by keeping a field journal to record "thoughts, feelings, uncertainties, values, beliefs, and assumptions" (Carlson, 2010).

Participants: Participants in the current study were either people identified as having BD and receiving mental health care or those who were on treatment but who were documented as currently discontinued from taking medications by the health centers found in Sodo district and Butajira town. Because previous quantitative research suggested that sociodemographic factors such as age, gender, educational,

occupational, and marital status were associated with clinical/functional outcomes (Kebede and Alem, 1999; Kebede et al., 2006), we selected participants purposively based on these key characteristics. Our approach to recruitment is as follows. Given the vulnerability of participants, in the first instance, we approached a gatekeeper (primary care clinician) to gain an initial assessment of the eligibility of potential participants, particularly concerning the person's current mental health and capacity to participate in the study. Field coordinators then approached all potential participants, informed them about the purpose of the study, and gauged their willingness to participate. A total of 31 participants were approached by field coordinators and 27 agreed to participate. Four participants did not attend at the scheduled interview time because of social obligations: Three caregivers were absent because of the death of someone in their village and one PBD could not attend because of an ill relative. Out of 27 participants, 20 were service-user-family caregiver pairs (i.e. 10 caregivers and 10 PBD). Seven participants were unpaired, from seven different families (five PBD and two caregivers).

Data collection: Topic guides for in-depth interviews were developed to cover the following themes: understanding what respondents noticed as forewarnings of illness, priority concerns of PBD and their caregivers, the factors they felt influenced illness, and the social and economic effects of living with illness (Annex-I and II). Participants were asked to talk about their illness beliefs and strategies they have used to manage their illness, and how these have evolved over time. Topic guides were developed, translated into Amharic, and piloted before the main data collection with two PBD to check for clarity and acceptability. Based on results from piloting, we added some probes that were found to elicit rich responses. Pilot interviews were integrated into the main dataset. For participants from Sodo district, interviews took place in the health center which the PBD was attending. In Butajira, participants were interviewed at the mental health research project office. All interviews were conducted face-to-face by MD in Amharic. Interviews lasted between 40 and 90 min. All interviews were audio-recorded and field notes were taken simultaneously. Data collection was a two-stage process; in the first stage, 21 interviews were completed, transcribed, coded, and analyzed. After discussing these results with co-authors, we decided further interviews were necessary in order to fully explore coping strategies. Six further interviews were conducted in this second stage of data collection.

Analysis: We used thematic analysis, which was conducted in three stages (Thomas and Harden, 2008) and was influenced by interpretative phenomenological analysis (Smith and Shinebourne, 2012). First, during familiarization and coding, all the first stage interviews were transcribed, translated to English, and imported into Open Code 4.03 software for analysis. Two members of the research team (MD, CH) independently carried out line-by-line coding of three randomly selected transcripts. Whenever a new concept appeared in the text, the coders assigned codes and wrote a code definition. They met to refine codes, developing a common codebook through discussion of individual code definitions and assignment. MD coded the remaining transcripts based on the codebook, developing and defining new codes where necessary. The second stage involved using OpenCode to facilitate data retrieval and comparison of concepts within each code before grouping of similar or related codes together into clusters to capture the essence of particular themes. Themes were then reviewed to check that they were a credible distillation of experience. In addition, themes were checked to see whether they were clearly and concisely defined with an informative name. Finally, quotes from a range of participants were selected to illustrate themes, and the themes that were not well-represented were dropped.

Ethical approval: Ethical clearance was obtained from the Institutional Review Board (IRB) of the College of Health Sciences of Addis Ababa University (Reference Number 04/17/Psy). Written informed consent was obtained from each participant. For participants who were illiterate, the interviewer read out the information sheet in front of another person, known to the participant, who was literate and able to confirm that full and accurate information was given. In these cases, a witness statement was included in the consent form in addition to the participants consent, which was indicated by a thumbprint. Confidentiality was ensured by anonymizing identifying information and assigning a unique ID code to all interviews.

3. Results

A total of 27 participants were interviewed (15 PBD and 12 caregivers). Among them, nearly half (12/27) were female, two-thirds (18/27) were married, and about a third were farmers ($n = 10$) and illiterate ($n = 11$). Seven out of 12 caregivers interviewed were the spouse (wife/husband) of the PBD. Findings are organized into three main themes: expressions and experiences of illness, managing self and living with otherness, and the costs of affliction that included sub-themes, as described in Fig. 1.

3.1. Experiences and expressions of illness

3.1.1. Forebodings of illness

Most caregivers described increased irritability, aggression, loss of respect for others, disturbed sleep, carelessness about what the PBD said or how they dressed, and laughing or talking to themselves as common signs that the PBD was beginning to experience an illness episode. These signs triggered worry for caregivers. One caregiver described the problems as

> "*every time when he starts to insult us, and quarrel with other people for irrational reasons as well as when he talks to himself, I will be aware of his situation and conscious about his illness. He doesn't violate others' rights when he is normal. So, I feel worried when he starts to argue with people and becomes aggressive.*" 25-year, Female-Caregiver ID014, Butajira

While some PBD also identified sleep disturbance and irritability as common forewarnings of upcoming illness episodes, they also noticed other signs, including heavy-headedness and lack of interest in activities or, alternatively, feeling unusually energetic and excessive talking. Recognition of these signs often induced anxiety and sometimes triggered actions from the PBD designed to contain or treat the illness:

> "*I feel heavy headed* (ጭንቅላቴን ክብድ ይለኛል) .... *there is a time that I become disinterested to do something that I planned to do. Then I realize that I'm going to get sick.*" 23-year, Male-PBD, ID20, Sodo-district

> "*At the beginning, I increase talking and my mind gets occupied with something and I feel anxious ... umm ... I talk too much and say things that are culturally inappropriate, I know that I'm going to have illness, so I tell them [family members] to chain me ....* " 30-year, Male-PBD ID23, Butajira

3.1.2. Differing priorities of PBD and family members

Sleep disturbance and aggressive behavior were the biggest concerns for caregivers, associated with threats to the safety and health of others:

> "*... During his illness, he was not sleeping the whole night. At that time, I was worried that he might slit the throat of one of my children; so, we were not sleeping, we were suffering a lot ... we don't need anything else than to get him sleeping well. When he sleeps well, all the family members feel well and the children start to gain weight ... above all lack of sleep is very much difficult ...*" 35-year, Female-caregiver ID013, Butajira

However, some PBD were mostly concerned about the incurable nature of the illness and the social consequences of living with lifelong illness (and medication). These ruminations were distressing and led to questioning why they had been singled out for affliction.

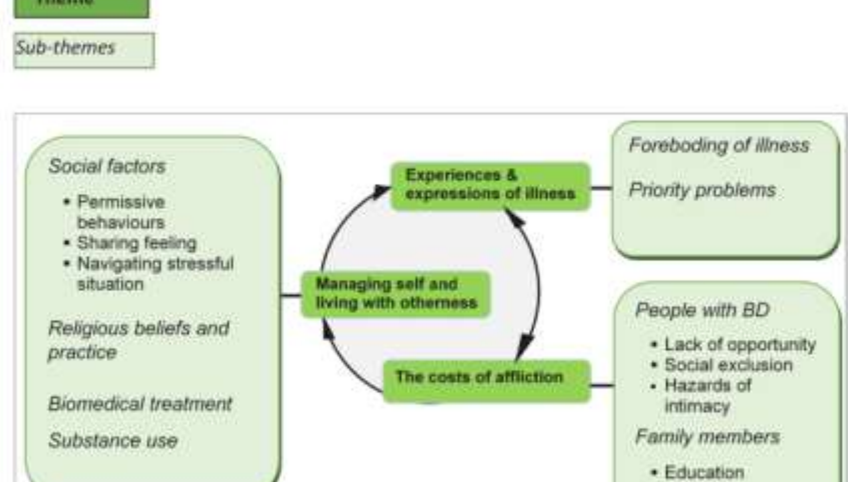

Fig. 1. Themes and subthemes for experiences of people with bipolar disorder.

" .... I'm always asking myself 'how long am I going to take medication?'; I ask God how long I will live with this illness? why doesn't God take this illness off from me? Why doesn't God say 'enough'? Is it for as long as I live? Will I take a medication until I die? People considered me as mentally ill who can't think and do things by myself, aggressive, and insulative. I'm always crying and praying in front of God. I don't know why, God made me inferior than other people. I don't know when he will tell me 'enough!' [participant distressed]." 27-year, Female-PBD ID005, Butajira

3.2. *Managing self and living with otherness*

3.2.1. *Quarrels and sharing feelings: the role of social relationships in shaping illness experience*

Participants reported that periods of illness would occur after a period of wellness. They described how longstanding animosities formed the backdrop to particular incidents that were seen as turning points, precipitating transition into illness.

Permissible behaviors: making sense of conflict and disagreement

Most participants described a circular relationship between social factors and the intensity of the illness. Negative social interactions had the effect of triggering illness; concurrently, the illness had the effect of worsening social conflict. PBD explained that ongoing disagreements and conflict were a major cause for the origin of their illness, a trigger during a period of wellness, and an exacerbator during an illness episode.

"My half-brother always speaks to me as if the house and place/land that I'm living currently does not belong to my father. He even threatened me to get me to leave ... so this makes my illness worse ... when my illness was back last time, he was accusing me of being a thief ... he insulted me as a thief." 34-year, Male-PBD ID018, Sodo-district

Labelling of the person with BD as mentally unwell aggravated social interactions, providing a rationale for grievances from community members while causing frustration for the person with BD and caregivers alike: PBD get frustrated because of their illness label, any disagreement is perceived as being due to their illness. Not being allowed to express a "normal" response to the disagreements is perceived to have a negative effect, making the patient angrier, and potentially triggering or worsening their illness.

'... there can be disagreement among people but, when we quarrel with anyone, they say "go to Amanuel hospital [mental hospital] if you finish your medication" ... they don't take it as a normal behavior of people, which is very annoying for him [patient], even for me.' 25-year, Female-Caregiver ID014, Butajira

Concomitantly, caregivers perceived that the PBD was sensitive to minor day-to-day disagreements which were seen to trigger their illness.

"Every normal individual may have some issue when they are living in marriage .... For him [patient] minor disagreement is enough to bring his illness back, despite taking medication properly ..." 22-year, Male-caregiver ID021, Butajira

The dilemmas of 'sharing feelings'

Participants expressed different perceptions regarding sharing their feelings with others; some people with BD shared their feelings with families and friends because they felt that they received an appropriate response, a sense of solidarity and support that made them feel better.

"I share my feeling to my sisters, brothers, and friends too and it helps me a lot. They let me know that I am not the only person who has a problem; it can happen to anyone ... they tell me that they even sometimes experience a similar problem, but they tried to tolerate and let the challenges pass. Thus, they advise me not to give up and so on." 23-year, Male-PBD ID20, Sodo-district

Some other PBD stated that, although they recognized the value of sharing their feelings with others and noted the damaging effects of not doing so, they felt unable to discuss with others due to their belief that

no one wanted to hear them. Alternatively, they lacked a confidante whom they trusted sufficiently not to divulge personal information to others.

> *"I don't share my feeling to other people because loving people is possible but, trusting all is difficult. No one is able to put aside their own problems to help me or they may even say she said this and that, and I don't want to be a topic of discussion in my neighborhood coffee ceremony … I keep everything to myself and I know that not sharing my internal feeling harms me."* 27-year, Female-PBD ID002, Butajira

However, some caregivers believed that the person with BD did not want to, or was incapable of, discuss their problems in such a way that would allow them to meaningfully address them. Rather, caregivers complained about destructive behavior, irresponsibility, and a lack of engagement in problem-solving.

> *"He does nothing; rather he gets angry and insults people around him or breaks anything he finds near to him without taking consequences into consideration, rather than looking for a solution."* 42-year, Female-Caregiver ID027, Sodo-district

Other caregivers reported that PBD do nothing to solve their problem or ask people to help them.

> *"He doesn't know how to solve problems with planning … umm … there is no discussion; he just keeps asking God to do something miraculous for him."* 35-year, Female-caregiver ID013, Butajira

"I leave the place and go somewhere to console myself": navigating stressful situations

Most participants spoke of trying to avoid troublesome social experiences which they associated with the beginning of illness as being more helpful than getting help after they had become unwell.

Some PBD preferred to avoid social events of situations which they perceived to be stressful:

> *"I believe that there is problem related to this. I don't feel good when there is crying/ shouting when someone die because the shouting makes me emotional and I absorb the sorrow. People with mental illness are like a sieve, all the sorrow goes through his body and hurts him a lot (የአእምሮ ህመም ያለበት ሰው እንደወንፊት ነው ሀዘኑ ሁሉ ወደ ሰውነቱ ይገባና በጣም ይጎዳዋል) … so I will see my condition and If I feel unwell, I leave it."* 48-year, Male-PBD ID 003, Meskan-Woreda

Caregivers explained that by understanding the factors that exacerbated illness, they could modify their interactions with the PBD to reduce provocation in an effort to decrease the potential for return of illness:

> *"when he [patient] talks loud because of anger, we don't respond to him, I keep quiet … so that he becomes calm … umm … if someone gets angry and talks loudly, it is good to be quiet, otherwise it makes the person more angry and brings the illness back."* 25-year, Female-Caregiver ID014, Butajira

Some PBD reported taking actions to change their surroundings; for example, chatting with friends or leaving a situation in order to neutralize their bad feeling.

> *"In order to forget a situation that makes me worried, I leave the place and go somewhere in order to console myself … I know the things that make my illness worse, so I try to control them."* 30-year, Male-PBD ID017, Butajira

3.2.2. Managing symptoms "avoiding and using substance"

Participants take a lesson from their illness experience to avoid or use substance to manage their symptoms. Some participants reported a positive role of alcohol use and khat, to improve their sleep and medicate their illness symptoms

> *"Sometimes, he [he patient] has sleep problem so, he disturbs the families wake-up from his sleep and going here and there. Thus, he drinks alcohol to sleep well so that he doesn't disturb anyone."* 63-year, Male-Caregiver ID012, Sodo-district

On the contrary, most participants agree that avoiding substance use like khat and alcohol was helpful to improve sleep and relationships with others, while also reducing the risk of directly triggering or worsening their illness.

> *"… I was chewing a lot so it has worsened my illness. Now, I stopped chewing for the last eight years because of my religious convictions. It [stopping chewing] has helped me a lot. For example, now, I sleep well, I have good relationship with others, I spend my time with my wife and children and I'm not irritable as before, I also eat well …"* 30-year, Male-PBD ID017, Butajira

3.2.3. Strength and healing: the role of religious beliefs and practices

There was a broad agreement among participants that religious practices such as praying, going to holy water (holy water is water that has been sanctified by a priest for the purpose of baptism, the blessing of persons, places, and objects, or as a means of repelling evil and treatment of illness) and listening to religious song were a positive influence upon the person's emotions, helping them to feel calm and encouraged when they experienced personal or interpersonal problems.

> *"I read the bible and listen to religious songs on Sunday. When I read the bible, it helps me to feel hope, for example, the bible says, 'blessed is the man that endures temptation … ' So, it reassures me and helps me to be strong. It indicates how common it is for people to face several problems and how much we should be strong. Everything written in the bible is true, so it gives me energy and helps me not to think too much."* 23-year, Male-PBD ID20, Sodo-district

Some participants reported that things happened according to the will of God. Therefore, they came to accept problems that could not be reversed or changed and found this acceptance calming:

> *"My illness started because of grief related to the death of my brother and became worse when my mother and my children died … I realized that I couldn't return things that are already lost. Everything happened in the will of God, he created us and we will pass, our time is already known by him so now I stopped worrying about them. I thank God and tell him to keep the rest of the children safe."* 27-year, Female-PBD ID002, Butajira.

However, some participants noted that there were difficulties in using a spiritual treatment in the form of holy water and biomedical treatment (medication) simultaneously. For some, this was a matter of creating confusion about which treatment had been effective, while for others, the two paradigms were more fundamentally incompatible because they believed that dependence on holy water necessitated abandoning biomedical treatment as it required a demonstration of faith.

> " …. she was not taking medication when we were in the holy water site because people told us it is not right to use holy water and medication simultaneously. Because this will make it difficult to know which bring the change, I mean the medication or the holy water."
>
> 50-year, Male-Caregiver ID011, Sodo district.

3.2.4. "Nothing helps him other than medication": the role of biomedical services

Both PBD and caregivers emphasized the power of biomedical treatment in alleviating symptoms of illness:

"the only thing that helped him to feel better is medication especially the injection. Nothing helps him other than medication" 32-year, Female-Caregiver ID015, Sodo-district

All participants agreed that treatment discontinuation was a major problem that could trigger the patients' illness after remission and worsen the illness once it had returned. However, most participants explained that treatment-related issues such as increased weight, feeling sleepy during the daytime, and being unable to wake-up in the morning were common reason to stop taking their medication.

"I'm taking the medication at night-time. I always feel sleepy in the morning even though I slept for a long time in the night .... Every morning, our neighbor asked me whether I slept well or not ... Thus, I sometimes stopped taking it not to be sleepy or to be fully awake." 30-year, Male-PBD ID23, Butajira

Some PBD adjusted their dosage and/or took medication breaks according to their perceptions of their illness status: increasing their dose when symptoms persisted and reducing/stopping when they felt better. Without the involvement of healthcare professionals, this sometimes-had adverse consequences, leading to a return to illness:

"he[patient] doesn't take medication when he is well ... they [health professionals] are also have not informed us to take medication while he is feeling well .... if he is normal, he doesn't take medication" 25-year, Female-Caregiver ID014, Butajira

Other participants reported that they stopped their medication because they perceived that medication was not curative.

"The medication didn't cure them fully but it gives her sleep and made her patient ....so some people advised her to stop taking it for a week and try to see how she felt without medication and she stopped ... then she got seriously sick and came ..." 50-year, Male-Caregiver ID011, Sodo district

Fear of stigma and of side effects of medication during pregnancy were also commonly described as reasons to discontinue treatment. Participants reported feeling negative judgments from the community related to frequent visits to the health facility, which sometimes prevented visits to the clinic, despite recognition by the person living with BD that they were unwell.

"... I feel as if people saying to me that I am frequently going to hospital because of getting the treatment free rather than being unwell. So, I didn't go to hospital immediately after feeling unwell ..." 36-year, Female-PBD ID025, Sodo-district

Whereas, some caregivers described patients' unwillingness to take their medication as a reason for non-adherence.

" .... There is a time that he refuses to take his medication. Because of that, in such times we will give him the medication without letting him know, we dilute the medication with the tea or coffee or milk and give it to him." 35-year, Female-Caregiver ID 013, Butajira

3.3. The costs of affliction

3.3.1. Lost opportunities

Some PBD and caregivers described that during younger ages, dropout from school was one of the main negative consequences of illness, leading to early curtailment of education:

". when I was a student, I couldn't attend properly and I couldn't write using pen and book like my friends. I was quarreling with the school community unless I missed the class ... so I stopped because of fear of worsening of symptoms at that time ..." 30-year, Male-PBD ID 017, Butajira

Participants explained that ill-advised decisions made during the illness period played a role in the economic problems they were experiencing.

"... previously, I had assets like sheep, goats, and chickens and I was trying to do different things. But, after I got sick, I felt as if they were not important and I sold them when I felt annoyed. I think I decided to sell them because of the illness because previously I was not planning to sell them ..." 23-year, Male-PBD ID020, Sodo-district

Others reported the negative consequence of illness upon their ability to work and acquire assets compared to other members of the community.

"sometimes he [PBD] gets sick during harvesting time, he may not be able to hold a sickle ... umm ... no one helps him ... when he tried to harvest, he feels tired and his hand couldn't hold the sickle properly so the time passes before we gather the crop." 32-year, Female-Caregiver ID015, Sodo-district

Participants described the direct and indirect cumulative effects of the illness on the affected person and the household economy over time, starting from a young age; some participants stated that they sold their assets to cover the treatment and other related costs:

"At the beginning, we sold my grandmother's land for transportation and different costs to go to different holy water places ... during the illness period my grandmother asked people for help and to take me to Addis Ababa Amanuel hospital." 27-year, Female-PBD ID005, Butajira

3.3.2. "I'm not happy. I feel shame": living with social exclusion

PBD and caregivers were concerned about direct or indirect social exclusion of PBD due to their illness, for example, some reported that people excluded them from social participation and behaved towards them in ways that would never normally be acceptable:

"Last time, my cattle entered another person's farm and were grazing there; because of that, the owner of the farm was hitting my cattle. My son [person with BD] asked him why he hit the cattle and he [owner of the farm] tried to hit him with an axe but he ran away and escaped. If the cattle were belonging to another person, they may not have tried to hit that person." 63-year, Male-Caregiver ID012, Sodo-district

Additionally, other participants reported that stigma shaped their interactions with members of the community, as well as restricting the social roles they were allowed to play:

"I don't know why but people, including my family members, change their direction when they see me on the street, not to talk to me as if they didn't see me .... I feel isolated when they react to me in this way ... people were calling me crazy and were not wanting to communicate with me." 48-year, Male-PBD ID 003, Meskan-Woreda

The stigma and misunderstanding of PBD were also mentioned as barriers to express their feelings and get help, leading to feelings of loneliness.

"... everybody at home says to me 'you don't feel shame when you always say I'm feeling unwell' ... One day, my husband said to me 'I wish your illness to be real' ... so I get angry and feel alone, I also don't tell them when I feel unwell or I don't go to the health facility unless it is serious." 32-year, Female-PBD ID025, Sodo-district

Many PBD and caregivers described the compounding effects of exclusion upon social isolation: with exclusion causing people with BD to avoid socialization due to feeling less confident, inferior, and ashamed about living with a mental illness.

"Previously, I didn't have fear to talk with people but now I'm not happy, I feel shame, I'm not motivated to talk and I don't want my voice to be

heard so I don't talk during social gathering, I just sit and hear what they are saying because people around me think that I am dangerous (both men and women talk as if I'm dangerous)." 50-year, Female-PBD ID09, Sodo-district

Some other participants reported that culturally, people chew khat in groups during the social and cultural ceremonies. Therefore, they use to chew khat with another community member as a mechanism to improve social integration.

"*Previously people were calling me '**Ebid** '(crazy) … I was isolated from others, so Khat created an opportunity for me to socialize, to share my ideas with other people. The more we get together, the better we know and understand each other so they don't stigmatize me. So, Khat is a good solution for me.*" 48-year, Male-PBD ID 003, Meskan-Woreda

3.3.3. The hazards of intimacy

Participants described the difficulties they had regarding establishing sexual relationships, getting married, and maintaining spousal relationships:

"*previously when I planned to marry, people said he is mentally ill …, many of them were not willing to have a marital relationship with me because of my mental illness …. my former wife also went abroad without my consent/consulting me.*" 30-year, male-PBD ID17, Butajira

Other participants explained their experience of divorce and community interference in their relationships.

"*I have been divorced for nine years. my neighbors and community members were supporting him [her husband]- everybody said, he has to get married to another woman and lead his own life … they decided that I had to leave the house with my children, so he took all of the assets, the land, and house and got married to another woman.*" 27-year, Female-PBD ID002, Butajira

Other participants described that they were scared to establish sexual relationships, anticipating divorce due to having a mental illness.

"*Previously, I stayed without getting married because my illness came back every time so I feared that it may work as a cause for disagreement and divorce …*" 27-year, Female-PBD ID005, Butajira

Caregivers described negative impacts of their relatives' illness on their children's education, relative's work, and social lives. These negative impacts arose from caregiving responsibilities, for example, trying to prevent or manage difficult behaviors, including threats of harm to self or others:

"*If he got sick, I look after him and caring for him is my responsibility, I couldn't do anything and I also sit with him. We spent the night without sleep too but he is alert in the next day also so how can I work? I was sitting and waiting him day and night …*" 35-year, Female-Caregiver ID13, Sodo-district

4. Discussion

To the best of our knowledge, this is the first study to explore the lived experience of living with BD in a rural LMIC setting. Our phenomenology-informed approach supported thick description and enabled in-depth exploration of the different domains of experience of the life-world, bearing witness to the experiences of marginalized individuals, whose voices are largely absent from the scientific literature and wider society. We acknowledge that our study was framed by the larger goal of developing a culturally appropriate primary care intervention. While designed to be broad and expansive, our overall aim inevitably shaped which aspects of lived experiences we prioritized in our topic guide. Our results, therefore, represent a particular perspective, which recognizes a role for the health system in supporting PBD and their families in LMIC settings. The study took place in a setting that was unusual in Ethiopia, where biomedical care was available and accessed in a community where extensive mental health research had taken place. Our results thus represent experiences of illness in a context where there is arguably greater awareness of "mental health" and more therapeutic options available than would be the case in most rural Ethiopian communities.

Our findings demonstrate that for PBD, illness is located in a constellation of life problems, primarily rooted in the social (see Fig. 1). Occurrences in the social world were seen both as the cause of the first period of illness experienced, and as a stimulus for moving from being well to unwell. The most significant consequences of illness for the PBD were social, for example, lost income generation opportunities, were perceived to be due to social exclusion. It is not just the PBD who is living with the illness, but the consequences of living with mental illness are also felt by the whole family. Our findings suggest that if successful interventions are to be developed, they must take account of these models of illness, ensuring that social outcomes are prioritized. For example, in a study carried out in Midwest, participants living with BD identified several helpful behaviors from friends, family, and colleague (Doherty and MacGeorge, 2013) that better enable them to both cope with illness and feel more socially connected, including talking and listening to the person living with illness, encouraging PBD to value themselves and their contributions, expression of love, and active support for help-seeking and treatment.

In our study, narratives were strongly rooted in the social world, with disrupted relationships seen as both a consequence and a cause of illness, which, in turn, led to broader socioeconomic impacts. Participants described the vicious cycle that resulted from fractious social encounters and antagonistic relationships that triggered and intensified the illness, in turn, leading to a worsening of relationship problems, social exclusion, stigma, and lack of support, and often hostility, from the community. Findings from other studies have described similar changes between PBD and the communities in which they live, with service-users describing circular relationships linking feeling misunderstood by the community and being blamed for their illness (Ganguly et al., 2010), leading to poor interpersonal and marital relationships (Habtamu et al., 2015; Hailemariam et al., 2019) and subsequently a lack of social support leading to further alienation.

Participants were aware that their experience of stigma had resulted in the internalization of their "spoilt identity" (Goffman, 2009), causing them to hesitate in sharing their feelings, lose confidence over time, and experience a sense of inferiority and shame about living with a mental illness. In addition to this problem, stigma and exclusion from work opportunities were perceived as a significant barrier to acquiring assets, leaving them unable to support themselves and exposed to another layer of stigma that became inseparable from that which was due to their illness. As have been elsewhere, consequences of illness were pervasive, affecting not just the PBD and their primary caregivers but stigmatizing the whole household/family (September and Beytell, 2019). Participants described the negative consequences on children's education and family member's ability to work, which they connected to impoverishment (Ganguly et al., 2010; Pompili et al., 2014).

Participants who visited religious places or traditional healers for their illness did so because: they believed their illness was caused or activated by supernatural power, or, they preferred to visit religious places because they believed that religious practice works as a means to combat stigma (Lan et al., 2018) and improve wellness (Speed et al., 2020). Studies about mental health in other sub-Saharan African countries have suggested that supernatural explanatory models and stigma can prevent seeking help from biomedical services; authors have suggested that these findings highlight the need for collaborative work with culturally recognized healers (Ae-Ngibise et al., 2010; Musyimi et al., 2016). Others reported substance use to improve social involvement and sleep. The important role of khat in facilitating social, cultural, and

religious activities was previously described in a study that examined the reasons for substance use among people living with severe mental illness carried out in the same setting (Teferra et al., 2011). While in rural Ethiopia, findings suggest substance use is perceived as a way to bridge social gaps, research from north-west England described how PBDs used drugs and alcohol to manage their mood and anxiety symptoms (Healey et al., 2009).

When considered in the context of our systematic review of psychosocial interventions for PBD, findings from our qualitative study have important implications for intervention design and delivery. Participants practiced a range of self-management strategies, and where necessary, sought help from more formal healing services, namely, Holy Water sites and medication. PBD and caregivers accumulated knowledge over time and used this knowledge to inform their behaviours. For example, PBD avoided situations they knew to be stressful and sought help from biomedical services when they recognized they were unwell. It has been suggested that self-care strategies improve knowledge and skills by empowering and helping PBD to take responsibility for their illness (Cappleman et al., 2015; Morton et al., 2018). Understanding life with BD, particularly knowledge of warning signs and factors which aggravate or exacerbate illness, may help PBD to accept their diagnosis and treatment, as well as encouraging them to be proactive regarding early signs of illness and reducing the risk of relapse (Billsborough et al., 2014; Doherty and MacGeorge, 2013; Pontin et al., 2009). The results of our qualitative study are consistent with findings from our systematic review, which suggested that health education may be effective in improving self-care (Demissie et al., 2018). We found stigma to be inescapable and debilitating in participants' lives, limiting the extent to which they felt comfortable sharing their feelings or participating in social events. This will need to be addressed if group therapy or peer support, where sharing of knowledge may be helpful, is to be considered.

Limitations. Although our aim was to capture emic experiences, our position was etic with regard to diagnosis. As highlighted above, this study was carried out by a clinical researcher with a particular approach, whose aim was to develop a psychologically informed intervention, located in the health system. These characteristics mean that the scope of the study was narrowed, accepting the existence of a recognizable disorder, aligned broadly with DSM and ICD criteria. This means that our study lacks the flexibility to consider the possibility of the existence of culturally bound syndromes that share some features of BD. Participants were people who had been diagnosed with BD and received care within the biomedical system. Our sample size enabled us to explore the aspects of experiences of most relevance to our overarching study aim. However, our sample was highly unusual in Ethiopia and it is likely that participants' explanatory models have altered over time as a result of their experiences of treatment. This was not the main focus of this study and the development of explanatory models overtime was not explored. We did not carry out member checking. However, the interviewer, who was also the lead researcher, is indigenous to Ethiopia, has good knowledge of local idioms, and, during interviews, ensured that she had understood participants' meanings by summarizing and repeating back to them what they had said. It is difficult to separate the different factors that shaped participants' responses in the interview. For example, in other work with people living with mental disorder in Ethiopia, we found that pervasive stigma of "madness" inhibited free discussion of opinions and experiences of illness, although this was less obvious in this study, it seems inevitable that stigma constrained responses (Mayston et al., 2016).

5. Conclusions

People with bipolar disorder and caregivers routinely recognize and act upon early warning signs as a means of coping with illness, but caregivers and PBD prioritize different signals. Stigma is intrinsic to illness experience, as a driver and consequence of illness. This circular relationship leaves PBD and their families socially alienated, which, in rural Ethiopian communities, results in a loss of economic opportunities. Nonetheless, some PBD benefit from close trusting relationships with family members and friends and many PBD and family members described how their spiritual beliefs and religious practice, and medication use helped them to cope. In the context of availability of spiritual, social, and biomedical resources, our study findings indicate the need for psychosocial intervention, to bolster self-help strategies, address internalized stigma and augment social support.

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Authors' contribution

Mekdes Demissie: Conceptualization, methodology, analysis, writing-original draft and interpretation, reviewing and editing the manuscript. Charlotte Hanlon: Conceptualization, methodology, analysis, writing-original draft and interpretation, reviewing and editing the manuscript. Lauren Ng: contributed to the design and interpretation and reviewed and edited the manuscript. Abebaw Fekadu: Conceptualization, methodology, analysis, and reviewing and editing the manuscript. Rose Mayston: contributed to study design, data analysis, interpretation, reviewing and editing the manuscript. All authors read and approved the final version.

Declaration of competing interest

None.

Appendix A. Supplementary data

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Appendix-C: Development of a psychological intervention for people with bipolar disorder in rural Ethiopia

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Development of a psychological intervention for people with bipolar disorder in rural Ethiopia

Mekdes Demissie, Charlotte Hanlon, Lauren Ng, Rosie Mayston, Sisay Abayneh and Abebaw Fekadu

Background

Evidence from high- and middle-income countries indicates that psychological interventions (PSIs) can improve the well-being of people with bipolar disorder. However, there is no evidence from low-income countries. Cultural and contextual adaptation is recommended to ensure that PSIs are feasible and acceptable when transferred to new settings, and to maximise effectiveness.

Aims

To develop a manualised PSI for people with bipolar disorder in rural Ethiopia.

Method

We used the Medical Research Council framework for the development and evaluation of complex interventions and integrated a participatory theory-of-change (ToC) approach. We conducted a mental health expert workshop (*n* = 12), four independent ToC workshops and a final workshop with all participants. The four independent ToC workshops comprised people with bipolar disorder and caregivers (*n* = 19), male community leaders (*n* = 8), female community leaders (*n* = 11) and primary care workers (*n* = 21).

Results

During the workshops, participants collaborated on the development of a ToC roadmap to achieve the shared goal of improved quality of life and reduced family burden for people with bipolar disorder. The developed PSI had five sessions: needs assessment and goal-setting; psychoeducation about bipolar disorder and its causes; treatment; promotion of well-being, including sleep hygiene and problem-solving techniques; and behavioural techniques to reduce anxiety and prevent relapse. Participants suggested that the intervention sessions be linked with patients' monthly scheduled healthcare follow-ups, to reduce economic barriers to access.

Conclusions

We developed a contextually appropriate PSI for people with bipolar disorder in rural Ethiopia. This intervention will now be piloted for feasibility and acceptability before its wider implementation.

Keywords

Psychoeducation; behavioural intervention; relapse prevention; individual therapy; theory of change approach.

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Burden

Bipolar disorder is a severe mental illness with an estimated global prevalence ranging from 0.4 to 2.4%.[1] In the 2017 Global Burden of Disease Study, bipolar disorder accounted for 9.3 million disability-adjusted life-years.[2] In low- and middle-income countries (LMICs), the burden of bipolar disorder is exacerbated by a high treatment gap, ranging from 76 to 90%,[3] which contributes to a risk of premature mortality double that of the general population.[4] In Ethiopia, the lifetime prevalence of bipolar disorder ranges from 0.5 to 1.8%.[5,6] Studies conducted in different settings in Ethiopia have found that people with bipolar disorder have multiple unmet needs, including a high relapse rate,[7] premature mortality[4] and verbal and physical abuse.[8] In addition, bipolar disorder in Ethiopia is associated with substantial social, physical and functional role restrictions.[5] Studies conducted in mental and general hospitals in Ethiopia have also reported a higher risk for hospital admission and length of hospital stay among people with bipolar disorder compared with other patients,[9,10] which is associated with higher healthcare costs[9] and insufficient use of limited mental health resources.[11]

The unmet psychosocial needs in LMICs

Studies conducted globally have identified potential mediators and moderators of bipolar disorder treatment outcomes, such as treatment adherence,[12] knowledge about the disorder[13] and sleep hygeine.[14] Moreover, social factors, including stigma and discrimination,[15] stressful life events[16] and substance use,[17] may influence the course and outcome of the disorder. In LMICS, inadequate care for people with bipolar disorder contributes to functional impairment, stigma, discrimination, human rights violence and premature death.[18] Therefore, to reduce the risk of relapse and improve the well-being of people with bipolar disorder, these factors must be addressed.[19]

The Mental Health Gap Action Programme intervention guide (mhGAP-IG) lists mood stabilisers as the main treatment for bipolar disorder.[20] However, in many LMICs, these medications are either unavailable or their supplies are unreliable.[3] As a result, people with bipolar disorder in rural Ethiopia are treated with typical antipsychotic medications,[21] which are more likely to cause adverse effects.[9] Studies conducted in Ethiopia have also shown that people with bipolar disorder have unmet psychological, social and treatment-related needs,[22] and people with mental illness need information about their illness and treatment.[21]

Studies conducted mainly in high-income countries indicate the efficacy of psychological interventions for reducing relapse, hospital admission[23] and symptom severity.[13] Evidence-based, contextualised psychological interventions for people with mental illness are scarce in LMICs, including Ethiopia.[24] Additionally, LMICs typically lack the specialised mental health professionals who could deliver psychological interventions.[25] In response to this, the World Health Organization recommends task-sharing delivery of mental healthcare with available and affordable non-specialist health professionals,[26] and integrating the service into primary healthcare (PHC).[27] In Ethiopia, in line with the National Mental

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Fig. 1 Overview of the process of development of a psychological intervention for bipolar disorder. LMICs, low- and middle-income countries.

Health Strategy, there have been efforts to scale up primary care-based mental healthcare. As a demonstration project, the Programme for Improving Mental Health Care (PRIME project) has developed and implemented a scalable mental healthcare plan for bipolar disorder based in PHC.[28] According to a systematic review of non-specialist-delivered mental health interventions in LMICs, psychological intervention have positive effects on depression[26] – another mood disorder – yet few psychological interventions have been developed for bipolar disorder in LMICs.

A systematic review that included studies from LMICs showed the effectiveness of psychological intervention in improving the outcomes of bipolar disorder. The review included 18 studies, but none of them were from low-income countries and only a single study was found from Africa. The review also reported that only a few of the included studies reported how the interventions were developed or adapted.[29] The meta-analysis of 76 interventions reported that the interventions that were targeted at a specific cultural group were four times more effective than interventions provided to groups consisting of clients from a variety of cultural backgrounds.[30] The adaptation of psychological intervention to the target population's culture and social context also plays a critical role in improving the feasibility and acceptability of an intervention.[24] Psychological interventions that can be delivered by non-specialists may play a particularly important role in settings where there is inadequate access to mood stabilisers and mental health specialists. Therefore, the aim of this study was to develop a contextualised, scalable and manualised psychological intervention for people with bipolar disorder that could be delivered by PHC workers in rural Ethiopia.

Method

Design

We used the Medical Research Council (MRC) Framework for the Development and Evaluation of Complex Interventions, integrated with a theory-of-change (ToC) approach.[31] The MRC framework has four phases – intervention development, feasibility and piloting, evaluation and implementation – all of which take place as an iterative rather than a linear process. We followed four steps to develop the intervention: (a) a systematic review, (b) a qualitative study with people with bipolar disorder and their caregivers, (c) a mental health expert workshop and (d) ToC workshops with various stakeholders (Fig. 1). The findings of the systematic review and qualitative study were published previously,[22,29] and the key findings are summarised in Table 2 and Supplementary File 1 available at https://doi.org/10.1192/bjo.2021.999.

ToC has been defined as a 'theory of how and why an initiative works'.[31] A ToC roadmap is developed using feedback from stakeholders, and is amenable to change throughout the intervention development and evaluation process. ToC can be incorporated into, and provide practical guidance for, the different phases of the MRC framework.[31] The ToC approach has been used to develop, implement, monitor and evaluate complex mental health interventions in Ethiopia.[28]

Setting

The qualitative study and ToC workshops were carried out at two adjacent sites: the Sodo and Butajira districts of the Gurage Zone, Ethiopia. Sodo district is located 100 km from the capital city of Addis Ababa, and had an estimated total population of 173 185 in 2014.[32] Sodo Gurage is the largest ethnic group (85.3%), followed by Oromo (11.6%). Most of its population are followers of Orthodox Christianity (97%). Butajira district is located 130 km from Addis Ababa and had an estimated total population of 350 297 in 2017,[32] with most of the population following Islam. The town of Butajira is a Health and Demographic Surveillance Site that has been functioning since 1987.

The Ethiopian healthcare system comprises three levels. The first level, which is the focus of this intervention, consists of PHC, which includes primary hospitals, health centres and health posts. Health centres are staffed with health officers, nurses and midwives.[33] Health posts are staffed with health extension workers (HEWs), high school graduates with 1 year of training in disease prevention and health promotion activities at the community level.[33] Sodo district has eight health centres and one primary hospital; Butajira district has one district hospital and 13 health centers.[33] PHC workers in both districts have been trained and

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supported to deliver mental healthcare through the PRIME project in Sodo district[28] and the Task-Sharing for the Care of Severe Mental Illness in a low-income country (TaSCS) project, which aims to test the effectiveness and cost-effectiveness of task-sharing the care of people with a severe mental illness within the PHC setting in Butajira.[33]

Participants and data collection methods

Mental health expert workshop

Twelve (three female and nine male) health experts and health professionals from diverse professional backgrounds (two psychiatrists, three public health professionals, five clinical psychologists, one pharmacist and one social worker) participated in this workshop. Findings from the systematic review[29] and the qualitative study[22] (stages 1 and 2) were presented and discussed. The experts were then asked to give their suggestions and recommendations on the content and delivery of the intervention based on the systematic review, the qualitative findings and their clinical and research experience. The workshop was conducted in Amharic and English in Addis Ababa, and lasted for 3 h. A.F., a psychiatrist, facilitated the discussion. The discussion was audio-recorded and notes were taken by the first author.

ToC approach

To reduce power imbalances among ToC workshop participants, we initially conducted separate workshops with groups of stakeholders with the lower difference among them.[34] Additionally, we engaged a balanced number of participants from each stakeholder groups to ensure the representation of various stakeholders' voices: (a) people with bipolar disorder and their caregivers, (b) women community leaders, (c) male community and religious leaders, and (d) PHC workers and district-level government office personnel. Even within these broad categories, power imbalances exist, e.g. between people with bipolar disorder and caregivers or between PHC workers and district-level government office personnel. In this setting, people with bipolar disorder commonly rely on caregivers to support them to attend meetings, and so the presence of both caregivers and people with bipolar disorder was necessary. To address this concern, within workshops, the facilitators paid particular attention to ensuring that all voices were heard. We grouped PHC workers and government officials in one ToC workshop because most of the officials were health professionals and had experience working in a PHC setting. Additionally, PHC workers and district-level officials have a culture of working together for a common purpose. The final ToC workshop included all participants from the stakeholder groups to ensure that each group could hear the others' voices, and to discuss issues that needed consensus.

The ToC workshop participants were selected purposively based on their experience in mental healthcare service delivery or roles in traditional or social associations in the communities. The first four ToC workshops were conducted in the Sodo district in August 2019, and the last ToC workshop was held in Butajira town in September 2019.

All ToC workshops were co-facilitated by M.D. and S.A., both of whom are PhD students. S.A. has previous experience in facilitating ToC workshops with various groups in the study site. All participants were given an opportunity to express their opinions, and were encouraged to identify challenges and suggest possible solutions for each topic area. The facilitators summarised the discussions, recorded key points on a flip chart and asked for confirmation. All ToC workshops except the final one, had two sections: (a) exploring the feasibility and acceptability of a psychological intervention; and (b) developing a ToC map that indicated the causal pathway through which the proposed psychological intervention was expected to achieve consensus in its short-, medium- and long-term effects, identification of preconditions for achieving the effect, possible barriers and facilitators and indicators of success.

In the first section, findings from the systematic review and qualitative study were presented, participants were introduced to the objectives of the ToC workshop, and their expected roles were outlined in a Microsoft PowerPoint for Windows presentation prepared in Amharic. Participants then discussed the findings, the potential benefits of psychological intervention, and the feasibility and acceptability of this approach. The participants were asked to consider anticipated or experienced responses to the intervention in relation to the culture and religion of the society; health system resources; the impact of the socioeconomic status of people with bipolar disorder and their caregivers; and the community, transportation availability, affordability, accessibility of the healthcare service, the PHC workers' time and any other relevant considerations.

During the second section, we used farming metaphors to explain the ToC concepts, procedures and avoid technical terms. For example, we asked question like: What did the farmer wants to achieve (effect)? What do farmers do to prepare the land for farming (interventions/pre-conditions)? Which activities should be done first and last, and why? The participant responses were used to explain how a similar way of thinking can help us to plan the development and testing of psychological intervention.

The actual ToC workshop then started by asking the participants what they wanted to see in the long run for people with bipolar disorder. Short-, medium- and long-term outcomes and wider effects were agreed upon, and then the pathways, interventions, preconditions, assumptions and indicators of success were mapped using sticky notes posted on the wall. An integrated ToC map was drafted by reviewing the ToC maps arising from each of the four workshops alongside the minutes and the recorded discussions. The goal of the fifth and final ToC workshop was to bring all stakeholder groups to a consensus on the content, timing, duration and number of sessions of the intervention, including implementation strategies to overcome potential barriers, in the context of broader care for people with bipolar disorder. In an initial presentation, the shared and divergent ideas from the preceding workshops were summarised and used to prioritise discussion points.

All ToC workshops were conducted in Amharic, lasted an average of 5 h, were audio-recorded and minutes were taken. The minutes, drafted ToC maps and recorded ToC workshops were reviewed by M.D. and A.F. to refine the ToC map and finalise the content of the psychological intervention. The draft manual was translated into the local language, and PHC workers reviewed and approved the content for pilot testing.

Analysis

All audio recordings were transcribed verbatim in Amharic and then translated into English. The transcripts were imported to OpenCode version 4.03 for Windows (Umeå University, Umeå, Sweden; see https://www.umu.se/en/department-of-epidemiology-and-global-health/research/open-code2/) to facilitate data management and assist analysis. We used thematic analysis procedures. First, MD conducted line-by-line coding of all five ToC workshop transcripts and shared them with the second author (C.H.) for review. M.D. and C.H. mapped codes onto themes deductively based on key components of the ToC map, including key tasks, intervention, preconditions, assumptions and indicators, as well as acceptability and feasibility (Table 3). Finally, we summarised the findings in the tables and text, and identified illustrative quotes.

In each ToC workshop, four draft ToC maps were developed through discussion and consensus, and then combined by the authors to develop a single ToC map. Finally, this final draft ToC map was refined and approved in the fifth ToC workshop with all ToC workshop participant groups.

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We triangulated the findings with different information sources (Table 2) to increase trustworthiness. Furthermore, M.D. and S.A. were engaged for an extended time in the field. The involvement of co-authors with multidisciplinary backgrounds improved data interpretation.

Quality of reporting

We used the Guidance for Reporting Intervention Development (GUIDED) checklist[35] to report the intervention development process.

Ethical approval

The Institutional Review Board of the College of Health Sciences of Addis Ababa University approved the study (reference number 043/17/Psy), and written informed consent was obtained from each participant.

Results

Mental health expert workshop

Mental health experts suggested two intervention components: (a) components that could be used to improve the PHC workers' skills in establishing therapeutic rapport and competence in needs assessment and goal-setting; and (b) the 'active ingredients' of the intervention, such as psychoeducation, development of relapse prevention plans and behavioural techniques such as muscle relaxation and breathing exercises, to help people with bipolar disorder to control their overarousal, aggression and anxiety symptoms. Experts recommended four intervention sessions for the following reasons: in our systematic review, most of the included studies reported three to eight sessions;[29] previously, four to eight sessions of interpersonal therapy for common mental disorders were proposed for a PHC setting in Ethiopia;[36] and the proposed components of intervention could be covered in four sessions. Participants suggested that PHC workers should deliver the intervention based on their being trained on the mhGAP-IG and having experience of treating people with severe mental illness. However, they were concerned about the potential work burden on PHC workers.

Experts recommended an individual format to simplify the challenge of having groups at a set time because of transportation problems in rural settings and other factors. They also recommended that caregivers be involved in the intervention considering the sociocultural context in which family members accompany patients when attending the facility. They reasoned that caregivers' involvement in the intervention could help to create awareness about the illness in the wider family as well as support their ability to help their family members. Nonetheless, they emphasized that people with bipolar disorder should decide whether their family members should be involved. Finally, to facilitate intervention provision and create awareness for people with bipolar disorder and their caregivers, they suggested the development of an illustrated information leaflet that explains the causes, symptoms and treatment of bipolar disorder.

Results of the ToC workshops

Four independent ToC workshops and one ToC workshop that included all participants were conducted, with a total of 59 participants (Table 1).

Table 1 Theory-of-change workshop participants

Stakeholder group	Female	Male	Total
ToC with patients and caregivers			
People with bipolar disorder	4	4	8
Caregivers	6	5	11
ToC with male community leaders	–	8	8
ToC with female community leaders	11	–	11
ToC with professionals			
Primary healthcare workers	5	11	16
District-level government office representative	0	5	5
Final ToC workshop participants	26	33	59

ToC, theory of change.

Feasibility and acceptability of psychological intervention

Participants perceived that PSI was needed for people with bipolar disorder. However, they also argued that the developed intervention must be feasible and acceptable to be implemented. The group that included people with bipolar disorder and their caregivers described the varying nature and intensity of symptoms over time. Because of the episodic nature of the illness, bipolar disorder was perceived by many people with bipolar disorder and their caregivers to be caused by evil spirits or other supernatural acts, leading them to try various religious or traditional treatments. They also noted the chronicity of the illness and the need for long-term support:

> '... Mental illness is not like tuberculosis, which gets cured just by giving medication. Mental illness requires long-term support and effort from doctors, caregivers and the surrounding societies ...'

People with bipolar disorder and caregivers reported that people with bipolar disorder are sensitive; simple stressors can be enough to trigger their illness. When other people speak of their own social affairs, they may be suspicious and assume that they are the focus of discussion, which may hurt them psychologically. Community leaders also noted that medications are important to people with bipolar disorder, and they believe that caregivers had a responsibility to support access. People with bipolar disorder and their caregivers reported experiencing stigma because of having a mental illness or having a relative with mental illness. One caregiver said:

> '... At the coffee shop, at a wedding, there are people who treat [the person with bipolar disorder] as if she is a different person. In such situations, there are times that she would return to home because her feelings get hurt ...'

The intervention was perceived as important because it would provide information about bipolar disorder, its causes and treatments, and would decrease misconceptions. One participant said:

> '... People take patients to different traditional places because of lack of awareness. As long as society is well-informed about the intervention and where they can access it, they will go to the health facility as soon as they feel sick. For instance, if someone gets malaria the society is well-informed about where to get treatment and the same is true in this case'.

The health professionals also expected that the intervention would be acceptable for PHC workers because it would help them develop their skills and would improve the acceptability of the service. This, in turn, was predicted to improve the mental health knowledge of people with bipolar disorder, their families and the community, and increase treatment adherence and improve outcomes. Health professionals reflected that, often, people with bipolar disorder visit health facilities only after the illness become severe. They emphasised that early detection of relapse should be addressed in the intervention.

Participants in all groups considered the health centre as the ideal place for the intervention because this is where people with bipolar disorder receive their regular follow-ups and fill their prescriptions. Additionally, a quiet and private place was preferred, but without segregating people with bipolar disorder from other

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Table 2 Summary of contribution of various methods to the development of a psychological intervention manual

Methods	Findings	Contribution to the psychological intervention development
Systematic review	• Identified psychological intervention: psychoeducation, family therapy, cognitive–behavioural therapy and mindfulness-based cognitive therapy • The number of sessions ranged from 1 to 18 • The content of the intervention includes education about signs and symptoms of bipolar disorder, the causes and prognosis of bipolar disorder, treatment adherence and side-effects of medication, early identification of symptoms of relapse, triggering factors, substance use, regular habits and management plans or prevention strategies • Intervention providers were mental health specialists or practitioners	Defined the type of intervention ▪ Defined the intervention content ▪ The studies were used to identify the intervention manual
Qualitative study	▪ People with bipolar disorder and their caregivers reported perceiving early signs and symptoms of relapse ▪ A major concern for people with bipolar disorder and their caregivers related to the patients' illness being identified ▪ Perceived factors that precipitate or worsen the illness were explored ▪ Coping mechanisms used by people with bipolar disorder to cope with stressful life events were explored ▪ Bipolar disorder has a negative effect on the social, functional and economic status of people with bipolar disorder and their families	▪ Define problems from the people with bipolar disorder and caregivers' lived experience ▪ Identify psychosocial factors that could be addressed in the current psychological intervention
Mental health expert workshop	▪ Possible components of the intervention were suggested to address the concerns of people with bipolar disorder and improve their health and treatment outcome	▪ Experts suggested intervention components based on their clinical and research experience as well as findings of qualitative and systematic review
Theory-of-change workshops	▪ Stigma and financial problems ▪ Need for psychological intervention ▪ The necessary condition for improving the acceptability and feasibility of psychological intervention ▪ Developed theory-of-change map ▪ Need for training in communication skills for intervention providers ▪ Need to improve community awareness	▪ Explored the feasibility and acceptability of psychological intervention ▪ Defined the necessary resources to give the intervention ▪ Support the patients to use the existing supporting platforms like the safety net programme ▪ Suggested the intervention content, frequency of sessions, format, and providers ▪ Defined the desired outcome ▪ Defined indicators for success

health centre attendees, to avoid stigma and discrimination. Some participants from the community and health professionals suggested that the intervention should be located at the health post to increase accessibility, and it should be delivered by the health centre staff as part of outreach activity. Finally, participants in the final ToC workshop agreed that the intervention should be delivered at the health centre by PHC workers because PHC clinicians are in a better position to know the mental health history and current health status of the person with bipolar disorder, and this will improve trust because the clinician is likely to be known to them from their routine care. Participants also mentioned the importance of HEWs creating awareness in the community, in the form of a campaign or through another mechanism, as an important supportive activity.

The participants came to a consensus that a one-to-one consultation format would be better than a group format. Among the reasons, people with bipolar disorder may not want to talk about their social, economic and personal lives in front of others. Furthermore, in rural areas, people may struggle to attend group interventions at a specific time. Similar to the mental health experts, participants also suggested the option of a common session for people with bipolar disorder and their caregivers as long as the patients are willing and it does not interfere with their privacy:

> 'People do not come alone and will have someone with them, those that came will also get an education on the subject that they will later transfer to other family members and improve the support they provide to the patient'.

Regarding the session, people with bipolar disorder and their caregivers and community groups suggested that the number, duration and frequency of intervention sessions should be determined based on the content and advice of professionals. Additionally, they underlined the importance of aligning the monthly intervention sessions with regular appointment dates, to encourage attendance by minimising transportation costs and time. PHC workers provided different suggestions for the duration of session (from 20 to 45 min). Finally, considering the workload of PHC workers, they reached a consensus to reduce the intervention content per session to be covered in a maximum of 20 min and to increase the number of sessions from four to five. They also suggested working in collaboration with HEWs, especially to help people with bipolar disorder with their treatment adherence. The PHC workers raised the issue of workload and expressed concerns about people with bipolar disorder and their caregivers being made to wait for a long time while they delivered the intervention.

All participants agreed on the importance of preparing an information leaflet to facilitate the sessions and encouraging the participants to share the information with their entire families and neighbours. The key findings and contributions of various methods to the development of the intervention is summarised in Table 2.

ToC Map

Factors identified as necessary to the development and implementation of a psychological intervention for people with bipolar disorder are summarised in the ToC map (Fig. 2) and described below.

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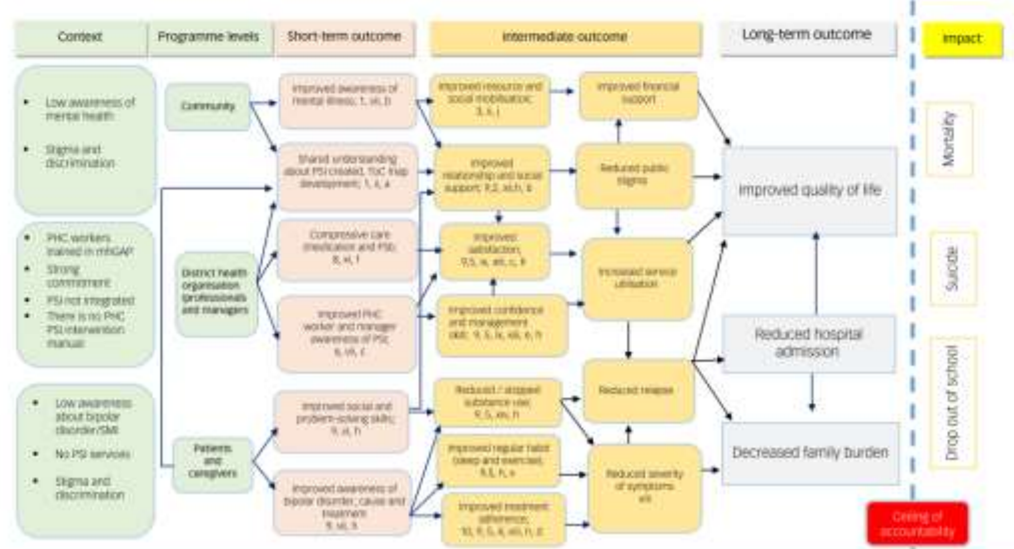

Fig. 2 ToC map for the development of a psychological intervention for bipolar disorder in rural Ethiopia. Example of assumptions: willingness and motivation to (1) be involved in ToC workshop; (2) work with PHC workers; (3) mobilise resources; (4) deliver PSI as per the manual; (5) give compassionate and respectful care; (6) undergo theoretical and practical training on PSI; (7) supervise, monitor and support PHC workers; (8) make the PSI manual available at the health facility; (9) people with bipolar disorder/caregivers receive all components of the PSI and (10) offer community and family support. Examples of indicators: number of stakeholders involved in (i) awareness creation programme, (ii) ToC workshop, (iii) resource mobilisation, (iv) type and amount of resource mobilised, (v) number of PHC workers who attended PSI training, (vi) number of caregivers/people with bipolar disorder who attended one session and four sessions, (vii) 80% increase in awareness, (viii) decreased severity of signs and symptoms as measured with the YMRS and PHQ, (ix) number of participants satisfied with treatment as assessed by an in-depth interview, (x) number of patients with a regular habit, (xi) number of health facilities that made the PSI manual, (xii) social inclusion, (xiii) number of professionals satisfied and (xiv) reduced substance use as measured by ASSIST. Example interventions: (a) conduct ToC workshop, (b) create mental health awareness creation programme, (c) offer theoretical and practical PSI training for PHC workers and managers, (d) engage people with bipolar disorder and caregivers in treatment planning, (e) ensure medication availability at the health centres, (f) make the PSI manual available at the health centres, (g) support patients in adhering to treatment, (h) deliver psychological intervention for people with bipolar disorder and caregivers, (i) evaluate the intervention and (j) mobilise resources. ASSIST, The Alcohol, Smoking, and Substance Involvement Screening Test; mhGAP, Mental Health Gap Action Programme; PHC, primary healthcare; PSI, psychological intervention; SMI, severe mental illness; ToC, theory of change; YMRS, Young Mania Rating Scale.

Outcomes and effects

People with bipolar disorder and their caregivers mentioned improved social and psychological well-being and reduced family burden, hospital admission and school drop-out as the desired long-term outcomes of the intervention, with reduced mortality as a potential broader effect of the intervention. Community leaders focused on stigma reduction and improved physical, social and functional well-being as the preferred long-term outcome. PHC workers and district health office managers emphasised the improved quality of life of people with bipolar disorder and reduced family burden as a long-term outcome. Participants also mentioned reduced mortality and disability related to the illness as a desired effect, but recognised that these require multisectoral changes and are not expected to be achieved just through the psychological intervention alone. In the final ToC workshop, participants discussed the feasibility of the identified long-term outcomes and reached a consensus that reduced hospital admissions, reduced caregiver burden and improved quality of life would serve as the long-term outcomes. Participants also discussed and agreed that the reduction of mortality and school drop-out needs the involvement of various stakeholders beyond the delivery of psychological intervention. As a result, they reached a consensus that reduced mortality and school drop-out would serve as an effect.

Preconditions for intervention

Participants were asked to list the interventions needed, preconditions, assumptions and indicators. Participants mentioned that there should be interventions for people with bipolar disorder and their caregivers, implemented at the community and health facility level. Likewise, the preconditions, assumptions and indicators were also identified to achieve an agreed-upon outcome were also identified, as illustrated in Table 3.

Description of the newly developed intervention manual

The findings from the formative qualitative study and ToC workshops were triangulated to identify the unmet needs and priorities of people with bipolar disorder. These inputs were then used to select the intervention components and to decide on the number, frequency and duration of sessions, as well as the facility where the intervention should be provided. During the design of the intervention, the identified needs and priorities were linked to the components of the intervention (Table 4).

In general, the intervention manual was structured in five sessions: (a) needs assessment and goal-setting; (b) psychoeducation about bipolar disorder, its causes and influencing factors; (c) treatment and treatment adherence; (d) sleep hygiene and

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Table 3 Summary of level of key tasks, intervention, preconditions, assumptions and indicators

Levels of intervention	Key tasks	Intervention	Preconditions	Assumptions	Indicators

Patients with bipolar disorder	• Identify early signs and symptoms of their illness
	• Actively engage in their own treatment plan
	• Practise having a regular a habit (e.g. sleep)
	• Use behavioural techniques such as breathing exercises and muscle relaxation
	• Practise problem-solving skills in their daily lives
	• Prepare a relapse prevention plan
		• Psychoeducation
		• Teaching behavioural techniques
		• Teaching problem-solving techniques
		• Awareness of regular habits
		• Involvement in the development of PSI ToC map
			People with bipolar disorder
			• Improved awareness about the illness, cause and treatment
			• Learned and practised behavioural techniques
			• Improved adherence to PSI and for medication
			• Practised a regular habit
			• Improved health-seeking behaviour
			• Improved awareness of a relapse prevention plan
				• The intervention is feasible and acceptable
				• People with bipolar disorder
				  • Are able to attend all sessions
				  • Discuss and practise what they have learned in the training
				  • Motivated to take an assignment
					• Number of patients and caregivers attending the first and all sessions
					• Duration of each session
					• Number of patients adherent to treatment
					• None/mild mood symptoms based on the YMRS and PHQ
					• 80% increase in awareness of bipolar disorder and its causes, treatment and prevention plan
					• Number of participants satisfied with the intervention
					• Number of patients with a regular habit compared with baseline
					• Level of social support received as measured by OSLO

Caregiver/ family	• Care for and support to patients
	• Understand patients' conditions
	• Identify early signs and symptoms of illness
	• Encourage patients to engage in social activities
	• Encourage patients to use behavioural techniques
	• Help patients form a regular habit
		• Psychoeducation
		• Teaching behavioural techniques
		• Training on problem-solving techniques and regular habits
		• Involvement in PSI ToC map development
		• Active participation in treatment and relapse prevention plan, and help people with bipolar disorder
			Caregivers
			• Improved their awareness about the illness, its cause and treatment
			• Improved involvement in the treatment plan
			• Improved practise in supporting people with bipolar disorder
				• The intervention is feasible and acceptable
				• Caregivers
				  • Able to attend all sessions
				  • Willing and motivated to help people with bipolar disorder
				  • Willing to work with PHC workers
				  • Non-stigmatised and non-stigmatising to patients
					• Number of patients and caregivers attending first and all sessions
					• Duration of each session
					• 80% increase in caregiver awareness of bipolar disorder, its cause and treatment
					• Number of caregivers satisfied with intervention
					• Level of social support received as measured by OSLO

Community	• Mobilisation of resources • Support patients and caregivers • Care for and love for patients and caregivers • Helping patients with social integration	• Working with the community and religious leaders, and HEWs • Awareness about mental illness in general and bipolar disorder in particular	• Improved community awareness about bipolar disorder, its causes and treatments • Improved communication among patients, caregivers and intervention providers • Community non-stigmatising attitudes and support • Improved collaboration of community stakeholders	• Religious and community leaders are willing to work together toward stigma reduction • The community engages in resource mobilisation to support people with mental illness • The community does not stigmatise those who use mental health services	• Number of community members with awareness of bipolar disorder, its causes and treatment • Number of community members participating in resource mobilisation to support people with mental illness
Health facility (service provider/ manager)	Made the psychological intervention service available with the required quality • Compassionate and respectful care for patients with bipolar disorder • Involve patients and caregivers in treatment planning • PHC workers and patients/ caregivers prioritise problems for the patients/ caregivers need to solve	• Giving both theoretical and practical training on PSI for PHC workers • Engaging patients and caregivers in treatment planning • Ensuring medication availability for bipolar disorder at the health centres • Adhering to intervention manual when treating patients with bipolar disorder	• Improved knowledge of and skills in PSI • Improved confidence in giving PSI • Intervention provided as per the manual • Improved medication availability • PHC workers having encouraged patients and caregivers to get involved in the treatment planning	• There is a newly developed, feasible and acceptable PSI available for use • Professionals are trained on the PSI manual • PHC workers are trained in mhGAP intervention guide • Health facility managers support PHC workers when needed • PHC workers are motivated to give the PSI	• Number of PHC workers in the facility who are trained to give PSI • Quality of therapeutic relationship between patients and PHC workers, measured by HAQ • Level of adherence to manual, measured by ENACT • Use of the newly developed PSI manual by PHC workers

PSI, psychological intervention; ToC, theory of change; YMRS, Young Mania Rating Scale; PHQ, XXX; OSLO, Oslo Social Support Scale; HEW, health extension workers; PHC, primary healthcare; mhGAP, Mental Health Gap Action Programme; HAQ, Helping Alliance Questionnaire; ENACT, Enhancing Assessment of Common Therapeutic factors.

problem-solving techniques to promote well-being and; and (e) behavioural techniques to target anxiety and relapse prevention, and closing session(Table 4). Each session was intended to last for 20 min and be delivered every month, aligned with the person's attendance for routine care. The intervention was designed to be given by PHC workers who had been trained in the mhGAP-IG and had received 1 week of theoretical and 1 week of practical training.

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Table 4 Intervention components and expected outcomes

Session	Unmet needs/priorities of PBD identified in qualitative study theory-of-change and mental health expert workshops	Sessions	Contents included in session	Reference manual
	• Therapeutic techniques		Therapeutic skills in psychological intervention	*Where There Is No Psychiatrist: A Mental Health Care Manual*[37]
Session one	▪ Need assessment and goal-setting	Needs assessment and goal-setting	Introduction and checklist • Need assessment • Goal-setting	
Session two	▪ Low awareness of bipolar disorder and its causes ▪ PBD are concerned about the long-term nature of the illness ▪ Substance use	▪ What do I need to know about my illness?	Psychoeducation • Sign and Symptoms of bipolar disorder • Identification of early symptoms of relapse • Cause and influencing factors	*Clinicians' Treatment Manual for Family-Focused Therapy for Early-Onset Youth and Young Adults*[38]
Session three	▪ Misperception about treatment (e.g. expecting cure with medication) ▪ PBD are concerned about the long duration of treatment ▪ Treatment non-adherence ▪ Caregivers are concerned about aggressive behaviours during relapse	▪ How can the treatment help me to get well?	Psychoeducation • Treatment • Treatment adherence • Problem-solving techniques • PBD who are non-adherent	*Psychoeducation Manual for Bipolar Disorder*[39]

Session four	▪ Caregivers are concerned about sleep problems
	▪ PBD use various negative coping mechanisms such as using substances to feel well and improve their socialisation
	▪ PBD and caregivers identified social, treatment-related and substance use issues as triggering factors for the person's illness
	▪ Social and relationship problems
	  • Self- and public stigma
	  • Disagreement and lack of social support
		▪ What kind of techniques and activities help me to improve my health?	Promoting well-being
			• Sleep hygiene and daily routine
			• Problem-solving techniques
				Cognitive Therapy for Bipolar Disorder: A Therapist's Guide to Concepts, Methods and Practice[40]

Session five	▪ PBD identified anxiety symptoms as early sign of relapse
	  • Heavy-headedness
	  • Anxiety
	  • Irritability
	▪ Some PBD and caregivers identified early symptoms of relapse
		▪ What helps me to feel well when I feel anxious or stressed?
		▪ What can I do when I identify early symptoms of illness?
			▪ Behavioural techniques
			  • Muscle relaxation
			  • Breathing exercise
			▪ Relapse prevention plan	

PBD, people with bipolar disorder.

The manuals and leaflets were translated into Amharic by two clinical psychologists with experience of working with people with mental illness. Mental health experts and PHC workers involved in the ToC workshop reviewed the translated manual and gave feedback that helped to simplify the manual's structure and readability. They recommended that illustrations in the manual and leaflet to be prepared based on local realities; for example, to include false banana trees, which are very common in the study area, as well as pictures representing people from different religions and genders. Case stories were also prepared and annexed to enable PHC workers to engage better and use them as illustrations as needed.

Discussion

This is the first manualised psychological intervention guide to be deployed in an integrated care context for people with bipolar disorder. We have used a comprehensive approach, including systematic reviews,[29] local constructs and the ToC approach integrated with the MRC framework.[31] The participatory development process of the intervention, anchored in ToC, enabled us to clarify how the intervention and associated implementation strategies would contribute to valued long-term goals, as well as the other elements of care that are necessary preconditions to success.

We used qualitative exploration to understand the unmet needs and priorities of people with bipolar disorder and their caregivers that could potentially be addressed by psychological interventions. Priorities identified by primary beneficiaries are important because psychological interventions work through common factors, such as the therapeutic alliance, positive expectations and a convincing treatment rationale, as well as through treatment-specific components.[41] Therefore, the components of psychological intervention and the cultural adaptation of the intervention to the local context are vital for improving an intervention's effectiveness.

We used ToC approaches involving different stakeholders, including people with bipolar disorder and their caregivers, community leaders and health professionals. This participatory approach was useful to understand the context and make decisions that reflect scientific evidence the views of patients/caregivers and service providers, to develop and implement the intervention. Therefore, the ToC approach worked as a bridge between the evidence and the local context, helping to ensure ownership, acceptability and support for the intervention, which are key to its implementation. The participatory approach also helped to build trust, encouraging the pooling of resources and knowledge.[42]

In our mental health expert and ToC workshops, psychoeducation about bipolar disorder, its causes, treatment and the course of the illness were considered essential by all groups of participants.

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This was seen as the key to improving the knowledge and attitudes of people with bipolar disorder, and their caregivers helping them to understand the illness and its treatment.[29] In this rural setting, literacy levels and access to formal education (beyond primary) are low, and most people lack access to the internet, underscoring the value of including consistent, relevant and evidence-based information within the intervention.

In the ToC workshop, participants spoke of the importance of caregivers' support and endorsed the importance of involving them in the intervention. Previous studies also mentioned that family members are the primary source for the physical, psychological and treatment-related support for people with mental illness in many low-income countries.[21] The positive effect of family interventions on clinical and functional outcomes of people with bipolar disorder[13,23] may be even greater in this setting. However, previous work from Ethiopia has also highlighted the differing priorities of people with mental health conditions and their caregivers, underlining the need to ensure that the person with bipolar disorder remains at the centre of care.

People with bipolar disorder and their caregivers, community leaders and health professionals had different perspectives for improving long-term outcomes. People with bipolar disorder and their caregivers prioritised social and functional outcomes, such as educational impact, stigma and productivity,[22] as the most important long-term outcome. However, community leaders acknowledged the difficulties of social engagement related to public stigma and emphasised stigma reduction as a long term-outcome,[43] as they viewed these as important barriers to reintegration into the community. Health professionals identified the improved quality of life of people with bipolar disorder and reduced caregiver burden as long-term outcomes. This may also reflect the view of health professionals with limited expertise regarding the longer-term outcome of bipolar disorder. These different perspectives are relevant and point to the need for a multi-layered intervention package beyond a health facility-based intervention to address multidimensional needs. Further development work to address these multisectoral and multidimensional issues is essential.

In LMICs like Ethiopia, the treatment gap for mental illness is around 90%.[3] The World Health Organization has recommended the integration of mental health services within PHC settings to address unmet mental health needs.[27] In our study, participants supported the delivery of the intervention by PHC workers to facilitate its future integration within routine care. Although the participants were concerned about the possible work burden on PHC workers, they considered that training would enhance PHC providers' skills, interest and confidence in providing the intervention, which could in turn reduce the feeling of work burden. Additionally, group intervention was noted to be less feasible for this rural setting, where there is inadequate local transportation and it is difficult to identify a convenient time for group intervention.[44]

Implications of the study

This intervention was developed based on previous evidence and by involving mental health specialists with clinical and research experience, PHC workers, people with bipolar disorder and their caregivers, and community leaders. The approach focused on intervention content, manual and leaflet preparation, language and delivery strategies. This improved stakeholders buy-in,[44] ensuring that this intervention will be feasible and acceptable. A pilot test to assess the feasibility, fidelity and acceptability in routine clinical settings, and to ensure the scalability and preliminary efficacy of the developed psychological intervention, is warranted.

Strengths and limitations

The main strength of this study is that we began the intervention development by synthesising evidence on the efficacy of the psychological intervention in LMICs and conducting formative work. Our study involved diverse stakeholder groups, which can ensure the intervention's local appropriateness through stakeholder buy-in and direct inputs. Although we sought to reduce the impact of power imbalances in the ToC workshops by conducting separate workshops with groups of similar stakeholders, a residual power imbalance (e.g. between caregivers and people with bipolar disorder) may still have affected the content of what participants felt comfortable to expressing. The skilled facilitator sought to address this by actively seeking out the views of people with bipolar disorder. However, even skilled facilitation did not fully address the power imbalance; therefore, future studies may consider capacity-building training to enhance participants' capacity before conducting ToC interventions. Finally, we brought all stakeholder groups together at the end of the study, which allowed us to ensure that the views of all participants were incorporated. However, some participants in the group of people with bipolar disorder, their caregivers and the community, struggled to understand the visual presentation of the ToC map, especially the final ToC map that included the merged ToC map. This could be because of the low literacy rate in a rural community, the lack of experience with intervention development and the technical elements of the ToC map. Regarding reviewing the manual, people with bipolar disorder and their caregivers were not involved in reviewing the manual, unlike PHC workers. However, in the final ToC workshop, the intervention content and the number and frequency of the sessions were discussed and approved by all ToC participants, including people with bipolar disorder and their caregivers. Additionally, we plan to evaluate the feasibility and acceptability of the actual implementation of the intervention and address any gaps that are identified in the next step.

Although financial problems were repeatedly reported in our qualitative study[22] and ToC workshops, economic problems were not directly targeted with our intervention. However, we do anticipate indirect benefits to financial status through the problem-solving techniques and change to the anticipated outcomes, like reduced symptom severity and caregiver burden, improved well-being of people with bipolar disorder and reduced stigma[45] However, further studies are needed to determine better ways to reduce financial problems.

In conclusion, the mixed approach that we have used to develop the intervention, including a systematic review, qualitative study, expert workshop and ToC workshops, enabled us to understand the needs and priorities of people with bipolar disorder and their caregivers, and identify intervention components. The ToC workshop helped us to develop the ToC map, which includes an intervention component, underlying assumptions and preconditions for its effective implementation. Finally, the methods enabled us to develop a culturally appropriate, individual psychosocial intervention that can be delivered in five sessions in the PHC setting. This intervention needs to be tested for feasibility, acceptability and effectiveness before wider implementation.

Mekdes Demissie, WHO Collaborating Centre for Mental Health Research and Capacity Building, Department of Psychiatry, School of Medicine, College of Health Sciences, Addis Ababa University, Ethiopia; and School of Nursing and Midwifery, College of Health Sciences and Medicine, Haramaya University, Ethiopia; **Charlotte Hanlon**, WHO Collaborating Centre for Mental Health Research and Capacity Building, Department of Psychiatry, School of Medicine, College of Health Sciences, Addis Ababa University, Ethiopia; Centre for Innovative Drug Development and Therapeutic Studies for Africa (CDT-Africa), College of Health Sciences, Addis Ababa University, Ethiopia; and Centre for Global Mental Health, Department of Health Services and Population Research, Institute of Psychiatry, Psychology and Neuroscience, King's College London, UK; **Lauren Ng**, Department of Psychology, University of California, Los Angeles, USA; **Rosie Mayston**, King's Global Health Institute, Department of Global Health and

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Social Medicine, King's College London, UK; **Sisay Abayneh**, WHO Collaborating Centre for Mental Health Research and Capacity Building, Department of Psychiatry, School of Medicine, College of Health Sciences, Addis Ababa University, Ethiopia;
Abebaw Fekadu, WHO Collaborating Centre for Mental Health Research and Capacity Building, Department of Psychiatry, School of Medicine, College of Health Sciences, Addis Ababa University, Ethiopia; Centre for Innovative Drug Development and Therapeutic Studies for Africa (CDT-Africa), College of Health Sciences, Addis Ababa University, Ethiopia; Department of Global Health and Infection, Brighton and Sussex Medical School, University of Sussex, UK; and Centre for Affective Disorders, Department of Psychological Medicine, Institute of Psychiatry, Psychology and Neuroscience, King's College London, UK

Correspondence: Mekdes Demissie. Email: mekdesdemissie2016@gmail.com

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Supplementary material

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Data availability

The authors confirm that the data supporting the findings of this study are available within the article and its supplementary materials.

Author contributions

M.D., A.F. and C.H. designed the study. M.D. led the study, and drafted and revised the manuscript with supervision from A.F., C.H., R.M. and L.N. The mental health experts workshop was led by M.D. and A.F. The ToC workshops were run by M.D. and S.A. M.D. and C.H. conducted the analysis. A.F., C.H., R.M., S.A. and L.N. edited the paper. All authors read and approved the final manuscript.

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Declaration of interest

Professor Abebaw Fekadu is a member of the Editorial Board but he was not involved in the peer review or decision making process of the paper.

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Appendix-D: Feasibility and acceptability of a contextualized brief psychological intervention for people with bipolar disorder in rural Ethiopia

1 # Feasibility and acceptability of a contextualized brief psychological
2 intervention for people with bipolar disorder in rural Ethiopia

3 **Mekdes Demissie, Charlotte Hanlon, Lauren Ng, Rosie Mayston, Abebaw Fekadu**

4 **Abstract**

5 **Background:** There is a huge unmet need for appropriate psychological interventions (PSIs) for
6 bipolar disorder (BD) for use in low-and middle-income countries. We developed and evaluated
7 a psychological intervention to treat bipolar disorder (BD) in Ethiopia using the Medical Research
8 Council's (MRC) framework for complex interventions in a Primary Health Care (PHC) setting.
9 **Aims:** To investigate the feasibility, acceptability and fidelity of this newly developed
10 intervention in PHC.
11 **Method**. The study was conducted in south-central Ethiopia. A total of 12 euthymic people with
12 BD and five caregivers participated in five-weekly sessions of the PSI, each session scheduled for
13 20 minutes. We used a mixed-method evaluation, including in-depth interviews, intervention
14 fidelity assessment in 25% of randomly selected recorded intervention sessions, and change in
15 symptom severity using the symptom severity assessment checklist. We used thematic analysis for
16 qualitative data and descriptive analysis for quantitative data
17 **Results:** Except for one caregiver, all participants completed all five-sessions. Intervention
18 providers and recipients expressed satisfaction with the intervention. Intervention providers
19 confirmed that the intervention can be provided in the PHC setting although 20-minutes was
20 considered too short. While participants acknowledged the importance of involving caregivers in
21 the intervention, they raised privacy concerns. Intervention providers' adherence to the manual
22 was moderate. Preliminary findings indicate a reduction in depressive symptoms post-intervention
23 and improvement in providers' perceived knowledge and skills.
24 **Conclusions:** This contextually adapted psychological intervention for BD has promising
25 feasibility, acceptability and potential utility. Further studies should evaluate time considerations
26 and effectiveness.

27 **Competing interests:** None
28 **Keywords:** Fidelity; Intervention development; Primary Health Care; Intervention integrity, Low-
29 and middle-income countries

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30 **Introduction**

31 Bipolar disorder (BD) is a disabling condition. In 2017, the global disability-adjusted life years
32 (DALYs) for BD totaled 9.29 million, an increase of 54.4 percent since 1990 (1). With an early
33 age of onset, the incidence of BD is high among those aged 10–14 years, with DALYs peaking in
34 the 15–19 year age range (1). Studies from low-and middle income countries (LMICs) showed
35 that bipolar disorder is associated with a high relapse rate (2), suicidality (3), stigma (4), premature
36 mortality (5), and functional impairment (6).

37 Psychological interventions reduce the risk of relapse and hospital admission, and improve
38 functioning in people with BD (7, 8). Moreover, the use of culturally adapted or developed
39 psychological interventions increases acceptability and feasibility (9, 10). Various studies have
40 reported that cultural adaptability (11), treatment fidelity (12), and competency of the intervention
41 providers (13) are associated with the effectiveness of psychological interventions. There is
42 evidence that shows a modest to high degree of association between therapist competency and
43 treatment outcomes (13). Acceptability of the intervention to both intervention providers and
44 recipients affects the successful implementation of the intervention (14). If the intervention lacks
45 acceptability, this may reduce adherence and reduce effectiveness (12). We used participatory
46 methods to develop a contextually appropriate, brief, psychological intervention that addressed the
47 unmet needs and priorities of people with BD in rural Ethiopia (15).

48 The aim of this study was to investigate the feasibility, acceptability and fidelity of this new
49 psychological intervention for people with BD in routine clinic settings. Informed by the
50 developed Theory of Change (ToC) map for the intervention and its implementation (15), we
51 examined the content, structure, and process of delivering the intervention and its perceived
52 usefulness from the perspectives of (a) intervention providers, (b) people with BD, and (c)
53 caregivers of people with BD. A particular focus was on the feasibility and acceptability of
54 caregiver involvement in the intervention.

55 **Methods**

56 **Study design:** We used a mixed-methods approach to investigate the feasibility, acceptability,
57 fidelity, change in symptom severity and perceived utility of the intervention.

58

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59 **Study setting:** This study was conducted in the Butajira and Sodo districts of the Gurage Zone,
60 Southern Nations, Nationalities, and People's region (SNNPR), Ethiopia. The study was carried
61 out in primary care health centers. Sodo district has eight health centers and one primary hospital,
62 whereas Butajira and its surroundings have one district hospital and 13 health centers (16). In this
63 feasibility study, we included two health centers, one primary hospital, and one district hospital.
64 Details of the study site are described elsewhere (15, 17).

65 **Brief description of the intervention:**

66 We used the Medical Research Council (MRC) framework for complex interventions integrated
67 with a Theory of change (ToC) approach to develop a manualized psychological intervention for
68 people with bipolar disorder in rural Ethiopia (15, 18). The MRC framework recommends four
69 phases to develop and evaluate complex interventions: intervention development, feasibility and
70 piloting, evaluation, and implementation (19). During the intervention development phase, we
71 reviewed evidence for effective psychological interventions for people with BD in LMICs (8),
72 conducted formative work to understand the unmet needs and priorities of people with BD in
73 Ethiopia (17) and used participatory ToC workshops with PHC workers, service users, community
74 representatives, and mental health experts that involved different mental health professionals such
75 as psychiatrists, psychologists, and social workers to develop contextually relevant psychological
76 intervention components (15). In this paper, matching the second phase of the MRC framework,
77 we evaluated the feasibility and acceptability of the intervention.

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78 The developed psychological intervention has five sessions (15): (i) Initial engagement: focuses
79 on needs assessment and goal setting; (ii) Psychoeducation: this session discusses bipolar disorder
80 symptoms, early warning signs of relapse, and cause and influencing factors for bipolar disorder;
81 (iii) Treatment and treatment adherence: this session discusses treatment options, medication side
82 effects, and the importance of taking medication regular basis; (iv) Promoting wellness: this
83 session focuses on problem-solving techniques and sleep hygiene, which address the role of
84 sleep and how patients can improve their sleep pattern; and (v) Anxiety management and relapse
85 prevention planning: this session focuses on muscle relaxation and breathing exercises, as well as
86 how to prepare action plan that will be to prevent relapse. The intervention manual was prepared
87 in the local language (Amharic) with the help of service users, caregivers, PHC workers, and

88 community members. Each session was intended to last for 20 minutes and to be delivered by PHC
89 workers.

90 The intervention was delivered in individual sessions for half of the patients and with their
91 caregivers for the rest over five weeks. Additionally, patient and intervention providers'
92 information leaflets that focused on introducing bipolar disorder, its causes and influencing factors,
93 and treatments were used to facilitate the intervention sessions. The intervention was delivered in
94 the health facility where the person with BD attended for their regular follow-up care. Session
95 timings were arranged in consultation with the participants (15).

96 **Intervention providers/facilitators:** Health professionals were eligible to participate in the
97 feasibility study if they were previously trained on the World Health Organization mental health
98 Gap Action Programme intervention guide (mhGAP-IG) which seeks to equip primary care
99 workers with skills to provide frontline care for people with priority mental health conditions,
100 including bipolar disorder. To be eligible, health workers also needed to be actively treating people
101 with mental illness in their out-patient clinics, able to attend all the training sessions, and to express
102 an interest in taking part in the feasibility study. Seven intervention providers and two supervisors
103 participated in a two-week-long training course on the intervention manual. The training was
104 facilitated by the first author [MD] who led the intervention development and a clinical
105 psychologist. In the first week, the professionals took theoretical training and in the second week
106 they practiced applying aspects of the intervention in their clinics. Only four PHC workers and
107 two supervisors were selected for further delivery of the intervention based on their engagement
108 in treating people with mental illness during routine services, completing both the theoretical and
109 practical training, and being able to participate in the intervention during the study period. The
110 providers were supported by weekly supervision and as-needed consultations from the trainers.

111 **Participants (intervention recipients):** The target sample size was 12 people with BD to allow
112 in-depth exploration of acceptability and feasibility in this pilot study. To explore the acceptability
113 of providing the intervention for people with BD with or without their caregivers involved in the
114 sessions, six of the twelve people with BD received the intervention alone and the rest 6 people
115 with BD received the intervention with their caregivers. Participants were selected purposively
116 based on gender, socio-economic status, residence, age and their clinical status that only people

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117 with bipolar disorder who are euthymic were included in the study. First, potential people with BD
118 who were euthymic and able to participate in the study were identified by PHC workers from
119 people with BD attending for their regular follow-up in the health centre. Then, research field
120 workers approached these potential participants, informed them about the study, and asked for
121 their permission to participate. Those who provided informed consent were linked to the
122 intervention providers. All those who were approached agreed to participate in the study. The
123 eligibility criteria are summarized in table-1

124 **Table 1: Eligibility criteria for study participants**

Participants	Eligibility criteria
People with BD	✓ Age 18 or above ✓ Diagnosed with BD and on treatment during the study period ✓ Willing to attend five consecutive weekly sessions. ✓ Psychiatric nurses conducted a clinical assessment to confirm the patients were euthymic, ability to give informed consent and participate in the study.
Caregivers	✓ Age 18 or above ✓ Immediate caregivers of patients with BD ✓ Willing to attend five consecutive weekly sessions.

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125 **Outcome and outcome measures**

126 The outcomes measured were feasibility, acceptability, fidelity, and potential benefit of the
127 developed intervention (table 2).

128

129

130 **Table 2: Primary and secondary outcomes**

Outcomes		**Outcomes measures**
Primary outcome	Feasibility	Number of People with BD ▪ Participants approached and willing to participate ▪ Dropped out before finishing the intervention ▪ Intervention completion rate Semi-structured interviews with intervention providers and service recipients
	Acceptability	Satisfaction of intervention providers and service recipients

	Fidelity	Expert review of 25% of the recorded intervention sessions using a fidelity measure created for this project
Secondary outcome	Change in knowledge and skill of intervention providers	Pre- and post-training assessment of perceived knowledge and skills
	Change in symptom severity	Before and after intervention assessment using Patient Health Questionnaire-9 and Young Mania Rating Scale for mania symptoms

131

132 **1. Feasibility of intervention:** we recorded the number of people with BD and caregivers who
133 were approached and agreed to participate. We also interviewed participants and recorded the
134 number of sessions completed by participants.

135 **2. Acceptability of intervention:** we used semi-structured interviews with people with bipolar
136 disorder, caregivers, and intervention providers to explore satisfaction with the intervention,
137 understandability of the content, challenges they experienced during the intervention process and
138 their perceptions of the benefits or any harms of the interventions All interviews were conducted
139 in Amharic by two experienced researchers who were not involved in training or delivery of the
140 intervention. Participants were interviewed in a private room, either in the facilities where they
141 received the intervention or in the project office, based on their preference. The interviews were
142 conducted one week after completion of the intervention. Interviews lasted from 20 to 40 minutes
143 and all were audio recorded.

144 **3. Fidelity:** A recommended approach to assessing intervention fidelity is to compare the content
145 of 20-40% of recorded intervention sessions to a prespecified criterion such as a treatment manual
146 (20, 21). All intervention sessions were audio-recorded which resulted in a total of 60 audio records
147 from 12 participants.
148 A fidelity checklist was developed based on the manual and piloted before starting the intervention
149 study. The fidelity checklist had two sections: the first section included three items used to assess
150 the general skill of the intervention providers. The second section included specific items for each
151 session, as follows: session-one =2 items, session-two = 3 items, session-three = 4 items, session-
152 four = 3 items and session-five = 2 items. Each item rated in Likert scale ranged from 1 (very

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153 poor) to 5 (excellent). Rating of 1 and 2 indicate a lack of adherence and rating of 3 to 5 indicate
154 that the providers were adherent to the intervention manual.
155 Two MA level clinical psychologists who were not part of the research team carried out the ratings
156 of intervention fidelity. In order to understand the intervention fidelity of each session, they
157 randomly selected three records from each of the five-session which resulted 25% (15/60) of the
158 total records. Then, each of them listened to the selected recorded interventions and rated them
159 independently using the fidelity checklist. For any differences in ratings, the two raters listened
160 again to the session that was rated differently and reconciled their ratings through discussion.
161 Additionally, when providing a score for each session, they also documented their observations on
162 the quality of the intervention delivery and identified any areas that indicated the need for further
163 training.

164 **4. Change in knowledge and skill:** We used self-administered pre- and post-training assessment
165 questionnaires to investigate changes in the knowledges and skills of intervention providers. The
166 questionnaires had eight knowledge-related items and eight items linked to skill. Each item was
167 rated on a Likert scale that ranges from 1 (very poor) to 5 (excellent). The items focused on
168 symptoms and causes of BD (3 items), treatment (3-items), knowledge about how to promote
169 wellness and manage anxiety (1-item), and core skills in the psychological intervention (2 item).

170 **5. Change in symptom severity:** We used pre-and post-intervention assessments. We used the
171 Young Mania Rating Scale (YMRS) (22) for manic symptoms and the Patient Health
172 Questionnaire-9 (PHQ-9) for depressive symptoms (23) as continuous variables. PHQ has 9 items,
173 and the score of each item range from 0-3. The YMRS has 11 items with an item score that ranges
174 from 0 to 4. In both assessment tools, the higher scores indicate greater severity of symptoms (22,
175 23). Both instruments were previously used in Ethiopia (24, 25). The questionnaires were
176 administered by PHC workers who were trained in the mhGAP intervention guide and on the
177 intervention manual. These healthcare workers were not involved in the direct provision of the
178 psychological intervention for the study participants. Participant information that includes age,
179 gender, education, job, duration of illness, and number of previous relapses was collected at
180 baseline.

181

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211 **Table 3: Socio-demographic and clinical characteristics of the study participants**

Socio-demographic variables		Number
People with bipolar disorder		
Age in years	Mean (SD)	32.6 (11.1)
Sex	Female	7
	Male	5
Educational status	Non-literate	2
	Primary	5
	Secondary or tertiary	5
Marital status	Single	6
	Married	6
Number of relapses since the onset	No relapse	2
	1-2 relapse	4
	3-5 relapse	4
	> 5 times	2
Duration of illness	< 2 years	3
	2-5 years	4
	>5 years	5
Caregivers of patients with bipolar disorder		
Age in year	Mean (SD)	41.2 (8.7)
Sex	Female	2
	Male	3

212

213 **Feasibility of the intervention**

214 Twelve people with BD were invited to participate in the intervention and half of them were asked
215 to come with their caregivers. A total of 12 people with BD and six caregivers attended the first
216 session. All participants except one caregiver completed all five sessions. This caregiver dropped
217 out after the second session because of a scheduling conflict with his new job. The rating of scores
218 of recorded intervention session length showed that an additional 5-20 minutes were needed to
219 complete each session (Table-4).

220 **Table 4: Participants' attendance and duration of each session**

Outcomes of interest		
The number of people with BD who attended the sessions	First session	12
	Completed all sessions	12
The number of caregivers who attended the session	First session	6
	Completed all sessions	5
	Session-I	25

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182 **Analysis**

183 For the qualitative data, we used a thematic analysis approach (26). First, interviews were
184 transcribed verbatim, and then translated to English and imported into Open Code 4.03 (27). First,
185 the first author familiarized herself with the data by repeatedly listening to the audio files and
186 reading through the transcripts. Then, the first authors carried out line-by-line coding of two
187 randomly selected transcripts, discussed the codes, and developed a codebook. MD coded the
188 remaining transcripts based on the codebook, developing and defining new codes when necessary.
189 In the second stage, we grouped similar or related codes into clusters to capture the essence of
190 particular themes, assisted by Nvivo-12.
191 For the fidelity assessment, the consensus scores obtained from the two raters for each item within
192 a session were averaged to get the mean score for the session. We obtained the overall fidelity
193 measure across all the sections by calculating the mean score of all items across the five sessions
194 (n=15). To understand the changes obtained in symptom severity and knowledge of intervention
195 providers, we used simple descriptive summary measures, and we reported the median score with
196 a minimum and maximum because of the small sample size.
197

198 **Ethical considerations**

199 The study was approved by the Institutional Review Board of the College of Health Sciences of
200 Addis Ababa University (Reference Number 043/17/Psy). Written informed consent was obtained
201 from participants who could read and write. For non-literate participants (n=4), the research field
202 workers read the information sheet in front of a witness who confirmed that full and accurate
203 information had been read out verbatim. They then indicated consent with a fingerprint.

204 **Results**

205 **Socio-demographic characteristics**

206 A total of 12 people with BD and six caregivers approached to participate in the study and all
207 agreed. Most of the people with BD had formal education and half were married. Most had more
208 than a three-year history of illness and had relapsed at least once since being diagnosed. Among
209 the six caregivers, four of them cared for female patients (Table-3). All intervention providers were
210 male health professionals with more than three years of clinical experience.

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211 **Table 3: Socio-demographic and clinical characteristics of the study participants**

Socio-demographic variables		Number
People with bipolar disorder		
Age in years	Mean (SD)	32.6 (11.1)
Sex	Female	7
	Male	5
Educational status	Non-literate	2
	Primary	5
	Secondary or tertiary	5
Marital status	Single	6
	Married	6
Number of relapses since the onset	No relapse	2
	1-2 relapse	4
	3-5 relapse	4
	> 5 times	2
Duration of illness	< 2 years	3
	2-5 years	4
	>5 years	5
Caregivers of patients with bipolar disorder		
Age in year	Mean (SD)	41.2 (8.7)
Sex	Female	2
	Male	3

212

213 **Feasibility of the intervention**

214 Twelve people with BD were invited to participate in the intervention and half of them were asked
215 to come with their caregivers. A total of 12 people with BD and six caregivers attended the first
216 session. All participants except one caregiver completed all five sessions. This caregiver dropped
217 out after the second session because of a scheduling conflict with his new job. The rating of scores
218 of recorded intervention session length showed that an additional 5-20 minutes were needed to
219 complete each session (Table-4).

220 **Table 4: Participants' attendance and duration of each session**

Outcomes of interest		
The number of people with BD who attended the sessions	First session	12
	Completed all sessions	12
The number of caregivers who attended the session	First session	6
	Completed all sessions	5
	Session-I	25

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The average duration of intervention session (minutes)	Session-II	33
	Session-III	39
	Session-IV	40
	Session-V	35

221

222 The findings from the qualitative study are organized into three major themes: feasibility of
223 intervention duration, acceptability of intervention and Perceptions of intervention providers on
224 training and the manual

225 ***Feasibility of intervention duration:***

226 The intervention providers mentioned that the scheduled 20 minutes was short to cover the session.
227 They reported various reasons why they were not able to complete within the specified time,
228 including the need to practice new skills with participants, getting involved in long conversations
229 with the participants, and taking extra time to review the previous session before beginning the
230 day's session. Intervention providers mentioned that sessions four and five took longer because
231 they required time to practice problem-solving techniques, muscle relaxation, and breathing
232 exercises. Additionally, they mentioned the duration of intervention might vary based on the
233 participants' understanding of the content of the intervention.

234 *Some patients ask more questions and need to discuss more whereas, some patients need less*
235 *time. In general, session three and session four take up to 40 minutes. Hence, the time allocated*
236 *for the delivery of these sessions needs to be revised* [Intervention provider, ID-2].

237 Another intervention provider mentioned that patients want to share their life experiences during
238 the intervention, and stopping them would reduce their understanding of the participants and the
239 quality of their therapeutic relationship.

240 *Patients want to share with you their personal experiences, and they want to be listened to.*
241 *Sometimes, they might cry when they recall their previous experiences. Thus, discussing those*
242 *issues takes time, and it is not always possible to do all of that within 20 minutes.* [Intervention
243 provider, ID01].

244 Though the intervention duration was longer than expected, participants mentioned that they did
245 not feel worried or bored. This was because the intervention was delivered at a time that was
246 convenient for the participants. They also described that the convenient schedule contributed for
247 their high attendance.

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248 *I came here after I have finished all the household work. I also informed my families that I*
249 *have intervention and get permission from them. This was about 30 or 40 minutes but, I was*
250 *not worried about the work I had when I get back home. So, I'm okay with the time* [PBD,
251 ID01]
252 Professionals who rated the recorded intervention sessions reported that intervention providers
253 spent quite a bit of time reviewing the previous sessions before starting the day's session,
254 contributing to the longer duration of intervention. The intervention providers suggested making
255 all sessions 30 minutes and splitting the last two sessions into three sessions. This would increase
256 the number of sessions from five to six but was reported to be acceptable.

257 ***Acceptability of the intervention content and format***

258 Participants with BD and their caregivers mentioned that they were ready to participate in the
259 intervention due to the perceived benefit. One caregiver spoke of his motivation:
260 *Of course, if people are not convinced, sitting for 10 minutes could be difficult. But, if they*
261 *understand that the treatment is for their own benefit, an hour could be tolerable. You have*
262 *given us this education to improve the health of my wife. So, how could I feel tired to*
263 *learn?*
264 Participants also mentioned that they found the intervention useful, and supported their coping
265 efforts, though the session perceived to be the most important differed depending on their priority
266 problems. Some participants said that education about illness and treatment was most helpful
267 because it had helped them to improve their knowledge about their own or their relative's illness
268 and treatment. One person with BD said:
269 *I have learned a lot about my illness and the treatment. I learned that the medication will*
270 *help me to feel calm and have a good relationship with my family. I have also learned why*
271 *I need to take medication for a long time and the negative effect of stopping it on my health*
272 [PBD, ID12].
273 Caregivers also acknowledged the usefulness of the session that described the treatment, reporting
274 their satisfaction as follows:
275 *In general, the session on medication was most important. It (medication) is very helpful*
276 *for her [patient]to stay well, it helps her to live a normal life with the family, neighbors,*
277 *and with the community. It is also important for us as a family because if one person gets*
278 *unwell in the household, the whole family gets affected.* [Caregiver, ID02].

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279 Other participants mentioned the content on "how to improve sleep" as most important. They
280 mentioned that sleep problems are one of the major challenges for people with BD. People with
281 BD described the importance of this session as follows:

282 *I am happy because I have learned how to improve my sleep. Now, I know the importance*
283 *of sleeping at a regular time and waking up at the same time. Now, I am trying to bring*
284 *that practice. I also stopped drinking coffee at night.* [PBD, ID08].

285 Regarding anxiety management techniques (muscle relaxation and breathing exercises),
286 participants reported different experiences. Some found it hard and needed more practice to master
287 the exercises, others found the exercise easy to practice and they liked it best of all aspects of the
288 intervention.

289 *I liked exercise session most because they teach us how to reduce our tension by using it.*
290 *The inhaling and exhaling part of the exercise is very enjoyable to me and not that much*
291 *difficult* [PBD, ID04].

292 Intervention providers also reported that participants were happy during the intervention sessions,
293 even though they noticed different levels of understanding among participants. As a result, the
294 same topic took a different amount of time to cover for different people with BD and caregivers.
295 One intervention provider explained the situation as follows:

296 *"Participants were happy during the intervention sessions but, they have a different level*
297 *of understanding. They understand most of the intervention session but not all…especially*
298 *illiterate patients need more time."* [Intervention provider, ID02].

299 Regarding the intervention format, both people with BD and their caregivers who received the
300 intervention together highlighted the importance of engaging caregivers in the intervention. When
301 caregivers were involved, people with BD were pleased with their involvement. The reason was
302 that caregivers learned more about their relative's illness and started to understand the person better
303 than before they received the intervention.

304 *My husband started to understand my illness after he took the education. Now, he even*
305 *tells the children not to disturb me, he advises me to finish the chores and sleep early. Now,*
306 *he is starting to understand me because he has learned about my illness* [PBD, ID01]

307 Intervention providers, on the other hand, identified the difficulties of discussing family-related
308 issues with people with BD in the presence of their caregiver or vise-versa, despite believing that

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309 involving caregivers in the intervention was important because of the essential role that caregivers
310 play in the lived of people with BD.

311 *Sometimes, there are family-related issues like disagreement or other family-related issues*
312 *that the patients perceived as a cause or triggering factor for their illness. Thus, they feel*
313 *discomfort talking about it in the presence of their family and they need to discuss it alone.*
314 *So, it is good to consider both sides.* [Intervention provider, ID03].

315 ***Perceptions of intervention providers on training and the manual***

316 Intervention providers liked the way that the training material had been prepared, including the
317 color printing and the instructions given to intervention providers. They also mentioned that
318 preparation of a manual in the local language helped them to understand better.
319 All the intervention providers mentioned that the content covered by the manual was sufficient to
320 help them deliver the intervention. They also specifically, mentioned that the communication skills
321 component was most useful because of its applicability for any patients, whether they had a
322 physical or mental illness.

323 *Communication skill was one of the sessions that received a lot of attention during the*
324 *training. Since we are not mental health experts, we had a communication gap. Previously*
325 *we were relying more on medicine than psychological intervention. This section is useful*
326 *to build good communication with other patients as well.* [Intervention provider, ID01].

327 Regarding the training approach, professionals appreciated the use of case stories, role plays, and
328 experience sharing.

329 *During the training, we were discussing about hypothetical case based on our previous*
330 *experience. For example, we were saying what if the participant possibly asks this and that*
331 *question and how we can provide an answer for them and the like… which was really*
332 *helped us to understand the topic* [Intervention provider, ID03].

333 Another intervention provider also mentioned the importance of communication skills as follows.

334 *We have discussed how to create trust, which is a great idea. We do not always inquire*
335 *about issues that are not clearly described by the patient. For example, we do not usually*
336 *check if patients have had a history of suicidal attempts or ideation. Therefore, the skill we*
337 *got from the current training was important.* [Intervention provider, ID02].

338 Finally, the intervention providers described that the providers' information leaflet was helpful,
339 especially to quickly review the content of the intervention during intervention provision.

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340 However, the font size was considered to be too small and the double-sided printing affected
341 how it could be used.

342 **Findings from pre-post knowledge assessment.**

343 Compared to the pre-training assessment results, there was an improvement post-training in
344 perceived knowledge and skills of the providers in four domains of the psychological intervention:
345 symptoms and causes of BD, treatment, techniques used to improve wellness, and core skills (table
346 5).

347 **Table 5: Change in providers' knowledge and self-reported skills (n=9)**

Domain of interest from the intervention	Items used as a measurement	Pre-training Median (Min, Max)	Post-training Median (Min, Max)
Symptoms of BD	Perceived knowledge on symptoms	11 (9, 14)	15 (12, 15)
	Psychoeducation delivery skills	9 (7, 15)	15 (12,15)
Treatment of the BD	Knowledge about treatments of BD	13 (12, 15)	15 (14, 15)
	Skill to education for PBD and caregivers	11 (8, 13)	15 (13, 15)
Techniques used to improve wellness (PST, sleep hygiene, & anxiety management)	Perceived knowledge of techniques	3 (3, 5)	4 (4, 5)
	Skill to education PBD & caregivers	3 (2, 5)	4 (4,5)
Core skills in psychological intervention	Perceived knowledge	4 (3,5)	4 (4,5)
	Skill in treating patients	7 (5, 10)	8 (8, 10)

348 * Minimum= Min, Maximum= Max, People with Bipolar Disorder = PBD

349

350 **Fidelity of intervention delivery**

351 With the exception of the fourth session, the intervention providers level of adherence to all
352 components of the intervention manual was high (Figure 1). Adherence varied from 58% to 98%
353 (2.8/5 to 4.9/5). Overall mean adherence to intervention content for all five sessions was 78%. The
354 fourth session had a lower mean score (2.8/5) and the third session had the highest mean score
355 (4.9/5). For the three items that were used to assess the competency of intervention providers in
356 explaining the aim of the session (beginning the session with general questions, and managing

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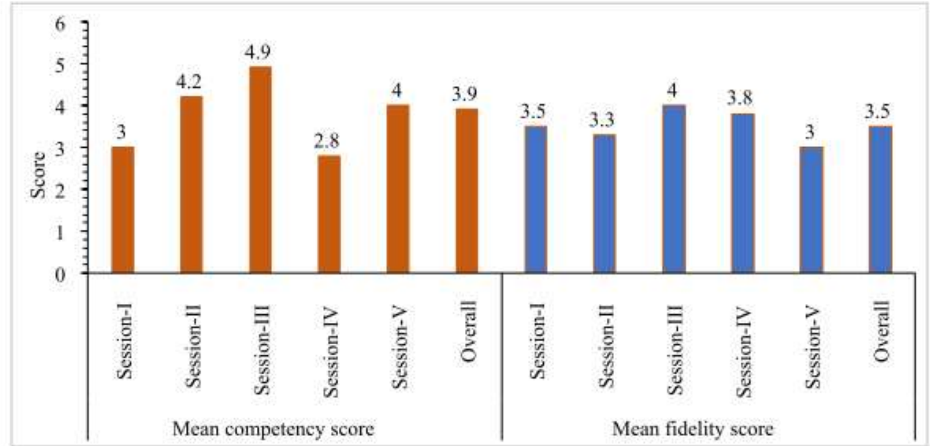
357 time effectively), the mean competency score varied from 60% (3/5) in the fourth session to 80%
358 (4/5) in the third session. The overall mean competency score for all the sessions was 70%.



359

360 **Figure 1: Mean adherence of intervention providers to the intervention contents**

361

362 **The impact of the intervention on symptom severity**

363 The median score of depressive and mania symptom severity scores before and after delivering
364 the intervention are summarized in table 6. There was a reduction in depressive symptoms after
365 the intervention compared to the pre-intervention results. However, the reduction in mania
366 symptoms score was not different from pre-intervention.

367

368 **Table 6: Depressive and mania symptom severity score before and after intervention (n=12)**

Symptoms of interest	Instruments used to measure the outcomes	Pre-intervention Median (Min, Max)	Post-intervention Median (Min, Max)
Depressive symptom severity	PHQ-9	4 (0,9)	1.5 (0,6)
Manic symptom severity	YMRS	1.5 (0,5)	1.5 (0,4)

369 * Minimum= Min, Maximum= Max, Patient Health Questionnaire (PHQ-9), Young Mania Rating Scale (YMRS)

370 **Discussion**

371 To the best of our knowledge, this is the first study to assess the feasibility and acceptability of a
372 psychological intervention for people with BD that was developed to be contextually appropriate
373 for the primary care setting in a low-income country. The developed intervention was well-
374 received by people with BD, caregivers and providers and led to perceived benefits. The providers'
375 knowledge about bipolar disorder, its treatment, and techniques used to improve wellness and
376 anxiety management improved after the training. The intervention implementation fidelity score
377 was moderate.
378 All except one caregiver attended all sessions, indicating the feasibility of the intervention (14).
379 This finding is comparable with a pilot study conducted in Pakistan that reported a 100%
380 attendance rate in 12 sessions of psychoeducation for people with BD (28) and is lower than the
381 levels of drop-out reported in studies that tested the feasibility of 16-20 sessions of cognitive
382 behavioral therapy for bipolar disorder (23-40% drop-out) (29, 30). The high attendance rate of
383 the intervention in our study could be due to a lower number of sessions, the participatory
384 development of the intervention, involving all stakeholders (31, 32), and the efforts made to ensure
385 that it would fit into the local context (9, 10). With psychological interventions, difficulty finding
386 a convenient time for sessions is a common barrier to attendance (33). In the current study, the
387 time flexibility during intervention provision helped the participants to attend all the sessions and
388 reduced the risk of drop out of participants from the intervention.
389 The psychosocial intervention was used to enhance the understanding of study participants about
390 the illness, to help them to acquire skills used to cope with challenges (34) and to maintain their
391 psychosocial wellbeing (35). In this study, participants reported that they had acquired improved
392 knowledge and skills related to BD. However, the degree of importance of each session was
393 different for different participants, indicating a need for the providers to personalize the focus of
394 the intervention. People with BD have various needs related to symptoms of illness, treatment,
395 quality of life, and their family relationships which need different approaches (36). Likewise,
396 caregivers and people with BD may also have different priorities (17). Although the sample size
397 was very small, it is encouraging that depressive symptoms were reduced, which is in line with the
398 findings of systematic reviews (7, 8). The first review included studies were from LMICs, and the
399 sessions ranged from 3 to 18, but, most of the intervention providers were mental health experts
400 (8) and the second review (7) included studies conducted mainly in high income countries. This

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401 may indicate that a non-specialist can deliver mental health interventions that have positive effects
402 on depression (37).
403 In the current study, the overall mean level of adherence to the intervention content and providers'
404 competency in delivering the intervention were moderate. This result is lower than the previous
405 feasibility studies conducted in high income countries, which found high fidelity in a family-
406 focused intervention for schizophrenia (38) and youth at risk of bipolar (39). However, the
407 difference might be because of difference in qualification and year of experience in providing PSI.
408 PHC workers delivered the intervention for the first time in our study, while in the previous studies
409 (38, 39), providers were masters or doctoral level psychologists.
410 Almost all sessions took longer to deliver than the proposed 20 minutes. Intervention providers
411 reported that the content was important and should not be reduced, instead suggesting that the last
412 two sessions could be made into three sessions and that 30 minutes was a more realistic timeframe
413 for each session. A systematic review that synthesized published results in LMICs reported 3-12
414 individual sessions and the duration of each session ranged from 45-60 minutes (8) which is much
415 higher than that allocated for each session in the current study. Therefore, taking the feasibility of
416 time into account is needed during manual revision.
417 The findings of a previous systematic review indicated that family-focused psychological
418 interventions were effective in reducing relapse and hospital admission (8). During the intervention
419 development, the Theory of Change (ToC) participants and mental health experts strongly
420 suggested the engagement of caregivers as long as this accorded with the preference of the person
421 with BD (15). During the feasibility study, however, intervention providers observed incidences
422 of hesitation to freely discuss family-related issues both among people with BD and caregivers.
423 Thus, understanding confidentiality issues and how family conflicts can be managed needs to be
424 considered (40). The way to do this is to have one session with each group member (service user
425 and care giver in our study) before the actual delivery of the intervention session, which helps to
426 understand the needs of each participant (41). In the current feasibility study, intervention
427 providers also suggested that there should be flexibility to allow providers to meet with the person
428 with BD and caregiver individually whenever they find it to be necessary.
429 **Implications of the study**
430 This intervention was tested in a routine clinical setting where the intervention was planned to be
431 delivered. The study identified both strengths and challenges that are likely to occur during the

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432 actual implementation of the intervention. During the intervention development (15), workshop
433 participants of ToC and mental health expert also anticipated facilitators like providing the
434 intervention in a facility where patients receive their regular follow-up, using intervention manual
435 and information leaflet prepared in a local language and delivering the intervention using mhGAP
436 trained professions. They also mentioned the importance involving caregivers in the intervention
437 provided that the interest and freedom of people with BD are ensured before engaging caregivers
438 which was also noted during the delivery of the intervention.
439 The intervention evaluation approach focused on the feasibility and acceptability of the developed
440 intervention in terms of content, training manual and leaflet preparation, language, and delivery
441 strategies that helped to improve stakeholders' buy-in (42) and ensured scalability of the developed
442 psychological intervention. The mixed-methods approached described in this study, can be applied
443 by other researchers to identify the strengths and challenges of implementation and to develop
444 strategies that can help to potentially improve implementation fidelity and engagement of service
445 users. The next step should be to investigate the revised intervention for its effectiveness in a
446 randomized controlled trial.
447
448 **Strengths and limitations**
449 The strength of this study is that based on the recommendation of the MRC framework, which we
450 used to develop the intervention, we assessed the feasibility and acceptability of the intervention
451 using the various methods: qualitative interview, pre-post assessment, and recording all
452 intervention sessions, and checked for the fidelity of intervention implementation. Second, we
453 assessed the feasibility and acceptability of intervention from both service users' and intervention
454 providers' perspectives. Third, the study identified areas that need further modification before
455 testing effectiveness. However, the findings should be interpreted in light of the following
456 limitations: (i) the sample size was small, particularly for caregivers, (ii) due to small sample size
457 and limited resources, we used a single group intervention ; and (iii) we did not quantify the change
458 in knowledge and skills of intervention participants.

459 In conclusion, the findings demonstrated that psychological intervention is feasible and acceptable
460 to deliver by PHC workers in LMIC settings. Efficacy and effectiveness trials are necessary before
461 taking the intervention into the routine PHC setting for wider community use.
462

463 **Authors' affiliation**

464 **Mekdes Demissie**, WHO Collaborating Centre for Mental Health Research and Capacity Building,
465 Department of Psychiatry, School of Medicine, College of Health Sciences, Addis Ababa University, Addis
466 Ababa, Ethiopia; and School of nursing and midwifery, College of Health Sciences and Medicine,
467 Haramaya University, Haramaya, Ethiopia; **Charlotte Hanlon**, WHO Collaborating Centre for Mental
468 Health Research and Capacity Building, Department of Psychiatry, School of Medicine, College of Health
469 Sciences, Addis Ababa University, Addis Ababa, Ethiopia; Centre for Innovative Drug Development
470 and Therapeutic Studies for Africa (CDT-Africa), College of Health Sciences, Addis Ababa
471 University, Ethiopia; and Centre for Global Mental Health, Institute of Psychiatry, Psychology and
472 Neuroscience, Health Services and Population Research, King's College London, UK; **Lauren**
473 **Ng**, Department of Psychology, University of California, Los Angeles, Los Angeles, CA, USA;
474 **Rosie Mayston,** Global Health & Social Medicine/King's Global Health Institute, King's College
475 London, NE Wing Bush House, 30 Aldwych, London WC2B 4BJ, UK; **Abebaw Fekadu,** Centre for
476 Innovative Drug Development and Therapeutic Studies for Africa (CDT-Africa), College of
477 Health Sciences, Addis Ababa University, Ethiopia; WHO Collaborating Centre for Mental Health
478 Research and Capacity Building, Department of Psychiatry, School of Medicine, College of Health
479 Sciences, Addis Ababa University, Addis Ababa, Ethiopia; Department of Global Health and
480 Infection, Brighton and Sussex Medical School, University of Sussex, Brighton, UK; and Center
481 for Affective Disorders, Institute of Psychiatry, Psychology and Neuroscience, Department of
482 Psychological Medicine, King's College London, UK
483

484 **Correspondence:** Mekdes Demissie, PO BOX 9086, Addis Ababa, Ethiopia.
485 Email: mekdesdemissie2016@gmail.com

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496 **Authors' contribution**

497 MD, AF and CH designed the study. MD led the study, drafted and revised the manuscript with
498 supervision from AF, CH, RM, and LN. AF, CH, LN, and RM contributed in interpretation of
499 the findings, and revised the Manuscripts. All the authors read and approved the final manuscripts.

500

501 **Declaration of interest**

502 None

503 **Data availability**

504 The data that support the findings of this study are available from the first, MD., upon reasonable
505 request

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Appendix-E: Topic guide to assess the lived experience of people with bipolar disorder

- ❖ Basic Socio-demographic information

Can you tell me a bit about yourself?

A. Age, Education, Religion, Place of residence, Marital status, Occupation, with whom you are living

- ❖ Illness history

Please do you tell me about your first and last illness experience?

Probes

A. When did you get unwell for the first time (first onset of your illness)?
B. Can you tell me how it looked when you got ill for the first time? What were the problems?
C. What about when you got unwell the last (most recent) time?
   Probe
   What happened? What were the problems?

Perceived cause/factors) that affect the illness positively or negatively

- **What do you think was the reason that you got unwell for the first time (first onset of your illness)?**

Probes

- Can you tell me more how those situations related to the first onset of your illness?
- Can you tell me more about any additional things that you experienced and remember before you got unwell for the first time?

What do you think was the reason you got unwell the last (most recent) time (relapse) / ?

Probes

- Can you give me some examples of how those things related to getting unwell?
- Can you tell me more about anything that you experienced and remember before you got unwell for the last time?
- Examples- challenges in daily life, relationships, financial, work/education, substance use

Other than what we already discussed before, were there any other difficulties that you or your families or close friends experienced that made the time of relapse significantly different from other time?

- Can you tell me more about the problem?
- How do you think these problems contributed to your illness?

You have told me about the problems that makes your illness come back. Now, please tell me about things that makes you feel good, or that you think are important to prevent your illness coming back?

- Can you tell me about anything that you were experienced / think as important to prevent or decrease how severe your illness is when you get unwell?

Probes:

- ▪ What about social support?
  - Can you tell me more about **who** was around you in the past time when you were in need (list all people)?
  - As you mentioned, you got help from…. when did you have help from them?
  - How did it help you?
- ▪ **What** about taking medication?
  - Can you tell me how it helps you?

Coping mechanisms

Now, I want to know how you have done or have you doing to reduce or cope with the challenges that you have faced?

- What do you do during the period of your illness?
  - Ask patients to describe/list all activities/ coping mechanisms/ they were using)?
  - How those activities help you to feel well or reduce your distress?
  - Examples: visiting health facility/taking medication, social involvement, religious activities, substance use, limiting social involvement

Self-care strategies

Can you tell me what type of self-care strategies you use to improve your health?

Probes

- Examples: sleep, eating, exercise, help-seeking

Impact of illness

Can you tell me about the challenges you face because of having mental illness /bipolar disorder?
Probe

- Does the illness have any effect on your everyday life?
- If yes, can you give me an example of how did the illness affect your everyday life?
- What about challenges related to relationships with others?
- **Wha**t about changes in how people treat you due to your illness?
- Can you give examples?

AMHARIC VERSION

መሰረታዊ የማህበራዊ-ስነ-ሕዝብ መረጃ

ስለራስዎ ትንሽ ሊነግሩን ይችላሉ?

ሀ. ዕድሜ ፣ ትምህርት ፣ ሃይማኖት ፣ የመኖሪያ ቦታ ፣ የጋብቻ ሁኔታ ፣ ሥራ ፣ ከማን ጋር ነው እንደሚኖሩ?

የሕመም ታሪክ

እባክዎን ስለ መጀመሪያ እና የመጨረሻ ህመም ተሞክሮዎ ይንገሩኝ?
ምርመራዎች

ሀ. ለመጀመሪያ ጊዜ (በበሽታዎ መጀመሪያ) የታመሙት መቼ ነበር?
ለ. ለመጀመሪያ ጊዜ ሲታመሙ እንዴት እንደነበረ ሊነግሩኝ ይችላሉ? ችግሮቹ ምን ነበሩ?
ሐ. ለመጨረሻ ጊዜ (በጣም የቅርብ) ጊዜ ሲታመሙስ እንዴት ነበር?
መ. ምንድን ነው የሆነው? ችግሮቹ ምን ነበሩ?

ሕመሙን በአዎንታዊ ወይም በአሉታዊነት ይነካሉ ተብለው የሚታሰቡ ምክንያቶች

- ✓ **ለመጀመሪያ ጊዜ (በበሽታዎ መጀመሪያ) የታመሙበት ምክንያት ምን ይመስልዎታል?**

ምርመራዎች

- እነዚያ ሁኔታዎች ከበሽታዎ የመጀመሪያ አጀማመር ጋር እንዴት እንደሚዛመዱ የበለጠ ሊነግሩኝ ይችላሉ?
- ለመጀመሪያ ጊዜ ከመታመምዎ በፊት ስላጋጠመዎት እና ስለሚያስታውሷቸው ተጨማሪ ነገሮች የበለጠ ሊነግሩኝ ይችላሉ?

ያለፈው (የቅርብ ጊዜ) ጊዜ (ህማምዎ ሲመለስ) ፤የታመሙበት ምክንያት ምን ይመስልዎታል?

ምርመራዎች

- ✓ እነዚያ ነገሮች ከመታመምዎ ጋር እንዴት እንደሚዛመዱ አንዳንድ ምሳሌዎችን ሊሰጡኝ ይችላሉ?
- ✓ ለመጨረሻ ጊዜ ከመታመምዎ በፊት ስላጋጠመዎት እና ስለሚያስታውሱት ማንኛውም ነገር የበለጠ ሊነግሩኝ ይችላሉ?

- ✓ ምሳሌዎች- በዕለት ተዕለት ሕይወት ውስጥ ያሉ ተግዳሮቶች ፣ ግንኙነቶች ፣ ገንዘብ ነክ ፣ ሥራ/ትምህርት ፣ የዕፅ አጠቃቀም

ቀደም ብለን ከተወያየነው ሌላ ፣ እርስዎ ወይም ቤተሰቦችዎ ወይም የቅርብ ጓደኞችዎ ካጋጠማቸው ችግሮች ለማገገም ወይንም መልሶ ለመቋቋም የፈጀው ጊዜ ከሌላው ጊዜ በእጅጉ የሚለዩ ነበሩ?

- ✓ ስለችግሩ የበለጠ ሊነግሩኝ ይችላሉ?
- ✓ እነዚህ ችግሮች ለበሽታዎ አስተዋጽኦ እንዴት ያደረጉት ይመስልዎታል?

ሕመምዎ እንዲመለስ ስለሚያደጉ ችግሮች ነግረዉኛል። አሁን እባክዎን ጥሩ ስሜት እንዲሰማዎት ስለሚያደርጉ ወይም ህመምዎ ተመልሶ እንዳይመጣ ለመከላከል አስፈላጊ ናቸው ብለው ስለሚያስቧቸው ነገሮች ይንገሩኝ?

- እርስዎ ካጋጠመዎት ውስጥ በሚታመሙበት ጊዜ የህመምዎ ክብደትን ለመቀነስ ወይም ለመከላከል የረዳዎትን ማንኛውንም ነገር ሊነግሩኝ ይችላሉ?

ምርመራዎች

- ማህበራዊ ድጋፍስ?
  - ✓ ባለፉት ጊዜያት እርስዎ በፈልጉበት ጊዜ በዙሪያዎ የነበረው ማን እንደሆነ የበለጠ ሊነግሩኝ ይችላሉ (ሁሉንም ሰዎች ይዘርዝሩ)?
  - ✓ እርስዎ እንደገለፁት ከ… እርዳታ አግኝተዋል። የእነርሱን እርዳታ መቼ ነበር ያገኙት?
  - ✓ እንዴት እንደረዳዎት?
- መድሃኒት መውሰድስ?
  - ✓ እንዴት እንደሚረዳዎት ሊነግሩኝ ይችላሉ?

የመቋቋም ዘዴዎች

አሁን ፣ ያጋጠሙዎትን ተግዳሮቶች ለመቀነስ ወይም ለመቋቋም እርስዎ እንዴት እንዳደረጉ ወይም እያደረጉ እንደሆነ ማወቅ እፈልጋለሁ?

- በህመምዎ ወቅት ምን ያደርጋሉ?
  - ✓ ሕመምተኞች ሁሉንም እንቅስቃሴዎች/ የመቋቋም ዘዴዎች/ የሚጠቀሙባቸውን/ እንዲገልጹ/ እንዲዘረዝሩ ይጠይቋቸው?
  - ✓ እነዚያ እንቅስቃሴዎች ጥሩ ስሜት እንዲሰማዎት ወይም ጭንቀትዎን እንዲቀንሱ እንዴት ይረዱዎታል?

ምሳሌዎች - የጤና ተቋምን መጎብኘት/መድሃኒት መውሰድ ፣ ማህበራዊ ተሳትፎ ፣ የሃይማኖታዊ እንቅስቃሴዎች ፣ የዕፅ አጠቃቀም ፣ የማህበራዊ ተሳትፎን መገደብ

የራስ-እንክብካቤ ስልቶች

ጤናዎን ለማሻሻል ምን ዓይነት የራስ-እንክብካቤ ስልቶች እንደሚጠቀሙ ሊነግሩኝ ይችላሉ?
ምርመራዎች
ምሳሌዎች-መተኛት ፣ መብላት ፣ የአካል ብቃት እንቅስቃሴ ፣ እርዳታ መፈለግ

የበሽታው ተፅዕኖ

የአእምሮ ሕመም ስላለብዎ ያጋጠሙዎትን ችግሮች/ተግዳሮቶች ሊነግሩኝ ይችላሉ?

ምርመራ

- ሕመሙ በዕለት ተዕለት ሕይወት ላይ ተጽዕኖ አለው?
- አዎ ከሆነ ፣ ሕመሙ በዕለት ተዕለት ሕይወትዎ ላይ ምን ተጽዕኖ እንዳሳደረብዎ የሚያሳይ ምሳሌ ሊሰጡኝ ይችላሉ?
- ከሌሎች ጋር ባለዎ ግንኙነትስ እንዲያጋጥምዎ ያደረገው ተግዳሮቶችስ አሉ?
- በህማምዎ ምክንያት ሰዎች እርስዎን የሚያዩበት/የሚገነዘቡበት ሁኔታ ላይለውጦች እንዲመጡ አድርጉዋል
- ምሳሌዎችን መስጠት ይችላሉ?

Appendix-F: Topic guide for caregivers of people with bipolar disorder

- **Basic Socio-demographic information**

Can you tell me a bit about yourself?

A. Age, Education, Religion, Place of Residence, Marital status, Occupation, what is your relationship with the patient

- **Illness history**

Please can you tell me about your relative (child/husband/wife/brother/sister.) first and the last illness experience?

Probes

A. When did your relative got unwell for the first time (first onset of your illness)?
B. Can you tell me how it looked when your relative get ill for the first time? What were the problems?
C. What about when your relative got unwell for the last time?
Probe
How was it? What were the problems?

Perceived cause / factors) that affect the illness positively or negatively

- **What do you think was the reason that your relative (child /husband/ wife/ brother /sister) got unwell for the first time (first onset of your illness)? (List all)**

Probes

- Can you tell me more how those situations related with the first onset of her/his illness?
- Can you tell me more about any additional things that she/ he experienced before she/he got unwell for the first time?

What do you think the reason for your relative (child /husband/ wife/ brother /sister….) got unwell for the last time (relapse)? (list all)

Probes

- Can you give me some examples of how those things related to getting unwell after the first time?
- Can you tell me more about anything that child /husband/ wife/ brother /sister…experienced before she/he got unwell for the last time?

Probes

- Any challenges in the patient's daily life (sleep, Loss or damage of personal properties...)?
- Problems related to relationships.
- Divorce or separation, breaking relationship or unfaithfulness, Death of loved one,
- What about financial problems? How those challenges affected your relative (child /husband/ wife/ brother /sister…) health?
- What about job-related problems (If the caregiver says yes, probe)
    - What was the reason for the problem?
    - Probes changes in the patient's previous time of job, responsibilities or Retirement
    - What about education related problems like a failure, starting a new education
    - How those challenges affected your child /husband/ wife/ brother /sister…your health?
- What about substance use like Alcohol, Khat...?
    - ✓ What kind of substance was she/he use?
    - ✓ Why do your child /husband/ wife/ brother /sister…use that substance/s?
    - ✓ How those challenges affected her/his health condition?

Other than what we already discussed before, were there any other difficulties that your child /husband/ wife/ brother /sister… experienced before he/she got ill.?

- ✓ Can you tell me more the problem?
- ✓ How do you think these problems contributed to your child /husband/ wife/ brother /sister…illness?

Thank you very much, now let's discuss things that make your child /husband/ wife/ brother /sister…to feel good, or that you think important to prevent the exacerbation of his/her illness

- Can you tell me about anything that you think as important / helps your relative feel better?
- What about things that help him/ her to minimize the chance of experiencing illness after he/she got better?

Probes:

- What about social support?
  - ✓ Can you tell me more about who was/is around him/her in the past time when he/she was in need (list all people)?
  - ✓ As you mentioned, he/she got help from…. How it helped him/her?
- What about taking medication?
  - ✓ Can you tell me how it helps him/her?

Coping mechanisms

Now, I want to know what your child /husband/ wife/ brother /sister… has doing to reduce or cope with challenges that he/she has faced and How you and other family members trying to help him/her.

- What do he/she do during the period of his /her illness?
  - ✓ Ask the caregiver to describe/list all activities that his relative was/is using)?
  - ✓ How those activities help him/her to feel well or reduce your distress?

Probes

- What about visiting health facility/ using medication
- What about sharing feelings to others?
  - ✓ Can you give me an example to whom your relative shared his/her feeling?
  - ✓ How these activities help your relation?
  - ✓ If not why, why not?
- What about social involvement?
  - ✓ How is your relative social involvement?
  - ✓ How do involve in social activities helps him in the last period of his/her illness?
  - ✓ How it helped him/her? Or why that not helped him/her?
- What about religious activities like praying, fasting, listening religious song...?
  - ✓ How these things help your relative to feel good?
- What about not want to talk about the problem/ situation?
- What about denial (refuse to believe that the problems had happened)?
- What about self-criticism/ blaming?
- What about the use of the substance to forget the problem?

Probes

- ✓ What kinds of substances are/were your relative use?
- ✓ When do your relative use that substances most of the time?
- ✓ Why do you think that he/she is using those substances?
- What about reading books? How it helps him/her?
- What about waiting for the problem to be solved by itself through time?

Please, tell me how you and other family members trying to help your relative (your child /husband/ wife/ brother /sister)

- What do you do?
- How it helps the patient to feel good?

Self-care strategies
Can you tell me what type of self-care strategies your child /husband/ wife/ brother /sister use to improve his /her health status?
Probes

- What do you do to improve your sleep pattern?
- What do you do to improve your eating habit?
- What about doing exercise?
  - Can you tell me more about what type of exercise he/she is doing?
  - When do your relative do the exercise?
  - Where do your relative do the exercise?
  - How the exercises do benefit you to improve your health?

- What about obtaining regular medical care as part of prevention?
  - What type of medical care is he/she is/was getting?
  - When does he/she get help from health care setting?

Impact of illness

Now, please, tell me about challenges your child /husband/ wife/ brother /sister face because of having mental illness /bipolar disorder or family member because of having relative with mental illness
First tell about the challenges that your child /husband/ wife/ brother /sister is facing because of having a mental illness

Probe

- What are the challenges that your child /husband/ wife/ brother /sister facing because of having a mental illness?
- If yes, can you give me an example of how did the illness affects his/her everyday life?
- What about challenges in his/her relationships with others?
  Probes what about with his/her
  - Children, Family, Partner, Work colleagues Friends and Neighbours

- **Wha**t about Stigma and discrimination, or a change in acceptance due to his/her illness?

Probes

- Can you tell me who stigmatized and discriminate against him/her?
- Family member, Friends, Neighbors or Co-workers
- Can you tell me more about why they stigmatized and discriminate against him/her?
- What about quarrels and legal problems with your relative, families, or friends?
- What about challenges in getting or maintaining his/her job

Now, tell me about challenges that you as a caregiver or other family members facing because of having a relative with mental illness.
Probe

- Effect of social life /relationship
- What about on job/ education
- What about family health

We discussed about your child /husband/ wife/ brother /sister illness, what makes his/her illness exacerbate or back after he/she got well, about his/her treatment, how you and other family members/ community tried to help him/her to cope with challenges. What is most worrisome problem for you and other family members that you need to be solved related with your child /husband/ wife/ brother /sister illness

Amharic Version

- **መሰረታዊ የማህበራዊ-ስነ-ሕዝብ መረጃ**

ስለራስዎ ትንሽ ሊበግሩኝ ይችላሉ?

ለ / ዕድሜ ፣ ትምህርት ፣ ሃይማኖት ፣ የመኖሪያ ቦታ ፣ የጋብቻ ሁኔታ ፣ ሥራ ፣ ከታካሚው ጋር ያለዎት ግንኙነት ምንድነው?

- **የህመም ታሪክ**

እባክዎን ስለ ታማሚው (ልጅዎ/ባልዎ/ሚስትዎ/ወንድምዎ/እህትዎ) መጀመሪያ እና የመጨረሻው የሕመም ተሞክሯቸው ሊነግሩኝ ይችላሉ

ምርመራዎች

ሀ / ዘመድዎ ለመጀመሪያ ጊዜ ታማሚው ምልክት የታየበት መቼ ነበር (ህመሙ ለመጀመሪያ ጊዜ ሲጀምራቸው)

ለ / ዘመድዎ ለመጀመሪያ ጊዜ ታማሚው እንዴት እንደ ሆነ ምን አይነት ምልክት እንዳሳዩ ሊነግሩኝ ይችላሉ? ችግሮቹ ምን ነበሩ?

ሐ / ታማሚው ለመጨረሻ ጊዜ ሲታመሙስ እንዴት ነበር/ምን አይነት ምልክት ነበር ያሳዩት ምርመራ እንዴት ነበረ? ችግሮቹ ምን ነበሩ?

ሕመሙን በአዎንታዊ ወይም በአሉታዊነት ይነካሉ ተብለው የሚታሰቡ ምክንያቶች

- ✓ **ታማሚው (ልጅዎ / ባልዎ / ሚስትዎ / ወንድምዎ / እህትዎ...) ለመጀመሪያ ጊዜ (በበሽታዎ መጀመሪያ) የታመሙበት ምክንያት ምን ይመስልዎታል? (ሁሉንም ይዘርዝሩ)**

ምርመራዎች

- እነዚያ ሁኔታዎች ከእሷ/ከእርሱ/ከእርሳቸው ሕመም አጀማመር ጋር እንዴት እንደሚዛመዱ የበለጠ ሊነግሩኝ ይችላሉ?
- እሷ/ እሷ/እርሳቸው ለመጀመሪያ ጊዜ ከመታመማቸው በፊት ስላጋጠሟቸው ተጨማሪ ነገሮች የበለጠ ሊነግሩኝ ይችላሉ?

ታማሚው (ልጅዎ / ባልዎ / ሚስትዎ / ወንድምዎ / እህትዎ...) ላይ ህመሙ የተመለሰበት ምክንያት (ለመጨረሻ ጊዜ እንደገና ህመሙ ሲመለስ) ምን ይመስልዎታል (ሁሉንም ይዘርዝሩ)

ምርመራዎች

- እነዚያ ነገሮች ከመጀመሪያው ጊዜ በኋላ ከመታመማቸው ጋር እንዴት እንደሚዛመዱ አንዳንድ ምሳሌዎችን ሊሰጡኝ ይችላሉ?
- ልጅ/ባል/ሚስት/ወንድም/እህት ከመታመማቸው በፊት ስላጋጠማቸው ማንኛውም ነገር የበለጠ ሊነግሩኝ ይችላሉ?

ምርመራዎች

- በታካሚው የዕለት ተዕለት ሕይወት ውስጥ ማንኛውም ተግዳሮቶች (እንቅልፍ ፣ ማጣት ወይም የግል ንብረቶች መበላሸት ...)?
- ከሰዎች ጋር ባላቸው ግንኙነቶች ጋር የተያያዙ ችግሮች
- ፍቺ ወይም መለያየት ፣ ግንኙነት መቋረጥ ወይም አለመታመን ፣ የሚወዱት ሰው ሞት ፣
- የገንዘብ ነክ ችግሮችስ? እነዚያ ተግዳሮቶች ታማሚው (ልጅዎ / ባልዎ / ሚስትዎ / ወንድምዎ / እህትዎ...) ጤና ላይ ምን ተጽዕኖ አሳድረዋል?
- ከሥራ ጋር የተያያዙ ችግሮችስ አጋጥሞዋቸው ነበር? (ተንከባካቢው አዎ ካለ፣ ተጨማሪ ጥያቄ ይጠይቁ)
  - ለችግሩ ምክንያት ምን ነበር?
  - በታማሚው የስራ ሃላፊነቶች ለውጦች ነበሩ/ ጡረታ አይነት ለውጦች ነበሩ
  - ከትምህርት ጋር የተያያዙ ችግሮች እንደ ትምህርት አለመሳካት ፣ አዲስ ትምህርት መጀመርን የመሳሰሉ ለውጦች ነበሩ
  - እነዚያ ተግዳሮቶች ልጅዎን / ባልዎን / ሚስትዎን / ወንድምዎን / እህትዎን / ጤናቸውን እንዴት ነካቸው?
- እንደ አልኮሆል ፣ ጫት ... ያሉ ንጥረ ነገሮችን ይጠቀሙ ነበር
  - እሷ/እሷ ምን ዓይነት ንጥረ ነገር ይጠቀሙ ነበር?
  - ልጅዎ/ባል/ሚስትዎ/ወንድምዎ/እህትውዎ... ያንን ንጥረ ነገር ለምን ምክንያት ይጠቀሙታል?
  - እነዚህ ተግዳሮቶች በእሷ/በእሱ/በእሳቸው ጤንነት ሁኔታ ላይ ምን ተጽዕኖ አሳድረዋል?

ቀደም ብለን ከተነጋገርነው ሌላ ልጅዎ/ባለቤትዎ/ሚስትዎ/ወንድም/እህትዎ ከመታመማቸው በፊት ያጋጠሟቸው ሌሎች ችግሮች ነበሩ?

- ስለችግሩ የበለጠ ሊነግሩኝ ይችላሉ?
- እነዚህ ችግሮች ለልጅዎ / ለባለቤትዎ / ለባለቤትዎ / ለወንድም / ለእህትዎ ህመም አስተዋፅኦ ያደረጉ ይመስልዎታል?

በጣም አመሰግናለሁ ፣ አሁን ልጅዎ/ባል/ሚስት/ወንድም/እህት/ጥሩ ስሜት እንዲሰማቸው የሚያደርጉትን ወይም የሕመሙን መባባስ ለመከላከል አስፈላጊ እንደሆኑ በሚያስቡት ነገሮች ላይ እንወያይ።

- ዘመድዎ የተሻለ ስሜት እንዲሰማው ይረዳል ብለው የሚያስቡትን/ አስፈላጊ ነው ብለው የሚያስቡትን ማንኛውንም ነገር ሊነግሩኝ ይችላሉ?
- እሱ/ እሷ ከተሻላቸው በኋላ ህማሙ የመመለስ እድልን ለመቀነስ የሚረዱት ነገሮችስ አሉ?

ምርመራዎች

- ማህበራዊ ድጋፍስ?
  - ✓ እሱ/እሷ በችግር ላይ በነበሩበት ጊዜ እና ሰው በሚፈልጉበት ጊዜ ምን አብሮአቸው እንደነበር የበለጠ ሊነግሩኝ ይችላሉ?
  - ✓ እርስዎ እንደገለፁት እሱ/እሷ እርዳታ ያገኙት ከ... ነበር፣ እሱን/እሷን እርዳታው እንዴት እረዳቸው?
  - ✓ መድሃኒት መውሰድስ?
  - ✓ እሱ/እርሷን እንዴት እንደረዳቸው ሊነግሩኝ ይችላሉ?

የመቋቋም ዘዴዎች

አሁን ፣ ልጅዎ/ባለቤትዎ/ሚስትዎ/ወንድም/እህትዎ የሚያጋጥማቸውን ተግዳሮቶች ለመቀነስ ወይም ለመቋቋም ፤እርስዎ እና ሌሎች የቤተሰብ አባላት እሱን/እርሷን/እርሳቸውን ለመርዳት ምን እያደረጉ እንደሆነ እና እንዴት እንደሆነ ማወቅ እፈልጋለሁ።

- በህመሙ ወቅት እሱ /እሷ/እርሳቸው ምን ያደርጋሉ?
  - ✓ ተንከባካቢው ታማሚው የሚጠቀምባቸውን /እየተጠቀመባቸው ያሉ ሁኔታዎችን ሁሉ እንዲገልጽ/ እንዲዘረዝር ይጠይቁት?
  - ✓ እነዚያ ሁኔታዎች እሱ/እሷ ጥሩ ስሜት እንዲሰማቸው ወይም ጭንቀትዎን እንዲቀንሱ እንዴት ይረዳሉ?

ምርመራዎች

- የጤና ተቋምን ይጎበኛሉ/ መድሃኒትስ ይጠቀማሉ?
- ስሜታቸውን ለሌሎች የማካፈል ሁኔታስ?
  - ✓ ታማሚው/ዋ ስሜቱን/ስሜቷን የሚያካፍሉበተን ምሳሌ ሊሰጡኝ ይችላሉ?
  - ✓ እነዚህ እንቅስቃሴዎች ከታካሚው ጋር ያለዎት ግንኙነት ላይ እንዴት ይረዳሉ?
  - ✓ የማይረዱ ከሆነ ለምን?
- ስለ ማኅበራዊ ተሳትፎስ?
  - ✓ የታማሚው ማህበራዊ ተሳትፎዎ ላይ እንዴት ናቸው?
  - ✓ በህመማቸው የመጨረሻ ጊዜ ላይ በማህበራዊ እንቅስቃሴዎች ውስጥ መሳተፋቸው እንዴት ረዳቸው?
  - ✓ እነዚያ ማህበራዊ እንቅስቃሴዎች እሱ/እሷ/እርሳቸው እንዴት ረዳቸው? ከልረዳቸው ለምን አልረዳቸውም?

- እንደ መጸለይ ፣ መጾም ፣ ሃይማኖታዊ መዝሙሮችን ማዳመጥን የመሳሰሉ ሃይማኖታዊ እንቅስቃሴዎችን ያደርጋሉ?
  - ✓ እነዚህ ነገሮች ታማሚው ጥሩ ስሜት እንዲሰማቸው የሚረዱት እንዴት ነው?
- ስለችግሩ/ ሁኔታ ማውራት አለመፈለግ አለ?
- ስለ መካድ (ችግሮቹ እንደተከሰቱ ለማመን አሻፈረኝ ማለትስ)?
- ራስን መተቸት/ መውቀስ ይታይባቸዋል?
- ችግሩን ለመርሳት ንጥረ ነገርን ወደ መጠቀም ማዘንበል አለ?

ምርመራዎች

- ✓ ታማሚው ምን ዓይነት ንጥረ ነገሮች ነበር የሚጠቀሙት?
- ✓ ታማሚው አብዛኛውን ጊዜ እነዚህን ንጥረ ነገሮች የሚጠቀሙት መቼ ነው?
- ✓ እሱ/እሷ/እርሳቸው እነዚህን ንጥረ ነገሮች የሚጠቀሙባቸው ለምን ይመስልዎታል?

- እሱን/እሷን/እሳቸውን መጽሐፍትን ማንበብስ እንዴት ይረዳቸዋል?
- ችግሩ በጊዜ በራሱ እስኪፈታ የመጠበቅ ሁኔታስ አለ?

እባክዎን ፣ እርስዎ እና ሌሎች የቤተሰብ አባላት ዘመድዎን (ልጅዎን / ባልዎን / ሚስትዎን / ወንድምዎን / እህትዎን) ለመርዳት እንዴት እንደሚሞክሩ ይንገሩኝ።

- ምን ታደርጋለህ?
- ይህ ነገር ታካሚው ጥሩ ስሜት እንዲሰማው የሚረዱት እንዴት ነው?

የራስ-እንክብካቤ ስልቶች

ልጅዎ /ባልዎ /ሚስትዎ /ወንድምዎ /እህትዎ /የጤና ሁኔታቸውን ለማሻሻል ምን ዓይነት የራስ-እንክብካቤ ስልቶች እንደሚጠቀሙ ሊነግሩኝ ይችላሉ?

ምርመራዎች

- ✓ የእንቅልፍዎን ሁኔታ ለማሻሻል/ለማስተካከል ምን ያደርጋሉ?
- ✓ የአመጋገብ ልማድዎን ለማሻሻል ምን ያደርጋሉ?
- ✓ የአካል ብቃት እንቅስቃሴስ ያደርጋሉ ማድረግስ?
  - እሳቸው/እሱ/እሷ ምን ዓይነት የአካል ብቃት እንቅስቃሴ እንደሚያደርጉ የበለጠ ሊነግሩኝ ይችላሉ?
  - እነርሱ መቼ መቼ ነው የአካል ብቃት እንቅስቃሴ የሚያደርጉት?
  - ታማሚው የአካል ብቃት እንቅስቃሴውን የት ነው የሚያከናውኑት?
  - ልምምዶች ጤናቸውን ለማሻሻል የሚጠቅሙዎት እንዴት ነው?
- ✓ እንደ መደበኛ መከላከል አካል ሆኖ የሕክምና እንክብካቤ ማግኘትስ?
  - እሱ/እሷ/እርሳቸው ምን ዓይነት የሕክምና እንክብካቤ እያገኙ ነው/ያገኙ ነበር?
  - እሱ/እሷ/እርሳቸው የጤና እንክብካቤ እርዳታ መቼ እና ከየት ያገኛሉ?

የበሽታው ተፅዕኖ

አሁን ፣ እባክዎን ልጅዎ /ባልዎ /ሚስትዎ /ወንድም /እህትዎ የአእምሮ ሕመም ስላለባቸው ወይንም የቤተሰብ አባላቸው የአእምሮ ሕመም ስላለበት ስላጋጠማቸው ተግዳሮቶች ንገሩኝ።

በመጀመሪያ ልጅዎ / ባልዎ / ሚስትዎ / ወንድም / እህትዎ የአእምሮ ህመም ስላለባቸው ብቻ ስለሚያጋጥማቸው ተግዳሮቶች ይንገሩኝ

ምርመራ

- ልጅዎ / ባልዎ / ሚስትዎ / ወንድምዎ / እህትዎ በአእምሮ ሕመም ምክንያት የሚገጥሟቸው ተግዳሮቶች ምንድን ናቸው?
- ተግዳሮቶች ካሉ፣ ሕመሙ በዕለት ተዕለት ሕይወታቸው ላይ ምን ያህል ተጽዕኖ ያሳድር እንደነበር አንድ ምሳሌ ሊሰጡኝ ይችላሉ?
- ከሌሎች ጋር በሚኖረው ግንኙነት ውስጥ የሚያጋጥሙ ተግዳሮቶች አሉ?
- ከተንከባካቢው ልጆች ፣ ቤተሰብ ፣ አጋር ፣ የሥራ ባልደረቦች ጓደኞች እና ጎረቤቶች ጋር ያሉ ተግዳሮቶች አሉ
- በህመሙ ምክንያት መገለልና መድልዎ ወይንም በሰዎች ዘንድ የአቀባበል ለውጦች ነበሩ?

ምርመራዎች

- እሷን/እሱን/እርሳቸውን ማን እንዳገለለ እና አድሎ እንዳደረገባቸው ሊነግሩኝ ይችላሉ
- የቤተሰብ አባል ፣ ጓደኞች ፣ ጎረቤቶች ወይም የሥራ ባልደረቦች
- ለምን እሱን/እሷን/እሳቸውን እንዳገለሉ እና አድሎ እንዳደረጉባቸው በበለጠ ሊነግሩኝ ይችላሉ?
- ከዘመዶችዎ ፣ ከቤተሰቦችዎ ወይም ከጓደኞችዎ ጋር ጠብ እና ሕጋዊ ችግሮችስ ነበሯቸው?
- ሥራን በማግኘት ወይም ያለን ስራ በመጠበቅ ረገድ የሚያጋጥሙ ችግሮችስ ነበሩ?

አሁን እርስዎ እንደ ተንከባካቢ ወይም የአእምሮ ህመም ያለበት ሰው ዘመድ ወይንም የቤተሰብ አባልነት ስላጋጠሙዎት ተግዳሮቶች ንገሩኝ።

ምርመራ

- የማኅበራዊ ሕይወት /ግንኙነት ላይ ያለው ተፅዕኖ
- በስራ/ በትምህርት ላይ ያለው ተፅዕኖ
- በቤተሰብ ጤናስ ላይ ያለው ተፅዕኖ

ስለ ልጅዎ/ባለቤትዎ/ሚስትዎ/ወንድም/እህትዎ ህመም ፣ እሱ/እሷ ከበሽታ ከዳኑ በኋላ ህመሙ እንዲባባስ ወይም ወደ ኋላ እንዲመለስ የሚያደርግ ፣ ስለ ህክምናው እና መደሃኒቶቹ ፣ እርስዎ እና ሌሎች የቤተሰብ አባላት/ማህበረሰብ እርሱን/እርሱዋን/እርሳቸውን ለመርዳት እንዴት እንደሞከሩ ተወያይተናል። ፈተናዎችን ለመቋቋም እሷን። ከልጅዎ / ከባለቤትዎ / ከሚስትዎ / ከወንድም / ከእህትዎ ህመም ጋር ተያይዞ ሊፈቱ የሚገባቸው ለእርስዎ እና ለሌሎች የቤተሰብ አባላት በጣም የሚያስጨንቅዎ ችግር ምንድነው?

Appendix-G: Topic guide on feasibility test for people with bipolar disorder and their caregivers

English Version	
1	**Thank you for coming and willing to participate, today, I want to ask you about the PSI you have received** How was the PSI you received (duration, method, participation of the trainees)? Probe • For how many days did you receive the intervention • How was the intervention (difficulty, homework)
2	How was the adequacy of training time to understand and practice homework?
3	Among the intervention sessions you participated, which education/session discussed well? (Which part of the intervention sessions were well taught/facilitated well?) • Would you please tell me why you feel that way? • Can you give me an example?
4	Among the intervention sessions you participated, • Which part of the intervention was easy to understand and implement? • And which one was difficult?
5	Among the intervention you received, which part of the intervention sessions were appropriate for your needs? • Why? • Which session do you like most? Why? • Which sessions do you feel less important? Why?
6	Among the PSI you received, which session do you like most? • What were your favorite parts or strengths of the intervention? • What was your least favorite part or weakness of the intervention?
7	Any other suggestion or comments to help us improve for the future? • As intervention receiver / participant, what additional topic would you need to learn in addition to what you already received?
8	If someone like your friends, family or someone in the community needs similar help, what is your recommendation about this intervention? • If you need help again, would you come back to this PRogramme?
Amharic version	
1	የወሰዱት የስነልቦና ህክምና እንዴት ነበር አውጫጭ • ለምን ያህል ጊዜ ወሰዱ • አሰሰጣጡ እንዴት ነበር (ከባድ/ቀላል, የቤት ስራ እንዲሰሩ ይነገሮት ነበር)

2	የስነልቦና ህክምና በደንብ ለመረዳት እና ለመለማመድ የስልጠናው ጊዜ ምን ያህል በቂ ነበር?
3	በጠቅላላው በየሳምንቱ ለአምስት ክፍለ ጊዜ ከወሰዱት የስነልቦና ህክምና የትኛውን ክፍለ ጊዜ በደንብ የተማሩት • ለምን እንደዚህ እንደተሰማዎት ሊነግሩኝ ይችላሉ? • ምሳሌ ሊሰጡኝ ይችላሉ?
4	ከተማሩት የህክምና ክፍል ውስጥ • የትኛውን ለመረዳት እና ለመተግበር ቀላል ነበር? • የትኛው ነው ከባድ?
5	ከተማሩት ውስጥ የሚፈልጉትን ነገር ለማወቅ እና ፍላጎቶትን ለማሟሟላት • **ትክክለኛ የሆነው /ደስ ያሉት /የወደዱት ክፍል** የትናው ነው? ለምን? • ብዙም ያልወደዱት ክፍል የትናው ነው? ለምን?
6	የወሰዱት የስነልቦና ህክምና • የወደዱት ወይም ጠንካራ ጎኑ ምን ነበር? • ያልወደዱት ወይም ደካማ ጎኑ ምን ነበር?
7	ወደ ፊት ይህንን የስነልቦና ህክምና ለማሻሻልና ለመቀጠል እንዲረዳን • ለወደፊቱ መሻሻል አለበት /ቢስተካከል ጥሩ ነው የሚሉት ነገር ምንድን ነው? • ከተማሩት ውጪ ሌላ ቢጨመር ጥሩ ነው የሚሉት ትምህርት አለ?
8	የእርሶ ጓደኛ ፣ ቤተሰብ፣ ወይም በህብረተሰቡ ውስጥ ያለ አንድ ሰው ተመሳሳይ እርዳታ ቢያስፈልገው፣ ስለዚህ ህክምና ምን ይመክራሉ? • እርሶ ወደፊት እንደገና እርዳታ ቢያስፈልጎ፣ ወደ እዚህ መጥተው ይህንን የስነ-ልቦና ህክምና ይወስዳሉ?

Appendix-H: Topic guide on feasibility test for intervention providers (PHC workers)

English version	
1	**Training related questions** How was the training process (duration, method, the participation of trainees)? Probe • How was the adequacy of time to understand and give the intervention? • Which part of the training you feel was sufficiently interactive? Which session needs more practical sessions? • Which part of the training session you feel was NOT sufficiently interactive and describe why you feel that way. • Would you please tell me why you feel that way? Can you give me an example? • Which part of the training was easy to understand? • And which one was difficult? Why? • How does the intervention need to be improved to make it easy and understandable for the future?

2	As you involved in the training and in the pilot test, • Which part of the training session do you feel had quality content and appropriate to your needs/ patients' need? (clear, relevant, easy to deliver and understandable by participants) • If you were given the task of revising the intervention manual or the training approach, what would you change? Why? • What was your favorite part or the strengths of the training? • What was your least favorite part or the weakness of the training? • Which part of the training session do you feel **had POOR quality content**? What was missing in the content that you would like to see when the intervention manual revised? • Any other suggestion or comments do you have to help us improve future training? • As a PHCWs and intervention provider, what additional assistance would you need to implement what you learned during these training?

3	**Intervention manual and intervention provider leaflet related questions**
	
	How do you feel about / see the intervention manual?
	Probe-
	• Quality of the manual in terms of preparation, color, font, clarity instruction
	• Clarity of content in the manuals
	• What do you like from manual preparation most? Why?
	• What do you dislike / or felt less important from the manual preparation?
	• How was the intervention provider leaflet? Probe
	    • Preparation, color, font, clarity instruction)
	    • quality and usefulness for facilitating the sessions:
	    • Clarity of content in the manuals
	• What do you like from leaflet and recorder audio most? Why?
	• What do you dislike / or felt less important from the provider leaflet? Why?
	• What do you recommend to improve the intervention manual? What about the leaflet?

4	**Intervention provision related questions**
	▪ How was the intervention provision (duration, method)?
	▪ Probe
	    • How was the adequacy of time to provide the intervention for PBD /Caregiver?
	    • If, the time is inadequate, which session takes more time
	    • What do you recommend to finish the content (increase the number of sessions, duration of sessions, decrease the content)?
	    • Which was easy to deliver? Why?
	    • Which was difficult to deliver? Why?

	• What do you recommend to make it easy and understandable? • Any other suggestion or comments do you have to help us improve future intervention provision?
5	**Service users related questions** From user observation during pilot test, • For service users. which sessions was easy to understand and sufficiently interactive? Why? • For service users. which sessions was difficult to understand and not sufficiently interactive? Why? • What do you suggest to make it easier and more understandable in the future?
Amharic version	
1	**ከስልጠናው ጋር የተያያዙ ጥያቄዎች** • ህክምናውን ለማስረዳት እና ለመስጠት ስልጠናው የተሰጠው ጊዜ ምን ያህል በቂ ነበር? • በስልጠና ወቅት • በደንብ የተብራራው እና የተወያያችሁበት ክፍለ ጊዜ የትኛው ነበር? • የትኛው የስልጠናው ክፍል ነበር በበቂ ሁኔታ አሳታፊ ያልነበረው? ለምን መደንብ አሳታፊ ያልሆነ ይመስልሀል? • የትኛው ክፍል ተጨማሪ የልምምድ ጊዜ የሚፈልግ ይመስልሀል? • የትኛው የስልጠናው ክፍል ለመረዳት ቀላል ነበር? • ለመረዳት ከባድ የነበረውስ የትኛው የስልጠና ክፍለ-ጊዜ ነበር? ለምን? • ለወደፊቱ የበለጠ ቀላል ለማድረግ እና ለመረዳት የሚያስችል እንዲሆን ህክምናው እንዴት ቢሻሻል ጥሩ ይመስልሀል / እንዴት መሻሻል አለበት?
2	**በስልጠናው ወቅት እና ህክምናውን በሚሰጡበት ጊዜ** • የትኛው የስልጠናው ክፍል ነበር ለእርሶ ወይም ለታካሚው ተገቢ /አስፈላጊ የሆነ ይዘት ነበረው? • አላስፈላጊ ነው / ብዙም አያስፈልግም የሚሉት አለ? ለምን? • እርሶ የህክምና መመሪያውን የመከለስ ሀላፊነት ቢሰጥዎት የትኛውን ክፍል / የአሰጣት መንገድ ይቀይሩት ነበር? ለምን? • እርሶ የወደዱት ወይም የስልጠናው ጠንካራ ክፍል ምን ነበር? • እርሶ ያልወደዱት ወይም የስልጠናው ደካማ ክፍል ምን ነበር? • ለወደፊቱ ስልጠና እንዲስተካከል ሌላ አስያየት ካሎት? • የህክምና መመሪያው ሲሻሻል ማየት የሚፈልጉት የጎደለ/ያልተሟላ ይዘት የትኛው ነው? ቢጨመር የሚሉት ነገር አለ? ለምን? • እንደ ህክምና ሰጪ ወይም የጤና ባሙያ በእነዚህ ስልጠናዎች ወቅት የተማሩትን ለመተግበር ምን አይነት እገዛ ያስፈልጎታል?
3	**አሁን ደግሞ የህክምናውን መመሪያ የተመለከተ አንዳንድ ጥያቄዎች እጠይቆታለሁ** **የህክምና መመሪያውን እንዴት አገኙት?** አውጫጭ፡ • የመመሪያው ጥራት ፣ አዘገጃጀት፣ ቀለም፣ አፃፃፍ፣ የመመሪያዎች ግልፅነት • የመመሪያው ይዘቶች ግልፅነት

	• የወደዱት ምንድን ነው? ለምን? • ያልወደዱት ወይም አስፈላጊ ሆኖ ያልተሰማዎት ምንድን ነው? • የህክምናው ሂደት ለማሳለጥ / ይረዳል ተብሎ ለእናንተ የተዘጋጀው በራሪ ወረቀት እንዴት ነበር? • ጥራት ፣ አዘገጃጀት፣ ቀለም፣ አፃፃፍ፣ የመመሪያዎች ግልፅነት, ምስሎቹ • ይዘቶች ግልፅነት • ስለ በራሪ ወረቀቱ የወደዱት ምንድን ነው? ለምን? • ብዙም ያልወደዱት ምኑን ነው ወይም ብዙም ጠቃሚ አይደለም የሚሉት ምንድን ነው? ለምን? • እንዲሻሻል የሚመክሩት ነግር ካለ?
	አሁን ደግሞ ከህክምና አሰጣጡ የተመለከተ አንዳንድ ጥያቄዎች እጠይቆታለሁ የህክምና አሰጣጡ እንዴት ነበር? • ህክምናውን ለመስጠት የነበረው ጊዜ ምን ያህል በቂ ነበር? • ሰአቱ በቂ ካልሆነ የትኛው ክፍለ ጊዜ የበለጠ ጊዜ ይወስዳል • ይዘቱን ለመጨረስ እንዲችሉ ምን ይመክራሉ (የክፍለ ጊዜውን ቁጥር መጨመር፣ ክፍለ ጊዜው የሚወስደውን ጊዜ መጨመር፣ ይዘቱን መቀነስ • የትኛው የስልጠናው ክፍል ለመስጠት / ተሳታፊዎች ለማስረዳት ቀላል ነበር? • ለመስጠት / ለተሳታፊዎች ለማስረዳት ከባድ የነበረውስ የትኛው የስልጠና ክፍለ-ጊዜ ነበር? ለምን? • ለወደፊቱ የበለጠ ቀላል ለማድረግ እና ለማስረዳት የሚያስችል እንዲሆን ህክምናው እንዴት ቢሻሻል ጥሩ ይመስልሀል / እንዴት መሻሻል አለበት?
	የህክምናውን በሚሰጡበት ጊዜ ከተሳታፊዎች የተመለከቱት • ተሳታፊዎች ለማስረዳት ቀለል የሚላቸው እና በደንብ የሚሳተፉበት ክፍለ-ጊዜ የትኛው ነበር? • ተሳታፊዎች ለማስረዳት ከባድ የሚሆንባቸው እና በደንብ የማይሳተፉበት ክፍለ-ጊዜ የትኛው ነበር? • ለምን? • ለወደፊቱ ለተሳታፊዎች የበለጠ ቀላል ለማድረግ እንዲሆን እንዴት ቢሻሻል ጥሩ ይመስልሀል / እንዴት መሻሻል አለበት?

Appendix-I: Intervention fidelity assessment checklist

Psychosocial intervention Fidelity Scale
Date___________________________
Name of assessor = _____________________
Signature: ________________________

Please record each rating next to the item.
Overall Session Quality is calculated as an average of all other 1-5 rating scores.

Items that need to be assessed for all sessions.

No.	Items	Score
1	Explained aim of the session	
2	Start the session with a general question related to the topic	
3	Uses time efficiently to meet session goals	

1. **Items that need to be assessed for all sessions.**

No.	Items	Assessor
Session one: Need assessment and Goal setting		
1	Done need assessment	
2	Set the goal in discussion with the participants	
Session two: Awareness about Bipolar Disorder		
1	Described bipolar disorder and the sign and symptoms of BD	
2	Described how to recognize early sign and symptoms of BD	
3	Discussed about how to identify influencing factors ion with participants on	
Session three: Treatment		
1	Described the treatment of the bipolar disorder	
2	Described the side-effect of medication	
3	Define treatment adherence	
4	Identify /understand the reasons for non-adherence from the people with BD and their caregivers	
Session four: Promoting Wellbeing of People with Bipolar Disorder:		
1	Discussed sleep problems and sleep hygiene techniques	
2	Define about stressful situations and effect on illness	
3	Discussed techniques used to manage interpersonal problems	
Session 5: Anxiety management and substance use prevention		
1	Discuss on coping mechanisms/anxiety management	
2	Describe about the importance relapse prevention action plan & its components?	

Appendix-J: Intervention providers' knowledge and skill assessment checklist

Please review the following list of knowledge and skills statements. Give some thought to what you know by putting an X in the number that best represents your knowledge and skills

RATING SCALE:

1 = Very poor 2=Poor 3 = Fair 4 = Good 5=Excellent

	SELF-ASSESSMENT OF KNOWLEDGE AND SKILLS RELATED TO	**1**	**2**	**3**	**4**	**5**
Three items about symptoms of depression and mania	Knowledge about the sign and symptoms of bipolar disorder					
	Knowledge about the early warning signs of relapse					
	Knowledge about the cause and influencing factors BD					
	Able to teach PBD and their caregivers about the sign and symptoms of bipolar disorder					
	Able to teach PBD and their caregivers about the early warning signs of relapse					
	Able to teach PBD and their caregivers about the cause and influencing factors BD					
Three items about treatment of BD	Knowledge about treatment options					
	Understand about medication side-effect					
	Knowledge about importance of early treatment and adherence					
	Having a skill to teach PBD and their caregivers about medication side-effect					
	Having a skill to teach PBD and their caregivers about medication adherence					
	Having a skill to teach PBD and their caregivers about the importance of early treatment					
Promoting wellness	Knowledge about techniques used to promote people with BD's wellbeing					
	Having a skill to teach about techniques used to promote people with BD's wellbeing					
Anxiety management	Knowledge about action plan to prevent relapse and improve early treatment					
	Skill on how to prepare and teach action plan to prevent relapse and improve early treatment					

Appendix-K: Patient Health Questionnaire-9 (PHQ-9)

Over the past two weeks, how often have you been bothered by any of the following problem?		Not at all	Several days	More than half the days	Nearly every day	Answer
1.	Little interest or pleasure in doing things	0	1	2	3	[ ]
2.	Feeling down, depressed or hopeless	0	1	2	3	[ ]
3.	Trouble falling asleep, staying asleep, or sleeping too much	0	1	2	3	[ ]
4.	Feeling tired or having little energy	0	1	2	3	[ ]
5.	Poor appetite or overeating	0	1	2	3	[ ]
6.	Feeling bad about yourself or that you are failure or have let yourself or your family down	0	1	2	3	[ ]
7.	Trouble concentration on things, such as reading Newspapers or watching television	0	1	2	3	[ ]
8.	Moving or speaking so slowly that other people could have noticed or the opposite being so fidgety or restless that you have been moving around a lot more than usual.	0	1	2	3	[ ]
9.	Thought that you would be better off dead or of hurting yourself in some way.	0	1	2	3	[ ]

Appendix-L: Young Mania Rating Scale (YMRS)

1.	Elevated Mood	0 = Absent
		1 = Mildly or possibly increased on questioning
		2 = Definite subjective elevation; optimistic, self-confident; cheerful; appropriate to content
		3 = Elevated; inappropriate to content; humorous
		4 = Euphoric; inappropriate laughter; singing
2.	Increased Motor Activity-Energy	0 = Absent
		1 = Subjectively increased
		2 = Animated; gestures increased
		3 = Excessive energy; hyperactive at times; restless (can be calmed)
		4 = Motor excitement; continuous hyperactivity (cannot be calmed)
3.	Sexual Interest	0 = Normal; not increased
		1 = Mildly or possibly increased
		2 = Definite subjective increase on questioning
		3 = Spontaneous sexual content; elaborates on sexual matters; hypersexual by self-report
		4 = Overt sexual acts (toward patients, staff, or interviewer)
4.	Sleep	0 = Reports no decrease in sleep
		1 = Sleeping less than normal amount by up to one hour
		2 = Sleeping less than normal by more than one hour
		3 = Reports decreased need for sleep
		4 = Denies need for sleep
5.	Irritability	0 = Absent
		2 = Subjectively increased
		4 = Irritable at times during interview; recent episodes of anger or annoyance on ward
		6 = Frequently irritable during interview; short, curt throughout
		8 = Hostile, uncooperative; interview impossible
6.	Speech (Rate and Amount)	0 = No increase
		2 = Feels talkative
		4 = Increased rate or amount at times, verbose at times
		6 = Push; consistently increased rate and amount; difficult to interrupt
		8 = Pressured; uninterruptible, continuous speech
7.	Language-Thought Disorder	0 = Absent
		1 = Circumstantial; mild distractibility; quick thoughts
		2 = Distractible, loses goal of thought; changes topics frequently; racing thoughts
		3 = Flight of ideas; tangentiality; difficult to follow; rhyming, echolalia
		4 = Incoherent; communication impossible
8.	Content	0 = Normal
		2 = Questionable plans, new interests

		4 = Special project(s); hyper-religious
		6 = Grandiose or paranoid ideas; ideas of reference
		8 = Delusions; hallucinations
9.	Disruptive-Aggressive Behavior	0 = Absent, cooperative
		2 = Sarcastic; loud at times, guarded
		4 = Demanding; threats on ward
		6 = Threatens interviewer; shouting; interview difficult
		8 Assaultive; destructive; interview impossible
10.	Appearance	0 = Appropriate dress and grooming
		1 = overdressed
		2 = Poorly groomed; moderately disheveled; Minimally unkempt
		3 = Disheveled; partly clothed; garish make-up
		4 = Completely unkempt; decorated; bizarre garb
11.	Insight	0 = Present; admits illness; agrees with need for treatment
		1 = Possibly ill
		2 = Admits behavior change, but denies illness
		3 = Admits possible change in behavior, but denies illness
		4 = Denies any behavior change

Appendix-M: Information sheet for qualitative study [English version]

IRB Reference Number: 043/17/Psy).

Psychosocial intervention for bipolar disorder in integrated care setting in rural Ethiopia

We would like to invite you to participate in this original post graduate research project. You should only participate if you want; choosing not to participate will not disadvantage you in any way and not connected to your current treatment.

Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information.
This study is being conducted as a PhD requirement in mental health epidemiology given by the Department of Psychiatry, Addis Ababa University.

Aims of the research; this study is to develop psychosocial intervention for bipolar disorder.

Who are we recruiting? A person with bipolar disorder and their care givers who uses mental health care service in primary health care settings in Sodo and Butajira district.

What will happen if you agree to take part? You will be asked few questions in one to one interview about your own understanding and experience of psychosocial risk factors for relapse, coping mechanism and self-care strategy. The interview will be undertaken in this health facility or another place that is convenient for you. The interview may take 45-60 minute. If you are willing, for the purpose of listening and understanding the situation well, the interview will be audio-recorded.

Risks of being in the study

We don't expect any sort of risks associated with this study. In case if you are not comfortable to answer some of the questions you are not obliged to answer all. If you are distressed during the interview, it can be stopped.

Possible benefits: we hope that the information obtained will help to understand the psychosocial risk factors, coping mechanism and self-care strategies of peoples with bipolar disorders. After the completion of the study, the findings will be shared with you, either by inviting you on the meeting or giving you a leaflet,

What we will do with your data

In you participated in the interview, we will make sure that the tapes or the notes do not include your name or identifying information. It will be kept in a locked cupboard. Once the interview tapes have been written down, and the data has been analyzed, the tapes will be cleared. Nobody except the principal researcher will know that the information belongs to you. After the end of this study, the information you tell us may be used by other researchers, but they will not be able to identify you in any way.

Main researchers:

Mekdes Demissie under primary supervision of Dr. Abebaw Fekadu. Dr. Charlotte Hanlon Dr. and Dr. Roise Mayston.

You can contact us at the PRIME project office on telephone Number .... from

It is up to you to decide whether to take a part or not. If you decide to participate, you are free to withdraw at any time without giving a reason.

If this study has harmed you in any way, you can contact the Institutional Review Board, Addis Ababa University, using the details below for further advice and information:

- Institutional Review Board, School of Medicine, Addis Ababa University Telephone number: 0115-5538734 and Mekdes Demissie +2519-13205130

Appendix-M: Information sheet for qualitative study [Amharic version]

የጥናቱ ተሳታፊዎች የመረጃ ቅፅ

IRB Reference Number: 043/17/Psy).

"የስነ-ልቦና እና ማህበራዊ ህክምና አገልግሎት ለመስጠት የሚያስችል መመሪያ ማዘጋጀት"

በዚህ በአይነቱ የመጀመሪያ በሆነ የጥናትና ምርምር ፕሮጀክት እንዲሳተፉ በትህትና እንጋብዝዎታለን፡፡ በጥናቱ ለመሳተፍ መወሰን ያለብዎት ለመሳተፍ ከፈለጉ ብቻ ነው፡፡ ላለመሳተፍ በመወሰንዎ በማንኛውም መልኩ የሚደርስብዎት ጉዳት ወይም የሚያጡት ጥቅም አይኖርም (አሁን እየወሰዱ ካለት ህክምና ጋር ምንም አይነት ግንኙነት የለዉም)፡፡

በጥናቱ ለመሳተፍ ከመወሰንዎ በፊት ጥናቱ ለምን እንደሚካሄዴና የእርስዎ ተሳትፎ ምን እንደሆነ መገንዘብዎ አስፈሊጊ ነው። እባክዎ ትንሽ ጊዜ ይወስዱና የሚከተለውን መረጃ በጥንቃቄ ያንብቡ፡፡ ግልፅ ያልሆነለዎት ነገር ካለ ወይም ተጨማሪ መረጃ ከፈለጉ ይጠይቁን፡፡ ይህ ጥናት በአዲስ አበባ ዩኒቨርስቲ በአእምሮ ህክምና ትምህርት ክፍለ ለአዕምሮ ጤና ኤፒዲሞልጂ የዶክትሪት ዲግሪ ማሙያ የሚካሄዴ ነው፡፡

የጥናቱ አላማ

የዚህ ጥናት ዋና አላማ የሸቅለት ሕመምተኞች የስነ ልቡና እና ማህበራዊ ህክምና አገልግሎት መስጫ መመሪያ ማዘጋጀት ነው፡፡

በጥናቱ የሚሳተፉ እነማን ናቸው?

በሶዶ ወረዳ በሚገኙ ጤና ጣቢያዎች ህክምና በመከታተል ላይ የሚገኙ የሸቅለት ሕመምተኞችና ቤተሰቦቻቸው በዚህ ጥናት እንዲሳተፉ የሚመረጡ ይሆናል፡፡

በዚህ ጥናት ለመሳተፍ ከተስማሙ ምን ይጠበቅብዎታል?

ጠለቅ ያለ ቃለ-መጠይቅ

አንደ ለአንዴ በሆነ ቃለ-መጠይቅ የተወሰኑ ህመምዎን ሊቀሰቅሱ፣ ሉያባብሱ ወይም በተቃራኒው ሊከላከሉ እና ቶል እንዲያገግሙ የሚያደርጉ ስነልቡናዊ እና ማህበራዊ ጉዳዮች እንዲያስረዱን ይጠየቃሉ፡፡ ቃለ-መጠይቁ በዚህ ጤና ጣቢያ የሚካሄዴ ይሆናል፡፡ ቃለ-መጠይቁ ከአንድ 45 ደቂቃ እስከ አንድ ሰዓት ያህል የሚቆይ ይሆናል፡፡ በእርስዎ ሙሉ ፈቃደኝነት በድጋሚ እያዳመጥን በደንብ መረዳት ያስችለን ዘንድ ቃለ-መጠይቁን በቴፕ ሪከርደር የምንቀርፅ ይሆናል፡፡

በጥናቱ በመሳተፍዎ የሚደርስብዎ ጉዳት: ውይይቱ ማንኛውም አይነት ችግር ያደርስብዎታል ብለን አናስብም፡፡ ምናልባት በጣም አልፎ አልፎ ሰዎች በሚጠየቁት ጥያቄዎች ቅር ሊሰኙ ይችላሉ፡፡ ምናልባት ከጥያቄዎቹ መካከል አንዳንድ ጥያቄዎች የማይመችዎት ከሆኑ ሁሉንም ጥያቄዎች አለመመለስ (መልስ አለመስጠት) ይችላሉ ወይም ዑግሞ በማንኛውም ጊዜ ጥያቄዎቹ የማይመችዎት ከሆኑ ሊቆም ይችላሉ።

ሊገኙ የሚችሉ ጠቀሜታዎች: በዚህ ቃለ-መጠይቅ የሚገኘው መረጃ ሽቅለት ህመም ያለባቸው ሰዎች ህመማቸውን ሊቀሰቅሱ፣ ሉያባብሱ ወይም በተቃራኒው ሊከላከሉ እና ቶል እንዲያገግሙ የሚያደርጉ ስነ-ልቦናዊ እና ማህበራዊ ጉዳዮችን፣ ሕመምተኞች ያለባቸውን ስነ-ልቦናዊ እና ማህበራዊ ጫናዎችን ለመቐቐም የሚውስደዋቸው እርምጃዎችን እና የራሳቸውን ጤንነት እንድት እንደሚንከባከቡ ለመረዳት ያስችላል፡፡ በአጠቃላይ ጥናቱ ከተጠናቀቀ በኋላ በጥናቱ የተደረሰባቸውን ግኝቶች በስብሰባ ወይም ደግሞ በበራሪ ወረቀት የምናሳውቅ ይሆናል፡፡

የሚሰጡት መረጃ እንድት ይያዛል?

በጥናቱ የሚሳተፉ ከሆነ በቴፐ ሪከርደር በሚቀርፅ ቃለ-መጠይቅ ስምዎትን ወይም ማንነትዎን ሊገልፅ የሚችል መረጃ እንደማንቀርፅ እናረጋግጥልዎታለን፡፡ ማስታወሻ ብቻ የሚወሰድ ከሆነ ደግሞ ማስታወሻው ውስጥ ስምዎት ወይም ማንነትዎን ሊገልፅ የሚችሉ መረጃ እንዲይሰፍር እናደርጋለን፡፡ ማስታወሻዎችና የተቀረፁ የቴፐ ካሴቶች ሳጥን ውስጥ የሚቆልፍባቸው ይሆናል፡፡ የተቀረፁ ካሴቶች ወደ ጽሁፍ ከተገለበጡና መረጃው ከተቀናበረ በኋሊ ካሴቶች እንዲወገዱ ይደረጋል፡፡ ከዋና ጥናት አድራጊው በስተቀር መረጃው የእርስዎ መሆኑን ማንም እንዲያውቅ አይደረግም፡፡ መጠይቆቹን በተቆለፈ ሳጥን ውስጥ የምናስቀምጣቸው ይሆናል፡፡ የሰጡን መረጃ ይህ ጥናት ከተጠናቀቀ በኋላ ልሎች ተመራማሪዎች ሊጠቀሙበት ይችላልሉ ነገር ግን በምንም መንገድ የእርስዎን ማንነት ሉያውቁ አይሉም፡፡

ዋና ተመራማሪዎች

መቅደስ ደምሴ ፣ በዶ/ር አበባው ፍቃዱ፣ በዶ/ር ሻርሎቴ ሀንለን፣ በዶ/ር ሎረን እና በዶ/ር ሮዚ አማካሪነት

በስልክ ቁጥር .... በስራ ሰዓት ከ...... እስከ ....ከተማ በሚገኘው የፕሮጀክት ጽ/ቤታችን ሊያገኙን ይችሊሉ፡፡

በዚህ ጥናት ለመሳተፍ ወይም ላለመሳተፍ ሙሉ በሙሉ የእርስዎ ውሳኔ ነው፡፡ ለመሳተፍ ከወሰኑ በማንኛውም ጊዜ ምንም አይነት ምክንያት መስጠት ሳያስፈልግዎ ተሳትፎዎን ማቋረጥ ይችላሉ፡፡ይህ ጥናት በማንኛውም መልኩ ጉዳት ካደረሰብዎ የአዱስ አበባ ዩኒቨርስቲን ተቋማዊ ግምገማ ቦርዴ ለተጨማሪ መረጃና ምክር በሚከተለው አድራሻ ማግኘት ይችላሉ፡፡

ተቋማዊ ግምገማ ቦርድ፤ የሕክምና ት/ቤት፤ አዱስ አበባ ዩኒቨርሲቲ ስልክ ቁጥር 0115 53 87 ወይም መቅደስ ደምሴ +2519-13 20 51 30

Appendix-N: Patients consent form [English version]

Please complete this form after you have read the information Sheet and/or listened to an explanation about the research.

Title of the research

"Psychosocial intervention for bipolar disorder in integrated care setting in rural Ethiopia"

Addis Ababa University Research Ethics Committee Ref: 043/07/Psy

Thank you for considering taking part in this research. The person organizing the research must explain the project to you before you agree to take parts. If you have any question arising from the information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this consent form o keep and refer to at any time.

I understand that if I decide at any time during the research that I no longer wish to participate in this project, I can notify the researchers involved and withdraw from it immediately without giving any reason. Furthermore, I understand that I will be able to withdraw my data up until they are published.

I consent to the processing of my personal information for the purposes explained to me. I understand that such information will be handled in accordance with the terms of the national data protection rules.

If I am interviewed, I consent to that interview being audio-taped. The information you have submitted will be published as a report. Please note that confidentiality and anonymity will be maintained and it will not be possible to identify you from any publications.

I agree that the research team may use anonymized data for future research.

Participant's Statement:

I ____ agree that the research project named above has been explained to me to my satisfaction and I agree to take part in the study. I have read both the notes written above and the Information Sheet about the project, and understand what the research study involves.

Signed___________________________________Date______________________

Witness Statement (in event that participant is not literate):

I____agree that the research project named above has been explained to __________________ (participant) to her satisfaction and that she agrees to take part in the study. Both the notes written above and the Information Sheet about the project have been read to her, and she understands what the research study involves.

Signed________________________________ **Date**_________________________

Investigator's Statement:

I ____ confirm that I have carefully explained the nature, demands and any foreseeable risks (where applicable) of the proposed research to the participant.

Signed_________________________________ **Date**__________________________

Appendix-N: Patients consent form [Amharic version]

የጥናትና ምርምር ተሳታፊዎች ወይም የተጠያቂዎች የፈቃደኝነት መጠየቂያ ቅጽ

የመረጃ ቅፁን በጥሞና ካነበቡ ወይም ስለ ጥናቱ የተሰጠውን መግለጫ ከሰሙ በኋላ እባክዎ ይህንን ቅፅ ይሙሉ፡፡

የጥናቱ ርዕስ

"የስሜት መቃያየር ሕመም ያለው ህመምተኞች ህመማቸውን ሊቀሰቅሱ፣ ሊያባብሱ ወይም በተቃራኒው ሊከላከሉ እና ቶሎ እንዲያገግሙ የሚያደሩጉ ስነ-ልቡናዊ እና ማህበራዊ ጉዳዮችን፣ ህመምተኞች ያሉባቸውን ስነ-ልቡናዊ እና ማህበራዊ ጫናዎችን ለመቐቐም የሚውስዱዋቸው እርምጋዎች እና እራሳቸውን የሚንከባከቡባቸው መንገዶች"

የአዲስ አበባ ዩኒቨርሲቲ የጥናትና ምርምር ስነ-ምግባር ኮሚቴ ቁጥር……

በዚህ ጥናት ለመሳተፍ በማሰብዎ በቅድሚያ እናመሰግናለን፡፡ በጥናቱ ለመሳተፍ ከመወሰንዎ በፊት ጥናቱን የሚያስተባብረው ግለሰብ ስለ ጥናቱ ገለፃ ማድረግ አለበት፡፡ የመረጃ ቅጹን በተመለከተም ሆነ በተሰጠዎ መግለጫ ጥያቄ ካለዎት ወደ ጥናቱ ከመግባትዎ በፊት ጥናት አድራጊውን ግለሰብ ይጠይቁ፡፡

የዚህ የፈቃደኝነት መጠየቂያ ቅፅ እርስዎ ዘንድ እንዲቀመጥና አስፈላጊ ሆኖ በተገኘ ጊዜ እንዲያዩት አንድ ኮፒ ይሰጥዎታል፡፡

ምርምሩ በሚካሄድበት በማንኛውም ወቅት ተሳትፎዬን ማቋረጥ ከፈለኩ ወይም የልጄ ተሳትፎ እንዲቋረጥ ከፈለጉ ውሳኔዬን ለተመራማሪዎቹ በመናገር እና ምንም ምክንያት ማቅረብ ሳይኖርብኝ ከተሳትፎ የመውጣት ወይም ልጄ ከተሳትፎው/ዋ እንዲወጣ/ድትወጣ መወሰን እንደምችል ተረድቼአለሁ፡፡ በተጨማሪም የምሰጠው መረጃ ወደ ሕትመት እስካልገባ ድረስ የሰጠውትን መረጃ ማንሳት እንደምችል ተረድቻለሁ፡፡

- የግል መረጃዬ ለተገለፀልኝ አላማ እንዲጠናቀር ሙሉ ፈቃደኝነቴን ሰጥቻለሁ፡፡ ይህ መረጃ በብሔራዊ የመረጃ አጠባበቅ ሕጎች መሰረት እንደሚያዝ ተረድቻለሁ፡፡
- ጠለቅ ባለ መልኩ ቃለ-መጠይቅ እንዲደረግልኝ የምመረጥ ከሆነ ቃለ-መጠይቁ በቴፕ ሪከርደር እንዲቀረፅ ፈቃደኝነቴን ሰጥቻለሁ፡፡
- የሰጡት መረጃ በሪፖርት መልክ የሚታተም ይሆናል፡፡ መረጃው በሚስጥር የሚያዝና መረጃው የእርስዎ መሆኑን ማንም እንዳያውቅ እንደሚደረግ እንዲሁም በሕትመቱ እርስዎን ማንም ሊያውቅዎ እንደማይችል ልብ ይበሉ፡፡
- የጥናት ቡድኑ የሰጠውትን መረጃ ማንነቴን ሳያጋልጥ እና ሚስጥርነቱን እንደተጠበቀ ወደፊት በሚደረግ ጥናትና ምርምር እንዲጠቀምበት ተስማምቻለሁ፡፡

የተሳታፊው/ዋ ቃል

እኔ____ከላይ የተጠቀሰው የጥናትና ምርምር ፕሮጀክት ለእኔ ባረካኝ መጠን የተገለፀልኝ መሆኑን ተስማምቻለሁ እንዲሁም በጥናቱ ለመሳተፍ ተስማምቻለሁ፡፡ ከላይ የሰፈሩትን ስለ ፕሮጀክቱ የተሰጡትን ማሳሰቢያዎች እና የመረጃ ቅፅ አንብቤያለሁ እንዲሁም ጥናትና ምርምሩ ምን እንደሚይዝ (እንደሚያጠቃልል) ተረድቼአለሁ፡፡

ፊርማ_________________ ቀን__________________________

የምስክርነት ቃል (ተሳታፊው/ዋ ማንበብና መፃፍ የማይችሉ ከሆነ)

እኔ____ከላይ የተጠቀሰው የጥናትና ምርምር ፕሮጀክት ለ______________ ለእርሳቸው ባረካቸው መጠን የተገለፀላቸው መሆኑን ተስማምቻለሁ እንዲሁም በጥናቱ ለመሳተፍ ተስማምተዋል፡፡ ከላይ የሰፈሩት ስለ ፕሮጀክቱ የተሰጡት ማሳሰቢያዎች እና የመረጃ ቅፅ የተነበበላቸው ሲሆን ጥናትና ምርምሩ ምን እንደሚይዝ (እንደሚያጠቃልል) ተረድተዋል፡፡

ፊርማ_________________ ቀን__________________________

የተመራማሪው ቃል

እኔ____የታቀደውን ጥናትና ምርምር ባህሪ፣ ጥናትና ምርምሩ የሚጠይቀውን ነገር እና አስፈላጊ ሆኖ ሲገኝ ማንኛውም ሊከሰቱ የሚችሉ አደጋዎችን ለጥናቱ ተሳታፊ በጥንቃቄ ማብራራቴን አረጋግጣለሁ፡፡

ፊርማ_________________ ቀን__________________________

Appendix P: Psychological intervention for people with bipolar disorder [English version]

Psychological Intervention for Bipolar Disorder Ethiopia

A manual for primary health care use

Prepared by: Mekdes Demissie, Dr. Abebaw Fekadu and Dr. Charlotte Hanlon

Addis Ababa University

College of Health Sciences

Department of Psychiatry

January 1, 2020

Addis Ababa, Ethiopia

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ABBREVIATIONS AND ACRONYMS

Bipolar disorder…………………………...............	BD
Cognitive Behavioral Therapy ……………........	CBT
Mindfulness-Based Cognitive Therapy ………	MBCT
Mental health Gap Action Program…….	mhGAP
Psychoeducation ……………………..............	PE
Psychosocial intervention ……………..........	PI

UNIT ONE: INTRODUCTION TO THE MANUAL

1.1 Background

Bipolar disorder (BD) is a severe mental illness which has a recurrent or relapsing course. Bipolar disorder can lead to substantial functional and social impairment, as well as an economic burden on the person and their family. In common with people who have other chronic disease, people with bipolar disorder may find it difficult to adhere to treatment and lifestyle recommendations, which in turn leads to worse outcomes.

Psychosocial interventions for bipolar disorders are any non-pharmacological interventions for people with BD and caregivers. In this context, psychosocial interventions seek to do the following: provide education about the disorder, the causes and factors affecting relapse; motivate constructive engagement with treatment and equip the person with strategies on how to manage stressful life events and to prevent or delay relapse; and improve the quality of life of people with BD and their families.

1.2 What is the rationale for the psychosocial interventions and for the training manual?

Medication is the mainstay of the treatment of bipolar disorder; however, many people with BD experience relapse despite taking medication. Studies have shown that adding on a psychosocial intervention to medication treatment improves the clinical and functional outcomes better than medication alone.

In a study from Ethiopia, people with bipolar disorder were found to have a poor clinical and functional outcome. In part, this may be related to the lack of availability and affordability of mood-stabilizer medications. Also, people with BD and their caregivers identified social, economic, cultural and spiritual factors, substance use, and treatment-related factors (e.g., non-adherence to medication) as important factors affecting relapse. The need for interventions to improve treatment adherence, reduce stigma, and help people to regain confidence were identified.

In the World Health Organization ***mental health Gap Action Programme (WHO mhGAP) intervention guideline***, it is recommended that psychoeducation and basic psychosocial interventions should be given for all people with bipolar disorders, regardless of where they live in the world. The Federal Ministry of Health of Ethiopia is implementing the WHO programme (mhGAP) as part of the National Mental Health Strategy. The Strategy and the Health Sector Transformation plan both aim to make mental health care more accessible to all Ethiopians by training primary healthcare workers to delivery critical components of care in health centers and primary hospitals. This includes medication and psychosocial care for people with BD. However, there are no trainings for primary care providers on psychosocial interventions or their delivery. There are also no manuals to support training. This training manual was developed to equip

primary healthcare workers to deliver brief psychosocial interventions for people with BD, so that they can have better outcomes and quality of life.

1.3 Aim of Psychosocial Intervention

The aim of psychosocial intervention described in this manual is to improve the lives of people with bipolar disorder and their caregivers.

1.4 Development process of the manual

This draft manual was developed as part of a Ph.D. project of a candidate based at AAU (MD). The manual development was informed by a systematic review of psychological interventions for bipolar disorder that has been tested in other low- and middle-income countries (LMICs) [1], and qualitative studies and participatory 'Theory of Change' workshops conducted among people with bipolar disorder and caregivers to understand the influencing factors and what they need. Further workshops with primary health care workers, Woreda health office officials, community leaders, mental health experts were also carried out.

The review included evaluation of several intervention manuals and used the following manuals as a reference to prepare this intervention manual: Clinicians Treatment Manual: For Family-Focused Therapy for Early-Onset Youth and Young Adults (FFT-EOY) [2]; Where There Is No Psychiatrist [3] ; Psychoeducation Manual for Bipolar Disorder[4]; Cognitive Therapy for Bipolar Disorder: A Therapist's Guide to Concepts, Methods, and Practice[5]. These manuals were selected based on an initial review[1] in which the primary studies adapted the intervention from these manuals.

1.5 Who is this manual for?

This manual is for primary health care clinicians who have already taken mhGAP training and are currently treating people with severe mental illness.

1.6 Who are the beneficiaries?

The primary targets for this psychosocial intervention are people with Bipolar disorder and caregivers.

1.7 How is the intervention manual organized?

This training manual has been organized into three sections (initial engagement, treatment and closing or end) with five sessions:

(I) Initial engagement-

Session 1: Needs assessment and goal setting

(II) Treatment:

Session 2: Introduction about bipolar disorder and influencing factors,

Session 3: Pharmacological treatment

Session 4: Promoting wellbeing

Session 5: Anxiety management and relapse prevention plan

(III) Closing:

Each session is intended to last for 20 minutes and to be given every week. We made the intervention five sessions long because a systematic review conducted on psychosocial interventions in LMICs showed that three to 12 sessions are effective in improving the course and outcome of BD. Also, during an expert workshop and Theory of Change (ToC) workshop with the stakeholders, participants suggested that the number of sessions should not be more than six. Additionally, the four sessions interpersonal therapy has been tested in primary health care setting Ethiopia and is feasible and acceptable but, the report is not published

1.8 How is the intervention given?

The intervention will be given to the individual with BD, using an interactive approach. We encourage the career to be involved in the treatment but only with permission from the patient.

1.9 How to use this manual while delivering the intervention?

The manual will be used as a guide to provide the psychosocial intervention. Patients should get adequate information that enables them to gain knowledge about their illness and skills to manage their behavior and other factors and seek professional help. Health workers should stick to these identified specific topics rather than overwhelming patients with lots of information. After reflective discussion and psychoeducation on a specific topic, patients will be sent home with brief fact sheets or information leaflets which emphasizes the key messages.

1.10 Pacing and Flexibility of Sessions

All sessions of this psychosocial intervention can be used for both people with bipolar disorder and their caregivers. Each participant is expected to take all the sessions. However, some participants may need more than one session to cover everything properly, or on the contrary, some may be faster to understand or have knowledge about their illness and treatment so they may need less than five session to cover everything. For example, if the participant does not use substances (alcohol or khat) and does not have a history of substance use, the health worker may not need much time to cover the topic related to substance use. Therefore, health workers need to know the level of the participants to stretch or minimize the number of sessions. If some sessions are not appropriate and not feasible for some participants, it is ok to omit that part.

UNIT TWO: CORE SKILLS

2.1 Communication skills

it is a general skill that used for all your patients with mental disorder. In fact, this is good for everyone with or without mental illness. Different people may need a different approach, and so there is a need for flexibility and tailoring of the way that you interact with people. The core communication skills that are relevant to every clinical encounter involve listening, speaking, observing and empathizing.

2.2 Respect and dignity

- Introduce yourself and explain what you are doing and what is going to happen.
- Explain to the person before you ask questions from family members
- Clearly show that you value them the same as any other person.

2.3 Being warm, encouraging and empathic

To make the person to feel comfortable to speak about their problems

- A bright smile and a friendly attitude
- 'Empathy' is when you put yourself in the person's position and imagine how they must be feeling.

2.4 Not judging the person

Sometimes a person might tell you about something that you do not approve of or something that is against your values. For example, they may tell you about the use of illegal substances or marital infidelity. Do not say "you are wrong" rather try to focus on the difficulty that the person is coming with, for example, suicidal ideas, and recognize that they are coming to you for support and guidance.

2.5 Listening 'actively.'

People will find it hard to talk to you about mental health problems if you are not Listening actively. Thus,

- Take a deep breath before each new person enters your room and prepare yourself to focus on what they are saying.
- Have good eye contact
- Show your attention and interest using some encouraging signals like nodding, saying uhuh
- Don't interrupt them
- Try to understand the problem correctly before you give them advise
- Summarizing the main points of what they have been telling you

2.6 Asking questions in the right way

The way you ask questions will affect what the person tells you thus, avoid leading questions. For example.

- If you say 'You are not suicidal, are you?' then most people will say 'no' even if they are experiencing suicidal thoughts. That is because the way questions are asked suggests that the health worker does not expect the person to be suicidal (or that they don't want to hear about it!).
- It would be better to ask: 'Have things ever got so bad that you thought about ending your life?' (If yes :) 'Tell me about that.'

2.7 Keeping calm

if the participant is angry or hostile try to calm him/her using techniques listed the box bellow

- Use a calm, positive but firm tone of voice.
- Use simple language
- Give the individual extra time to respond and to calm down
- Don't argue with them
- Make the therapy place safe and comforting

2.8 Being observant

Full assessment of mental health problems is relying on our skills in communication and observation. Thus, observe

Observe

- Physical appearance of the person and dressing
- What the person is saying and their emotional state and behavior.
- how the person makes us feel (e.g., frightened)

2.9 Being respectful of religion

People may conceptualize mental health problems in religious terms, for example, like possession by an evil spirit or punishment for sinful behavior. Sometimes, symptoms of mental health problems are spiritual in nature; for instance, if a person with mania claims to be appointed by God to save the world. Thus, respect of the person's religious beliefs but, do not allow them to influence the care you will offer

2.10 Respecting confidentiality

Any information of an individual, or group of individuals, is respected strictly but, if the person is a danger to themselves or to other people, we need to tell this to a responsible body who can help to make sure that appropriate action is taken.

PHCWs, explain what confidentiality mean on the first session and it would be repeated whenever needed

We can explain confidentiality saying

Thank you for coming. Today we will discuss about ...... and any information that we discuss in all sessions will not be shared with any other person against your will. The only rare exception would be if I was worried about your safety or the safety of another person.

2.11 Engaging the person

Effective care for bipolar disorder requires an effort to engage and motivate people with BD and their caregivers to continue with the treatment to derive the maximum benefits.

Some ways to engage the person in care are:

- Good communication skills
- Focusing on the person's priority problems
- Making sure the person understands about their problem and treatment;
- Encouraging patients saying like: 'It is good that you came to the health center and spoke to me about these problems. I am sure that if you continue with the treatment, we discussed you would feel much better soon
- Giving the person a reason to come to the follow-up appointment

2.12 Keeping a professional distance

The relationship between a person with BD and their health care worker depends on trust and respect. Therefore, some clear boundaries which you must not cross while being a health worker for the person.

These include:

1. Accepting gifts
2. Asking the person to carry out work for you without proper remuneration
3. Developing an intimate or romantic relationship
4. Any form of sexual contact.

2.13 other important skills

- Communicating with families when necessary
- Clear and relevant documentation: allow you to easily monitor progress over time, reduce the risks of prescribing mistakes, and communicate your assessment to your colleagues.
- Keeping on learning: Try to keep a note of things that you are not sure about. Then make sure you read about those areas, for instance, by consulting with this manual. In addition, you need to take an active part in regular supervision sessions, at least once a month, with mental health specialist.

2.14 Looking after your own mental health

Just as health workers can suffer colds and infections, they may also suffer mental health problems. Because health workers are human beings themselves, with worries and concerns like any other person and may ignore their own problems while spending most of their time caring for other people. Therefore, it is useful to plan how you might look after yourself when working in a situation which is known to be stressful and get support.

Summary of things to remember about core skills for mental health care

- Knowledge is not enough: good communication is essential for mental health care
- Communication skills can be learned, take time, speak to caregivers and observe carefully
- All people deserve to be treated with dignity and keep their information confidential
- Health workers should also look after their own mental health

UNIT THREE: GETTING STARTED WITH THE PSYCHOSOCIAL INTERVENTION

Session One: Needs assessment and goal setting

The objective of the session: Help the PHCWs

1. To understand the participants needs and expectations
2. To decide which session of the psychosocial intervention important

Table 1: Needs assessment and goal setting

Duration 20 minutes	Learning Objectives:		
	Content	**Method**	**Duration**
	Need assessment	Reflective Discussion	10 minutes
	Goal setting		10 minutes

3.1 What is a Needs Assessment?

The Needs Assessment is an organized way of finding out what challenges each individual and family are facing. In this session, you will evaluate what needs the person has, introduce the therapy and set goals for the therapy.

Why do we do the needs assessment?

1. Helps the health worker to understand what the person with BD and their caregivers want to change in his/her life, or the most important problems they need to solve. This will help the health worker to decide which psychosocial intervention sessions are relevant for this individual person.
2. Help to make the person interested in, and motivated to achieve, goals that they select themselves.
3. Help the individual and caregivers understand that you are interested in their problems. It will help build a trusting relationship.
4. Will be an important baseline against which the health worker can evaluate whether the problems have been addressed by treatment or are still there, and what still needs to be done.

Who is involved in the need's assessment?

The Needs Assessment should always involve the person with BD, caregivers, and the health worker who will give the intervention. Other individuals and family members who are engaged in individual care may also be included when necessary. There may be different views about what the most important needs are. For example, the individual may feel the most urgent need is to get back to work. The caregivers may feel that the symptoms like sleep disturbance and treatment non-adherence need to be under better control first. At this stage, it is crucial to get all the points of view.

How do health workers assess the needs of the person with BD and their caregivers?

1. Introduce yourself

2. Once you feel you have begun to connect with the person with BD and their caregivers, let them know that you are interested in hearing about what they hope to get out of the treatment. You want to convey to them that you are knowledgeable about their situation and that you have some ideas about what might be helpful to them. But what is most important first is to hear about what they are interested in getting out of therapy. Also remember that they know more about their illness and what makes it better or worse than you do. This is a session where you learn from the person with BD and their caregivers.

3. Sometimes, PHCW may need to ask a specific question to understand the person's problems. For example, to assess substance use problem, you could say,

"Sometimes a person might chew Khat or drink alcohol because of cultural practice or to increase their social involvement, to feel better when they feel anxious or to get sleep. Have you had any problems that made to chew khat or drink alcohol?"

"Is there anything that you would like to have going a little better in your life? What about with school/work? What about with friends? What about with your family?"

4. **Using the Needs Assessment form:** All problems that are planned to be targeted using this psychosocial intervention are included in the need assessment form (see **Annex- 1**). Therefore, the need assessment form used to record whether each possible need is already met or unmet. Additionally, it is used to understand whether people with BD and their family have any other problems or needs that have not been covered in the intervention manual. Finally, the needs assessment used to set goals with the participants. The needs assessment form, includes the following
    - Understanding Bipolar disorder
    - Symptoms
    - Influencing factors (things that make the symptoms worse or better)
    - Medication and medication adherence
    - Sleep hygiene
    - substance use prevention
    - Anxiety management
    - Social life and Interpersonal conflict
5. **Observation:** PHCWs and caregivers can also use their observations about what the problems are. For example, they may notice that the individual is very drowsy (which might be a side effect of medication).

3.2 What is Goal Setting?

Goal-setting means discussing and putting a roadmap of what we need to achieve in the 5 sessions of treatment, in which order and what is the correct way to lead us there. Goal setting is an essential tool to increase a person's motivation. It can help individuals to recover more quickly. Goal setting makes sure that this psychosocial intervention is the right one for him or her. Goal setting also gives a sense of achievement and progress when a goal is achieved.

PHCWs, once you feel you have begun to connect with each people with BD and their caregivers, let them know that you are interested in hearing about what they hope to get out of the treatment., you could say:

Goal setting

"I know that you have spent a lot of time explaining your situation and describing the challenges you are dealing with during need assessment. I have a lot of ideas about what I think might be helpful to you in terms of treatment, but before we get into that I would like to hear a bit about what each of you wants to get out of our work together. In what ways would your lives look different if the treatment were successful?"

Who is involved in Goal Setting?

Goal setting should always involve the person with BD who will receive the intervention and PHCWs. The caregiver may be involved with the permission of the person with BD. Other individuals and family members who are engaged in individual care may be required when necessary.

When do we do Goal Setting?

We do Goal Setting as part of this psychosocial intervention review at the beginning of each session. Goal Setting should always come after the Needs Assessment.

How do we do Goal Setting?

If the participants are new to the idea of a Psychosocial intervention, it could be difficult to them understand what you mean by 'goals'. Therefore, the PHCWs needs to structure the process by explaining and giving examples. (like the ones below)

- Knowing about bipolar disorder and its cause
- Understanding about influencing factors bipolar disorder
- Knowing the treatment options available
- How to cope with stressful life events
- Managing mood and anxiety symptoms
- Promoting the physical, social and psychological health
- Relationship (with families, friends, and teachers, co-workers)

Explaining about the psychosocial intervention

After we have done the needs assessment and understood the goals of participants, the next step is to inform them about the intervention format and manage their expectations of the intervention.

Regarding the format, some of the sessions are given for people with BD and their caregivers together and some are given individually but, it is also provided for people with BD separately if they want to take t alone.

You may want to say something like the following:

> *"This is a reasonably structured treatment. We have a lot of information that we would like to share with you, and a lot of skills that we would like to introduce to you over the next five weeks. We have five sessions and we will be meeting every week and discuss. Does that sound manageable for all of you?*

Continuing:

> *"Now let's talk about what you can expect of me during this intervention. We will start the sessions on time and make sure that we end in about 20 minutes. If you want to ask anything or need any clarification in between, you can say "I have a question" at any time.*

Describing the next session

> *Next week we would like to talk about the sign and symptoms of bipolar disorder and what might be the cause/ risk factors for the illness. Then over the next few sessions we would like to focus on the medication given for the treatment to bipolar disorder, the advantage of taking medication regularly and their possible side-effects and how to manage those side-effects, how to identify early warning signs of relapse and prevention strategies, and how to cope with stress. We want to teach everyone techniques that will help you to work together in this way. Can you imagine how this might be helpful?*

Explaining the role of PHCW during an intervention. PHCWs, first try to explain your role. You can start saying

> ***"my role is basically like that of coach so we will discuss about bipolar disorder, the treatment and teach you some skills and then to practice those with you so that by the end of the treatment you can use the skills in your day-to-day life, and you no longer need my assistance. We will also prepare a plan for how, when and at what time we will meet. Sometimes I will ask you to practice some of the skills we are learning at home/ school/work during the week. Do you think this would be manageable? What queries/concerns do you have at this point?"***

Avoid listing goals that cannot be achieved in this context

If participants have mentioned goals that cannot be achieved by this psychosocial intervention, it is important to make it clear that you will not be working on those particular issues and to explain the reason why. For example, the participant may have poverty that they want to focus on. You could explain saying ....

> ***"That certainly does sound like an important issue and I am glad that you brought it up but the main focus of this intervention is on.... [mention the components of intervention] to help people with BD to feel and to function better. Therefore, this intervention is not directly addressing poverty rather helping people with BD and their caregivers to learn about bipolar disorder and new skill that can help them to improve physical, social and psychological health"***

Avoid starting problem solving during the first session

Use this initial session as an opportunity for getting to know the person and information gathering. If the participants start to talk about arguing or insisting and difficulties in the families etc., you can redirect them by saying something like,

> ***"I know there are lots of pressing concerns that you have, and we will get to those as soon as possible. But first, we need to develop a plan for how we are going to work together. Now, we are just taking the first step that lays the groundwork for all of our future work together. We will get to the family issues, and many of the other concerns you have."***

Summary of needs assessment and goal setting

- We do a Needs Assessment to understand what problems the individual has and to decide which parts of the psychosocial intervention session are relevant.
- We understand the needs of the individual by asking questions, using a checklist, and making observations.
- We do Goal Setting to decide which needs to address and in which order, and to follow the progress of the individual

Session two: Awareness about Bipolar Disorder (Psychoeducation)

The objective of the session: Help the person with BD and their caregiver to improve their knowledge about

3. the nature of the bipolar disorder, prodromal symptoms, cause and influencing factors
4. the treatment of bipolar disorder

Table 2. Awareness about bipolar disorder, causes and treatment

	Content	**Method**	**Duration**
Duration 20 minutes	Sign and symptoms of bipolar disorder	Reflective Discussion focusing on what is relevant to the person	10 minutes
	Early warning signs of relapse (relapse signature)		2 minutes
	Cause and influencing factors Misconceptions about the cause		8 minutes

What is bipolar disorder?

PHCWs, first try to learn about what the participant knows about bipolar disorder. You can do this by first asking questions as follows:

- ***Please tell me a little about the illness that has affected you?***
- ***What do you think about the cause of your illness? How or why do others think you got it?***
- ***How does the illness affect your daily life, work, and relationships?***
- ***What do you do to deal with this? What does your family do? Neighbors? What do others advise you to do?***

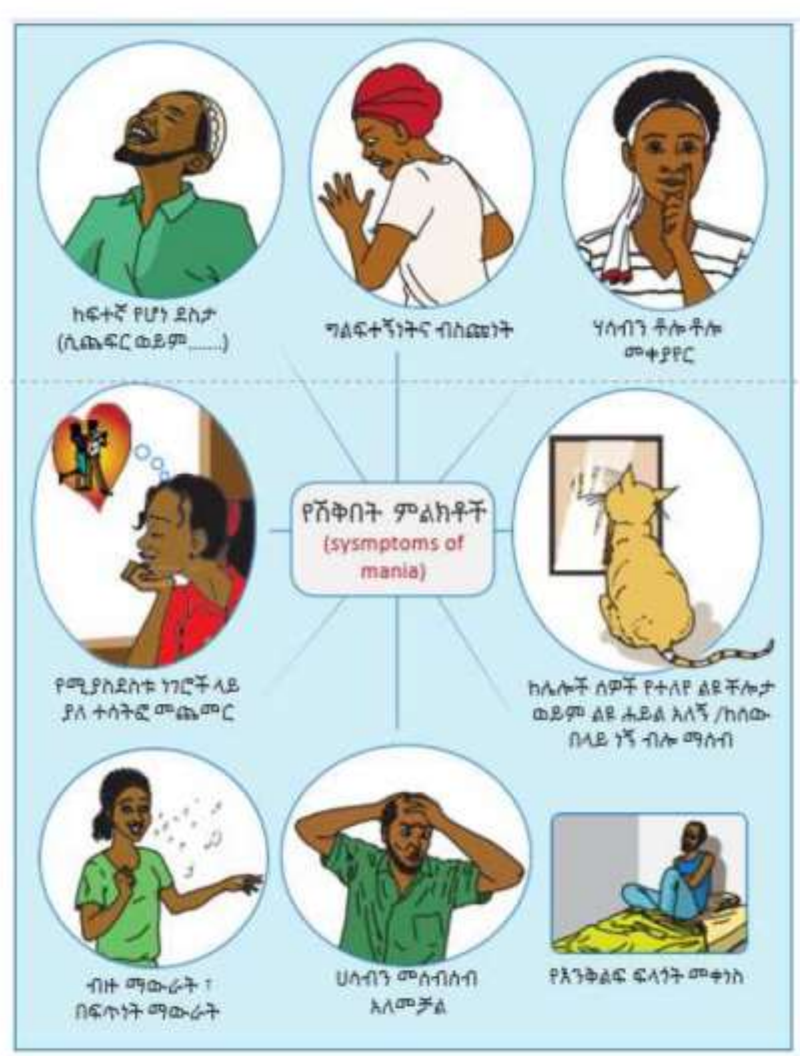
You can then go ahead and explain about bipolar disorder, its cause and influencing factors, using the personal experience of the participant as a tool. For example, you can say, you are right, Bipolar disorder is....

Bipolar disorder is a type of illness that comes and goes. People with BD have a problem with mood change, from excessive happiness or irritable (Mania) to the low mood (depression) that makes it difficult for them to lead a good life ...

PHCWs, please describe the sign and symptoms that people could have during manic episodes. look at Annex 2, a case study on manic sign and symptoms of bipolar disorder to better understand manic symptoms

The core symptom of mania are elation or irritability, in addition DIG FAST

- **D**istractibility
- **I**ncreased involvement in pleasurable activity
- **G**randiosity
- **F**light of idea
- increased goal directed **A**ctivity
- decreased need for **S**leep
- **T**alkativeness



PHCWs,

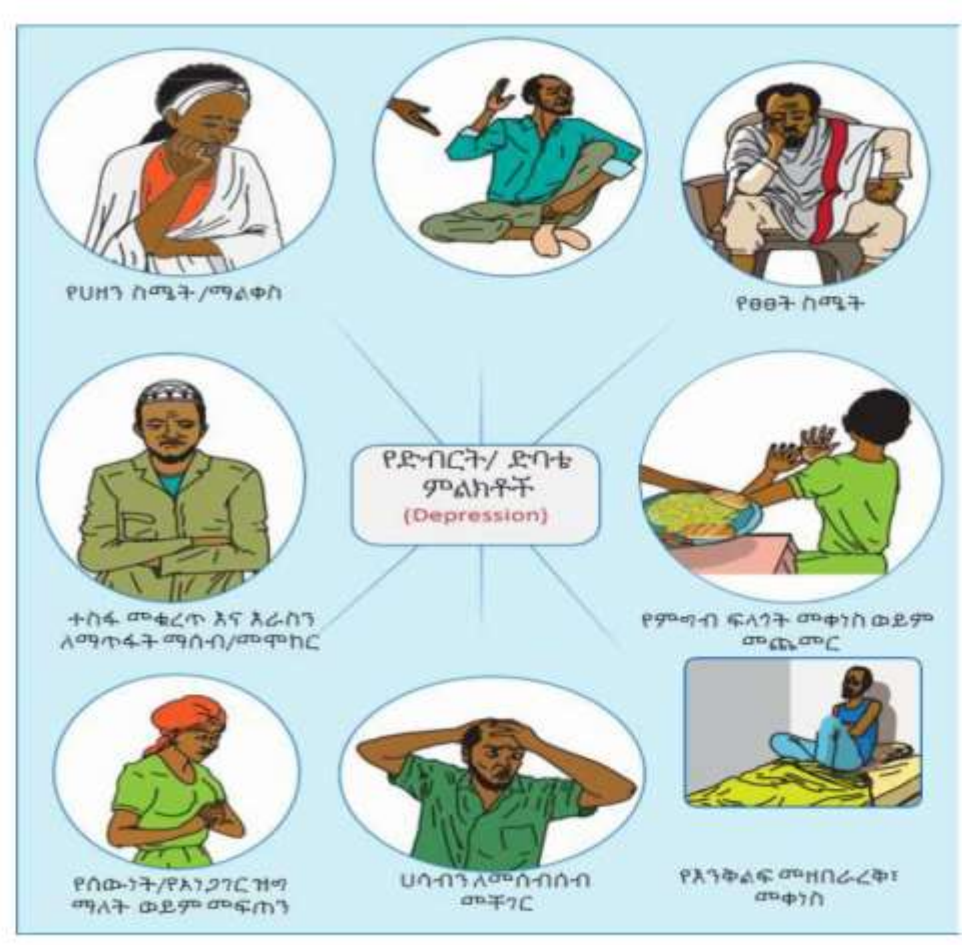
please describe the sign and symptoms that people could have during depressive phase. look at Annex 3, a case study on depressive sign and symptoms of bipolar disorder to better understand depressive symptoms

Summary on sign and symptoms of Depression: SIGH CAPES

S = Sad feeling,
I = Interest
G = Guilt/worthlessness
H = hopelessness and Suicidal

C = Concentration
A = Appetite
P = Psychomotor activities

E = energy
S = Sleep



What are the early sign and symptoms of relapse (relapse signature)?

PHCWs,

First try to learn about very early sign and symptoms (relapse signature), from the participants by asking the following question

Do you know what happens when you get unwell?

How do you know whether you are going to have / your relative's illness is coming back before the illness become severe?

Yes, as you said...

The very early sign and symptoms (relapse signature), and symptoms during episodes of relapse are similar, but they are less severe compared to full-blown episodes

Tell them that in a qualitative study conducted in Ethiopia, the following early sign and symptoms (relapse signature), were noticed by people with BD or observed by caregivers

1. sleep disturbance
2. Easily irritable that get people with BD into an argument with wife, children, friends, teachers, neighbors, and other people.
3. Carelessness about what they say or how they dress
4. Feeling unusually energetic, talking too much than usual,
5. Talk to people culturally inappropriate way e.g. not respecting elder people
6. Spend a lot of money, and buy a lot of useless things
7. Lack of interest and feeling heavy-headedness

PHCWs, give the participant list of these early symptoms reported by patient to use for their reference

What are the causes and influencing factors for BD?

PHCWs, keep in your mind the "Diathesis-stress" model to understand the causes and influencing factors.

The Diathesis-stress-model gives a conceptual framework that shows the interaction between physiological and psychosocial factors. As shown in figure 1, this model considers the effect of stress and circadian rhythm. The model also indicates the role of psychosocial interventions on

regular sleep habit, activity scheduling to establish a systematic routine, identification of prodromal symptoms and effective coping strategies for prodromal symptoms and careful assessment of triggers for previous episodes and suggests working on modifying these vulnerabilities as an essential element. While underlying biological predispositions may not be changed, we can modify the level of exposure to stress and the response to these stresses.

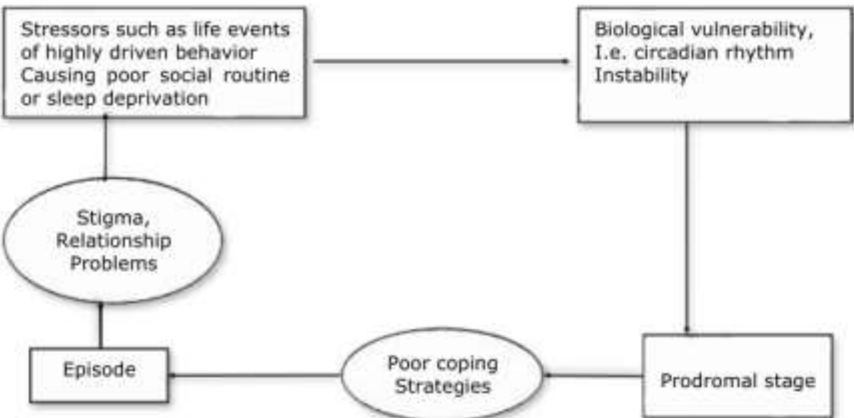


Figure 1. Diathesis-Stress Model for psycho-social intervention in bipolar affective disorders adapted from Lam et al. "Cognitive Therapy for Bipolar Disorder: A Therapist's Guide to Concepts, Methods, and Practice" 2006

PHCWs, first try to learn about what the participant thinks about factors that influence their illness / their relatives' illness. You can do this by first asking questions as follows:

- **What do you think about the cause of your illness/ your relative's illness?**
- **Please tell me a little bit about what makes your illness/ your relative's illness trigger after you/ she/he remained well?**
- **What makes your illness / their relative's illness worse after it come back?**
- **What makes your illness / their relative's illness better after it come back?**

You can then go ahead and explain or educate about cause and influencing factors using the personal experience of the participant as a tool. For example, you can say, you are right, Bipolar disorder is....

> ***"Bipolar disorder is usually caused by a combination factors that happen before a person is born or early in life (Vulnerability) and other environmental factors...Among the factors, xx [the factors that participants told you] can cause/ trigger the illness. There are also some other factors like ... [factors that are not mentioned by the participant"***

Among vulnerability the followings:

- A person's mother is having problems during her pregnancy, for example, an infection.
- Having a problematic birth during which the baby gets injured.
- Having a head injury during childhood.
- Using khat from an early age.
- Having bad experience/ things happened during childhood.
- Genetic: When someone has a mental illness or bipolar disorder in the family. Not every person who has a family history of mental illness or bipolar disorder will develop the illness but, they are at higher risk compared to individuals who do not have a family history of mental illness.

Environmental /Psychosocial factors

These are social and psychological life events in a person's life that put a lot of pressure on them. They might lead them to feel annoyed, worried, or sad. These can even trigger the onset of symptoms in those who are vulnerable or make the illness back after they get treated and become well.

This might include

- Social support:
- Disagreement/ divorce/ conflict
- Economic problem:
- Unemployment:
- Daily hassles:
- Natural disaster
- Experiencing traumatic events (accident,
- Loss / bereavement/ illness
- Not getting enough sleep or interrupted sleep one of the risks that trigger the illness
- Coping strategies
- Regular use of medication
- Substance use/ abuse (includes alcohol such as Tella, Teji, Araki, beer and other types of alcohol, Khat, and Cigarettes

(**Please see the case-scenario on how to give educationn about influence factors on Annex-4**)

Session three: Treatment

Objectives of the session

- To discuss about the medication that they are taking, how medication can help them and what side effects can happen (To therapist: take examples from patient's experience)

- To explore issues of adherence and how they can be supported to take their medication regularly.

Table 3. Treatment

Session three: Treatment			
	Content	**Method**	**Duration**
Duration 20 minutes	Medication adherence Medication side effects	Reflective discussion	20 minutes

What is the treatment for bipolar disorder?

PHCWs, first try to learn about what the participant knows about the treatment. You can do this by first asking questions as follows:

- **Please tell me a little about your treatment?**
- **How frequently do you take the medication per day?**
- **How regularly do you take your medication?**
- **Do you think that you need to take medication when you are normal? Why or why not?**
- **How much is the medication helping you in improving your health?**
- **Are you experiencing any side-effects from the medication that you are taking and how are you dealing with those?**

You can then go ahead and explain or educate about medication, medication adherence and side-effects of medication and types of choice of medication available using the personal experience of the participant as a tool.

"Previously, you said it is/not important to take medication while the feeling normal. In the treatment of bipolar disorder there are two phases of treatment in mental illness or bipolar disorder"

- Acute phase treatment: is a treatment given during the illness period to reduce symptoms, and improve wellness
- Maintenance phase: is a treatment phase after the people with BD get well to avoid triggering of illness or prolong the duration of the period of wellness

What types of medication are there?

For example, you can say...

"you are right, there are different types of medication that can be given alone or in combination with other medication or psychosocial intervention. Among them, medication xx [the medication that participants told you] is one. There are also some other types of medication that can be used for BD but we will not talk about them today because you are not taking them"

PHCWs, refer to table 3 while teaching about the type of medication and common side-effect of medication that the patient is currently taking. Focus only on the medication that the participants are taking currently

Table 4. MhGAP treatment guideline included medication for bipolar disorder.

Type	Name of medication	Class of drug	Common side-effect
Mood-stabilizer	Lithium	Tablet	Sedation, cognitive problems, tremor, impaired coordination, hypotension, leukocytosis, polyuria, polydipsia, nausea, diarrhea, weight gain, hair loss, rash.
	Sodium valproate	Tablet	Sedation, headache, tremor, ataxia, nausea, vomiting, diarrhea, weight gain, transient hair loss
	Carbamazepine	Tablet	Sedation, confusion, dizziness, ataxia, double vision, nausea, diarrhea, benign leucopenia.
Anti-psychotic	Haloperidol	Tablet/ injection	Sedation, dizziness, blurred vision, dry mouth, urinary retention, constipation
	Chlorpromazine	Tablet / injection	Sedation, dizziness, blurred vision, dry mouth, urinary retention, constipation, and tachycardia.
	Fluphenazine	depot	Impaired consciousness, parkinsonism.
	Risperidone	Tablet	Sedation, dizziness, tachycardia
Antidepressant	Amitriptyline	Tablet	Sedation, orthostatic hypotension (risk of fall), blurred vision, difficulty urinating, nausea, weight gain, sexual dysfunction.
	Fluoxetine	Tablet	Sedation, insomnia, headache, dizziness, gastrointestinal disturbances, changes in appetite, and sexual dysfunction.

What does treatment /medication adherence mean?

Treatment adherence refers to the patient's ability to be concordant with instructions given by health professionals including medication, health-promoting behaviors, and habits, and attending all clinic appointments.

What is the importance of taking medication regularly?

PHCWs, you can then go ahead and explain about the importance of regular use of medication. You can say,

Taking medication regularly even if the person with bipolar disorder is feeling well has several advantages: Among them xx [mentioned by the participant at the beginning] some of the advantage. But additionally, ... [mentions the following advantages if they are not specified by the

participant.

- To feel better, to be able to get back to usual activities like farm work and housework.
- To prevent the illness from coming back
- To decreased hospitalization and mortality due to suicide
- To improve the course of illness and functioning /wellness.

What are the reasons for medication discontinuation?

Some of the reasons are:

- Economic reason: not able to buy medication because of lack of money
- Feeling normal: when people feel normal, they think that their illness is cured and no need to take medication
- Side-effect of medication or fear of side-effects
- Medication not helping as anticipated
- Traveling to a place where they can't get the medication
- Feeling bored: since the medication is taken for a long time, patients may develop fatigue of taking the medicine.
- Forgetting to take the medicine
- They do not want to take the medicine
- Insufficient support from the family and other people
- Feel shame or stigma from taking the medication
- Believe that the illness is due to spirit possession or curse

Can we predict poor adherence?

It is essential to identify early people with bipolar disorder who are poorly adherent to have an intervention plan. People who might be at risk of poor treatment adherence

- Personal history of poor adherence
- Not attending the clinic regularly
- The side-effect of medication or fear of side-effects
- Taking more than two types of medication
- If they do not consider bipolar disorder as a problem for them
- Family not supportive of taking medications
- Substance use
- Older or younger age

How can we support people with bipolar disorder to take their medication?

The intervention has to be responsive to the specific reasons for non-adherence and needs to be planned carefully with people with BD and their caregivers. Problem-solving techniques (PST) can help to improve treatment adherence. Support and encouragement from the PHCW are also important.

STEP 1: ask participants about his/ her medication history as follows

- **Do you have any difficulty taking all of your prescribed medications?**
- **Do you ever try to cope on your own without the medication?**
- **Many people miss taking their medications from time to time; how has it been for you?**
- **In your opinion, will medications help you to attain your personal goals?**

STEP 2: Once you learned the participants are not taking their medication as recommended,

- **involving both people with BD and caregivers**
- **Ask the reasons for not taking medication regularly**
- **Try to get the person to tell you the pros/cons of using medication**
- **Ask and list anything they tried before to improve taking medication, discuss and build on their ideas**

Remember that it is difficult for anybody to take medications over an extended period of time. The reason for non-adherence may be due to circumstances beyond the control of the person, e.g. affordability. Put yourself in the person's position and try to be understanding and supportive at all times.

STEP 3: Addressing the problem of taking medication based on the reason they reported

If the reason for non-adherence is related to a misconception about the illness or treatment:

- **Provide information about the illness and treatment and the treatment benefit.**
- **Provide information on the benefits and side-effects of medicines.**
- **Inform what the clinicians should expect from the treatment**
- **Avoiding the creation of false-cure expectations**

If the reason for non-adherence is religious or traditional practice or treatment

- **Engage with traditional and spiritual healers**

- **Explain for traditional/ religious leaders, people with BD, and their caregivers the importance of taking medication while also receiving holy water. Tell them that it is possible to take medication after they used holy water, and taking at the same time does not have a negative interaction.**

If the reason for non-adherence is related to forgetfulness about the illness or treatment:

- **Find out who are the important individuals who can support the person with BD. Consider meeting with them to gain their support so that they can remind the person with BD to take medication.**
- **Consider advising the family to observe the individual during the illness period because the person with BD may not understand that they have an illness. Therefore, they may not be willing to take their medication. If this happens, you should not force them to take it but should refer/ bring them to the health facility.**
- **Advice, people with BD to take their medication always at the same time (regular time) after doing a daily task or**
- **Use an alarm to remember such use using mobile phone alarm, if they are Muslim, to relate with Solat time, if they are workers when they get back from work or always before sleeping or when they wake-up from sleep. Please plan with the people with BD and their caregivers**

If the reason for non-adherence is related to treatment:

- **Discuss the current side-effect of medication or fear of side-effect and possible side-effects.**
- **Revise the medication: increase, decrease the dose of medication, or changing medication and medication schedule based on availability and sustainability**
- **Arrange a medication review: Taking the medication once daily is likely to be easier to remember if the schedule is too complicated**
- **See the option of injectable and tablet if possible, based on the people with BD preference**
- **Ask both the individual and the caregiver if there have been any problems**
- **Avoid forcing individuals to take medication, for example, by tying up the individual and forcing the medication into his or her mouth**

(Please see the case-scenario on how to provide education about treatment adherence on Annex-5)

Session four: Promoting Wellbeing of People with Bipolar Disorder

Aim of the session

The aim of this session is to promote the wellbeing of people with bipolar disorder to help them to stay well through reflective discussion on the importance of regular sleep, anxiety management skill, substance use prevention and improve relationship

Intervention component

PHCWs, please note that this session has four components: sleep hygiene, managing stressful situations, stablish better relationship and substance use prevention. Choose two approaches that seem most relevant to the patient.

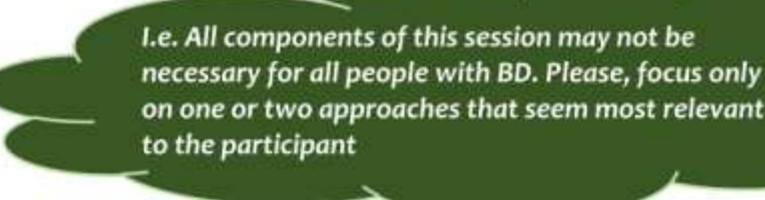


Table 5. Promoting the wellbeing of people with bipolar disorder

Session four: Promoting the wellbeing of people with bipolar disorder			
	Content	**Method**	**Duration**
Duration 20 minutes	Sleep hygiene & regular routines'	Reflective discussion	10 minutes
	Avoiding or managing stressful situations		10 minutes
	Establish better relationships		10 minutes

Sleep hygiene & regular routines'

The aim of this session is to discuss about the importance of sleep with the participants and advice for promoting sleep through lifestyle and environmental changes.

What is the importance of sleep?

PHCWs, first try to learn about what the participant knows about the importance of sleep. You learn first asking questions as follows:

- **Please, first tell me about your sleep pattern, what time you go to bed, wake-up...and how your sleep looks like**
- **Please tell me a little bit about the importance of sleep?**
- **What do you feel when you sleep well?**
- **What do you feel on the days you have not been sleeping well?**

You can then go ahead and explain or educate about sleep and its importance. For example, you can say, you are right, sleep is....

Sleep is one of the most important human practices. It is used for energy restoration, homeostatic function and appears to be crucial for normal thermoregulation and emotional regulation.

Sleep disturbance have both been implicated in mood disorder in general and bipolar disorder in specific, and it triggers a relapse. Sleep disturbance such as an increase or decrease in the amount of sleep or decreased quality of sleep is both a symptom of illness and a major trigger of relapse of bipolar disorder. Therefore, interventions targeting sleep disturbance improve the course and outcome of the disorder.

How can we improve our sleep? And what is sleep hygiene?

PHCWs, first try to learn about what the participant does to improve their sleep. You learn first asking questions as follows:

- **What do you do to improve you sleep or to sleep well?**
- **What do people in your community do to sleep well?**

You can then go ahead and explain sleep hygiene. Start saying ...

> ***You are right, there are different methods to improve sleep. Now I will explain about sleep hygiene and then we will discuss what you need to do to improve your sleep. However, you need to practice it in your day to day life to improve your sleep and reduce/prevent triggering or worsening or your illness related with sleep disturbance***

Sleep hygiene is the term used to describe a proper sleep habit and has twelve elements. And continue teaching the following

1. **Sleep and wake-up at a regular time**
2. **Go to bed when you feel sleepy**.
3. **Get up & try again**: get-up and try again if you haven't been able to get to sleep after about 20 minutes or more, get up and do something calming or boring until you feel sleepy. Avoid doing anything too stimulating or interesting like listening to music or radio or going on the internet
4. **Avoid caffeine & nicotine**. Avoid drinking coffee, tea, and Coca-Cola drinks, smoking cigarettes for at least 4-6 hours before going to bed because it stimulates and affects the regular sleep pattern
5. **Avoid alcohol**: Avoid using alcohol because it affects the quality of sleep.
6. **Use the bed only for sleep**: avoid using your bed for watching TV, eating, or reading
7. **Avoid naps:** avoid taking naps during the day, to make sure that you are tired at bedtime
8. **Use a sleep diary.** That means writing or asking people who living with you at home (children/siblings...) what time you slept at night and at what time you wake-up in the morning. The worksheet can be a useful way of making sure you have the right facts about your sleep, rather than making assumptions.
9. **Exercise**. Regular exercise is a good idea to help with good sleep, but try not to do strenuous exercise in the 4 hours before bedtime. Morning walks are a great way to start the day feeling refreshed.
10. **Eat right.** Eating any food found at home including grain, Enjera, Kocho, a warm glass of milk if available and other foods on time
11. **The right space.** If you are not able to sleep in a place whether there is noise, try to get a place that is quite or discuss with you families how to maintain your home quite while you sleep. For example, when talking to each other may affect you sleep
12. **Keep daytime routine the same**. As much as possible, keep your daytime activities regular even if you have a bad night sleep and feel tired.

Avoiding or managing stressful situations

PHCWs, first try to learn from the participant about the situation that are stressful to him/her and what they are doing to manage those stressful situations. You learn first asking questions as follows:

- **Is there any situation that makes you worried, bothering you a lot?**
- **What are those situations?**
- **Is there a time that you decided to avoid those situations in order to minimize stress or to improve your wellbeing?**

You can then go ahead and explain about avoiding or managing stressful situation. You can start saying…

Stressful situations are situations perceived as a threat to one's wellbeing, usual activities, or causing a substantial change or readjustment.

All stressful situation may not be equally stressful for all individuals; thus, some participants reported that understanding and avoiding or managing stressful situation or source of stress are beneficial to them.

All stressful situations cannot be avoided instead of using different techniques to cope with those stressful life events are important.

Tell them that the qualitative study conducted in Ethiopia, people with BD and caregivers reported the following methods are helped them to manage stressful life events.

- **Avoid stressful situation:** People with BD internalize the stressful situation, so that makes them to feel sad, worried, or anxious. For example, people with BD reported that attending the funeral ceremony and observing people while crying during mourning make them worried thus, they prefer to avoid those places.
- **Chatting with somebody:** Others participants reported that chatting with friends to neutralize their bad feeling is helpful to them. Whereas, some participants believe that things happened in the will of God and accept the problems that cannot be reversed or changed
- **Social support:** Most participants emphasized the importance of social support in improving patients' wellbeing. Caregivers also described understanding the patients' condition is important to improve the people with BD's treatment-seeking behavior, and to handle patients' behavior accordingly

- **Sharing feelings:** Participants have different perceptions regarding sharing their feelings with others; some people with BD share their feelings with families and friends because they get appropriate response and support that makes them feel better. Some other stated that they don't share their feelings to others person due to their belief that no one wants to hear them or they lack anyone with whom they feel comfortable to share their feeling. However, the damaging effects of not sharing feeling were recognized by most the participants.

Continue to teach about the how to manage stressful life events using the following Shemsu's story

Avoiding stress

PHCWs ... *"Hello Shemsu, please can you tell me a situation that you perceived as a threat for your wellbeing and you want to avoid?*

Shemsu, *Yes, "I'm not feeling good when there is crying/ shouting during mourning or when someone die because the shouting makes me emotional and absorb the sorrow. So, if I feel unwell, I leave the place or avoid those places... my neighbors and families also understand me since they know about my illness"*

Establish better relationships with others

The aim of this sub-section is to teach people with BD about problem solving techniques that enable then to establish better relationship with other people

PHCWs, In order to understand the problem, first try to explore in detail the disagreement, and the relationship with the person whom they are in conflict with, the patient's view of the issues in dispute, other important people's views of the dispute, what he/ she has tried, and would like to change.

You can do this by first asking questions as follows:

- **Please tell me a little bit about your interpersonal problem**
- **What was your expectations about the situation, and what he/she would like to change?**
- **Tell me about the problem from the other person's point of view [person who have disagreement with the participants] and reactions and feelings**

Then use the following problem-solving steps to solve the relationship problems

- **Second: ask the participant to list all the he possible solution to the relationship problem.** ***You can say:***

  "think of as many solutions as you can: I will keep a note of your ideas. Don't worry about whether the solutions will work or not".
- **Third: discuss with the participants on the advantage and disadvantage of each suggested solutions and choose the best solution among the list**
- **Fourth: discuss about how can the participant implement the solution**
  - **make a plan. Think and discuss about how the participant will start: when? Where? What will she/he say (if you plan to say anything)? How will she/he react to what others say or do?**
  - **After this session, encourage the participants to put the plan into action.**
    - **Tell them that, if it does not solve their problem, that is ok. You are happy to discuss it at the next session.**
- **Fifth: evaluation: could the participants able to put the plan into action?**
  - **Discuss about their experience, and ask them whether the solution solve their problem or not**
  - **If it does not work, encourage the participants to try other solutions**
- **Have I solved the problem?**

Session five: Anxiety Management, preparing action plan and closing

Aim of the session

The aim of this session to teach people with BD about the importance of stress reduction skill, the importance of preparing action plan and closing the session.

Table 6. Anxiety Management, preparing action plan and closing

Session five			
	Content	**Method**	**Duration**
20 minutes	Stress reduction	Reflective discussion and practice	5 minutes
	Relapse prevention and personalized action plan		10 minutes
	Closure		5 minutes

Stress reduction

What is stress?

PHCWs, first try to learn what the participant does to reduce or manage when they feel stressed. And whether they tried relaxation techniques and breathing exercise before and their experience. You can ask the following questions:

- **What do you do to feel well when you felt stressed and anxious?**
- **Have you ever tried relation techniques and breathing exercise?**
- **If yes, how was your experience and what did you feel after doing it?**

You can then go ahead and explain the importance of relaxation and breathing exercise. For example, you can say...

When we become stressed, our breathing rate often speeds up. Slowing down our breathing and relax our muscle can help in reducing stress, to sleeping well, and to feel more comfortable. Therefore, relaxation and breathing exercise training can be a useful behavioral technique for the management of over-arousal and also for addressing anxiety symptoms, which can commonly be associated with mood difficulties.

PHCWs, during breathing exercise and muscle relaxation techniques, you will employ the 'tension and release' cycle across the following muscle groups: left and then right arms and hands; face area including forehead; upper body; stomach and then legs.

- **The main idea to deep breathing is to breathe deeply from the abdomen, getting as much fresh air as possible in your lungs. When you take deep breaths from the abdomen, rather than shallow breaths from your upper chest, you inhale more oxygen. The more oxygen you get, the less tense and anxious you will feel. So, the next time you feel stressed, take a minute to slow down and breathe deeply.**

PHCWs, Now I will teach you how to do deep breathing and relaxation technique. First, we will start from deep breathing exercise and then we will process to muscle relaxation techniques. It may take 5-10 minute and then we will practice together, follow me

Breathing exercise

First step: Sit comfortably with your back straight. Put your feet apart on the floor, and rest your hands softly on your knees.

Second step: Close/open your eyes and focus on your breath. Become aware of your breath. Just be present in your body and notice how it feels as you breathe in and out

Third step: Take a breath in through your nose slowly, counting to four counts and hold for one count.

Fourth step: Now breathe out through your mouth slowly, counting to four counts.

First, practice the breathing exercise when you're not feeling stressed. Some people describe feeling more stressed when they first begin using controlled breathing. It is important to carry on with the technique, because this feeling of stress will decrease with practice. You can do in lying down or while sitting but, lying down is easier than sitting in a chair.

PHCWs, Ok, Now I will teach muscle relaxation techniques like breathing exercise. This muscle relaxation techniques helps you to releasing muscle tension with each outward breath.

When you do muscle tension "Focus on your breathing...in and out ... As you breathe in, tense the muscles in your feet as tight as you can. As you breathe out, relax your feet and let go of the tension". You then go through each specific areas of the body, in turn, continuing with the ankles and working upwards. Now, I will start...

Steps for practicing muscle relaxation

1. For example, we instruct participants to sit back and relax

2. **Right hand and forearm**. Make a fist with your right hand. Focus on the tension in your hand and your arm (below the elbow) and hold the tension for 5 seconds. Relax your hand and arm, releasing the tension for about 10 seconds. Notice the difference between the tension and the relaxation

3. **Right upper arm.** Bring your right forearm up to your shoulder. The closer you bring your hand to your shoulder, the tenser your upper arm will become. Focus on the muscles in between your elbow and your shoulder- try not to tense your forearm or your hand too much. Hold the tension for 5 seconds, then release for 10 seconds.

4. **Left hand and forearm.** Repeat as for right hand and forearm.

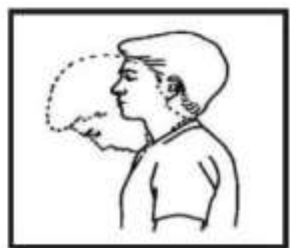
5. **Left upper arm.** Repeat as for right upper arm.

6. **Forehead.** Focus on your face now, raising your eyebrows as high as they will go, as though you were surprised by something. Feel the tightness in the muscles above your eyes. When you release the tension of the muscles around your forehead, focus on them becoming smooth and relaxed.

7. **Eyes and cheeks.** Squeeze your eyes tight shut. Focus on the tension around your eyes and your cheeks. Notice how the tension is released as you relax those muscles.

8. **Mouth and jaw.** Open your mouth as wide as you can, as some people do when they have a big yawn. Feel all the muscles in the hinge of your jaw tightening and notice the tension around your mouth. When you relax your mouth and jaw, you can leave your lips slightly apart and just let your jaw hang freely.

9. **Neck.!!!** Be careful as you tense these muscles. Focus on the muscles in your neck by facing forward and then pulling your head back slowly, as though you are looking up to the ceiling. Feel the tension in the muscles in the back of your neck, as this is often an area that becomes tense. Relax these muscles by bringing your head back down to a loose, resting position, noticing how the tension is released.



10.Shoulders. Tense the muscles in your shoulders as you bring your shoulders up towards your ears. Focus on the tightness in your shoulders. Hold it for 5 seconds, and then let go of the tension by dropping your shoulders right down to a relaxed position. It is very common for people to keep tension in their shoulders, so notice the comparison between tensed and relaxed.

11. Shoulder blades/Back.

Push your shoulder blades back, trying to almost touch them together, so that your chest is pushed forward. Hold the tension in the muscles, feeling the tightness in your upper back and your shoulder blades. Release the tension by dropping your shoulders into a resting, relaxed posture, feeling the tension fade away.

12.hest and stomach.

Breathe in deeply, filling up your lungs and chest with air. Feel the tension in your chest and stomach muscles. Hold it for 5 seconds, and as you slowly breathe out, feel the muscles relaxing.

13.Hip sand buttocks. Squeeze your buttock muscles, noticing the tension in your buttocks and hips. Try not to tense up your legs, just focus on tightening up the buttock and hip muscles. Relax the muscles, and feel them loosen up.

14.Right upper leg. Tighten your right thigh, concentrating on the tension in that area. You may get some tension in your hip and in your calf muscle, but try to focus most of the tension in your thigh muscle. Release the tension and feel the muscle relax.

15.Right lower leg!!! Do this slowly and carefully to avoid cramps. Pull your toes towards you to feel the tightness in your calf muscle. Hold it, then relax it and notice all the tension fade away from the muscle.

16 . Right foot. Curl your toes down wards to feel the tension in your right foot. Hold the tension and then relax your toes, bringing them into their normal resting position.

17. Left upper leg. Repeat as for right thigh.

18. Left lower leg. Repeat as for right calf.

19. Left foot. Repeat as for right foot

Now, we will do it together, always focus on your breathing…and make your muscles as tight as you can. While you breath in count 4 and during breathing out count one.

At the end, ask participant what they feel and tell them that they need to practice it at home and use it when they feel tense or anxious

What is relapse prevention?

PHCWs, first remind the participant that you already discussed about early sign and symptoms of relapse (relapse signature) in session two.

> ***As you remember, last time we discussed about early sign and symptoms of relapse or relapse signature. Please, would you tell me about the early sign and symptoms?***

Then, summarize what the participant/s told you

> ***Yes, as you said… xx [list of sign and symptoms that participants told you] are*** **relapse signature** ***that appear first, thus, identifying those*** **relapse signature help you to take action.**

Second, ask the participant/s about what relapse and relapse prevention mean. For example, you can ask the following question ….

- **Please, tell me about what relapse mean?**

Then, define what relapse mean. Yes, as you said

> **Relapse is a return of symptoms of manic, depressive or both that affect the persons functioning.**

Third, continue discussing about relapse prevention methods such as personalized relapse prevention plan. Start with asking what they do to prevent their illness from coming back. You can do this by asking the following questions:

- **Please tell me, what you do to prevent your illness from coming back?**
- **When do you think you and other people with BD should come for consultation?**
- **Why it is important to get treatment as early as possible?**
- **What are the barriers not to start treatment early?**

Then, build on what the participant/s told you and discuss about relapse prevention plan

Yes, as you said... xx [list of actions the participants use to prevent relapse] are method used to prevent relapse. As we also discussed earlier in early treatment section, discussing with PHCWs and early interventions are much more useful than waiting until symptoms are at a more severe level or becoming worse. Therefore, it's always good to have relapse prevention action plan to lower the risk of relapse. That means, what action need to be taken when you identify relapse signature, when we face stressors that may affect you and your mental health.

Now we will discuss about the components of action plan. **The action plan consists of four steps:**

1. Identify relevant stressors that may be affecting the people with BD or the family as a whole
2. Identify relapse signature
3. Mobilize efforts to cope with stressors and early warning signs
4. Early treatment
5. Plan ways to overcome obstacles.

Therefore, the relapse prevention action plan is prepared in the form of table.

Steps one: on the table, the first column is used to register "Stressors/Triggers." Invite the family members to discussions on identifying stress, or invite the patients to report on recent stressors from her mood chart. Remind them that stressors can change from week to week. You can also put "triggers" here, such as "my irregular sleep patterns," "missing several days of medications," or "fighting with my parents about my room."

Step two: In the send column is used to register, "Early Warning Signs/ relapse signature"

Step three: Third, and most importantly, they should list coping/prevention skills, which may include some of the items on the "Protective Factors" list:

1.1 Taking medications more regularly
1.2 Sleeping more regularly
1.3 Talking with others about difficult feelings
1.4 Monitoring one's mood more regularly
1.5 Staying away from alcohol and drugs
1.6 Reducing conflicts
1.7 Engaging in pleasurable activities (e.g., hobbies) and
1.8 Use stress management techniques

Step four: early treatment: coming to a health facility to discuss with health professionals as early as possible when the relapse signatures are identified and taking medication to minimize worsening of symptoms is very important. Because, treatments work better when taken early than the lately after the illness become worse.

Preventive action plan

	Stressors or Triggers	Early Warning Signs	Tell their family or go to the health center	Overcoming obstacles

Closure

The goal of this section is to ensure that they can be able to monitor their own progress and to discus and solve if there is any doubt about the previous sessions

PHCWs, first try to learn if the participants have any questions about the previous sessions. You can ask the following questions:

- ***Now, we finished the sessions, but if you have any questions or any difficulty that you may have encountered while proceeding through the home works, we can discuss. Do you have anything that you would like to discuss or revise from all the sessions we had?***

Then, give a chance to the participant to review and summarize what she/he has gained and learned during the previous sessions. You can ask the participants to summarize what she/he has learned and its importance to change their behavior saying:

- ***Can you tell me what you learned from the discussion we had till today?***
- ***How do you believe about your participation in the intervention has changed your behaviors or any thinking with respect to various areas?***
    - ***Awareness about bipolar disorder and sign and symptoms***
    - ***Treatment and treatment adherence***
    - ***Promoting wellness and***
    - ***Managing anxiety symptoms and prevention plan***

- ***what do you like most and least, what helped you most?***
- ***Do you have any concern about termination?***

Finally, thank the client and discuss any remaining questions or concerns and provide contact details in case they need additional help or in case they relapse.

Appendix

Annex-1: Needs Assessment Form

Needs Assessment Form						
Individual		**Date**				
PHCWs		**Supervisor**				
Others present						
Start time		**Finish time**				
Review (Tick)						
Review I		**Review II**				
Session one						
Need			**Not a problem**	**Partially met need**	**Unmet need**	**Comments**
1. Individual and caregiver have been informed about bipolar disorder						
2. PBD and their caregivers know about the sign and symptoms of bipolar disorder						
3. PBD and their caregivers know about the early warning signs of relapse						
4. PBD and their caregivers know about the cause and influencing factors and there is no misconception about the cause						
Session two						
1. PBD and their caregivers know about the medication the PBD are taking and its side-effect						
2. PBD and their caregivers know about medication side effect						
3. PBD is willing to take medication						
4. PBD are adherent to their treatment						

Session three				
1. PBD has no sleep problem				
2.				
3. PBD avoiding or managing stressful situations				
4. PBD has good relationships with others				
5. PBD don't use substance				
Session four				
1. Early treatment				
2. Anxiety management (Relaxation technique and breathing exercise)				
3. Relapse prevention plan				

Annex-2: Manic sign and symptoms of bipolar disorder

Trainers: Now, I'm going to tell you about the symptoms that people with BD experience. First, let me introduce Almaz.

Case 1: Almaz is 28-year-old women who was diagnosed with BD when she was 17 years old. Her illness started for the first time three days after she failed in 12th grade national exam. When she got unwell, Almaz experienced mood change, and started to have sleep disturbance at the beginning. Almaz has consistent feeling of happiness and being cheerful. She sings and dances even when there is no celebration and she is energetic even though she doesn't sleep well in the night. During her happiest period, Almaz was hopeful and confident about future, and was talking too much and fast but she was also short tempered and easily irritated. Though time, Almaz start to have the urge to go out of the house. Sometimes she runs naked and her family gets worried that someone may take advantage
of her illness and physically or sexually abuse her. Sometimes Almaz has problem of focusing on her work and talks about unrelated ideas in which content changes abruptly, in other time she speaks as if she has a power, knowledge that enable her to do anything she want to do.

Ask the participants

- **Did you notice any signs of illness in Almaz? What were they?**
- **Was there a time that you heard some of the symptoms that Almaz had from your patients?**

Second, reflect each of the sign and symptoms, and add any sign/symptom which is not listed. Say to participants that based on the types of episodes, the signs and symptoms of BD can be different in different people

Annex-3: Depressive signs and symptoms of bipolar disorder

Case 2: Now, I will tell you another story about Shemsu, a 31-year old man and a father of three children. Shemsu came to the health center accompanied by his elder brother and his wife after he attempted suicide by poisoning. A week before the suicide attempt, he had a disagreement with his neighbor. However, the illness started for the first time two years earlier, following the death of his brother. For the last one month, Shemsu had been crying frequently and had lost interest in friends, social activities and farming that is very key to feed his children. He had a total loss of interest in daily routines. Shemsu often stayed in bed all day because of fatigue, lack of motivation and sad feeling. He complained about tiredness despite spending most of the day lying on his bed. He also felt guilty and feels as if he is responsible for every failure that has happened in his or his families' life. Shemsu**'s** wife reported that his ability to think or concentrate reduced, and not give order and decision for his children as before.

Ask the participants

- **Did you notice any signs of illness in Shemsu's history? What were they?**
- **Was there a time that you heard some of the symptoms that Shemsu had from your patients?**

Second, reflect each of the sign and symptoms, and add any sign/symptom which is not listed. Say to participants that based on the types of episodes, the signs and symptoms of BD can be different in different people

Annex-4: influencing factors for onset and relapse of bipolar disorder

Almaz's story

Alemaz is living in the rural area and supporting herself and her family by selling goods with her mother. According to Almaz, her illness was triggered at different times by being worried about her job, lack of sleep due to different social and cultural ceremonies or due to mourning /loss of her relatives. However, her family believes that her illness is caused evil spirits. When Almaz came to the health facility she reported that she had stopped her medication because she doesn't believe that she has a problem that needs medication.

Guiding question:

- Which Psychosocial, social and biological factors did you identify in Alemaz's story?
- Do think the factors that makes Almaz's illness to back over and over modifiable?

Now, let me tell you additional story of about Shemsu

Shemsu is a farmer and living in a village where social life and group work is highly valued. Shemsu's family believed that his illness triggered due to different factors and it doesn't have a specific reason but, mostly related with chewing Khat and stopped his medication because feeling well. As they reported, Shemsu's behavior changed after chewing and become aggressive, and not sleeping well. Sometimes Shemsu's illness also triggered when there is minor disagreement in the families or with his neighbors. Because of this, Shemsu's families encouraged and support him to take his medication regularly and not to chew Khat

Guiding question:

- Which Psychosocial, social and biological factors did you identify in Shemsu's story?
- Do you think the factors that makes Shemsu's illness to back over and over modifiable?

Annex-5: treatment and treatment adherence

PHCWs: So, as you told me, you stopped taking medication

Almaz: yes

PHCWs: What made you to stop taking it? When we met last time, you said that it was really helpful to you.

Alemaz: Because **I felt better** so, I thought, taking medication without having any symptoms **may cause some problem** in the future. As you heard from my family, they believe that my illness is related with bad spirits because I sometimes feel normal and sometimes abnormal.

PHCWs: Often the medication has side effects that the person taking the medication doesn't like. Thus, a person may quit taking the medicine or reduce it to decrease side effects to avoid those side-effects. Second, when people start to feel better, as you did Almaz, they think that they don't need the medicine anymore. They think of it like Paracetamol, "I take it when I have a headache and then quit taking it when the headache goes away" and some others people just forget to take their medication.

Alemaz: feeling better and fear of medication are related problems. I didn't think I needed it

PHCW: I can understand that, but it's important for you to know, Almaz, that taking your medicine helps you to feel better, manage the symptoms, to prevent the illness from becoming worse, and to reduce or prevent your illness from coming back at different time. One of the reasons that you are feeling better now is probably because you are taking the medicine, not because you don't need the medicine. Do you understand how this could be so?

Alemaz: yes, but it is boring to take it every day. I can just take it again if my symptoms get worse.
PHCW: I understand, feeling frustrated with having to take medication is pretty normal. But if you're not able to find a way to manage that frustration it could make you want to stop taking it. The medicine you take is similar to the medicine people take for diabetes or high blood pressure. There are studies that have shown that for some people who discontinue their medications all of a sudden, they can get worse and for some people the medication not work effective as before.

Alemaz: umm... Actually, the medication is not bad, I don't like it

PHCW: Well, that's understandable, but you'd be surprised to find out how many people take some medicine to manage their health. People don't necessarily talk about it.

Alemaz: Okay... I will take it regularly

Annex-VI: Psychosocial intervention Fidelity Scale

Date_______________________

Name of assessor = __________________

Signature: _____________________

Please record each rating next to the item. Overall Session Quality is calculated as an average of all other 1-5 rating scores.

Items that need to be assessed for all sessions.

No.	Items	Score
1	Explained aim of the session	
2	Start the session with a general question related to the topic	
3	Uses time efficiently to meet session goals	

1. **Items that need to be assessed for all sessions.**

No.	Items	Assessor
Session one: Need assessment and Goal setting		
1	Done need assessment	
2	Set the goal in discussion with the participants	
Session two: Awareness about Bipolar Disorder		
1	Described bipolar disorder and the sign and symptoms of BD	
2	Described how to recognize early sign and symptoms of BD	
3	Discussed about how to identify influencing factors ion with participants on	
Session three: Treatment		
1	Described the treatment of the bipolar disorder	
2	Described the side-effect of medication	
3	Define treatment adherence	
4	Identify /understand the reasons for non-adherence from the people with BD and their caregivers	
Session four: Promoting Wellbeing of People with Bipolar Disorder:		
1	Discussed sleep problems and sleep hygiene techniques	
2	Define about stressful situations and effect on illness	
3	Discussed techniques used to manage interpersonal problems	
Session 5: Anxiety management and substance use prevention		
1	Discuss on coping mechanisms/anxiety management	
2	Describe about the importance relapse prevention action plan & its components?	

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Appendix P: Psychological intervention for people with bipolar disorder [Amharic version]

የስሜት መቀያየር ሕመምን ለማከም የተዘጋጀ በስነልቦና ህክምና

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አዲስ አበባ፣ ኢትዮጵያ

ምስጋና

ይህ ስራ በ ዴልታስ አፍሪካ (DELTAS-Africa) እና በ አዲስ አበባ ዩኒቨርሲቲ ድጋፍ የተዘጋጀ ነው። የዴልታስ አፍሪካ በአፍሪካ ሳይንስ አካዳሚ እራሱን የቻለ የስራ ማስኬጃ ገቢ ያለው (funding scheme) ሲሆን በአፍሪካ የአመራር ክህሎት የስልጠና እንዲሁም የሳይንስ ልህቀትን ለማጎልበት የሚሰራ ሲሆን በአፍሪካ የልማት እቅድ እና ማስተባበሪያ ኤጀንሲ እና በአሜሪካን መንግስት ድጋፍ የሚንቀሳቀስ ተቋም ነው። በዚህ ስራ ውስጥ የተንጸባረቁት ሀሳቦች/አቋም ይህንን መመሪያ ያዘጋጁት ጸሐፊዎች እንጂ ከላይ የተጠቀሱት ድጋፍ ሰጪ ተቋማት አቋም አይደለም።

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ምእራፍ አንድ፡ ስለ መመሪያው መግቢያ

1.1 መግቢያ

የስሜት ከአንድ ጽንፍ ወደ ሌላ ጽንፍ የመቀያየር ሕመም ከባድ ከሚባሉት የአዕምሮ ሕምም አይነቶች መካከል አንዱ ሲሆን በተደጋጋሚ የማገርሸት ወይም ከተወሰነ መሻሻል በኀላ ተመልሶ የመከሰት እድል አለው። ይህ የአእምሮ ህምም ህመሙ ባለባቸው ሰዎች እና በቤተሰቦቻቸው የእለት ተለት ስራ፣ ማኅበራዊ ሕይወት እና ኢኮኖሚ ላይ ከባድ ጉዳት ሊያስከትል ይችላል። የስሜት መቀያየር ሕመም ያለባቸው ሰዎች ሌሎች ለረዥም ጊዜ የሚቆይ ህመም (ለምሳሌ የስኳረ በሽታ የደም ብዛት) እንዳለባቸው ሰዎች ሁሉ የሚሰጣቸውን ህክምና እና የአኗኗር ዘይቤ ማስተካከያ ምክሮች መከታተል እና መተግበር ሊከብዳቸው ይችላል።

የስነ ልቦና ሕክምናዎች የሚባሉት የስሜት መቀያየር ሕመም ላለባቸው ሰዎች እና ለአስታማሚዎቻቸው /ተንከባካቢዎቻቸው የሚሰጡ፣ መድሀኒትን የማያካትቱ የህክምና አይነቶች ናቸው። በዚህ መመሪያ ውስጥ የስነ ልቦና ሕክምናዎች ከዚህ ቀጥሎ የተዘረዘሩትን ያካትታሉ እነሱም፤ ስለ ሕመሙ ማስተማር፣ የህመሙን መንስዔ እና ህምሙን ሊቀሰቅሱ እና ሊያባብሱ የሚችሉ ነገሮችን ማስረዳት፣ ታካሚዎች በህክምናቸው ውስጥ ተሳታፊ እንዲሆኑ ማበረታታት እንዲሁም አስቸጋሪ የሆኑ የሕይወት አጋጣሚዎችን መቋቋም የሚያስችሉ ክህሎቶችን በማስተማር ህመሙ እንዳያገረሽ መከላከል ወይም ማዘግየት ብሎም የታማሚዎችን እና የቤተሰብ አባላትን የኑሮ ሁኔታ ማሻሻል ናቸው።

1.2 የስነ ልቦና ሕክምና እና የስልጠና መምሪያው አስፈላጊነት

የስሜት መቀያየር ሕመም የመድሀኒት ሕክምና ዋነኛው እና አስፈላጊ ነገር ቢሆንም ብዙ ህመሙ ያለባቸው ሰዎች መድሀኒቱን እየወሰዱ ሕመሙ ሊያገረሽባቸው ይችላል። ጥናቶች እንደሚጠቁሙት በመድሀኒት ብቻ ከማከም ይልቅ የመድሀኒት ህክምና እና የስነልቦና ሕክምናዎችን በማጣመር የተሸለ የህክምና እና የእለት ተእለት እንቅስቃሴ ላይ ወጤት ማምጣት ይቻላል።

ኢትዮጵያ ውስጥ በተደረጉ ጥናቶች የስሜት መቀያየር ሕመም ያለባቸው ሰዎች ባላቸው የህመም ምልክቶች እና የእለት ተእለት እንቅስቃሴያቸው ጥሩ እንዳልሆነ ያሳያሉ። ለዚህም በከፊል እንደምክንያትነት የሚቀርበው መድሀኒቶቹ ውድ መሆናቸውና በተፈለገው ጊዜ ሁሉ አለመገኘታቸው ነው። ከዚህ በተጨማሪ የስሜት መቀያየር ሕመም ያለባቸው ሰዎችና ቤተሰቦቻቸው የተለያዩ ማኅበራዊ፣ ኢኮኖሚያዊ፣ ባሕላዊ፣ መንፈሳዊ/ ሀይማኖታዊ ችግሮች፣ የተለያዩ አደንዛዥና አነቃቂ ዕጾችን መጠቀም እና ከህክምናው ጋር የተያያዙ ችግሮች (ለምሳሌ መድሀኒትን በአግባቡ አለመውሰድ) ለህመሙ ማገርሸት እንደምክንያት ጠቅሰዋቸዋል። የህክምና ውጤታማነት ለማሻሻል ፣ በህመሙ ምክንያት የሚመጣን መገለል እና መድሎ ለመቀነስ፣ እና በራስ

የመተማመን ብቃታቸውን ለማመሻሻል ስራ መስራት እነደሚያስፈልግ ተጠቁሟል። በአዕምሮ ጤና ህክምና ላይ ያለውን ክፍተት ለመሙላት በዓለም የጤና ድርጅት የተዘጋጀው የህክምና መምሪያ (WHO mhGAP intervention guideline), የስነ ልቦና ሕክምናና ትምህርት የስሜት መቀያየር ሕመም ላለባቸው ሰዎች ሁሉ መሰጠት እንዳለበት ይመክራል፡

የኢትዮጵያ ፌደራላዊ ዲሞክራሲያዊ ሪፐብሊክ መንግስት የጤና ጥበቃ ሚኒስቴር ይህንን የዓለም የጤና ድርጅት ያዘጋጀውን የህክምና መምሪያ በማካተት የአእምሮ ጤናን ለማስፋፋት የአእምሮ ጤና አገልግሎት እቅድ ማስፈጸሚያ አውጥቶ በመንቀሳቀስ ላይ ይገኛል። ይህ እቅድ መተግበሪያ እና የጤና ሴክተር ትራንስፎርሜሽን እቅድ (The Strategy and the Health Sector Transformation plan) ዓላማ በጤና ጣቢያ እና በመጀመሪያ ደረጃ ሆስፒታል የሚሰሩ የጤና ባለሞያዎችን በማሰልጠን መሰረታዊ በሆነ የአዕምሮ ጤና ህክምና እንዲሰጡ በማስቻል ለሁሉም ኢትዮጵያውያን የአዕምሮ ጤና ሕክምናን በተሻለ ተደራሽ ማድረግ ነው ። ይህም የስሜት መቀያየር ሕመም ላለባቸው ሰዎች የመድሀኒት እና የስነልቦና ህክምና አገልግሎት መስጠትን ይጨምራል ። ነገር ግን በተግባር የስነልቦና ህክምና የሰለጠነ የጤና ባለሙያ እና የስነልቦና ህክምና ለመስጠት የሚረዳ መመሪያ የለም። ስለዚህ ይህ መመሪያ የተዘጋጀው በጤና ጣቢያ እና በመጀመሪያ ደረጃ ሆስፒታል የሚሰሩ የጤና ባለሞያዎች የስነልቦና ህክምናን የስሜት መቀያየር ሕመም ላለባቸው ሰዎች እና ለተንከባካቢዎቻቸው መስጠት እንዲችሉ እና የህመሙን ውጤታማነትና የእለት ተለት የኑሮ እንቅስቃሴያቸውን ለማሻሻል ነው።

1.3 የስነ ልቦና ህክምና ዓላማ

በዚህ መምሪያ ውስጥ የተገለፀው የስነልቦና ህክምና ዓላማ የስሜት መቀያየር ሕመም ያለባቸው ሰዎችን እና ቤተሰቦቻቸውን ህይወት ማሻሻል ነው።

1.4 የመምሪያው አዘገጃጀት ሂደት

ይህ የመጀመሪያ ቅጂ የስነልቦና ህክምና መስጫ መምሪያ በአዲስ አበባ ዩኒቨርሲቲ ለሶስተኛ/ ዶክትሬት ዲግሪ ጥናት አካል ሆኖ የተዘጋጀ ነው። መመሪያው በሚዘጋጅበት ወቅት ከዚህ በፊት በታዳጊ አገሮች የተሞከሩ የስለልቦና እና ማህበራዊ ህክምና አይነቶችና ውጤታቸውን እና ልምዶችን ከጥናቶች በመውሰድ፣ ህመሙ ካለባቸው ሰዎች፣ ተንከባካቢዎቻቸው/ ቤተሰቦቻቸው ጋር ህምሙን ሊቀሰቅሱ እና ሊያባብሱ ስለሚችሉ ነገሮች እና የእነሱ ፍላጎቶች ላይ ውይይት በማድረግ የተዘጋጀ ነው። ከዚህ በተጨማሪ በጤና ጣቢያ እና የመጀመሪያ ደረጃ ሆስፒታል ከሚሰሩ የጤና ባለሞያዎች፣ የወረዳ ሀላፊዎች፣ የአካባቢው ሽማግሌዎች፣ የአእምሮ ጤና ህክምና እና የስነ-ልቦና ህክምና ባለሙያዎች ጋር የተደረጉትን ውይይቶችና አስተያየቶችም ተካተዋል።

በተጨማሪም መመሪያውን በምናዘጋጅበት ወቅት የተለያዮ የስነልቦና እና ማህበራዊ ህክምና መምሪያዎችን በመገመገም ከዚህ ቀጥሎ ያሉትን ለማጣቀሻነት ተጠቅመናቸዋል። (1) በባለሙያ የሚሰጥ ቤተሰብን መሰረት

ያደረገና ለወጣቶች እና ለአዋቂዎች የተዘጋጀ መምሪያ (2). በአእምሮ ጤና ህክምና የሰለጠኑ ባለሙያዎች ሳይኖር የአእምሮ ጤና ህክምና ከተባለው መጽሀፍ (3) የስሜት መቀያየር ሕመም ላለባቸው ሰዎች የስነ-ልቦና ትምህርት መስጫ መምሪያ እና (4) የስሜት መቀያየር ሕመም ላለባቸው ሰዎች እሳቤያዊ የምክክር ህክምና እንዲሰጡ ለባለሙያዎች የተዘጋጀ ። እነዚህ የስነ ልቦና ህክምና መስጫ መምሪያዎች የተመረጡት በሌሎች ታዳጊ ሀገሮች ላይ የተሰሩትን ጥናቶች መሰረት በማድረግ ነው

1.5 መመሪያው የተዘጋጀው ለማን ነው?

በጤና ጣቢያ እና የመጀመሪያ ደረጃ ሆስፒታል የሚሰሩ የጤና ባለሞያዎች የሆኑ እና በዓለም የጤና ድርጅት የተዘጋጀውን የአእምሮ ህክምና መስጫ መምሪያ ላይ ስልጠና የወሰዱ (WHO mhGAP intervention guideline) እና ከባድ የአዕምሮ ህመም ያለባቸውን ሰዎች በማከም ላይ ለሚገኙ ባለሞያዎች ናቸው።

1.6 ከዚህ መመሪያ የሚጠቀሙት እነማን ናቸው?

የዚህ የስነ ልቦና ህክምና ዋነኛ ተጠቃሚዎች የስሜት መቀያየር ሕመም ያለባቸው ሰዎች እና ቤተሰቦቻቸው / ተንከባካቢዎቻቸው ናቸው።

1.7. የመመሪያው አወቃቀር

ይህ የስልጠና መመሪያ በሶስት ዋና ዋና ክፍሎች እና በ አምስት ንዑስ ክፍሎች የተዋቀረ ነው።

ሀ. የመጀመሪያ መግቢያ (Initial engagement)

ክፍል አንድ፡ የሚፈልጉትን አገልግሎት ማወቅና የህክምናውን ግብ ማስቀመጥ

ለ. ህክምና

ክፍል ሁለት፡ ስለ ሕመሙ፣ መንስዔው እና ህምሙን ሊቀሰቅሱ / ሊያባብሱ/ ሊቀንሱ የሚችሉ ነገሮች መግቢያ

ክፍል ሶስት፡ የመድሀኒት ህክምና

ክፍል አራት፡ ጤናማነትን ማጎልበት (Promoting wellbeing)

ክፍል አምስት፡ ጭንቀትን መቆጣተርና ህመሙ እንዳያገረሽ መከላከል

ሐ. ማጠቃለያ

እያንዳንዱ የስልጠና ክፍለ ግዜ በ20 ደቂቃ ውስጥ እንዲጠናቀቅ እና በየሳምንቱ እንዲሰጥ ታስቦ የተዘጋጀ ነው። ህክምናው በ አምስት ክፍለ ጊዜ እንዲጠናቀቅ የሆነበት አንደኛው ምክንያት ከዚህ ቀደም አነስተኛ እና መካከለኛ ገቢ ያላቸው ሀገራት ላይ የተደረጉት ጥናቶች ከ 3 – 12 ክፍለ ጊዜ ውስጥ የሚሰጡ የስነ ልቦና እና ማኅበራዊ ህክምና አገልግሎቶች ውጤታማ መሆናቸውን ስለሚያሳይ፣ ከአእምሮ ጤና ባለሙያዎች ጋር በተደረገው ውይይት እና በኢትዮጵያ ጤና ጣቢያዎች ላይ አራት ክፍለ ጊዜ ያለው የምክክር አገልግሎት ተሞክሮ ተቀባይነት እንዳለው የሚያመለክቱ መረጃዎች እንደልምድ በመጠቀም ነው።

1.8 ህክምናው የሚሰጠው እንዴት ነው?

ህክምናው በግል አሳታፊ በሆነ መልኩ ይሰጣል። ህመሙ ያለባቸው ሰዎች ፈቃደኛ ከሆኑ ቤተሰቦቻቸውም እንዲሳተፉ እናበረታታለን።

1.9 ህክምናውን በምንሰጥበት ወቅት ይህንን መመሪያ እንዴት መጠቀም ይቻላል?

ይህ መመሪያ የስነልቦና ህክምናን ለመስጠት እንደ መመሪያ ያገለግላል። ሕመሙ ያለባቸውን ሰዎች ስለህመማቸው በቂ የሆነ እውቀት፣ ባህሪያቸውንና ሌሎች ተጽዕኖ ሊያስከትሉባቸው የሚችሉትን ነገሮች ለመቆጣጠር የሚያስችሉዋቸው ክህሎቶችን እና አስፈላጊ ሲሆን ተጨማሪ ሙያዊ እርዳታ እንዲጠይቁ የሚያስችላቸውን በቂ የሆነ መረጃ ማግኘት አለባቸው። የጤና ባለሞያዎች ታካሚዎችን በብዙ መረጃዎች ከማጨናነቅ ይልቅ በመመሪያው ውስጥ የተጠቀሱትን መረጃዎች በአግባቡ መስጠት ላይ ማተኮር ይኖርባቸዋል። ህመሙ ያለባቸው ሰዎች ሀሳባቸውን የሚያንጸባርቁበት ውይይትና በተመረጡ እርዕሶች ላይ ትምህርት ካገኙ በኃላ ወደ ቤታቸው ወስደው ሊያነቡት የሚችሉት በዋና ዋና ጉዳዮች ላይ ብቻ የሚያተኩር መረጃዎችን የያዘ አጭር መመሪያ ይሰጣቸዋል።

1.10 የህክምናው አካሄድ እና ክፍለጊዜው ከሁኔታዎች ጋር ያለው ምቹነት

በዚህ የስነልቦና ህክምና መመሪያ ውስጥ የተካተቱትን ሁሉንም ክፍለጊዜ ሕመሙ ያላባቸው ሰዎች እና ተንከባካቢዎቻቸው/ቤተሰቦቻቸው ልንጠቀምበት እንችላለን። ተሳታፊዎች ሁሉንም ክፍለ ጊዜ እንዲሳተፉ ይጠበቅባቸዋል። ሆኖም ግን አንዳንድ ተሳታፊዎች ለአንድ ክፍለ ጊዜ የተመደበውን ስራ ለማጠናቀቅ ከአንድ ክፍለ ጊዜ በላይ ሊወስድባቸው ይችላል በተቃራኒው ስለ ህመማቸው በቂ እውቀት እና ጥሩ የመረዳት አቅም ያላቸው ተሳታፊዎች ደግሞ ከአምስት ክፍለ ጊዜ ባነሰ ሁሉንም ሊጨርሱ ይችላሉ። ለምሳሌ ታካሚው ምንም አይነት አደንዛዥ እና አነቃቂ እፆችን የማይጠቀም እና የመጠቀም ልማድ ካልነበረው በዚህ ርእስ ላይ ብዙ ጊዜ ማጥፋት አያስፈልገውም። ስለሆነም የጤና ባለሞያዎች የህክምናውን ክፈለ ጊዜ ለማስረዘምም ሆነ ለማሳጠር የታካሚዎቻቸውን ደረጃ ማወቅ እና መረዳት ያስፈልጋቸዋል። በአንዳንዶቹ ክፈለ ጊዜያት የሚነሱት ሀሳቦች ለአንዳንዶቹ ታካሚዎች አስፈላጊ በማይሆኑበት ጊዜ ማስወጣት ወይም ማለፍ ይቻላል።

ምዕራፍ ሁለት፡ መሰረታዊ ክህሎቶች

2.1 የተግባቦት ክህሎት

ይህ ክህሎት ለተለያየ የአእምሮ ህመም ያለባቸው ሰዎች በምናክምበት ጊዜ ልንጠቀምበት የምንችለው ሁሉን አቀፍ የተግባቦት ክህሎት ነው፡፡ በርግጥም የአእምሮ ህመም ለሌለባቸው ሌሎች ህመምተኞች ይጠቅማል፡፡ ለተለያዩ ሰዎች የተለያየ የተግባቦት ክህሎት መጠቀም አስፈላጊ ሊሆን ይችላል፤ በመሆኑም እንደሁኔታው ከሰዎች ጋር የሚኖረንን ተግባቦት ጥሩ ለማድረግ የተለያየ አይነት ዘዴ ለመጠቀም ዝግጁ መሆን ያስፈልጋል፡፡ ለሁሉም አይነት ህመምተኞች ከሚጠቅሙ ዋና ዋና የተግባቦት ክህሎቶች ውስጥ ማዳመጥ፣ መናገር፣ መመልከት እና ትኩረት መስጠትን ይጨምራል፡፡

2.2 ክብር እና አክብሮት

- ራስን በሚገባ ማስተዋወቅ እና በህክምና ሂደቱ ውስጥ የሚከናወኑትን ነገሮች ማስረዳት
- ከቤተሰቦቻቸውም ሆነ አብረዋቸው ከመጡት ሰዎች ጥያቄ መጠየቅ ቢያስፈልግ ለታካሚዎች አስቀድሞ በሚገባ ማስረዳት
- የአዕምሮ ህምም ያለባቸውን ሰዎች እንደማንኛውም ሰው ክብር እንደሚሰጡዋቸው በተግባር ማሳየት

2.3 መልካም አቀባበል፣ማበረታታት እና የሌሎችን ችግር እንደራስ መረዳት

ሰዎች ስለ ችግሮቻቸው ሳይፈሩና ሳይሸማቀቁ ምቾት ተሰምቷቸው እንዲናገሩ

- ብሩህ ፊት እና መልካም አቀባበል ማድረግ
- ራስን በሌሎች ቦታ ተክቶ እነሱ የሚሰማቸውን ስሜት ለመረዳት መሞከር ያስፈልጋል

2.4 አለመፍረድ/እንደዚህ ሊሆን ይፍላል ብሎ አለመገመት

አንዳንድ ጊዜ ሰዎች እኛ የማንቀበለውን ወይም የማንስማማበትን ነገር ሊነግሩን ይችላሉ። ለምሳሌ ህገ ወጥ የሆነ ዕጽ እንደሚጠቀሙ፣ ከትዳር ውጪ ስላላቸው ፆታዊ ግንኙነት ሊነግሩን ይችላሉ። በዚህ ወቅት ተሳስተሀል/ሻል ከማለት ይልቅ ሰዎች ወደ ህክምናው በመጣቸው ጉዳዮች ላይ ብቻ ማተኮር ያስፈልጋል። ለምሳሌ ራስን የማጥፋት ሀሳብ ሊሆን ይችላል። ስለዚህ የእኛን እርዳታ እና ምክር ፈልገው መምጣታቸውን መረዳት ያስፈልጋል።

2.5 በንቃት ማዳመጥ

ሰዎችን ትኩረት ሰጥተን የማናዳምጣቸው ከሆነ ስለ ችግሮቻቸው ማውራት ሊፈሩ ይችላሉ።

- እያንዳንዱን ታካሚ ወደ ህክምና ክፍል ከመግባቱ በፊት በደንብ ትንፋሽ መውሰድና የሚነግሩንን በደንብ ለመከታተል ዝግጁ መሆን
- ጥሩ የዐይን ለዐይን ግንኙነት
- እያዳመጥንቸው መሆናችንን ራስን በመነቅነቅ፣ የሚበረታታ ፊት በማሳየት መግለጽ
- በሚናገሩበት ጊዜ አለማቋረጥ
- ምክር ከመለገሳችን በፊት ችግራቸውን በደንብ ለመረዳት መሞከር
- የተናገሩትን ፍሬ ሀሳብ ጨምቆ ማቅረብ

2.6 በተገቢው መንገድ ጥያቄዎችን መጠየቅ

ጥያቄ የምንጠይቅበት መንገድ የመልሱን አይነት ይወስናል። ስለዚህ አዎ ወይም የለም ብቻ ብለው እንዲመልሱ የሚጋብዙ ጥያቄዎችን ማስወገድ አለብን።

ለምሳሌ

- ራስህን ልታጠፋ አታስብም አይደል ብለን ብንጠይቅ ምንም እንኳን ራስን የማጥፋት ሀሳብ ቢኖራቸውም አብዛኞቹ ሰዎች መልሳቸው አዎ ላጠፋ አላስብም ነው የሚሆነው። ይህ የሚሆንበት ምክንያት ጥያቄውን የጠየቅንበት መንገድ የሚያሳየው የጤና ባለሞያው የሰዎችን ራስ ማጥፋት እንደማይቀበሉ ወይም መስማት እንደማይፈልጉ ነው።
- ስለዚህ ጥያቄ የምንጠይቅበት መንገድ እንደሚከተለው መሆን አለበት
  - "አንዳንድ ሁኔታዎች በጣም ከባድ ሆነው ሕይወትህን ስለማጥፋት አስበህ ታውቃለህ?"
  - መልሱ አዎ ከሆነ "እስቲ ስለሆኔታው በደምብ ንገረኝ" ብሎ መጠየቅ ጥሩ ይሆናል።

2.7 ማረጋጋት

ተሳታፊው ከተናደዱ ወይም ቁጡ ከሆኑ በሳጥን ውስጥ የተዘረዘሩትን መንገዶች በመጠቀም ልናረጋጋቸው ይገባል፡፡

- ረጋ ግን ጠንከር ባለ ድምጽ ጥሩ የሆነ ነገር መጠቀም
- ቀላል ቋንቋዎችን መጠቀም
- እስኪረጋጉ እና መልስ እስኪሰጡን ድረስ ጊዜ መስጠት
- አለመከራከር
- የህክምና መስጫ ክፍሉን ነፃ እና ምቹ ማድረግ

2.8 በንቃት መከታተል

የአእምሮ ጤና ሙሉ ምርመራ በጤና ባለሙያዎች የተግባበት እና በንቃት ሁኔታዎችን የመመልከት ክህሎት ላይ የተመሰረተ ነው፡፡

ህመምተኛውን በንቃት መመልከት

- አካላዊ ሁኔታ እና አለባበስ
- የሚናገሩትን፣ስሜቶቻቸውን እና ድረጊታቸውን
- ምን እንዲሰማን እንዳደረጉ (ለምሳሌ እንድንፈራ....)

2.9 ሀይማኖቶችን ማክበር

ሰዎች የአዕምሮ ህመምን ከሀይማኖት ጋር አያይዘው ሊረዱት ይችላሉ፡፡ ለምሳሌ የህመማቸው ምክንያት እርኩስ መንፈስ ወይም በኀጢአት ምክንያት የመጣ ቁጣ አድርገው ሊመለከቱት ይችላሉ፡፡ አንዳንድ ጊዜ ደግሞ የአዕምሮ ህመም ምልክቶች መንፈሳዊ መገለጫ ሊኖራቸው ይችላል፡፡ ለምሳሌ ከፍ ያለ ስሜት በሚኖራቸው ጊዜ ዓለምን ለማዳን ከፈጣሪ ተልኬያለሁ ብለው ሊያምኑ ይችላሉ፡፡ ስለዚህ የህመምተኛውን ሀይማኖታዊ አመለካከቶች ማክበር ይገባል፡፡ ነገር ግን የእነርሱ መንፈሳዊ እምነት በምንሰጠው አገልግሎት ላይ ተፅእኖ እንዲኖረው መፍቀድ የለብንም፡፡

2.10 ምስጢርን መጠበቅ

የማንኛውም ሰው ወይም ቡድን መረጃ ሚስጢራዊነቱ የተጠበቀ ነው፡፡ ነገር ግን ህመምተኞች ለራሳቸው ወይም ለሌሎች ሰዎች አደገኛ በሚሆኑበት ጊዜ ለሚመለከተው አካል ተገቢው እርምጃ እንዲወስድ ልንጠቁም እንችላለን፡

ለጤና ባለሞያዎች፡

ምስጢርን መጠበቅ ማለት ምን ማለት እንደሆነ በመጀመሪያው ክፍለ ጊዜ መግለፅ እና እንደአስፈላጊነቱ በሌላ ክፍለ ጊዜ ደግመን ልንነግራቸው እንችላለን፡፡

ምስጢርን መጠበቅ ማለት ምን ማለት እንደሆነ በሚከተለው መልኩ ልንገልፅላቸው እንችላለን

"ዛሬ ስለመጡ አመሰግናለሁ፡፡ ዛሬ ስለ............እንወያያለን፡፡ እዚህ የምንነጋገራቸው ማንኛውም መረጃ ምስጢራዊነቱ የተጠበቀ ነው ስለዚህ ያለ እርስዎ ፈቃድ ለሌላ ሦስተኛ ወገን ተላልፎ አይሰጥም፡ ነገር ግን ምስጢራዊነቱ የሚሻርባቸው ምክንያቶች የራስዎ ወይም የሌሎች ሰዎች ደህንነት ካሳሰበኝ የእርስዎንም ሆነ የሌሎችን ደህንነት ለመጠበቅ ብቻ ይሆናል "

2.11 ታካሚዎችን ማሳተፍ

የስሜት መቀያየር ሕመም ያለባቸው ሰዎች የሚሰጣቸውን ህክምና ውጤታማ ለማድረግ እና ህክምናቸውን እንዲከታተሉ ለማድረግ እነሱን እና ተንከባካቢዎቻቸውን/ ቤተሰቦቻቸውን ማሳተፍ እና ማበረታታት ያስፈልጋል፡፡

በህክምናቸው ላይ እንዲሳተፉ ለማድረግ ከሚረዱ መንገዶች መካከል

- ጥሩ የተግባቦት ክህሎት
- ታካሚዎች ቅድሚያ የሚሰጡት ችግሮች ላይ ማተኮር
- ታካሚዎች ስለ ህመማቸው እና ህክምናው በሚገባ መረዳታቸውን ማረጋገጥ እና ማበረታታት

  ወደ ጤና ተቋም መምጣትዎ እና ስለ እነዚህ ችግሮች ማማከርዎ በጣም ጥሩ ነው፡፡ ህክምናውንም በደምብ የሚቀጥሉ ከሆነ በቶሎ መሻሻል እንደሚኖር እገምታለሁ፡፡
- በቀጠሮ ቀን መምጣትና ህክምናን መከታተል ያለውን ጥቅም ማስረዳት

2.12 ሙያዊ ርቀትን መጠበቅ

የጤና ባለሞያዎች ህመሙ ካለባቸው ሰዎች ወይም ተንከባካቢዎቻቸው ጋር ያላቸው ግንኙነት የሚመሰረተው በመተማመን እና በመከባበር ላይ ነው፡፡ ስለዚህ እንደ ጤና ባለሞያ ከታካሚ ጋር በሚኖራችሁ ግንኙነት በጭራሽ ልታደርጓቸው የማይገቡ ነገሮች አሉ ፡፡

ከነዚህ በጭራሽ ልታደርጓቸው ከማይገቡ ነገሮች ውስጥ የተወሰኑት

- ስጦታዎችን መቀበል
- ያለ ተገቢ ክፍያ ስራዎችን ማሰራት
- በጣም የመቀራረብ ወይም የፍቅር ግንኙነት መመስረት
- ማንኛውንም አይነት ፆታዊ ግንኙነት

2.13 ሌሎች አስፈላጊ ክህሎቶች

- አስፈላጊ ሆኖ ሲገኝ ከተንከባካቢዎቻቸው/ ቤተሰቦቻቸው ጋር ውይይት ማድረግ
- አስፈላጊ የሆኑ መረጃዎችን ግልፅ በሆነ መንገድ መመዝገብ፡ ይህም በጊዜ ሂደት የሚኖራቸውን ለውጥ ለመከታተል፣ ሊከሰት የሚችለውን ስህተት ለመቀነስ፣ እና በምርመራ ያገኘነውን ውጤት ከስራ ባልደረቦቻችን ጋር ለመወያየት ይጠቅማል።
- ሁልጊዜ መማር፡ እርግጠኛ ያልሆንባቸውን ነገሮች መጻፍ ጠቃሚ ነው። ከዛም ስለ ጉዳዩ የበለጠ ማንበብ ያስፈልጋል። ለምሳሌ ይህንን መመሪያ ደግሞ ማንበብ ሊሆን ይችላል። በተጨማሪም በቋሚነት ቢያንስ በወር አንድ ጊዜ ከአእምሮ ጤና ባለሙያዎች ጋር ውይይት ማድረግ፡

2.14 የራስን የአእምሮ ጤንነት መከታተል

ለጤና ባለሙያዎች፡

የጤና ባለሙያዎች በጉንፋን እና ኢንፌክሽን እንደሚያዙ ሁሉ የአእምሮ ጤና ችግር ሊኖርባቸው ይችላል። ምክንያቱም የጤና ባለሙያዎች እንደማንኛውም ሰው የተለያዩ ጭንቀቶች ወይም ችግሮች ሊኖርባቸው ይችላል፡ ከዚህ በተጨማሪ ሌሎች ሰዎችን በመንከባከብ ብዙ ጊዜያቸውን ስለሚያጠፉ ስለራሳቸው ጤንነት ለማሰብ ጊዜ አያገኙም። ስለዚህ በአስቸጋሪ እና እርዳታ የሚፈልጉ ሁኔታዎች ውስጥ በምንሰራበት ጊዜ የራሳችንን የአእምሮ ጤንነት እንዴት መከታተል እንዳለብን ማቀድ አስፈላጊ ነው።

ማስታወስ የሚገቡን ዋና ዋና የአዕምሮ ጤና አጠባበቅ ክህሎቶች ማጠቃለያ

- ለአዕምሮ ጤና ህክምና እውቀት ብቻውን በቂ ስላልሆነ ጥሩ የሆነ የተግባቦት ክህሎት ያስፈልጋል
- የተግባቦት ክህሎትን በተፈጥሮ የሌለን ቢሆን እንኳን ልንማረው እንችላለን፡ ጊዜን ወስዶ መስራት፣ ሕመም ያለባቸው ሰዎች እና ተንከባካቢዎቻቸውን ማነጋገርም ያስፈልጋል።
- ሁሉንም ሰዎች በአክብሮት ማከም እና የመረጃቸውን ሚስጢራዊነት መጠበቅ ያስፈልጋል።
- የጤና ባለሙያዎች የራሳቸውን የአእምሮ ጤንነት መከታተል አለባቸው

ምዕራፍ ሦስት፡ የስነልቦና እና ማህበራዊ ህክምና መግቢያ

ክፍለ ጊዜ አንድ፡ ተሳታፊዎች እንዲፈታላቸው የሚፈልጉትን ችግሮች ለይቶ ማወቅ እና ግቦችን ማስቀመጥ

የክፍለ ጊዜው አላማ: ጤና ባለሙያዎች የሚከተሉትን ለመረዳት ያስችላቸዋል

1. ተሳታፊዎች እንዲፈታላቸው የሚፈልጉትን ችግሮች ለመረዳት ያስችላቸዋል።
2. ተሳታፊዎች ከስነልቦና ህክምና ክፍለጊዜ ውስጥ የትኛው እንደሚያስፈልጋቸው ለመወሰን ይረዳቸዋል።

ሰንጠረዥ 1፡ ተሳታፊዎችን እንዲፈታላቸው የሚፈልጉትን ችግሮች ለይቶ ማወቅ እና ግቦችን ማስቀመጥ

ክፍል ሁለት፡ ህክምና			
የሚወስደው ጊዜ 20 ደቂቃ	**ይዘት**	**የስልጠና ዘዴ**	**የሚወስደው ጊዜ**
	ተሳታፊዎች እንዲፈታላቸው የሚፈልጉትን ችግሮች ለይቶ ማወቅ	ውይይት	20 ደቂቃ
	ግቦችን ማስቀመጥ		

3.1 ተሳታፊዎች እንዲፈታላቸው የሚፈልጓቸውን ችግሮች ለይቶ ማወቅ ማለት ምን ማለት ነው?

ተሳታፊዎች እንዲፈታላቸው የሚፈልጓቸውን ችግሮች ለይቶ ማወቅ ማለት በተሟላ እና በተደራጀ መልኩ እያንዳንዱ ታካሚ እና ቤተሰቦቻቸው ያለባቸውን ችግሮች መረዳት እና ግቦችን ማስቀመጥ ማለት ነው።

ተሳታፊዎች እንዲፈታላቸው የሚፈልጓቸውን ችግሮች ለይቶ ማወቅ ለምን ያስፈልጋል?

- የጤና ባለሙያዎች ሕመም ያለባቸው ሰዎች እና ተንከባካቢዎቻቸው/ቤተሰቦቻቸው በህይወታቸው እንዲፈታላቸው የሚፈልጉትን ወይም ያለባቸውን አንገብጋቢ ችግር ለመረዳት ያስችላቸዋል።
- ይህ ደግሞ የጤና ባለሙያዎች ከስነልቦና ህክምና አገልግሎት ውስጥ የትኛው ክፍለ ጊዜ እንደሚያስፈልጋቸው ለመወሰን ይረዳቸዋል።
- ተሳታፊዎች እራሳቸው ያቀዱትን ለመተግበር ያላቸውን ፍላጎት እና መነሳሳት ይጨምራል
- ሕመም ያለባቸው ሰዎች እና ተንከባካቢዎቻቸው/ቤተሰቦቻቸው ችግሮቻቸውን ለመፍታት ያለንን ፍላጎቱ እንዲረዱት ይጠቅማል። ይህም በመተማመን ላይ የተመሰረተ ግንኙነት እንዲኖር ይጠቅማል፡
- ሕመም ያለባቸው ሰዎች እና የተንከባካቢዎቻቸው ችግር በተሰጣቸው ህክምና እንደተፈታና እንዳልተፈታ ለማወቅ እንደመነሻ መረጃ ሊያገለግል እና ያልተፈቱትን ችግሮች ለመፍታት ምን መደረግ እንዳለባቸው ለማወቅ ይጠቅማል።

ተሳታፊዎች እንዲፈታላቸው የሚፈልጓቸውን ችግሮች በማወቅ ሂደት ውስጥ የሚሳተፈው ማነው?

ተሳታፊዎች እንዲፈታላቸው የሚፈልጉትን ችግሮች ለይቶ በማወቅ ሂደት ውስጥ ሕመሙ ያለባቸው ሰዎች ፣ ተንከባካቢዎቻቸው እና ህክምና የሚሰጡትን የጤና ባለሙያዎች ማሳተፍ አለባቸው። በግል ህክምና ውስጥ የሚሳተፉ ሌሎች ሰዎች እና የቤተሰብ አባላት እንደአስፈላጊነቱ ሊሳተፉ ይችላሉ። ምናልባት ሕመሙ ያለባቸው ሰዎች እና ቤተሰቦቻቸው እንዲፈታ የሚፈልጉት ችግር ላይ የተለያየ አመለካከት ሊኖራቸው ይችላል። ለምሳሌ ህመሙ ያለበት ሰው የሚፈልገው ቶሎ ድኖ ወደ ስራ መመለስ ሊሆን ይችላል። ተንከባካቢዎቻቸው ደግሞ በመጀመሪያ የሚፈልጉት የህመሞቹ ምልክቶች ለምሳሌ የእንቅልፍ መረባበሽ እንዲስተካከል እና ህክምናውን በአግባቡ መከታተል ሊሆን ይችላል። በዚህ ጊዜ ሁሉንም አመለካከቶች መረዳት በጣም አስፈላጊ ነው።

የጤና ባለሙያዎች ተሳታፊዎች ያለባቸውን ችግሮች እንዴት ሊያውቁ ይችላሉ?

ለጤና ባለሙያዎች

1. እራስን መግለፅ

2. አንድ ጊዜ ሕመሙ ካለባቸው ሰዎች እና ቤተሰቦቻቸው ጋር እየተግባባን መሆናችንን ካወቅን ከህክምናው ምን ማግኘት እንደሚያስቡ የማወቅ ፍላጎት እዳላችሁ መንገር ያስፈልጋል። ስላለባቸው ችግር እውቀቱ እንዳላችሁና ምን ልትረዷቸው እንደምትችሉ የተወሰነ ሀሳብ እንዳላችሁ ንገሯቸው። ነገር ግን በመጀመሪያ እነርሱ ከዚህ ሀክምና ምን ማግኘት እንደሚሹ ማወቅ በጣም ጠቃሚ ነው። በተጨማሪም እነርሱ ስለ ህመማቸው፣ ምን እንደሚያሽለው ወይም እንደሚያባብሰው ከጤና ባለሙያው በተሻለ እንደሚያውቁ ያስታውሷቸው። ይህ ክፍል እርስዎ ህመሙ ካለባቸው ሰዎች እና ተንከባካቢዎቻቸው/ቤተሰቦቻቸው የሚማሩበት ክፍለ ጊዜ ነው።
3. አንዳንድ ጊዜ የጤና ባለሙያው የተሳታፊውን ችግር ለመረዳት የተወሰነ ነገር ላይ ያተኮሩ ጥያቄዎች መጠየቅ ሊያስፈልገው ይችላል። ለምሳሌ ተሳታፊው አደንዛዥና አነቃቂ የሆኑ እፆችን ይጠቀም መሆኑን ለመረዳት በሚከተለው መልኩ ሊጠይቁ ይችላሉ።

ተሳታፊዎች እንዲፈታላቸው የሚፈልጓቸውን ችግሮች ለይቶ ማወቅ

"አንዳንድ ጊዜ አንድ ሰው በባህል የተለመደ ስለሆነ፣ ከሰዎች ጋር ያለውን ግንኙነት ለማጠናከር ወይም ከሰዎች ጋር ለመቀላቀል፣ ሲጨንቀው ጥሩ ስሜት እንዲሰማው ወይም ደግሞ እንቅልፍ እንዲወስደው ብሎ ጫት ሊቅም ወይም መጠጥ ሊጠጣ ይችላል። እርሶ ጫት ለመቃም ወይም መጠጥ ለመጠጣት የሚያበቃ ችግር አጋጥሞዎት ያውቃል?"

"በህይወትዎ እንዲስተካከል የሚፈልጉት ነገር ምንድን ነው? ስራዎን/ ትምህርትዎን በተመለከተስ? ጓደኞችዎበተመለከተስ? ቤተሰብዎ በተመለከተስ?"

4. የተሳታፊውን ችግር ለማወቅ እና ለመፍታት የሚረዳ ቅፅን መጠቀም። በዚህ የስነልቦና ህክምና ሊፈቱ የሚችሉ ሁሉም ችግሮች በዚህ ቅፅ ውስጥ ተካተዋል **(አባሪ-1)** ። ስለዚህ ይህን ቅፅ ችግሮቹ መፈታታቸውን ወይም አለመፈታታቸውን ለመመዝገብ ይጠቅማል። ከዚህም በተጨማሪ ህመሙ ያለባቸው ሰዎች እና ተንከባካቢዎቻቸው/ቤተሰቦቻቸው በዚህ የስነልቦና ህክምና ሊፈቱ የማይችሉ ችግሮች ካሉ እነሱን ለመለየት ይረዳል። በመጨረሻም ከተሳታፊዎች ጋር ግቦችን ለማስቀመጥ የሚረዳ ሲሆን ቅፁም የሚከተሉትን ይይዛል፦
   - የስሜት መቀያየር ህመም ምንነትን መረዳት
   - የስሜት መቀያየር ህመም ምልክቶች
   - ህመሙን እንዲቀንስ ወይም እንዲባባስ የሚያደርጉ ነገሮች
   - ህክምናው እና ህክምናውን በአግባቡ መከታተለል

- ጤናማ ዕንቅልፍ (የዕንቅልፍ ጤንነት አጠባበቅ)
- አደንዛዥና አነቃቂ ከሆኑ ነገሮች መራቅ/አለመጠቀም
- የሚያስጨንቁ/የሚረብሹ ነገሮችን ማስወገድ ወይም መቆጣጠር
- ጤናማ የሆነ ግንኙነት መመስረት

5. መመልከት፦ የጤና ባለሙያዎች እና ተንከባካቢዎቻቸው/ቤተሰቦቻቸው ስለችግሩ የራሳቸው የሆነ ምልከታ ሊኖራቸው ይችላል። ለምሳሌ ህመምተኛው እንቅልፍ የተጫጫናቸው እንደሚመስሉ ሊረዱ /ሊመለከቱ ይችላሉ። ይህ ምናልባት የመድሀኒቱ የጎንዮሽ ጉዳት ሊሆን ይችላል።

3.2 ግብ ማስቀመጥ ማለት ምን ማለት ነው?

ግብ ማስቀመጥ ማለት የስነልቦና ህክምና በሚሰጥባቸው በአምስቱ ክፍለ ጊዜያት ውስጥ ምን ምን ነገሮችን ማግኘት እንደምንፈልግ መወያያት፣ የምንሰራቸውን ስራዎች በቅደም ተከተል ማስቀመጥ እና ግባችንን ለማሳካት የሚረዱን መንገዶች/ስልቶች ላይ መወያየት፣ መወሰንና ማስቀመጥ ማለት ነው። ግብ ማስቀመጥ የሰዎችን ተነሳሽነት ለመጨመር አስፈላጊ መሳሪያ ነው። ሰዎች በፍጥነት ወደ ጤንነታቸው እንዲመለሱ እና የስነልቦና ህክምናው ለተሳታፊው ጠቃሚ መሆኑን ወይም አለመሆኑን እርግጠኛ እንድንሆን ያረዳናል። በተጨማሪም ያስቀመጥነውን ግብ ማሳካት ከቻልን የአሸናፊነት ስሜት እንዲሰማንና የበለጠ እንዲንሰራ ያበረታታናል።

ለጤና ባለሙያዎች

አንድ ጊዜ ህመሙ ካለባቸው ሰዎች እና ከተንከባካቢዎቻቸው/ቤተሰቦቻቸው ጋር እንደተግባባችሁ ከተሰማችሁ ከህክምናው ምን ማግኘት እንደሚፈልጉ በሚከተለው መልኩ ሊጠይቋቸው ይችላሉ።

ግብ ማስቀመጥ

"ከህክምናው ውስጥ አስፈላጊ የሆነውን ክፍል ለማወቅ ባደረግነው ውይይት ያሉበትን ሁኔታ እና የሚያጋጥምትን ችግሮች ለመግለፅ ብዙ ጊዜ እንዳጠፉ ይገባኛል። ህክምናዎትን በተመለከት ሊረዳዎት ይችላል ብዬ የማስባቸው ብዙ ነገሮች አሉ። እነሱን ከመወያየታችን በፊት ግን እናንተ/አንቺ/አንተ ከዚህ ህክምና ምን ማግኘት እንደምትፈልጉ/ እንደምትፈልጊ / እንደምትፈልግ ትንሽ ነገር መስማት እፈልጋለሁ። ይህ ህክምና ውጤታማ ቢሆን በምን መልኩ ሂወታችሁ ሊቀየር ይችላል"

ግብ በማስቀመጥ ሂደት ውስጥ የሚሳተፈው ማነው?

ሁልጊዜ ግብ ማስቀመጥ ሂደት ውስጥ የስነልቦና ህክምና የሚደረግላቸው ህመሙ ያለባቸው ሰዎች እና የጤና ባለሙያዎች መሳተፍ አለባቸው። አስፈላጊ ከሆነ እና ህመምተኛው ፈቃደኛ ከሆኑ ተንከባካቢዎች/ ቤተሰቦች ሊሳተፉ ይችላሉ።

ግብ የምናስቀምጠው መቼ ነው?

በዚህ የስነልቦና ህክምና በመጀመሪያ ክፍለ-ጊዜ ግቦችን ማስቀመጥ ያስፈልጋል። ሁልጊዜ ግብ ከማስቀመጣችን በፊት ተሳታፊዎች እንዲፈታላቸው የሚፈልጓቸውን ችግሮች መረዳት ያስፈልጋል።

ግብ የምናስቀምጠው እንዴት ነው?

ተሳታፊዎች ለስነልቦና ህክምና አዲስ ከሆኑ ግብ ማለት ምን ማለት እንደሆነ ላይረዱት ይችላሉ። ስለዚህ የስነልቦና ህክምና አገልግሎት የሚሰጠው የጤና ባለሙያ ሂደቱት ከታች በተዘረዘሩት መልኩ ምሳሌ በመስጠት ማስረዳት ያስፈልጋል።

- ስለህመሙ እና የህመሙ መምጫ ምክንያቶች
- ህመሙን ሊያሽሉ ወይም ሊያባብሱ ስለሚችሉ ነገሮች
- ያሉ የህክምና አማራጮች
- የሚያስጨንቁ/የሚረብሹ ነገሮችን እንዴት ማስወገድ ወይም መቆጣጠር እንደሚቻል
- የስሜት መለዋወጥ ወይም ጭንቀት ማስወገድ ወይም መቆጣጠር
- አካላዊ፣ ማህበራዊ እና ስነ-ልቦናዊ ጤንነትን ማሻሻል
- ጤናማ የሆነ ግንኙነት መመስረት

የስነልቦና ህክምና ሂደት ምን እንደሆነ መግለፅ

ተሳታፊዎች ከዚህ የስነልቦና ህክምና ምን ማግኘት የሚፈልጉና ግባቸው ምን እንደሆነ ካወቅን በኋላ የሚቀጥለው ስለ ህክምናው ክፍለ-ጊዜ ማሳወቅ እና ከህክምናው ማግኘት በሚፈልጉት መልኩ ማስተካከል ነው። ክፍለ ጊዜውን በተመለከተ የተወሰኑት ህመሙ ላለባቸው ሰዎች እና ተንከባካቢዎቻቸው በአንድ ላይ የሚሰጡ ሲሆን የተወሰኑት ደግሞ ለየብቻ ይሰጣሉ ። ነገር ግን ህመሙ ያለባቸው ሰዎች ካልፈለጉ ለብቻቸው ሊሰጣቸው ይችላል። የስነልቦናው ህክምና የሚሰጥበትን ክፍለ ጊዜ በሚከተለው መልኩ ሊገልፁላቸው ይችላሉ።

> *"ይህ ህክምና አስፈላጊ በሆነ መልኩ በአምስት ክፍለ ጊዚያት የተዋቀረ ነው። ለሚቀጥሉት አምስት ሳምንታት ላካፍሎት የምፈልገው ብዙ ሀሳብና ክህሎት አለ። በየሳምንቱ እየተገናኘን እንወያያለን። ይህ ለእርሶ አመቺ ነው ብለው ያስባሉ?"*

በመቀጠልም

"አሁን በሚኖረን ክፍለ ጊዜ ከእኔ ምን እንደምትጠብቁ እንወያያለን። ውይይታችንን በሰአቱ እንጀምርና በሃያ ደቂቃ ውስጥ እንደምንጨርስ እርግጠኛ ይሁኑ ። በውይይታችን መካከል ጥያቄ መጠየቅ ወይም ማብራሪያ ካስፈለጎት በማናኛውም ሰአት መጠየቅ ይችላሉ።"

የሚቀጥለው ክፍለ ጊዜ ምን ላይ እንደሚያተኩር መግለፅ

"በሚቀጥለው ሳምንት ደግሞ የስሜት መለዋወጥ ህመም ምልክቶች፣ ህመሙ የሚመጣበትን ምክንያት፣ የህመሙ ምልክቶች ቶሎ እንዲጠፉ/እንዲቀንሱ ወይም እንዲባበሱ የሚያደርጉ ነገሮች ላይ እንወያያለን። በሚቀጥሉት ጥቂት ሳምንታት ደግሞ ስለህክምናውና መድሀኒትን በአግባቡ ሳያቋርጡ መውሰድ ያለውን ጥቅም እና የጎንዮሽ ጉዳት እና የጎንዮሽ ጉዳት ሲኖር ምን ማድረግ እንዳለብን ፣ የህመሙን ማገርሸት የሚጠቁሙ ምልክቶች፣ ህመሙ እንዳያገረሽ ለመከላከል የሚጠቅሙ መንገዶችን እና ጭንቀት እንዴት ማስወገድ ወይም መቆጣጠር እንዳለብን እንወያያለን። "

በስነ-ልቦና ህክምና ወቅት የጤና ባለሙያ ድርሻ ምን እንደሆነ መግለፅ

ለጤና ባለሙያዎች:

በመጀመሪያ የእርሶ ድርሻ ምን እንደሆነ ያብራሩላቸው። ለምሳሌ በሚከተለው መልኩ ሊጀምሩ ይችላሉ።

"የኔ ድርሻ ልክ እንደአሰልጣኝ ነው ስለዚህ ስለ ህመሙ እና ህክምናው እንወያያለን፣ አንዳንድ ክህሎቶችንም አስተምሮታለሁ ከዚያም አብረን ልምምድ እናደርጋለን። ስለዚህ ሁሉንም ክፍለ ጊዜ ከጨረስን በኋላም የእኔ እርዳታ ሳያስፈልጎ በእለት ተእለት ህይወቶ ውስጥ ሊጠቀሙባቸው ይችላሉ። ከዚህ ተጨማሪ መቼ፣ የት እና እንዴት እንደምንገናኝ እቅድ እናዘጋጃለን። አንዳንድ ጊዜ በሳምንት ውስጥ የተማርናቸውን ክህሎቶች በቤት ፣ ት/ቤት ወይም ስራ ቦታ እንዲለማመዷቸው ልጠይቆት እችላለሁ። ይህ ለእርሶ አመቺ ነው ብለው ያስባሉ? በዚህ ጊዜ ምን የሚያሳስቦት ነገር አለ?"

በዚህ የስነ-ልቦና ህክምና ሊፈቱ የማይችሉ ግቦችን ማስወገድ

ተሳታፊዎች በዚህ የስነ-ልቦና ህክምና ሊፈቱ የማይችሉ ግቦችን ቢያነሱ በተነሱት ሀሳቦች ላይ እንደማይሰሩ እና ለምን እንደሆነ መግለፅ ያስፈልጋል። ለምሳሌ የኢኮኖሚ ችግር ላይ ማተኮር ሊፈልጉ ይችላሉ። ይህንን እንደሚከተለው ሊገልፁላቸው ይችላሉ።

"ይህ በጣም ጠቃሚ እና ሊፈታ የሚገባው ችግር ነው ስላነሱት ደስ ብሎኛል። ነገር ግን ይህ ህክምና በዋናነት የሚያተኩረው የህመምተኞችን ስሜት እና የእለት ተእለት ተግባራቸውን ማሻሻል ላይ ነው። ስለዚህ በቀጥታ የኢኮኖሚ ችግርን የሚፈታ ሳይሆን የህመምተኞችን አካላዊ፣ ማህበራዊ፣ እና ስነልቦናዊ ጤንነታቸውን ለማሻሻል የሚረዳ ነው።"

በመጀመሪያው ክፍለ ጊዜ ያሉትን ችግሮች ለመፍታት አለመሞከር

ለጤና ባለሙያዎች:

የመጀመሪያውን ክፍለ ጊዜ ተሳታፊውን ለማወቅ እና መረጃ ለመሰብሰብ እንደጥሩ አጋጣሚ ይጠቀሙበት እንጂ ችግሮች ለመፍታት አይሞክሩ። ተሳታፊው በቤተሰብ ውስጥ ስላለው ጭቅጭቅ፣ ስድብ ወይም በቤተሰብ ውስጥ ስላለው አስቸጋሪ ሁኔታ ማውራት ከጀመሩ እንደሚከተለውን ሀሳባቸውን ማስቀየር ያስፈልጋል።

"ብዙ አስቸጋሪ ነገሮች እንዳለበት አውቃለሁ ወደእነሱ እንመጣበታለን። በመጀመሪያ ግን አብረን እንዴት መስራት እንደምንችል እቅድ ማዘጋጀት አለብን። አሁን ለሚቀጥሉት ስራዎቻችን መሰረት የሚሆኑ ስራዎችን እየሰራን ነው። ስለቤተሰብ እና ሌሎች ችግሮች ቀጥለን እንመጣበታለን"

ማጠቃለያ

- ተሳታፊዎች እንዲፈታላቸው የሚፈልጉትን ችግሮች ለይቶ ማወቅ የትኛው የስነልቦና ህክምና ክፍለ ጊዜ ሊጠቅማቸው እንደሚችል ለመወሰን ይረዳል።
- ተሳታፊዎች እንዲፈታላቸው የሚፈልጉትን ችግሮች ለይቶ ለመረዳት መጠይቆችን እና ምልከታን ልንጠቀም እንችላለን።
- ግብ ማስቀመጥ የትኞቹን ችግሮች በየትኛው ቅደም ተከተል መፍታት እንዳለብን ለመወሰን እና ተሳታፊው ያለውን ለውጥ ለመከታተል ይጠቅማል።

ክፍለ ጊዜ ሁለት፡ ስለ ሽቅለት (ስሜት መለዋወጥ) ህመም ግንዛቤ መፍጠር

የክፍለ ጊዜው አላማ: የስሜት መለዋወጥ ህመም ያለባቸው ሰዎች እና ተንከባካቢዎቻቸው/ቤተሰቦቻቸው ስለስሜት መለዋወጥ ህመም ምንነት፣ ምልክቶቹ፣ መንስኤዎቹ እና ህመሙን ሊያሽሉ ወይም ሊያባብሱ ስለሚችሉ ነገሮች ያላቸውን ግንዛቤ ማሻሻል ነው።

ሰንጠረዥ 2፡ ስለህመሙ፣ መንስኤና ህመሙን ሊያሽሉ ወይም ሊያባብሱ ስለሚችሉ ነገሮች

ክፍለ ጊዜ ሁለት			
	ይዘት	**የስልጠና ዘዴ**	**የሚወስደው ጊዜ**
የሚወስደው ጊዜ 20 ደቂቃ	የስሜት መለዋወጥ ህመም ምልክቶች	ውይይት	10 ደቂቃ
	የህመሙ ማገርሸት ጠቋሚ ምልክቶቹ		2 ደቂቃ
	የህመሙ መንስኤዎች፣ ህመሙን ሊያሽሉ ወይም ሊያባብሱ ስለሚችሉ ነገሮች		5 ደቂቃ

የስሜት መለዋወጥ ህመም ምንድን ነው?

ለጤና ባለሙያዎች፡

በመጀመሪያ ተሳታፊዎች ስለ ስሜት መለዋወጥ ህመም ያላቸውን እውቀት ለመረዳት ይሞክሩ። ለመረዳትም የሚከተሉትን ጥያቄዎች መጠየቅ ይችላሉ፡

እባክዎን እስቲ ስለ ህመምዎ በጥቂቱ ይንገሩኝ?

ህመምዎ የጀመረው በምን ምክንያት ነው ብለው ያስባሉ? ሌሎች ሰዎችስ እንዴት እና ለምንድን ነው የታመምኩት ብለው ነው የሚያስቡት?

ህመሙ የእለት ተእለት ህይወትዎ፣ ስራዎ እና ከሰዎች ጋር ባለዎት ግንኙነት ላይ ተፅእኖ እያሳደረቦት ያለው እንዴት ነው?

ችግሮትን ለመፍታት ምን ያደርጋሉ? ቤተሰቦችዎስ ምን ያደርጋሉ? ጎረቤቶችዎስ? ሌሎች ሰዎችስ ምን እንዲያደርጉ ይመክርዎታል?

በመቀጠልም ተሳታፊው ከነገርዎት የህይወት ተሞክሮ በመነሳት ስለ ስሜት መለዋወጥ ህመም ምንነት፣ ምልክቶቹ፣ መንስኤዎቹ እና ህመሙን ሊያሽሉ ወይም ሊያባብሱ ስለሚችሉ ነገሮች ገለፃ ያድርጉ።

ለምሳሌ

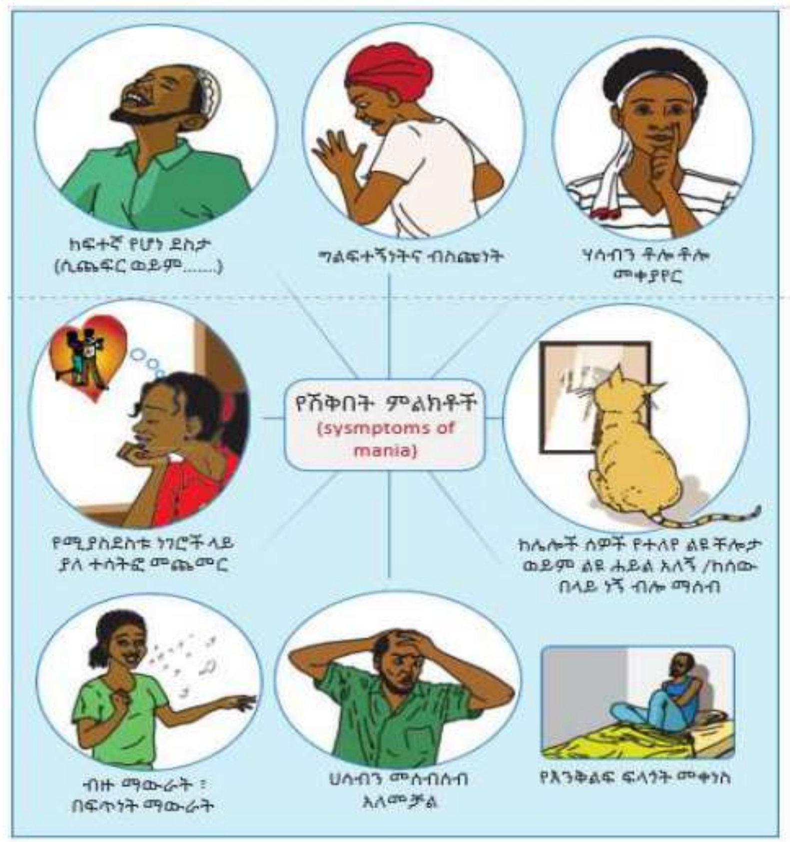
ያሉት ነገር ትክክል ነው። ስሜት መለዋወጥ ህመም አንድ ጊዜ የሚድን ሌላ ጊዜ ደግሞ የሚያገረሽ የህመም አይነት ነው። የስሜት መለዋወጥ ህመም ያለባቸው ሰዎች በጣም ከመደሰት ወይም መበሳጨት (ከፍተኛ የስሜት ደረጃ) እስከ ድብርት/ድባቴ ስሜት ሊኖራቸው ይችላል። በዚህም ስለሚቀያየር ጤናማ የሆነ ኑሮ መምራት ይቸገራሉ።

ለጤና ባለሙያዎች፡

እባክዎ የስሜት መለዋወጥ ህመም ያለባቸው ሰዎች በተለይም ከፍተኛ የደስታ ስሜት / ሸቅበት ጊዜ ሊኖሩ የሚችሉ ምልክቶችን ያስረዱዋቸው። የሚኖሩትን ምልክቶችን በሚገባ ለመረዳት አባሪ-2 ላይ ያለውን የአልማዝን ታሪክ ይመልከቱ ።

ከፍተኛ የስሜት ደረጃ / ሸቅበት ጊዜ **ከመጠን በላይ የሆነና የተጋነነ ደስተኝነት ወይም በተቃራኒው ግልፍተኝነትና** ቁጡነት ዋና ምልክቶች ሲሆኑ ከነዚህ በተጨማሪ

- ሀሳብን መሰብሰብ አለመቻል
- የሚያስደስቱ ነገሮች ላይ ያለ ተሳትፎ መጨመር
- ከሌሎች ሰዎች የተለየ ችሎታ ወይም ልዩ ሐይል አለኝ/ከሰው በላይ ነኝ ብሎ ማሰብ
- የእንቅልፍ ፍላጎት መቀነስ
- መለፍለፍ ወይም ብዙ ማውራት
- በንግግር ወቅት ተያያዥነት የሌላቸውን ነገር እያወሩ መዘባረቅና
- ከአንድ ሃሳብ ወደ አንድ ሃሳብ በፍጥነት መዝለል
- ከፍ ያለ የወሲብ ፍላጎት።
- ከፍተኛ የሆነ የብርታት ሥሜት / ድካም አለመሰማት

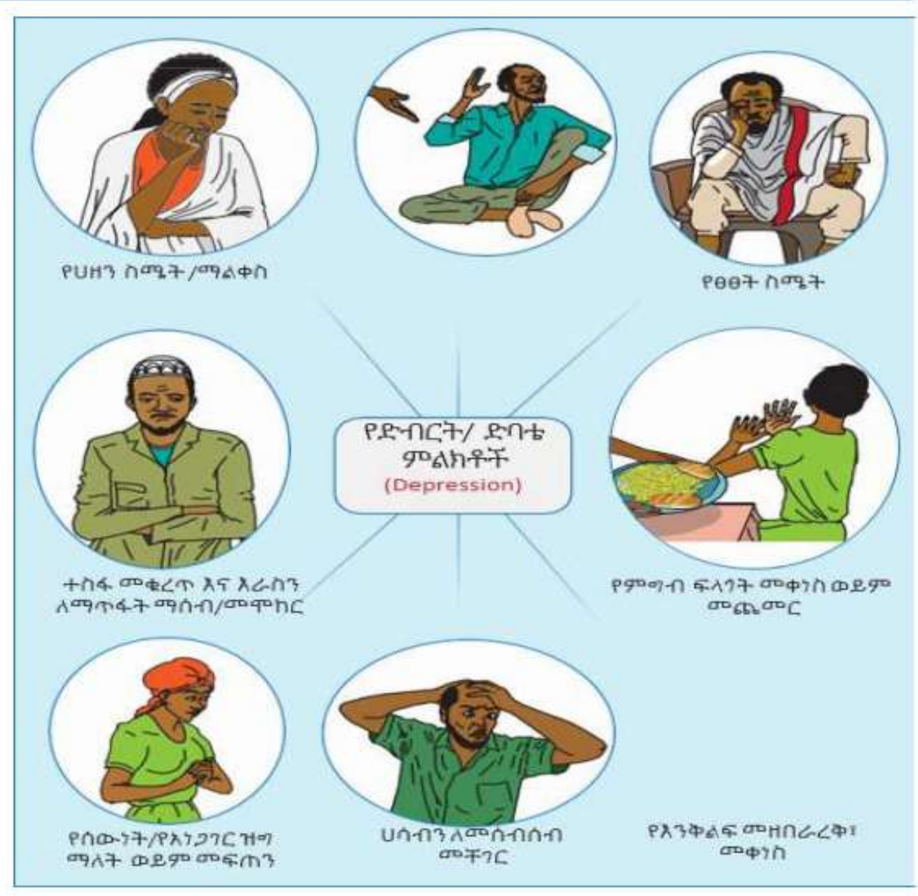


ለጤና ባለሙያዎች፡

እባክዎ የስሜት መለዋወጥ ህመም ያለባቸው ሰዎች በተለይም በድብርት /በድባቴ ስሜት ውስጥ በሚሆኑበት ወቅት ሊኖሩ የሚችሉ ምልክቶችን ያስረዱዋቸው፡፡ ስለ ድብርት /በድባቴ ምልክቶች በሚገባ ለመረዳት አባሪ-3 ላይ ያለውን የሽምሱን ታሪክ ይመልከቱ፡፡

የድብርት /ድባቴ ምልክቶች

- የሀዘን ስሜት
- በፊት የምንወዳቸውን ነገሮች መጥላት/ፍላጎት ማጣት
- የፀፀት ስሜት
- ተስፋ መቁረጥ እና እራስን ለማጥፋት ማሰብ/መሞከር
- ሀሳብን ለመሰብስ መቸገር
- የምግብ ፍላጎት መቀነስ ወይም መጨመር
- የሰውነት/የአነጋገር ዝግ ማለት ወይም መፍጠን
- የድካም ስሜት ፣ ሐይል መጨመር ወይም መቀነስ
- የእንቅልፍ መዘበራረቅ፣ መቀነስ ወይም መጨመር



የህመሙ ማገርሸት ጠቋሚ የሆኑ ምልክቶች ምን አይነት ናቸው?

ለጤና ባለሙያዎች፡

በመጀመሪያ ተሳታፊዎች ህመማቸው ሲመለስባቸው/ ሲያገረሽ የህመሙን ማገርሸት የሚጠቁሙ ምልክቶች ምን አይነት እንደሆኑ ተሳታፊው ያላቸውን እውቀት ለመረዳት ይሞክሩ።
ለመረዳትም የሚከተሉትን ጥያቄዎች መጠየቅ ይችላሉ፡

ከዚህ በፊት ያመምዎት ጊዜ እንዴት እንደነበር ያውቃሉ/ያስታውሳሉ? ሲጀምርዎት እንዴት ነበር?

ህመምዎ ከመባባሱ እና ከባድ ደረጃ ከመድረሱ በፊት ህመሙ እያገረሸ እንደሆነ እንዴት ያውቃሉ?

ተሳታፊው ቤተሰብ ከሆነ፡- የእርሶ ቤተሰብ ህመማቸው ከመባባሱ እና ከባድ ደረጃ ከመድረሱ በፊት እያገረሸ/ እየተመለሰባቸው እንደሆነ እንዴት ያውቃሉ?

በመቀጠልም ተሳታፊው ከነገርዎት የህይወት ተሞክሮ በመነሳት የህመሙ ማገርሸት ጠቋሚ የሆኑ የህመም ምልክቶች ምን ምን እንደሆኑ ገለፃ ያድርጉ። ለምሳሌ በሚከተለው መንገድ ሊያስረዱዋቸው ይችላሉ።

እርሶ እንዳሉት ህመሙ ከመባባሱ እና ከባድ ደረጃ ከመድረሱ በፊት እያገረሸ እንደሆነ ጠቋሚ የሆኑ የህመም ምልክቶች ከሌላው ጊዜ የተለዩ አይደሉም። ነገር ግን ህመሙ ከተባባሰና በደንብ ምልክቶቹ መታየት ከጀመሩ በኃላ ከሚኖሩት ምልክቶች አይነታቸው ተመሳሳይ ቢሆንም እንኳን በጣም ቀለል ያሉ ናቸው።

ኢትዮጵያ ውስጥ በተደረጉ ጥናቶችም እንደሚያሳዩት የስሜት መቀያየር ሕመም ያለባቸው ሰዎች እና ተንከባካቢዎቻቸው/ቤተሰቦቻቸው የሚከተሉትን የህመም ምልክቶች ለእነርሱ የህመሙ ማገርሸት ጠቋሚ ምልክቶች እንደሆኑ ተናግረዋል።

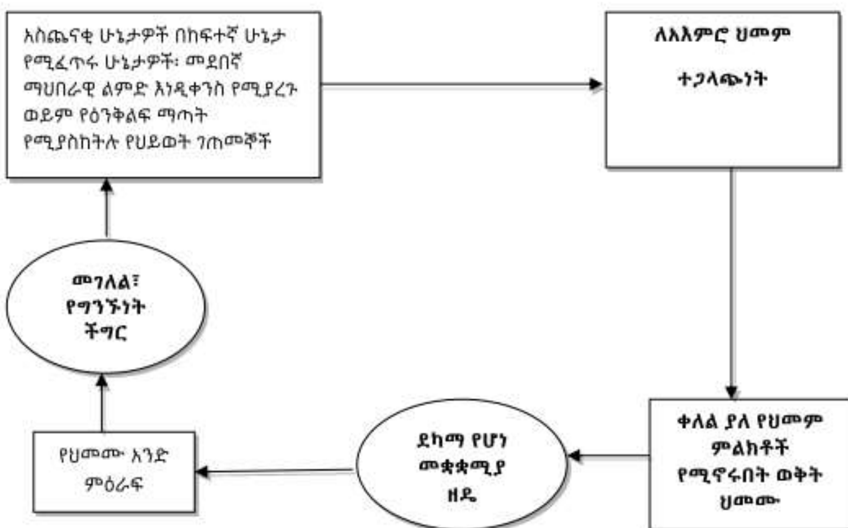
1. የእንቅልፍ መረባበሽ
2. ቶሎ ቶሎ መበሳጨት እና በመበሳጨታቸው ምክንያት ከቤተሰብ፣ ከልጅ፣ ከትዳር አጋር፣ ከጎረቤት፣ ከአስተማሪ፣ ከጓደኛ እና ከሌሎች ሰዎች ጋር መጨቃጨቅ /መጋጨት
3. ለአነጋገራቸው፣ ለአለባበሳቸው ግዴለሽ መሆን
4. ከሌላው ቀን በተለየ ሐይለኝነት እና ብዙ ማውራት
5. ከባህሉ ባፈነገጠ መልኩ ማውራት። ለምሳሌ በእድሜ ታላቅ የሆኑ ሰዎችን አለማክበር
6. ብዙ ብር ያለአግባብ ማጥፋት
7. የፍላጎት መቀነስ እና የጭንቀላት የመክበድ ስሜት
8. ጭንቅላቴን ይቀለኛል

ለጤና ባለሙያዎች፡ እነዚህን የህመሙ ማገርሸት ጠቋሚ የሆኑ ምልክቶችን ለሌላ ጊዜ እንደ ማጣቀሻ እንዲጠቀሙበት ለተሳታፊው በወረቀት ፅፈው ይስጧቸው።

የህመሙ መንስኤዎች እና ህመሙን ሊያሽሉ ወይም ሊያባብሱ የሚችሉ ነገሮች ምንድን ናቸው?

ለጤና ባለሙያዎች ብቻ:

የህመሙ ምክንያቶችና ህመሙን የሚቀሰቅሱ፣ የሚያባብሱ ወይም እንዳያገረሽ የሚጠቅሙ እና ቶሎ እንዲሻላቸው የሚረዱ ነገሮችን ለመረዳት **Diathesis-stress-model** ንድፈ ሀሳብ አዕምሮዋችህ ውስጥ ያዙ፡ የ **Diathesis-stress-model** በአካላዊ ፤ ስነ-ልቦናዊና ማህበራዊ ምክንያቶች እርስ በእርስ ያላቸውን ግንኙነት ንድፈ ሀሳብ ለመረዳት ያግዛል ። በምስል አንድ ላይ እንደሚታየው ይህ ንድፈ ሀሳብ ጭንቀት እና የእንቅልፍ ዑደት ያላቸውን ግንኙነት ያሳያል። ከዚህ በተጨማሪ ንድፈ-ሀሳቡ የስነልቦና ህክምና ተመሳሳይ የሆነ የእንቅልፍ ስርዓት ላይ፣ በስርዓት የተቀረፀ የድርጊት መርሀ ግብር ለማውጣት እና ህመሙ ሲያገርሽ ለማወቅ ጠቋሚ የሆኑ የህመም ምልክቶችን ለመለየት እና እነዚህን ምልክቶች ለመቋቋም የሚረዳቸውን ክህሎቶች፣ ከዚህ በፊት ህመሙን የሚቀሰቅሱ እና የሚያባብሱ ነገሮችን ለመመርመር እና አጋላጭ ሁኔታዎችን ለመለወጥ መስራት በጣም መሰረታዊ ነገር መሆኑን ይጠቁማል። ሌሎች ለህመም የሚያጋልጡ ስንወለድ ይዘናቸው የተወለድናቸው ወይም በልጅነታችን ያጋጠሙን ነገሮች ሊኖሩ ይችላሉ ነገር ግን እነዛን መቀየር አንችልም። ነገር ግን ለጭንቀት ያለንን የተጋላጭነት መጠን እና ለጭንቀት የምንሰጠውን ምላሽ ግን ማስተካከል እንችላለን።



ሥዕል አንድ፡ Diathesis-Stress Model በስሜት ከአንድ ፅንፍ ወደ አንድ ፅንፍ መለዋወጥ ህመም ውስጥ ላለ የሚሰጥ ስነ ልቦናዊና ማህበራዊ ህክምና።

ለጤና ባለሙያዎች፡

በመጀመሪያ ስለ ህመሙ መንስኤዎች እና ህመሙን ቶሎ እንዲሻላቸው ወይም እንዲባባስባቸው የሚያደርጉ ነገሮች ምን ምን እንደሆኑ ከተሳታፊዎቹ ጠይቀው ለመረዳት ይሞክሩ። ከዚህ በታች የተዘረዘሩት ጥያቄዎች መረጃውን ለማግኘት ይረዳዎታል.

ህመሞት በምን ምክንያት የመጣበት ይመስሎታል? ቤተሰብዎ ህመማቸው የመጣው በምን ምክንዳት ይመስሎታል?
እባክዎን ጤናማ ሆነው ከቆዩ በኃላ ህመሞ እንዲያገረሽበት የሚያደርጉት / ህመሞትን የሚቀሰቅሱ ነገሮች ምንድን ናቸው /ቤተሰብዎ ጤናማ ሆነው ከቆዩ በኃላ ህመማቸውንየሚቀሰቅሱ ነገሮች ምንድን ናቸው?
ህመሙ ካገረሸ በኋላ እንዲባባስ እና ከባድ እንዲሆን የሚያደርጉት ነገሮችስ ምንድን ናቸው?
ህመሙ ካገረሸ በኋላ ቶሎ እንዲሻልዎ/እንዲሻላቸው የሚረዱዋቸው ነገሮች ምንድን ናቸው?

በመቀጠልም ህመምተኞች ከነገርዎት የህይወት ተሞክሮ በመነሳት፣ ለህመማቸው ምክንያት ስለሚሆኑ ነገሮች እና ህመሙን የሚቀሰቅሱ፣ የሚያባብሱ ወይም በተቃራኒው እንዳያገረሽ ወይም ካገረሸ በኋላ ቶሎ እንዲሻላቸው የሚረዱ ነገሮችን በሚከተለው መንገድ መግለፅና ማስተማር ይችላሉ፡

"ቀደም ሲል እናነተም እንደገለፃችሁት የህመሙ መነሻ ምክንያት የተለያዩ ነገሮች ድምር ውጤት ሲሆን አንድ ሰው ከመወለዱ በፊት፣ በመጀመሪያዎቹ የሂወት ጊዜያት ወይም በልጅነት ጊዜ በሚያጋጥሙንና እና በሌሎች አካባቢያዊ ምክንያቶች ውህደት ነው። ከነዚህም ውስጥ .... (ተሳታፊው የነገሩንን መጥቀስ) ህመሙን ሊያመጣ ወይም ህመሙ እንዲያገረሽ ሊያደርግ ይችላል። ሌሎችም ምክንያት የሚሆኑ ነገሮች አሉ። ለምሳሌ...... (ተሳታፊው ያልጠቀሱዋቸው ካሉ ይግለፁላቸው"

ከነዚህም አጋላጭ ምክንያቶች መካከል፡-

- በእርግዝና ጊዜ አንድ እናት ችግሮች ካጋጠሟት ለምሳሌ ኢንፌክሽን
- በወሊድ ጊዜ ችግሮች ሲኖሩ ህፃኑ በሂደቱ ውስጥ ከተጎዳ
- በልጅነት ጊዜ የሚደርስ የጭንቅላት ላይ ጉዳት/ አደጋ
- ከልጅነት ጀምሮ ጫት መጠቀም(መቃም)
- በጨቅላነት ጊዜ የሚከሰቱ ጥሩ ያልሆኑ የህይወት ገጠመኞች
- በዘር ሀረግ....... አንድ ሰው በቤተሰብ ውስጥ የአዕምሮ ህመም ወይም የስሜት መለዋወጥ ህመም ሲኖር። ይህ ማለት ግን በቤተሰብ ውስጥ የአዕምሮ ህመም ወይም የስሜት መለዋወጥ ህመም አለ ማለት አንድ ሰው ህመሙ ይይዘዋል ማለት አይደለም ነገር ግን በቤተሰባቸው ውስጥ ህመሙ ከሌለ ቤተሰብ ሲነፃፀሩ የመጋለጥ ዕድላቸው ከፍተኛ ነው።

አካባቢያዊ / ማህበራዊ ምክንያቶች

እነዚህ አንድን ሰው ውጥረት ውስጥ ሊከቱ የሚችሉ አካባቢያዊና ማህበራዊ የህይወት ኩነቶች ሲሆኑ ሰዎችን የማናደድ፣ የስጋት ወይም የሐዘን ስሜት ውስጥ እነዲገቡ ሊገፋፉ ይችላሉ። ተጋላጭ በሆኑ ሰዎች ላይ ህመሙን የሚቀሰቅሱ ወይም ታክመው ከተሻላቸው በኋላ እንኳን ህመሙ ተመልሶ እንዲመጣ ሊያረጉ ይችላሉ።

ከአካባቢያዊ / ማህበራዊ ምክንያቶች ውስጥ

- የማህበራዊ እገዛ/ድጋፍ ማጣት
- ስምምነት ማጣት/ፍች/ግጭት
- የኢኮኖሚ ችግር
- ስራ አጥነት/ማጣት
- በእለት ተለት ኑሯችን የሚያጋጥሙን ትንንሽ ጭንቀት ፈጣሪ ጉዳዮች
- ተፈጥሮአዊ አደጋ
- የአዕምሮ ጠባሳ የሚፈጥር የህይወት ገጠመኝ /አደጋ፣.
- ማጣት/የሞት ሐዘን/ ህመም
- አደንዛዥና አነቃቂ ስለሆኑ ነገሮች ማለትም ጠላ፣ ጠጅ፣ አረቂ፣ ቢራ፣ ሲጋራ/ትንባሆ እና ጫት መጠቀም

ማስታወሻ

- የስሜት መለዋጥ ህመም በመጥፎ መንፈስ ምክንያት የሚመጣ አይደለም።
- የስሜት መለዋጥ ህመም በፈጣሪ ቁጣ የሚመጣ አይደለም።
- የስሜት መለዋጥ ህመም ከሰው ወደ ሰው የሚተላለፍ በሽታ አይደለም።

መልሶ ምልከታ

ለጤና ባለሞያዎች፡

- ተሳታፊዎችን ዛሬ ምን አዲስ ነገር እንደተማሩ ይጠይቁ
- ተሳታፊዎች ጥያቄ ወይም አስተያየት ካላቸው ይጠይቁ
- የቀኑን ዋና ዋና ነጥቦች አጠቃል/ይ

(ለበለጠ አባሪ-4 ይመልከቱ)

ክፍለ ጊዜ ሦስት፡ ህክምና

የክፍለ ጊዜው አላማ

- ስለሚወስዱዋቸው መድሀኒቶች፣ እንዴት እንደሚጠቅማቸው እና ምን አይነት የጎንዮሽ ጉዳቶች ሊከሰቱ እንደሚችሉ መረጃ ለመስጠት
- መድሀኒትን በተገቢ ሁኔታ መውሰድ እና እንዴት መድሀኒታቸውን በተከታታይ እንዲወስዱ ሊታገዙ እንደሚችሉ መወያየት።

ሰንጠረዥ 3፡ ህክምና

ክፍል ሁለት			
	ይዘት	**የስልጠና ዘዴ**	**የሚወስደው ጊዜ**
የሚወስደው ጊዜ 20 ደቂቃ	መድሐኒት በአግባቡ መከታተል /ፅኑ እምነት	በቃል	20 ደቂቃ
	የመድሐኒት የጎንዮሽ ጉዳቶች		

የስሜት መለዋወጥ ህመም ህክምናው ምንድነው?

ለጤና ባለሙያዎች፡-

በመጀመሪያ ተሳታፊዎች ስለ ህክምናው ያላቸውን ግንዛቤ ለመረዳት ሞክሩ። ለመረዳትም የሚከተሉትን ጥያቄዎች መጠየቅ ይችላሉ።

- *እባክዎ እስቲ ስለ ህክምናዎ በጥቂቱ ይንገሩኝ*
- *በቀን ስንት ጊዜ መድሐኒት ይወስዳሉ?*
- *የታዘዘሎትን መድሐኒት ምን ያህል በተባሉት መጠን እና ጊዜ ይወስዳሉ?*
- *ጤናማ በሆኑ ጊዜ መድሐኒነት መውሰድ አለብኝ ብለው ያስባሉ? ለምን? / ለምን አያስቡም?*
- *መድሐኒቱ ጤናዎ እንዲሻሻል ምን ያህል ረዳዎት?*
- *የሚወስዱት መድሀኒት ያመጣቦት የጎንዮሽ ጉዳት አለ? ካለ እንዴት ችግሩን ፈቱት?*

በመቀጠልም ህመምተኞች ከነገሩን የመድሀኒት የህይወት ተሞክሮ በመነሳት መድሀኒትን በተባሉት መጠን እና ጊዜ ስለ መውሰድ፣ ህክምናን በፅናት መከታተል፣ ስለ መድሀኒት የጎንዮሽ ጉዳት እና ስላለው የመድሀኒት አማራጮች በሚከተለው መንገድ መግለፅና ማስተማር ይችላሉ።

"ቀደም ብሎ ጥሩ የደህንነት ስሜት ከተሰማን መድሐኒት መውሰድ አስፈላጊ እንደሆነ / እንዳልሆነ ነግረውኛል (ተሳታፊው የነገርዎትን) ። ለስሜት መለወወጥ ህመም እና የአዕምሮ ህመም በአጠቃላይ ሁለት የህክምና ደረጃዎች/ሂደቶች አሉ..."

- *1ኛ በህመሙ ወቅት የሚሰጥ ህክምና ሲሆን የህመሙን ምልክቶች ለመቀነስ እና የታካሚውን ጤና ለማሻሻል የሚሰጥ ነው።*
- *2ኛ ቀጣይ የሆነ ህክምና ሂደት፡ ይህ ደግሞ የህመሙን ምልክቶች ከጠፉ ወይም ከቀነሱ በኃላ ህመሙ እንዳያገረሽ ለመከላከል ወይም ጤናማ ሆነው የሚቆዩበትን ጊዜ ረጅም ለማድረግ የሚደረግ ህክምና ነው፡*

ምን አይነት መድሐኒቶች ይገኛሉ /አሉ?

ለምሳሌ እንደሚከተለው ልትገልፅ ትችላለህ

"ትክክል ብለዋል፡ ለብቻቸው ወይም ከሌላ መድሀኒት ጋር ወይም የስነልቦና ህክምና ጋር ሊሰጡ የሚችሉ የተለያዩ የመድሀኒት አይነቶች አሉ። ከነዚም ውስጥ መድሐኒት......... (ተሳታፊው የጠቀሰው መድሐኒት ስም/አይነት) አንዱ ነው። ከዚህ በተጨማሪ የስሜት መለወወጥ ህመም ላለባቸው ሰዎች የሚሰጡ ሌሎች መድሀኒቶች አሉ። ነገር ግን እርሶ እነሱን ስለማይጠቀሙ ለዛሬ ስለነሱ አንወያይም"

ለጤና ባለሙያዎች ብቻ፡

ህመምተኛው አሁን እየወሰደ ስላለው መድሀኒት፣ የጎንዮሽ ጉዳት በሚያስተምሩበት ወቅት ሰንጠለዥ አራትን እንደማጣቀሻ ይጠቀሙ። ከዚህ በተጨማሪ ህመምተኛው አሁን እየወሰደ ያለው መድሀኒት ላይ ብቻ አተኩረው ይስሩ።

ሰንጠረዥ 4: በ ዓለም የጤና ድርጅት የአዕምሮ ጤና ላይ ያለውን ክፍተት ለመሙላት የተዘጋጀ የህክምና መምሪያ (MhGAP intervention guide) በሰንጠረዡ ውስጥ የተጠቀሱትን መድሐኒቶች ለስሜት መለዋወጥ ህመም ህክምና አካቷል

አይነት	የመድሐኒቱ ስም	የመድሀኒቱ መደብ	የተለመዱ የጎንዮሽ ጉዳት
ሙድ እስቴብላይዘር	ሊትየም	ኪኒን	መደንዘዝ፣ ከሀሳብ ጋር የተያያዘ የመገንዘብ ችግር፣ የሰውነት መንቀጥቀጥ፣ ነገሮችን የማስተናበር ጉዳት፣ የደም ግፊት፣ ማቅለሽለሽ.፣ተቅማጥ የክብደት መጨመር፣ የፀጉር ማጣት፣ የሰውነት መንደብደብ ሽፍታ፣ ቶሎቶሎ መሽናት፣ ብዙ ውሀ መጠጣት / መጠማት እና የነጭ የደም ሴል መጨመር
	ሶዲየም ቫልቦሬት	ኪኒን	መደንዘዝ፣ እራስ ምታት፣ የሰውነት መንቀጥቀጥ ፣ ataxia, ማቅለሽለሽ፣ ማስታወክ፣ ተቅማጥ፣ ክብደት መጨመር፣ ጊዛዊ የፀጉር ማጣት
	ካርባሜዛፒን	ኪኒን	መደንዘዝ፣ መደናገር፣ እራስ ማዞር፣, ነገሮች ሁለት ሆነው መታየት፣ ማቅለሽለሽ፣ ተቅማጥ፣ እና የነጭ የደም ሴል መቀነስ እና መንገዳገድ
አንቲ ሳይኮቲክ	ሀሎፐሪዶል	ኪኒን/በመርፌ	መደንዘዝ፣ ራስ ማዞር፣ የዕይታ መደብዘዝ፣ የአፍ መድረቅ፣ የሽንት መያዝ፣ ሽንት ለመሽናት መቸገር ፣ የሆድ ድርቀት።
	ክሎርፐሮማዚን	ኪኒን/በመርፌ	መደንዘዝ፣ ራስ ማዞር፣ የዕይታ መደብዘዝ፣ የአፍ መድረቅ፣ የሽንት መያዝ ችግር፣ የሆድ መድረቅ፣ እና የልብ ምት መጨመር ፣ ሽንት ለመሽናት መቸገር
	ፍሉፌናዚን	በመርፌ መልክ የሚሰጥ	በእንቅስቃሴዎ/በአካሄድዎ ለመጀመር መነሳሳት ላይ መቸገር (parkinsonism). የንቃተ-ህሊና ማነስ/መቀነስ
	ሪስፐሪዶን	ኪኒን	መደንዘዝ፣ የራስ ማዞር፣ የልብ ምት መጨመር
አንቲ ዲፕረሳንት	አሚትሪፕትሊን	ኪኒን	መደንዘዝ፣ የመውደቅ አደጋ፣ የዕይታ መደብዘዝ፣ ሽንት መሽናት ማዳገት/ችግር፣ ማቅለሽለሽ፣ የክብደት መጨመር፣ ግብረ-ሥጋ ግንኙነት ችግር
	ፍሎሲቲን	ኪኒን	መደንዘዝ፣ የዕነቅልፍ ማጣት፣ የራስ ምታት፣ ራስ ማዞር፣ የጨጓራ መረበሽ፣ የምግብ ፍላጎት መለዋወጥ እና ግብረ-ሥጋ ግንኙነት ችግር

የህክምና/ የመድሐኒት ጥብቅ እምነት ማለት ምን ማለት ነው

የህክምና ጥብቅ እምነት ማለት ታካሚው ከህክምና ባለሞያ የሚሰጠውን ሁሉንም ትዕዛዝ የመከተል ብቃት ማለት ሲሆን መድሐኒትን ጨምሮ፣ ጤናማነትን ለማሻሻል የሚረዱ ባህሪያት እና ልማድ እና ሁሉንም የህክምና ቀጠሮዎች መከታተልን ይጨምራል።

የህክምና/ የመድሐኒት ጥብቅ እምነት/ በተገቢ ሁኔታ መውሰድ ለምን ይጠቅማል?

ለጤና ባለሙያዎች፡ በመቀጠልም መድሐኒትን በተገቢው ሁኔታ መውሰድ ያለውን ጥቅም እንደሚከተለውን በመግለፅ ሊያስረዱዋቸው ይችላሉ።

ህመምተኛው በህመም ወቅት እና ከተሻለው በኃላ መድሐኒትን በተገቢው ሁኔታ መውሰድ የስሜት መለዋወጥ ህመም ላለባቸው ሰዎች ብዙ ጥቅም አለው፡ ከነዚህም ጥቅሞች መካከል ... (መጀመሪያ ላይ ተሳታፊው የጠቀሱዋቸው ጥቅሞች) የተወሰኑት ናቸው።ከዚህ በተጨማሪ .... ይጠቅማል (ተሳታፊው ያልጠቀሱዋቸውን ይጥቀሱ) ። ለምሳሌ የተሻለ ስሜት እንዲኖር፣ ወደ ተለመደው የዕለት ተለት ተግባራት ለመመለስ። ለምሳሌ ወደ እርሻ ስራ እና የቤት ውስጥ ስራ፣ ህመሙ እንዳያገረሽ ለመከላከል እና ሆስፒታል የመተኛት፣ እራስን በማጥፋት ምክንያት የሚከሰትን ሞት ለመቀነስ እና የህመሙን ሂደት፣ የእለት ተእለት የስራ እንቅስቃሴን እና ጤንነትን ለማሻሻል

መድሐኒትን ለማቋረጥ ምክንያቶቹ ምንድን ናቸው?

መድሐኒትን ለማቋረጥ እንደምክንያት ከሚሆኑት መካከል ጥቂቶቹ፡-

- የአቅም ምክንያት፡ በገንዘብ ችግር ምክንያት መድሐኒት መግዛት አለመቻል
- ጤናማ የሆነ ስሜት ፡- ሰዎች የጤናማነት ስሜት ሲሰማቸው ህመሙ የጠፋ/ ሙሉ በሙሉ የዳኑ አርገው በመወሰድ መድሐኒት መውሰድ አስፈላጊ ነው ብለው ስለማያስቡ ያቋርጡታል
- የመድሐኒት የጎንዮሽ ጉዳት ወይም የጎንዮሽ ጉዳት ሊኖር ይችላል የሚል ፍራቻ
- እንደጠበቁት መድሐኒት ሳይረዳቸው ሲቀር
- መድሐኒት ማግኘት ወደማይችሉበት ቦታ በተለያየ ምክንያት መሄድ/መኖር
- የመሰልቸት ስሜት፡ መድሐኒት ለረጅም ጊዜ ስለሚወሰድ ታካሚዎች መድሐኒት መውሰድ ይሰለቻሉ
- መድሀኒትን በሰዓቱ መውሰድ መርሳት
- መድሀኒትን ለመውሰድ ፈቃደኛ አለመሆን
- ከቤተሰብ እና ከሌሎች ሰዎች በቂ የሆነ ድጋፍ አለማግኘት
- መድሐኒት በመውሰድ የሚመጣ የመገለል ስሜትን ለመከላከል
- ህመሙ የመጣው በመንፈስ ምክንያት ነው ብሎ ማመን

ህክምናን /የመድሐኒትን በአግባቡ የማይከታተሉትን ህመምተኞች እንዴት ማወቅ /መገመት እንችላለን?

የስሜት መለዋወጥ ህመም ጋር ያሉ ሰዎችን ዝቅተኛ የሆነ የህክምና ፅኑ እምነት ቀደም ብሎ መለየት/ማወቅ ስለህክምናው እቅድ ለማዘጋጀት አስፈላጊ ነው። የሚከተሉት ሰዎች ህክምናቸውን በሚገባ የማይከታተሉ ሊሆኑ ይችላሉ

- ከዚህ በፊት ህክምናቸውን/መድሀኒታቸውን በተገቢው መንገድ የማይከታተሉ ሰዎች
- ከዚህ በፊት የመድሐኒት ጎንዮሽ ጉዳት የነበራቸው ወይም የጎንዮሽ ጉዳት ሊኖር ይችላል የሚል ፍረቻ ያላቸው
- ከሁለት አይነት መድሐኒቶች በላይ የሚወስዱ
- የስሜት መለዋወጥ ህመምን እንደችግር/ ህመም የማይቆጥሩ/ የማይመስላቸው
- ከቤተሰብ እና ከሌሎች ሰዎች በቂ የሆነ ድጋፍ የሌላቸው ሰዎች
- አደንዛዥና አነቃቂ የሆኑ ዕፆችን የሚጠቀሙ
- በዕድሜ የገፉ ወይም በወጣትነት ዕድሜ ክልል የሚገኙ ናቸው

የስሜት መለዋወጥ ህመም ያለባቸውን ሰዎች መድሐኒታቸውን እንዲወስዱ እንዴት ልንረዳቸው እንችላለን?

የህክምናን/ የመድሀኒትን በተገቢው መንገድ ላለመከታተል ምክንያት የሚሆኑ የተለያዩ ምክንያቶችን እና ፍላጎቶችን ሊኖሩ ይችላሉ። እነዚህን ችግሮች ለመፍታት ህመሙ ካለባቸው ሰዎች እና ከተንከባካቢዎቹ ጋር ማቀድ ያስፈልጋል። የስነ ልቦና ህክምና እያንዳንዱ ችግር የሚፈታ መሆን አለበት። የችግር መፍቻ ዘዴ አንዱ የህክምና ፅኑ እምነትን ከምናሻሽልባቸው መንገዶች ውስጥ አንዱ ነው። የጤና ባለሙያዎች ድጋፍ እና ማበረታቻም ሌላው ጠቃሚ ነገር ነው።

ደረጃ 1፡ ተሳታፊውን ስለመድሀኒት ያላቸውን ታሪክ በሚከተለው መልኩ ይጠይቋቸው

- ሁሉንም ለእርሶ የታዘዙ መድሐኒቶችን ለመውሰድ የሚያዳግቶት/የሚያስቸግርዎት ነገሮች አሉ? ማንኛውም ነገር ሊሆን ይችላል?
- ከመድሐኒት ውጪ በራሶ ህመሙን ለመቋቋም ሞክረው ያውቃሉ?
- ብዙ ሰዎች ከጊዜ ወደ ጊዜ መድሐኒት መውሰድ ያቆማሉ፣ እርሶስ እንዴት ነው /ምን ይመስላል?
- በዕርሶ አመለካከት መድሐኒት መውሰድዎ ያለዎትን እቅድ/ግቦችን ለማሳካት ይረዳኛል ብለው ያስባሉ?

ደረጃ 2፡ ተሳታፊዎች መድሐኒታቸው በተመከሩት/በታዘዙት መንገድ እየወሰዱ አለመሆናቸውን ከተረዱ በኋላ የሚከተለውን ያድርጉ

- የስሜት መለዋወጥ ህመም ያለባቸውን ሰዎች እና ተንከባካቢያቸውን ማሳተፍ
- መድሐኒት በታዘዘው መሰረት በአግባቡ የማይወስዱበትን ምክንያቶች መጠየቅ
- ታካሚው ስለመድሐኒታቸው ጥቅምና ጉዳቱን እዲነግሮት ለማድረግ ይሞክሩ
- ከዚህ በፊት መድሐኒት መውሰድን ለማሻሻል ያደረጓቸውን ማንኛውም ሙከራ በመጠየቅ እና በመዘርዘር ፣ መወያየት እና ሐሳባቸውን መገንባት

ለረጅም ጊዜ መድሀኒት መውሰድ ለማንኛውም ሰው አስቸጋሪ መሆኑን መዘንጋት የለብንም፡፡ ምንልባትም የመድሀኒትን በተገቢው መንገድ ላለመከታተል ምክንያት የሚሆኑት ችግሮች ከሰውየው አቅም በላይ ሊሆኑ ይችላሉ። ለምሳሌ መድሀኒት ለመግዛት ገንዘብ ማጣት ሊሆን ይችላል፡፡ እራሳችንን በእነርሱ ቦታ አድርገን ችግራቸውን በመረዳት ሁልጊዜ እነርሱን ልንረዳቸው ይገባል፡፡

ደረጃ 3፡ መድሐኒት ላለመውሰድ ችግሮች ብለው ያቀረቡትን ምክንያቶች ላይ በመንተራስ ችግሩን መፍታት፡፡

መድሐኒት ላለመውሰድ ስለ ህመሙ ወይም ህክምናው ያላቸው አመለካከት የተሳሳተ ከሆነ፡

- ስለ ህመሙ፣ስለ ህክምናው እና ስለ ህክምናው ጥቅሞች መረጃ ይስጧቸው
- ስለ መድሐኒት ጥቅምና ስለ ጎንዮሽ ጉዳቶች መረጃ ይስጧቸው
- የህክምና ባለሙያው ከህክምናው ምን እንደሚጠብቅ ይግለፁላቸው
- የተሳሳተ ሙሉ በሙሉ የመዳን ተስፋን መፍጠር ያስወግዱ

መድሐኒት ላለመውሰድ ምክንያቱ ሐይማኖታዊ ወይም ባህላዊ ተግባራትና ህክምናዎች ከሆኑ፡

- የባህላዊና መንፈሳዊ ህክምና ባለሙያዎችንማሳተፍ
- ለባህላዊ/የሐይማኖት መሪዎች ፣ ለስሜት መለዋወጥ ህመም ላለባቸው ሰዎች እና ለእነሱ ተንከባካቢዎች ፀበል እየተጠመቁ መድሐኒት መውሰድ ያለውን ፋይዳ ያስረዱ። በተጨማሪም ፀበል ከተጠመቁ እና ከጠጡ በኃላ መድሐኒት መውሰድ እንደሚችሉ እና ሁለቱም በአንድ ጊዜ መጠቀም ምንም አይነት ጉዳት እንደሌለው ያስረዱዋቸው፡፡

መድሐኒት ላለመውሰድ ምክንያቱ ስለ ህመሙ ወይም ህክምናው መርሳት ከሆነ፡

- ታካሚውን ሊረዳቸው የሚችለው ጠቃሚ ሰው ማን እንደሆነ ማወቅና እና መድሐኒት መውሰድ እንዳለባቸው እንዲያስታውሷቸው ማድረግ
- ህመሙ ያለባቸው ሰዎች ህምም ውስጥ መሆናቸው ያለባቸውን ህመም ላይረዱት እና መድሐኒት ለመውሰድ ፍቃደኛ ላይሆኑ ይችላሉ። ስለዚህ ለቤተሰቦቻቸው እንደታካሚ እንዲመለከቷቸው ምክር ይስጧቸው። በተጨማሪም መድሀኒት እንዲወስዱ አያስገድዷቸው ነገር ግን ወደ ጤና ተቋም መውሰድ/ማምጣት እንዳለባቸው ያስረዱዋቸው።
- የስሜት መለዋወጥ ህመም ያለባቸው ሰዎች መድሐኒታቸውን ሁልጊዜ በተመሳሳይ ሰዓት (በቋሚ ሰዓት) የዕለት ተዕለት ተግባራትን ካከናወኑ በኋላ እንዲወስዱ ይምከሯቸው።
- ማንቂያ ደውል እንዲጠቀሙ ይምከሯችው። ለምሳሌ የሞባይል ማንቂያ ደውል፣ የዕስልምና ሐይማኖት ተከታይ ከሆኑ ከሶላት ሰዓት ጋር እንዲያገናኙት፣ ሰራተኛ ከሆኑ ከስራ ሲመለሱ ወይም ከመተኛታቸው በፊት ከዕንቅልፍ ሲነሱ ወይንም ሌላ ለማስታወስ ይተቅመኛል የሚሉትን ዘዴ እንዲጠቀሙ ይወያዩ። እባክዎን ከታማሚው እና ከተንከባካቢያቸው ጋር እቅድ ያውጡ/ያዘጋጁ።

መድሐኒት ላለመውሰድ ምክንያቱ ከህክምናው ጋር የተያያዘ ከሆነ

- አሁን ያለውን የመድሀኒቱን የጎንዮሽ ጉዳት ፍራቻ እና ሊከሰት የሚችል የጎንዮሽ ጉዳቶች ተወያዩ
- መድሐኒትን ማስተካከል፤ ይህም የመድሐኒቱን መጠን መጨመር፣ መቀነስ ወይም መቀየር እና በዘላቂነት የሚገኘውን መድሐኒት እንዲወስዱ ማድረግ
- የመድሐኒቱን መጠን እና የሚወስዱበትን ሰዓት ማሻሻል፡ መድሐኒት የሚወስዱበትን ጊዜ በቀን አንድ ጊዜ ብቻ ማድረግ አወሳሰዱን ቀላል ያደርገዋል።
- የሚቻል ከሆነ የታካሚውን ፍላጎት ለማሟላት በመርፌ እና ኪኒን የሚሰጥ አማራጮች ካሉ ተመልከት
- ታካሚው እና ተንከባካቢው ችግር ገጥሟቸው ከነበረ ይጠይቁ
- ግለሰቦችን መድሐኒት በግድ እንዲወስዱ ማድረግን ያስወግዱ። ለምሳሌ በማሰርና በጉልበት መድሐኒቱን በአፋቸው መጨመር።

(ለበለጠ አባሪ-5 ይመልከቱ)

ክፍል አራት፡ የስሜት መለዋወጥ ህመም ያለባቸውን ሰዎች ጤንነት ማሻሻል

የዚህ ክፍለ ጊዜ አላማ

የዚህ ክፍለ ጊዜ አላማ የስሜት መለዋወጥ ህመም ያለባቸውን ሰዎችን ጤንነት ማሻሻል ሲሆን ይህም ሀሳብን በመግለፅ በሚደረግ ውይይት ሁልጊዜ ጤናማ የዕንቅልፍ ስርአት ፣ ጭንቀትን የመቆጣጠር ዘዴ፣ አደንዛዥና አነቃቂ ከሆኑ ነገሮች መራቅ/አለመጠቀም እና ከሰዎች ጋር ያለውን ግንኙነት ማሻሻልን ያካትታል፡፡

በዚህ ክፍለ ጊዜ ውስጥ የተካተቱ ንዑስ ክፍሎች

ለጤና ባለሙያዎች፡

እባክዎ በዚህ ክፍለ ጊዜ ውስጥ የተካተቱ አራት ንዑስ ክፍሎች ማለትም ጤናማ ዕንቅልፍ (የዕንቅልፍ ጤንነት አጠባበቅ) ፣ የሚያስጨንቁ/ የሚረብሹ ነገሮችን ማስወገድ ወይም መቆጣጠር፣ ጤናማ የሆነ ግንኙነት መመስረት እና አደንዛዥና አነቃቂ ከሆኑ ነገሮች መራቅ/ አለመጠቀም እንዳሉ ያስተውሉ፡፡ በመጀመሪያ ክፍለ ጊዜ ላይ የተቀመጡት ግቦች ላይ በመመርኮዝ ከነዚህ አራት ንዑስ ክፍሎች ውስጥ ለተሳታፊው በጣም ጠቃሚ የሚሆኑትን ሁለት ንዑስ ክፍሎች ይምረጡ፡፡

በዚህ ክፍለ ጊዜ የሚጠቀሱት ለሁሉም በስሜት መለዋወጥ ህመም ላለባቸው ሰዎች አስፈላጊ ላይሆኑ ይችላሉ፣ እባክዎን ከእነዚህ አራት ንዑስ ክፍሎች ውስጥ በሁለቱ ላይ ብቻ ትኩረት ያድርጉ

ሰንጠረዥ 5፡ የስሜት መለዋወጥ ህመም ያለባቸውን ሰዎች ጤንነት ማሻሻል

የስሜት መለዋወጥ ህመም ያለባቸውን ሰዎች ጤንነት ማሻሻል			
	ይዘት	የስልጠና ዘዴ	የሚፈጀው ጊዜ
የሚፈጀው ጊዜ 20 ደቂቃ	የዕንቅልፍ ጤና አጠባበቅ እና አስፈላጊነት	ሀሳብን በመግለፅ የሚደረግ ውይይት	6 ደቂቃ
	የሚያስጨንቁ/ የሚረብሹ ነገሮችን ማስወገድ ወይም መቆጣጠር		7 ደቂቃ
	ጤናማ የሆነ ግንኙነት መመስረት		7 ደቂቃ

ጤናማ የዕንቅልፍ ስርአት (የዕንቅልፍ ጤንነት አጠባበቅ)

የዚህ ክፍለ ጊዜ ዓላማ ተሳታፊዎችን ስለ ዕንቅልፍ አስፈላጊነት መወያየት እና የህይወት ዘይቤ እና አካባቢን በመለወጥ ዕንቅልፍን እንዴት ማሻሻል እንደሚቻል ለመምከር ነው።

ዕንቅልፍ ለምን ያስፈልጋል?

ለጤና ባለሙያዎች፡

በመጀመሪያ ተሳታፊዎችን ስለዕንቅልፍ ጥቅም ምን እንደሚያውቁ ለመረዳት የሚከተሉትን ጥያቄዎች ይጠይቁ

- ***እባክዎን በመጀመሪያ እንቅልፍዎ ምን እንደሚመስል ይንገሩኝ፣ ስንት ሰዓት እንደሚተኙ ስንት ሰዓት ላይ ከእንቅልፍዎ እንደሚነቁ እና በአጠቃላይ እንቅልፍዎ ምን እንደሚመስል***
- ***እስቲ በቂ እንቅልፍ ስላለው ጥቅም ይንገሩኝ***
- ***በደንብ/በአግባቡ የተኙ ዕለት ምን አይነት ስሜት ይሰማዎታል***
- ***ዕንቅልፍ በደንብ ያልተኙ ቀንስ ምን ይሰማዎታል (ለአጭር ጊዜ ብቻ ሲተኙ)***

በመቀጠል ስለ ዕንቅልፍ አስፈላጊነት ማስረዳት ወይም ማስተማር ይችላሉ። ለምሳሌ እንዲህ በማለት ሊያስረዱዋቸው ይችላሉ።

ዕንቅልፍ.... (ተሳታፊው የጠቀሱዋቸው ጥቅሞች) ይጠቅማል።

"አዎ እርስዎ እንዳሉት ዕንቅልፍ በጣም አስፈላጊ የሆነ የሰው ልጅ ልምድ ነው። ሀይልን መልሶ ለማሰባሰብ፣ የሰውነታች አሰራር የተስተካከለ እንዲሆን እና የሰውነታችንን ሙቀትና ስሜታችንን ለመቆጣተር ይጠቅማል ።

የእንቅልፍ መረበሽ ከስሜት መለዋወጥ ህመም ጋር የተያያዘ ነው (አንዱ ምክንያት ነው) ። የእንቅልፍ መረባበሽ ሲባል የእንቅልፍ መጠን መጨመር ወይም መቀነስ ወይም የእንቅልፍ ጥራት መቀነስ ሲሆን የህመሙ ምልክት ወይም ደግሞ ህመሙ እንዲያገረሽ ወይም ካገረሸ በኋላ እንዲባባስ የሚያደርግ ምክንያት ሊሆን ይችላል። ስለዚህ እንቅልፍ ላይ ትኩረት ያደረገ ህክምና የህመሙን ሂደት እና ውጤት ያሻሽላል።

ጤናማ ዕንቅልፍ ስርአት / የእንቅልፍ ጤና አጠባበቅ ምንድነው?

ለጤና ባለሙያዎች፡

በመጀመሪያ ተሳታፊዎች ዕንቅልፋቸውን ለማሻሻል ምን እንደሚያረጉ ለመረዳት የሚከተሉትን ጥያቄዎች ይጠይቁ

ዕንቅልፎዎን ለማሻሻል ወይም ጥሩ ዕንቅልፍ ለመተኛት ምን ያደርጋሉ?

በእናንተ ባህል የአካባቢያቹ ማህበረሰብ ጥሩ ዕንቅልፍ ለመተኛት ምን ያደርጋሉ?

በመቀጠል የዕንቅልፍ ጤና አጠባበቅ ማለት ምን ማለት እንደሆነ በሚከተለው መልኩ ማብራራትና ማስተማር ይችላሉ።

የነገሩኝ ትክክል ነው። ዕንቅልፍን ለማሻሻል የሚጠቅሙ የተለያዩ ዘዴዎች አሉ። አሁን የዕንቅልፍ ጤና አጠባበቅ ማለት ምን ማለት እንደሆነ እነግርዎታለሁ። በመቀጠልም የዕንቅልፎዎን ጤንነት ለማሻሻል ምን ማድረግ እንዳለብዎ እንወያያለን። ነገር ግን የምንወያይበቸው ነገሮች በዕለት ተዕለት ሕይወታችሁ ውስጥ ደጋግማችሁ መለማመድ ያስፈልጋችኋል። ይህም እንቅልፋችሁን ስለሚያሻሽለው በዕንቅልፍ መረባበሽ ምክንያት ህመማችሁ እንዳያገረሽ ወይም እንዳይባባስ ለመቀነስ ወይም ለመከላከል ይጠቅማል፡

በመቀጠል የሚከተሉትን አስራ ሁለት እንቅልፍን ለማሻሻል ጠቃሚ የሆኑ ነጥቦች ላይ ገለፃ ያድርጉ።

"የዕንቅልፍ ጤና አጠባበቅ ማለት የተስተካከለ የዕንቅልፍ ልማድን ለመግለፅ የምንጥቀምበት ሲሆን ...."

1. **ሁል ጊዜ በተመሳሳይ/በተለመደ ሰዓት ዕንቅልፍ መተኛት እና ከዕንቅልፍ መነሳት**
2. **እንቅልፍ ሲመጣብን ብቻ ወደ አልጋ መሄድ**
3. **ከዕንቅልፍ መነሳትና በድጋሚ ለመተኛት መሞከር፡-** ከ20 ደቂቃ በላይ በአልጋ ላይ ለመተኛት ሞክረህ ዕንቅልፍ ካልወሰደን ተነስቶ እስክንደክም ወይም እንቅልፋችን እስኪመጣ ድረስ ሊያረጋጋ የሚችል ወይም የሚያሰለች ነገር መስራት ጠቃሚ ነው። በምንም አይነት የሚያነቃቃ፣ ፍላጎትን የሚቀሰቅስ ለምሳሌ ሙዚቃ ወይም ራዲዮ ማዳመጥ ወይም ኢንተርኔት መጠቀምን ማስወገድ ያስፈልጋል
4. **ቡና መጠጦችን እና ሲጋራ ማጨስን ማስወገድ፡-** ቡና መጠጣትና ወይም ሲጋራ ማጨስ ሊያነቃቃን እና ዕንቅልፋችንን ሊረባብሽ ስለሚችል ወደ አልጋ ከመሄዳችን 4-6 ሰዓት በፊት ማስወገድ አለብን።
5. **የሚያሰክሩ መጠቶችን (አልኮል መጠጦች) ማስወገድ፡-** የዕንቅልፋችንን ጥራት ስለሚያውክ የሚያሰክሩ መጠጦችን (አልኮሎች መጠጦችን) አለመጠቀም

6. **አልጋችንን ዕንቅልፍ ለመተኛት ብቻ መጠቀም፡-** አልጋችንን ቴሌቭዥን ለመመልከት፣ ለመመገቢያ ወይም ለማንበቢያ አለመጠቀም
7. **በቀን ሸለብታ/ለአጭር ጊዜ መተኛትን መስወገድ፡-** ማታ ደክሞን እንቅልፍ እንዲወስደን ቀን ላይ ለአጭር ጊዜ መተኛትን ወይም ሸለብታን ማስወገድ አለብን
8. **የዕንቅልፋችንን ሁኔታ በማስታወሻ መያዝ፡-** ይህ ማለት እራሳችን ወይም አብረውን የሚኖሩ ሰዎችን (ልጆች/ወንድም/እህተ...) ስንት ሰዓት ላይ እንቅልፍ እንደወሰደን እና ስንት ሰዓት ላይ እንደነቃን እንዲፅፉልን/ እንዲመዘግቡልን ማድረግ ማለት ነው። ማስታወሻው ስለ ዕንቅልፍ ሁኔታችን ከምንገምት ይልቅ ትክክለኛውን ዕውነታ እንድናውቅ ይጠቅመናል።
9. **የሰውነት እንቅስቃሴ ማድረግ (ስፖርት መስራት)** ፡- በተከታታይ ስፖርት መስራት እንቅልፍን ለማሻሻል ጠቃሚ ነው። ነገር ግን ወደ አልጋ ከመሔዳችን 4 ሰዓታት በፊት ጠንከር ያለ የሰውነት ዕንቅስቃሴ ማድረግ የለብንም። ጠዋት ላይ የእግር ጉዞ ምድረግ ንቁ እና አዲስ የሆነ ስሜት ኖሮን ቀኑን ለመጀመር ይጠቅማል።
10. **በሚገባ መመገብ፡-** በቤት ውስጥ የሚገኘውን ማንኛውንም ምግብ ጥራጥሬ፣ እንጀራ፣ ቆጮ ከተገኘ የሞቀ የብርጭቆ ወተት እና ሌሎች ምግቦችን ጨምሮ በሰዓቱ መመገብ።
11. **ተገቢ የሆነ መተኛ ቦታ፡-** የሚተኙበት ቦታ በጫጫታ/ሁካታ ምክንያት ለመተኛት አመቺ ካልሆነ ፀጥታ ያለው ቦታ ለማግኘት መሞከር ወይም በምተኙበት ጊዜ ፀጥታው እንዲጠበቅ ከቤተሰብ ጋር መወያየት። ለምሳሌ እያወሩ የሚረብሹን ልጆች ወይም ሰዎች ካሉ እንዳይረብሹ መወያየት
12. **መደበኛ የቀን እንቅስቃሴያችንን ተመሳሳይነት መጠበቅ፡-** ለሊት ምንም ጥሩ እንቅልፍ ባይተኙና ድካም ቢሰማዎትም በተቻለ መጠን የእለት ተለት ስራችንን / እንቅስቃሴዎቻችንን ማቋረጥ የለብንም፡
:

የሚያስጨንቁ/ የሚረብሹ ነገሮችን ማስወገድ ወይም መቆጣጠር

ለጤና ባለሙያዎች፡

በመጀመሪያ ለተሳታፊዎች አስጨናቂ ሁኔታዎች ምን እንደሆኑ እና እነዚህ አስጨናቂ ሁኔታዎች በሚያጋጥሟቸው ጊዜ እንዴት እንደሚያስወግዱዋቸው ወይም እንደሚቆጣጠሩዋቸው ለመረዳት ይሞክሩ። የሚከተሉትን ጥያቄዎች በመጠየቅ መረዳት ይችላሉ

- ***እርሶን በጣም የሚያሰጨንቅዎት ወይም የሚያሳስቦት ነገሮች አሉ?***
- ***እነዚህ ነገሮች/ሁኔታዎች ምንድናቸው?***
- ***የእርሶን ደህንነት ለማሻሻል ወይም ጭንቀትን ለመቀነስ ወይንም ለማስወገድ የወሰኑባቸው ጊዚያት/ አጋጣሚዎች አሉ?***

በመቀጠል የሚያስጨንቁ/የሚረብሹ ነገሮችን ማስወገድ ወይም መቆጣጠር ማለት ምን ማለት እንደሆነ ማስረዳት ወይም ማስተማር ይችላሉ። ለምሳሌ እንዲህ በማለት ሊያስረዱዋቸው ይችላሉ።

የሚያስጨንቁ/የሚረብሹ ነገሮችን/ሁኔታዎች የአንድን ሰው የደህንነት ስጋት አድርገን የምንገነዘባቸው፣ ያልተለመዱ ድርጊቶች፣ ወይም በሰው ህይወት ላይ የጎላ ለውጥ የሚያመጡ የሚፈጥሩ ነገሮች ናቸው።

ምናልባት ሁሉም አስጨናቂ ሁኔታዎች ለሁሉም ሰው እኩል አስጨናቂ ላይሆኑ ይችላሉ። ስለዚህም አንዳንድ ተሳታፊዎች የሚያስጨንቁ/የሚረብሹ ነገሮችን/ሁኔታዎች መረዳት እና ማስወገድ ወይም በአግባቡ መያዝ ወይም ምንጫቸውን መረዳት ለነሱ ጠቃሚ እነደሆነ ይገልፃሉ

ሁሉንም አስጨናቂ ሁኔታዎች ማስወገድ አይቻልም ከዛ ይልቅ እነርሱን እንዴት ተቋቁመን/ተለማምደን መኖር እንደምንችል የተለያዩ ዘዴዎችም መጠቀም አስፈላጊ ነው።

ለጤና ባለሙያዎች፡ ኢትዮጵያ ውስጥ በተደረገ ጥናት በስሜት መለዋወጥ ህምም ጋር ለሚኖሩ ሰዎች እና ተንከባካቢዎቻቸው የሚያስጨንቁ/የሚረብሹ ነገሮችን ለመቆጣጠር የሚከተሉትን መንገዶች እንደሚጠቀሙ ይንገሩዋቸው፡-

> ***"በኢትዮጵያ ውስጥ የተደረገው ጥናት እንደሚያሳየው የስሜት መለዋወጥ ህምም ያለባተው ሰዎች እና ተንከባካቢያዎቻቸው የሚያስጨንቁ/የሚረብሹ ነገሮችን በሚያጋጥማቸው ጊዜ ለመቆጣጠር የተለያዩ መንገዶችን ይጠቀማሉ" ለምሳሌ ...... (ከታች የጠጠቀሱትን 4 ሀሳቦች ያስረዱዋቸው)***

- **አስጨናቂ ሁኔታዎችን ማስወገድ፡-** የስሜት መለዋወጥ ህመም ጋር ያሉ ሰዎች አስጨናቂ ሁኔታዎችን የግል ወይም የራስ ስብዕና ችግር ያደርጋሉ። በዚህም ምክንያት ሐዘን እንዲሰማቸው፣ እንዲሰጉ ወይም እንዲጨነቁ ያደርጋቸዋል። ለምሳሌ ለቅሶ/ ቀብር ቦታ መገኘት እና ሰዎች በለቅሶ ጊዜ ሲያለቅሱ መመልከት እንደሚያስጨንቃቸው ገልፀዋል። ስለሆነም እንደዚህ ያሉ ቦታዎችን ማስወገድ ይመርጣሉ:
- **ከጓደኞቻቸው ጋር ማውጋት/መጨዋወት፡-** ሌሎች የጥናቱ ተሳታፊዎች ጥሩ ያልሆነ ስሜታቸውን ለማስተካከል ከጓደኞቻቸው ጋር መጨዋወት/ማውጋት እንደረዳቸው የገለፁ ሲሆን የተወሰኑት ተሳታፊዎች ደግሞ ነገሮች የሚከሰቱት በፈጣሪ ፈቃድ የሆነ ነው ብለው ስለሚያምኑ የሚከሰቱ ችግሮች የማይመለሱ ወይም የማይቀየሩ ከሆኑ ችግሩን በመቀበል ያምናሉ።
- **ማህበራዊ ድጋፍ፡-** አብዛኛው ተሳታፊዎች የታካሚን ጤንነት ለማሻሻል ማህበራዊ ድጋፍ ያለውን ጥቅም አጉልተዋል። ተንከባካቢወችም የህመምተኞችን ሁኔታ መረዳት ለህክምና ያላቸውን ፍላጎት /ባህሪ ለማሻሻል እና ባህሪያቸውንም ለመቆጣጠር እንደሚረዳ ገልፀዋል።
- **ስሜትን እና ሀሳብን ማካፈል፡-** ተሳታፊዎች ስሜትን ለሌሎች ስለማካፈል የተለያየ አመለካከት/ግንዛቤ አላቸው፡ አንዳንድ የስሜት መለዋወጥ ህመም ጋር ያሉ ሰዎች ስሜታቸውን ለሌሎች በሚያካፍሉበት ጊዜ ጥሩ ስሜት እንዲሰማቸው የሚያደርግ ትክክለኛ የሆነ ምክር እና ግብረ መልስ ስለሚያገኙ ለቤተሰብ እና ለጓደኞቻቸው ያካፍላሉ። ሌሎች ደግሞ ማንም እነሱን ሊያዳምጣቸው እንደማይፈልግ ወይም ስሜታቸውን ለማካፈል የሚመቻቸው ሰው ስለሌለ ስሜታቸውን አያካፍሉም። ነገር ግን ስሜትን ለሌሎች ያለማካፈል ያለውን ጉዳት ብዙ ተሳታፊዎች ይስማሙበታል።

ለጤና ባለሙያዎች፡ የሚያስጨንቁ/የሚረብሹ ነገሮችን ማስወገድ ወይም መቆጣጠር ማስተማርዎን በሚከተለው ሽምሱ ታሪክ ይቀጥሉ

ጭንቀትን ማስወገድ

ለጤና ባለሙያዎች: *ሀይ ሽምሱ፣ እንዴት ነህ? እባክህን አስቲ ለደህንነቱ አደጋ/ ስጋት/ አስጨናቂ ናቸው ብለህ የምታስባቸውን እና ማስወገድ የምትፈልጋቸውን ነገሮች ልትነግረኝ ትችላለህ።››*

ሽምሱ አዎ፣ ‹‹ እኔ ለቅሶ ካለ ጥሩ ስሜት አይሰማኝም›› በለቅሶ ጊዜ ሲጮህ ወይም የሆነ ሰው ሲሞት ለቅሶ ሲኖር ያስጨንቀኛል። ምክንያቱም ለቅሶ ስሜታዊ እንድሆን እና ሀዘን ውስጤ እዲገባ ያደርገኛል ስለዚህም ጥሩ ያልሆነ ስሜት የሚሰማኝ ከሆነ እነዛ ቦታዎች ላይ መሄድ አልፈልግም ወይም እንደዛ አይነት ቦታዎች አስወግዳለሁ.... ህመሜን ስለሚያውቁ ጎረቤቶችና ቤተሰቦቼ ቀብር/ ለቅሶ ላይ እንዳልሳተፍም ይረዱኛል።››

ጤናማ የሆነ ግንኙነት መመስረት

የዚህ ንዑስ ክፍል ዋና አላማ ህመሙ ያለባቸው ሰዎች ጤናማ የሆነ ግንኙነት መመስረት እና ያላቸውን ግንኙነት የበለጠ ማሻሻል የሚያስችላቸውን ችግርን የመፍቻ ክህሎት ማስተማር ነው

ለጤና ባለሙያዎች፡

1ኛ፡ በመጀመሪያ ተሳታፊው ያለባቸውን ችግር ለመረዳት፣ ያሉትን ያለመግባባቶች፣ መግባባት ካቃታቸው/ ከተጣሉት ሰው ጋር ያላቸውን ግንኙነት፣ ባልተግባቡበት ሀሳብ ላይ ተሳታፊው ያላቸው አመለካከት፣ ችግሩን ለመፍታት ምን ምን ነገሮችን እንደሞከሩ እና ምን መቀየር እንደሚፈልጉ በደንብ መረዳት አስፈላጊ ነው። የሚከተሉትን ጥያቄዎች በመጠየቅ መረዳት ይችላሉ

- *እባክዎት እስቲ ከሰዎች ጋር ስላጋጠሞት ያለመግባባቶች ይንገሩኝ?*
- *ባልተግባቡበት ሀሳብ ላይ እርሶ እንዲሆን የሚፈልጉት/የሚጠብቁት ነገር ምንድን ነው?*
- *ምንድን ነው እንዲቀየር የሚፈልጉት ነገር?*
- *ከእርሶ ጋር የተጋጩት ሰው የሚፈልጉት ምንድን ነው? ምን አሉ? ምንድን ነበር የተሰማቸው?*

በመቀጠል የሚከተለውን ችግር መፍቻ ቅደም ተከተሎች በመጠቀም ያለባቸውን አለመግባባት እንዴት መፍታት እደሚችሉ ተወያዩ

2ኛ፡ ተሳታፊው የተለያዩ መፍትሄ ሊሆኑ የሚችሉ አማራጭ /የመፍትሄ ሐሳቦችን እንዲዘረዝሩ ይጠይቁ እና የሚነግሮትን ይፃፉ

- *የቻሉትን ያህል የተለያዩ መፍትሄ ሊሆኑ የሚችሉ አማራጭ/ የመፍትሄ ሐሳቦችን ሊነግሩኝ ይችላሉ። እኔ የሚነግሩኝን ሁሉንም እፅፋለሁ። የሚነግሩኝ የመፍትሄ ሐሳቦችን ሊሰሩ ወይም ላይሰሩ ይችላሉ ብለው አይጨነቁ*

3ኛ፡ በእያንዳንዱ የተዘረዘሩት የመፍትሄ ሐሳቦች ላይ ጥቅም እና ጉዳት ላይ ይወያዩ እና ችግሮቹን ለመፍታት የተሻለውን የመፍትሄ ሐሳብ ይምረጡ

4ኛ፡ በተሳታፊው የተመረጠውን የመፍትሄ ሐሳብ እንዴት ወደ ተግባር መለወጥ እንደሚቻል ይወያዩበት።

- እቅድ ማዘጋጀት፡ ተሳታፊው እንዴት የመፍትሄ ሐሳብ እንዴት ወደ ተግባር ለመለወጥ ፣ መቼ እና ከየት መጀመር እንዳለበት መወያየት።
- ሌሎች በሚያቀርቡት ሀሳብ ላይ እንዴት መመለስ እንዳለባቸው መወያየት
- ተሳታፊው እንዴት የመፍትሄ ሐሳቡን እንዲሚተገብሩት ማበረታታት
- የመፍትሄ ሐሳቡ ካልሰራ ምንም ማለት እንዳልሆነና በሚቀጥለው ጊዜ ለመወያየት ደስተኛ እንደሆኑ መግለፅ

5ኛ፡ ግምገማ፡ ተሳታፊው የመፍትሄ ሐሳቡን ወደ ተግባር መለወጥ ችለዋል?

- ተሳታፊው ስለነበራቸው ልምድ / ስላጋጠማቸው ነገር ተወያዩ

የመፍትሄ ሐሳቡ እንደሰራና እንዳልሰራ ይጠይቁ እና ይወያዩ። ካልሰራ ሌላ የመፍትሄ አማራጮችን እንዲሞክሩ ያበረታታቸው።

ክፍል አምስት፡ ጭንቀትን መቆጣጠር፣ እቅድ ማዘጋጀት እና ሙሉ ክፍለጊዜውን ማጠቃለል

የክፍለ ጊዜው ዓላማ

የዚህ ክፍለ ጊዜ ዓላማ ከስሜት መለዋወጥ ህመም ጋር ላሉ ሰዎች ጭንቀታቸውን መቀነስ ወይም መቆጣጠር የሚያስችላቸው ክህሎቶችን ማስተማር፣ ህመሙ እንዳያገረሽ ለመከላከል የሚያስችሉ እቅዶችን ማዘጋጀት ነው፡

ሰንጠረዥ 6: የጭንቀት መቆጣጠር፣ እቅድ ማዘጋጀት እና ሙሉ ክፍለጊዜውን ማጠቃለል

ክፍል አራት፡			
	ይዘት	**የስልጠና ዘዴ**	**የሚወስደው ጊዜ**
20 ደቂቃ	ጭንቀትን መቀነስ	ሀሳብን በመግለፅ በሚደረግ ውይይት (Reflective discussion)	5 ደቂቃ
	ህመሙ እንዳያገረሽ ለመከላከል የሚያስችሉ እቅዶችን ማዘጋጀት		10 ደቂቃ
	ክፍለጊዜውን ማጠቃለል		5 ደቂቃ

ንዑስ ክፍል አንድ፡ ጭንቀትን መቀነስ

ጭንቀት ምንድን ነው?

ለጤና ባለሙያዎች፡ በመጀመሪያ ተሳታፊዎች ሲጨንቃቸው ጭንቀታቸውን ለመቀነስ ወይም ለመቆጣጠር የሚጠቀሟቸውን ክህሎቶች ለመረዳት ሞክሩ። ከዚህ በፊት ጡንቻን የማፍታታት እና የአተነፋፈስ እስፖርቶችን ተጠቅመው እንደሚያውቁ ይተይቋቸው። ተጠቅመው የሚያውቁ ከሆነ የነበራቸው ልምድ ምን እንደሚመስል ጠይቋቸው።. የሚከተሉትን ጥያቄዎች መጠየቅ ይችላሉ፡-

- ***የመጨነቅና ውጥረት ስሜት ሲሰማችሁ ጭንቀቶትን ለመቀነስ ወይም ለመቆጣጠር ምን ታደርጋላችሁ?***
- ***የመፍታታት እና የአተነፋፈስ ስርዓት ልምምድን ሞክረው ያውቃሉ?***
- ***ከተጠቀሙ፣ ልምዱ/ስሜቱ እንዴት ነበር እና ተግባራዊ ካደረጉ በኋላ ምን ተሰማዎት?***

ለጤና ባለሙያዎች፡ በመቀጠል ስለመፍታታት እና የአተነፋፈስ ስርዓት ልምምድ/ስፖርት ማስረዳት ይችላሉ፣ እንዲህ በማለት መጀመር ይችላሉ...

ብዙ ጊዜ ስንጨነቅ አተነፋፈሳችን ይፈጥናል። ስለዚህ አተነፋፈሳችንን መቀነስ/መግራት እና ጡንቻዎቻችንን ማፍታታት ጭንቀታችንን ለመቀለስ፣ ጤናማ ዕንቅልፍ እንድንተኛ እና ጥሩ የሆነ ስሜት እንዲሰማን ይረዳናል ። ስለሆነም ጡንቻዎቻችንን የማፍታታት እና የአተነፋፈስ ስልጠና ከስሜት መዋዠቅ/መቀያየር ህመም ጋር ተያይዘው የሚመጡ ከመጠን ያለፈ የንቃት/የመንቀዥቀዥን እና የጭንቀት ምልክቶች ለመቆጣጠር ይጠቅማል።

ለጤና ባለሙያዎች፡

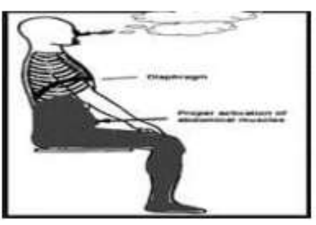
በአተነፋፈስ ስርዓት ልምምድና የጡንቻ ማፍታታት ክህሎት ልምምድ ወቅት "መወጠር እና ውጥረትን ማስወገድ" ሂደትን በሚከተሉት የጡንቻ ክፍሎች ላይ ይጠቀማሉ፡ የቀኝ ከዛ የግራ ክንድ እና እጆች፣ የፊታችን ክፍሎች ግንባርን ጨምሮ፣ የላይ ሰውነት ክፍላችን፣ ሆድ እና እግሮችን

በጥልቅ አተነፋፈስ ስርዓት ዋና ሀሳብ ከሆዳችን በጥልቀት እንድንተነፍስ እና በቻልነው መጠን ብዙ ንፁህ አየር ወደ ሳንባችን ማስገባት ነው። በላይኛው ደረታችን ክፍል ከላይ ከላይ አየር ከመውሰድ ይልቅ በጥልቀት ከሆዳችን አየር በምንተነፍስበት ወቅት ብዙ ኦክስጅን እናስገባለን፡ ስለዚህ ጭንቀት/ውጥረት በሚሰማዎት በሌላ ጊዜ ለመረጋጋት ግዜ መውሰድ እና በጥልቀት መተንፈስ ያስፈልጋል።

ለጤና ባለሙያዎች፡

"አሁን በጥልቀት እንዴት መተንፈስ እንደምትችሉ እና ጡንቻን የመፍታታት ዘዴን አስተምራችኋለሁ። በመጀመሪያ ከጥልቅ አተነፋፈስ ስርዓት ልምምድ እንጀምራለን ከዚያም የጡንቻ ማፍታታ ዘዴን እንቀጥላለን። ይሀም ከ5-10 ደቂቃ ሊወስድብን ይችላል ቀጥሎም በጋራ እንለማመዳለን። አሁን እኔን ተከተሉ"

የአተነፋፈስ ስርዓት የአተነፋፈስ ስልጠና/ ልምምድ

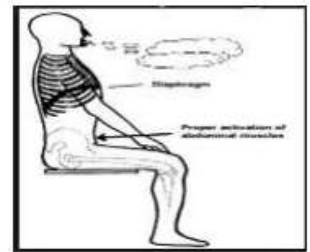


የመጀመሪያ ደረጃ፡- ጀርባችንን ቀጥ አድርገን በመደላደል መቀመጥ። እግራችንን አለያይተን በወለሉ ላይ ማስቀመጥ እና ሁለቱንም እጃችንን በቀላሉ ጉልበታችን ላይ ማስቀመጥ።

ሁለተኛ ደረጃ፡- አይናችንን መጨፈን/መግለጥ እና ትኩረትን በትንፋሽ ላይ ማድረግ፡ ትንፋሻችንን ማወቅ/መገንዘብ ትኩረትን አሁን ባለንበት ቦታ ላይ ማድረግና እያንዳንዱ ትንፋሽ ስናሰገባና ስናስወጣ ስሜቱን ማወቅ።

ሦስተኛ ደረጃ፡ በአፍንጫችን ቀስ እያልን አየር ማስገባት፣ ከዚያም ከአንድ እስከ አራት መቁጠርና ለያንዳንዱ ቁጥር አየር መያዝ፡

ደረጃ አራት፡ አሁን በአፋችን ቀስ እያልን አየር ማስወጣት ከአንድ እስከ አራት መቁጥር።



በመጀመሪያ አተነፋፈስ ሥርዓቱን ባልተጨነቅንበት ጊዜ መለማመድ ያስፈልጋል፡ አንዳንድ ሰዎች መጀመሪያ ላይ አተነፋፈስን በመቆጣጠር በሚጀምሩበት ወቅት የበለጠ የመጨናነቅ ስሜት እንደሚሰማቸው ይገልፃሉ። ስለሆነም የጭንቀቱ ስሜት በልምምድ እየቀነሰ ስለሚሄድ፡ ክህሎቱን ለማዳበር መለማመድ አስፈላጊ ነው ። ይህንን ስፖርት በጀርባዎ ተኝተው ወይም ተቀምጠው መስራት ይችላሉ ነገር ግን በጀርባ ተኝቶ መስራቱ ወንበር ላይ ቁጭ ብሎ ከመስራቱ ይቀላል።

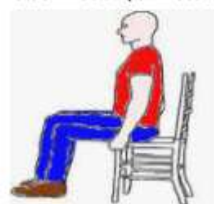
ለጤና ባለሙያዎች፡

እሺ፣ አሁን ደግሞ የጡንቻ ማፍታታት ዘዴ/ክህሎት እንዴት እንደሆነ አስተምራችኋለሁ። ይህ የጡንቻ ማፍታታት ዘዴ በእያንዳንዱ ትንፋሽ በምናስወጣበት ወቅት የጡንቻን መኮማትር ያስወግዳል።

> *"ጡንቻን መወጠር እና ማፍታታት ስፖርት በሚሰሩበት ወቅት ትኩረታችንን ትንፋሻችን ማስወጣትና ማስገባት ላይ ማድረግ አለብን። ወደ ውስጥ በምንተነፍስበት ጊዜ የእግራችንን ጡንቻ የቻልነውን ያህል መወጠር/ማኮማተር ወደ ውጭ በምንተነፍስበት ጊዜ ደግሞ የእግራችንን ጡንቻዎች ማፍታታት እና ውጥረቱን መልቀቅ ይኖርብናል። ከዚያም በመቀጠል ወደ እያንዳንዱ የሰውነታችን ክፍሎች ተራ በተራ መቀጠል ከቁርጭሚታችን ጀምረን ወደ ላይኛው የሰውነት ክፍላችን መሄድ። አሁን እኔ ጀምራለሁ"*

የጡንቻ ማፍታታት እስፖረት ልምምድ ቅድመ ተከተል

1. ለምሳሌ ተሳታፊዎችን ከጀርባቸው ቀጥ እና ዘና ብለው እንዲቀመጡ እናዘቸዋለን።



2. **የቀኝ እጅ እና ክንድ፡** በቀን እጃችን ወደውስጥ በደንብ ጭብጥ ማድረግ እና ትኩረታችንን በቀኝ እጃችን እና ክንዳችን ላይ ባለው ውጥረት ላይ ማድረግ፣ ውጥረቱን ለ5 ሰከነዶች ማቆየት። ከዚያም እጃችንን እና ክንዳችንን ማፍታታት ውጥረቱን ለ10 ሰከነዶች መልቀቅ። ይህን ባደረጉ ጊዜ በመፍታታት እና በመወጠሩ መካከል ያለው ልዩነት ማስተዋል።

3. **የላይኛው የቀኝ እጃችን ክንድ፡** የቀኝ እጃችንን ክንድ በማጠፍ ወደ ትከሻችን ማምጣት፡ የበለጠ ክንዳችንን ወደ ትከሻችን በመጣነው ቁጥር በላይኛው ክንዳችን ላይ ያለው ውጥረት ይጨምራል። ትኩረትን በክርናችንና (elbow) በትከሻችን መካከል ባለው ጡንቻችን ላይ ማድረግ፡ ውጥረቱን በክርናችንና በእጃችን ላይ እንዳይበዛ ለማድረግ መሞከር። ውጥረቱን ለ5 ሰከነዶች መያዝ እና ለ10 ሰከነዶች መልቀቅ።

4. **የግራ እጅ እና ክንድ፡** በቀኝ እጅ እና ክንዳችን ላይ የሰራናቸውን መድገም።

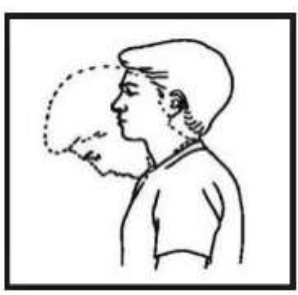
5. **የግራ የላይኛውን ክንድ፡** በቀን የላይኛው ክነዳችን ላይ የሰራናቸውን መድገም።

6. **ግንባር፡** አሁን ትኩረታችን ወደ ፊታችን እናደርጋለን፣ የምንችለውን ያህል ቅንድባችንን ከፍ ማድረግ, ልክ በሆነ ነገር እንደተደነቀ ሰው. ከአይናችን በላይ ያሉ ጡንቻዎች ላይ የመወጠር ስሜት ይሠማችኃል: የግንባራችን ጡንቻዎች በሚወጠሩበት እና በሚፍታቱበት ጊዜ ሙሉ በሙሉ መዘርጋትና መፍታታቸው ላይ ትኩት አድርጉ።

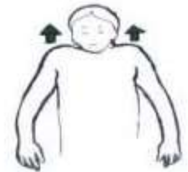
7. **አይናችን እና ጉንጫችን፡** አይናችንን አጥብቆ መጨፈንና በመጨመቅ፣ ከዚያም ትኩረታችንን በአይናችንና በጉንጫችን አካባቢ ባለው ውጥረት ላይ ማድረግ። ጡንቻዎቹን ሲኮማተሩ እና ሲፍታቱ የሚኖረውን ውጥረት ማስተዋል።

8. **አፍ እና መንገጭላ፡** አንዳንድ ሰዎች ሲያዝን እንደሚያደርጉት አፋችንን የቻልነውን ያህል መክፈት ከዚያም ልክ በመንገጭላችን መጋጣሚያ አካባቢ ያሉጡንቻዎችን ሁሉ እንዲሰማን ማድረግ እና በአፋችን አካባቢ ያለውን ውጥረት ማስተዋል። አፋችንን እና መንገጭላችንን ስናፍታታ ከንፈራችንን በጥቂቱ በማራቅ በነፃነት መንገጭላችን እንዲገጥም ማድረግ።

9. አንገት፡ እነዚህን ጡንቻዎች ስትወጥሩ ጥንቃቄ አድርጉ። ጭንቅላታችንን ወደ ፊት በማጎንበስና ወደ ኋላ በቀስታ በመጎተት ጣራ እስኪታየን ድረስ የአንገታችን ጡንቻዎች መወጠርን እነርሱ ላይ ትኩረት ማድረግ። ከአንገታችን ጀርባ ባሉ ጡንቻዎች ላይ ያለው ውጥረት ይሰማናል ፡ ጭንቅላታችንን መልሰን ወደኋል ቀስብለን በማጎንበስ፡ የመዝናናት አቀማመጥ በመያዝ እና እንዲፍታቱ በማድረግ ውጥረቱ እንዴት እንደሚለቅ ማስተዋል።



10.ትከሻዎች፡ ትከሻዎቻችንን ወደ ላይ ወደ ጆሮዎቻችን በማምጣት የትከሻዎቻችንን ጡንቻዎች መወጠር፡ ትከሻችን ላይ ያለው ውጥረት ላይ ትኩረት ማድረግ፡ ለ5 ሰከንዶች መያዝ እና በመቀጠል ትከሻችንን ወደ ታች በመመለስ ማፍታታት ወይም ለሰዎች ውጥረትን ትከሻዎቻቸው ላይ ማኖር በጣም የተለመደ ነው ስለዚህ በንፅፅር በውጥረት እና በመፍታታቱ መካከል ያለውን ልዩነት ማስተዋል።



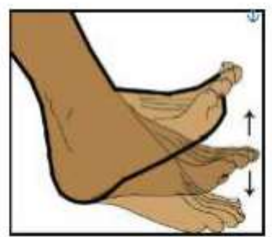
11. የትከሻችን የጀርባ ስለታም አጥንቶች ክፍል/ጀርባ፡ የትከሻችንን የጀርባ ስለታም አጥንቶች እስኪነካኩ ድረስ አንድ ላይ መግፋት ይህንን ስናደርግ ደረታችን ወደፊት ይመጣል። ከላይኛው የጀርባ የሰውነት ክፍላችን እና የትከሻችን ስለታም አጥንቶች ላይ ውጥረቱ እስኪሰማን ድረስ መያዝ። ትከሻችንን ውጥረቱን መልቀቅ/ማውረድ እና መፍታታት ስሜት መሰማት።

12. ደረት እና ሆድ፡ ወደ ውስጥ በጥልቀጥ መተንፈስ ሳንባችንን እና ደረታችንን በአየር መሙላት። በደረታችን እና በሆድ ጡንቻዎች ላይ ውጥረትን መሰማት፡ ለ5 ሰኮነዶች እንደዛው መያዝ፣ በቀስታ ወደ ውጭ ሲተነፍሱ የተንቻዎችን መፍታታት መሰማት

13. ወገብ እና ዳሌ፡ ዳሌያችን ላይ ያሉ ጡንቻዎችንን መጭመቅ፡ በወገባችን እና በመቀመጫችን ላይ ያለውን ውጥረት ማስተዋል። እግራችን ላለመወጠር እንጣር ትኩረት ማድረግ ያለብን ወገብና ዳሌያችን ላይ ያሉ ጡንቻዎች ላይ ይሆናል። መልሶ ጡንቻዎቹን ማፍታታት እና ስንለቃቸው ያለውን ስሜት ማዳመጥ።

14. የቀኝ እግራችን የላይኛው ክፍል፤ የቀኝ የላይኛውን እግራችንን መወጠርና ትኩረታችንን እዚያው አካባቢ ማድረግ፡ በወገባችንና በባታችን ጡንቻዎች ላይ ውጥረት ሊሰማችሁ ይችላል ነገር ግን ትኩረታችሁን በታፋ ጡንቻዎቻችሁ ላይ አድርጉ። ውጥረቱን መልቀቅ እና ጡንቻዎች ማፍታታት።

15.የታችኛው የቀኝ እግር፡ የእግራችን መሸማቀቅ ለማስወገድ ይህንን በቀስታና በጥንቃቄ ያድርጉ። መወጠሩ በባታችን ጡንቻዎች ላይ እንዲሰማን ጣቶቻችን ወደላይ/ፊት እንጎትታቸው፡ መጀመሪያ ወጥሮ መያዝ ከዛም ማፍታታት እና ከጡንቻዎቻችን ውጥረቱ ሲወገድ/ሲጠፋ ማስተዋል።



16.የቀኝ የእግር መርገጫ፡፡ ውጥረቱ በቀኝ እግራችን ላይ እንዲሰማን ጣቶቻችን ወደታች ማጠፍ። ውጥረቱን መያዝ ከዛም ጣቶቻችንን ወደ ነበሩበት የእረፍት ቦታ መመለስና ማፍታታት።

17.የግራ የላይኛው እግር ክፍል ፡ የቀኝ የላይኛው እግራችን ላይ የሰራነውን መድገም።

18.የግራ የታችኛው እግር፡ በቀኝ ባታችን ላይ የሰራነውን መድገም።

19.የግራ እግር፡ የቀኝ እግራችን ላይ የሰራነውን መድገም፡

ለጤና ባለሙያዎች፡

አሁን ሁላችንም አብረን እንሰራለን፤ ሁል ጊዜ በትንፋሻቹ ላይ ትኩረት ማድረግ አለባችሁ...ጡንቻዎቻችሁ የቻላችሁትን ያህል እንዲወጠሩ አድርጉ። ወደ ውስጥ ስትተነፍሱ አንድ፣ ሁለት እያላችሁ እስከ አራት ቁጠሩ ወደ ውጭ ስትተነፍሱ አንድ ብላችሁ ቁጠሩ።

በመጨረሻም ተሳታፊዎችን ምን እንደተሰማቸው ጠይቋቸው እና እቤታቸው ሄደው እንዲለማመዱ ይንገሩዋቸው።

"እስቲ አሁን ደግሞ የአሁንን የጡንቻ ማፍታታት ልምምድ ከሰራን በኃላ ምን እንደተሰማችሁ ንገሩኝ?"

ህመሙ እንዳያገረሽ ለመከላከል የሚያስችሉ እቅዶችን የማዘጋጀት መርሀ ግብር

ህመሙ እንዳያገረሽ መከላከል ማለት ምን ማለት ነው?

ለጤና ባለሙያዎች፡

በመጀመሪያ ለተሳታፊዎች ስለ ህመማቸው ሲያገረሽ ጠቋሚ የሆኑ ምልክቶች ምን ምን እንደሆኑ በሁለተኛው ክፍለ ጊዜ እንደተወያያችሁበት ያስታውሷቸው። ለምሳሌ እንዲህ ብላችሁ መጀመር ትችላላችሁ.......

"እንደምታስታውሱት ባለፈው ጊዜ የህመሙ ማገርሸት ጠቋሚ የሆኑ ምልክቶች ተነጋግረን ነበር. እስቲ የምታስታውሱትን ይነግሩኛል?"

ከዚያም፣ ተሳታፊው የነገሮዋትን ጠቅልል አድርገው ይናገሩ. ለምሳሌ

"ልክ ነው። አሁን እርሶ እንዳሉት ህመሙ በሚያገረሽበት ጊዜ በመጀመሪያ የሚታዩ ምልክቶች አሉ ። እነዚህን መጀመሪያ ላይ የሚከሰቱ ምልክቶች መለየት እና ማወቅ የመፍትሄ እርምጃዎችን እንድንወስድ ይረዳናል።"

ሁለተኛ፡- ተሳታፊዎችን የህመም ማገርሸት ወይም ህመም እንዳያገረሽ መከላከል ማለት ምን ማለት እንደሆነ ጠይቅ። ለምሳሌ እንዲህ ብላችሁ መጠየቅ ትችላላችሁ

"እስቲ የህመም ማገርሸት ማለት ምን ማለት እንደሆነ ይንገሩኝ"

ከዚያም የህመም ማገርሸት ማለት ምን ማለት እንደሆነ አብራራ

የህመም ማገርሸት ማለት የስሜት መለዋወጥ ህመም ምልክቶች ማለትም የድብርት/የድባቴ፣ የ ሽቅለት ወይም ሁለቱም አይነት ምልክቶች የህመምተኛውን የእለት ተእለት ተግባር/ስራ ሲያስተጎጉል/ ሲያውክ ነው።

ሶስተኛ፡ ህመሙ እንዳያገረሽ የምንከላከልባቸውን ዘዴዎች፤ ለምሳሌ ህመሙ እንዳያገረሽ ለመከላከል የሚያስችሉ እቅዶችን ማዘጋጀት ላይ መወያየት። በቅድሚያም እነርሱ ህመማቸው እንዳያገረሽ ምን ምን እንደሚያደርጉ ይጠይቁ።

- እባክዎ እስቲ ህመምዎ እንዳያገረሽ ምን ምን እንደሚያደርጉ ይንገሩኝ?
- የስሜት መለዋወጥ ህመም ያለባቸው ሰዎች ወደ ጤና ተቋም መምጣት ያለባቸው መቼ ነው?
- ህመም በሚያገረሽበት ወቅት በተቻለ መጠን ቶሎ መድሀኒት መውሰድ/ህክምና መውሰድ ለምንድን ነው የሚጠቅመው?
- በተቻለ መጠን ቶሎ መድሀኒት ለመውሰድ/ህክምና ቦታ ለመምጣት ተግዳሮቶቹ/እንቅፋት የሚሆኑት ነገሮች ምንድን ናቸው?

በመቀጠል ተሳታፊው ባልዎት ነገር ላይ በመጨመር ህመሙ እንዳያገረሽ ለመከላከል የሚያስችሉ እቅዶችን ማዘጋጀት ማለት ምን ማለት እንደሆነ ተወያዩበት።

"ልክ ነው። አሁን እርሶ እንዳሉት ...... (ተሳታፊው ህመማቸው እንዳያገረሽ ለመከላከል የሚጠቀሙዋቸው መንገዶች/ዘዴዎች ህመሙ እንዳያገረሽ ለመከላከል ይጠቅማሉ። ቀደም ሲል ባሉት ክፍለ ጊዜያት ስለህክምናው እና መሀኒቶቹ እንደተነጋገርነው ቶሎ ህመሙ ሳይባባስ ከህክምና ባለሙያ ጋር መወያየት እና ህክምና ማድረግ ህመሙ ከፍተኛ ደረጃ ከደረሱ በኋላ ከማድረግ በእጅጉ የተሻለ ነው። ስለዚህ የህመሙ የማገርሸት እድል ለመቀነስ ሁልጊዜ የቅድመ መከላከል እቅድ ማዘጋጀት በጣም አስፈላጊ ነው። ይህም ህመሙ እያገረሸ ወይም እየተመለሰብን እንዳለ ለማወቅ የሚረዱ ወይም ጠቋሚ የሆኑ ምልክቶችን በምናይበት/በሚሰማን ወቅት ወይም አእምሮ ጤንነታችንን የሚያውኩ/የሚያስጨንቁን ነገሮች በሚያጋጥሙን ጊዜ ምን ማድረግ እንዳለብን ቀድመን የምናውቅበት መንገድ ነው።"

አሁን ህመሙ እንዳያገረሽ ለመከላከል የቅድመ መከላከል እቅድ ውስጥ ሊካተቱ የሚገባ አራት ነጥቦች የሚከተሉት ናቸው። የስሜት መለዋወጥ ህመም ያለባቸው ሰዎችን እና ቤተሰቦቻቸው

1. በአጠቃላይ ጤንነታቸውን ሊያውኩ የሚችሉ ነገሮችን መለየት፡
2. ህመሙ እያገረሸ ወይም እየተመለሰ እንደሆነ ለማወቅ የሚረዱ ጠቋሚ ምልክቶችን ማወቅ እና መለየት (ገጽ 19 ይመልከቱ)
3. ቶሎ ህክምና ማድረግ
4. የሚያጋጥሙን እንቅፋቶችን ለመፍታት የሚያስችሉ መንገዶችን ማቀድ

ስለዚህ ህመሙ እንዳያገረሽ የቅድመ መከላከል የድርጊት መርሀ ግብር እቅድ የሚዘጋጀው በሰንጠረዥ መልክ ነው።

ደረጃ አንድ፡ በሰንጠረዡ ላይ የመጀመሪያው አምድ/ረድፍ ጭንቀት አምጪ/የሚቀሰቅሱ ነገሮች የምንመዘግብበት ቦታ ነው፡ የታካሚ ቤተሰቦችን ጭንቀትን አምጭ የሆኑ ነገሮች እንዴት መለየት እንደሚችሉ ለውይይት መጋበዝ፣ ህመሙ ያለባቸው ሰዎች በሰንጠረዡ ላይ የመዘገቡትን ነገር ለውይይት እንዲያመጡት መንገር። ጭንቀትን የሚያመጡ ነገሮች በየሳምንቱ ሊለዋወጡ እደሚችሉ ያስታውሷቸው። በተጨማሪ ጭንቀትን የሚያመጡ ነገሮች ለምሳሌ የዕንቅልፍ ሰዓት መዛባት ፣ በዛ ላሉ ቀናት መድሀኒት መውሰድን መርሳት፣ ከቤተሰብ ወይም ከሌላ ሰው ጋር መጣላት/መጋጨት ናቸው።

ደረጃ ሁለት፡ በሁለተኛው አምድ/ረደፍ ህመሙ እያገረሸ ወይም እየተመለሰብን እንዳለ ለማወቅ የሚረዱ ወይም ጠቋሚ የሆኑ ምልክቶችን የምንመዘግብበት ቦታ ነው።

ደረጃ ሦስት፡ በሦስተኛ ደረጃ እና በጣም አስፈላጊው፣ ህመሙ እንዳያገረሽ/እንዳይመለስ ለመከላከል የምንጠቀማቸው ክህሎቶች መዘርዘር አለባቸው። አንዳንዶቹ የመከላከል ሁኔታዎች ዝርዝር ውስጥ ሊካተቱ ይችላሉ።

- መድሐኒት በአግባቡ ሳናቋርጥ መውሰድ
- በተመሳሳይ ሰዓት መተኛት
- አስቸጋሪ የሆኑ ስሜቶች ከሰዎች ጋር ማውራት/መወያየት
- ስሜትን የበለጠ በተገቢው መልኩ መቆጣጠር/መከታተል
- ከአልኮል/ከሚያስከሩ መጠጦች እና ዕፆች መራቅ
- ግጭቶችን/አለመግባባቶችን መቀነስ
- የሚያስደስቱ ወይም የምንወዳቸው ድርጊቶች ላይ መሳተፍ
- ጭንቀትን ለመቀነስ ወይም ለመቆጣጠር የሚጠቅሙ ክህሎቶችን መተግበር
-

ደረጃ አራት፡ ህመሙ እያገረሸ ወይም እየተመለሰብን እንዳለ ለማወቅ የሚረዱ ወይም ጠቋሚ የሆኑ ምልክቶችን በምናይበት ወይም በሚሰማን ሰዓት በተቻለ ፍጥነት ቶሎ ከህክምና ባለሙያ ጋር መወያየት እና መድሀኒት መውሰድ ህመሙ እንዳይባባስ ለመከላከል ይጠቅማል። ምክንያቱም መድሀኒት ዘግይቶ ከመውሰድ ይልቅ ቶሎ ሲወሰድ የተሻለ ይሰራል።

ሰንጠረዥ 7: ህመሙ እንዳያገረሽ ለመከላከል ቅድመ መከላከል የድርጊት መርሀ ግብር ዕቅድ

	የሚያስጨንቁ/ጭንቀትን የሚያባብሱ ነገሮች	የቅድመ ማስጠንቀቂያ ምልክቶች	ለቤተሰብ መንገር ወይም ወደ ጤና ተቋም መሄድ	እንቅፋቶችን መወጣት/መቋቋም
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

ንዑስ ክፍል ሦስት ፡ የማጠቃለያ ክፍለ ጊዜ

የዚህ ንኡስ ክፍል ዋና አላማ ህመሙ ያለባቸው ሰዎች በራሳቸው የጤንነታቸውን ሁኔታ መከታተል እንደሚችሉ ማረጋገጥ እና ከመጀመርያው ጀምሮ ባሉት ውይይቶች ግልፅ ያልሆነ ነገር ካለ መወያየትና መፍታት ነው።

ለጤና ባለሙያዎች፡ ከመጀመሪያው ጀምሮ ባሉት ውይይቶች ግልፅ ያልሆነ ነገር ካለ ለመረዳት የሚከተሉት ጥያቄዎች ይጠይቁ።

- *አሁን ውይይታችንን ጨርሰናል። ነገር ግን በማንኛውም እርዕስ ላይ ጥያቄ ካላችሁ ወይም እቤት ውስጥ እንድትተገብሩ በተነገራችሁ ነገሮች ላይ ችግር አጋጥሞዋችሁ ከነበረ ምን ማድረግ እንዳለባችሁ አሁን ልንወያይ እንችላለን። እንድንወያይበት የምትፈልጉት ጥያቄ አላችሁ?*

በመቀጠል ተሳታፊዎች እስካሁን በነበራቸው ክፍለ ጊዜያት ምን እንዳወቁ እንዲናገሩ እድል ይስጧቸው። የሚከተሉት ጥያቄዎች በመጠየቅ በነበራቸው ክፍለ ጊዜያት ምን እንዳወቁ እና ስላለው ጥቅም ጠቅለል ያለ ሀሳብ እንዲሰጡ ያድርጉ።

- *እስካሁን በነበረን ውይይት ምን እንዳወቁ ሊነግሩኝ ይችላሉ?*
- *ይህ የስነልቦና ህክምና ምን ያህል የእርሶ ባህሪ ቀይሮታል ብለው ያስባሉ?*
    - *ስለ ስሜት መቃወስ ህመም ምልክቶች*
    - *ስለ ህክምና እና በህክምና ላይ ያለ ፅኑ እምነት*
    - *ጤንነትን ማሻሻል*
    - *የጭንቀት ምልክቶችን መቆጣጠር እና ህመሙ እንዳያገረሽ ለመከላከል እቅድ ማዘጋጀት*
- *እስካሁን በነበረን ውይይት በጣም የወደዱት የትኛውን ነው? በጣም የጠቀሞትስ የትኛው ነው?*
- *እስካሁን በነበረን ውይይት ብዙም ያልወደዱት የትኛውን ነው?*
- *አሁን ህክምናውን በማቋረጣችን የሚያሳስቦት ነገር አለ?*

በመጨለሻም ተሳታፊውን/ዋን ማመስገን እና በማንኛውም ጊዜ ውይይት ማድረግ ከፈለጉ እርሶን ወይም ህክምናውን የት ማግኘት እንደሚችሉ መረጃ ይስጡ

አባሪ

አባሪ-1፡ የፍላጎት ዳሰሳ

ግለሰብ		ቀን	
የተሃድሶ ሰራተኛ		ተቆጣጣሪ	
ሌሎች የተገኙ ሰዎች			
የተጀመረበት ሰአት		የተጠናቀቀበት ሰአት	
ግምገማ 1		ግምገማ 2	

ክፍለ-የተሃድሶ 1 (PHASE 1)				
ፍላጎት	**ችግር አይደለም**	**ችግሩ በከፊል ተቀርፏል**	**ችግሩ አልተቀረፈም**	**አስተያየት**
1. ተሳታፊዎች ስለ ስሜት መለዋወጥ (ሽቅለት ህመም) ምንነት መረጃ ማግኘት ችለዋል				
2. ተሳታፊዎች ስለ ስሜት መለዋወጥ (ሽቅለት ህመም) ምልክቶች አውቀዋል				
3. ተሳታፊዎች ስለ የህመሙ ማገርሸት ጠቋሚ ምልክቶች አውቀዋል				
4. ተሳታፊዎች ስለ የህመሙ መንስኤዎች፣ ህመሙን ሊያሽሉ ወይም ሊያባብሱ ስለሚችሉ ነገሮች አውቀዋል				
ክፍለ-የተሃድሶ II (PHASE II)				
1. ተሳታፊዎች ስለ ስሜት መለዋወጥ (ሽቅለት ህመም) ህክምናውና ስለ መድሐኒቶቹ መረጃ ማግኘት ችለዋል				
2. ህመምተኛው መድሀኒታቸዉን የጎንዮሽ ጉዳቶች ያውቃሉ				
3. ህመምተኛው መድሀኒታቸዉን ለመውሰድ ፍቃደኛ ናቸው				
4. ህመምተኛው መድሀኒታቸዉን በታዘዘላቸው መሰረት አስታውሰዉ ይወስዳሉ።				
ክፍለ-የተሃድሶ III (PHASE III)				
1. ህመምተኛው የእንቅልፍ መረባበሽ ችግር የለባቸውም				
2. ህመምተኛው ስለ የዕንቅልፍ ጤና አጠባበቅ ያውቃሉ				
3. ተሳታፊዎች የሚያስጨንቁ/ የሚረብሹ ነገሮችን ማስወገድ ወይም መቆጣጠር የሚችሉባቸውን መንገዶች/ ስልቶች ያውቃሉ				
4. ህመምተኛው ጤናማ የሆነ ግንኙነት መመስረት ችለዋል				
5. አደንዛዥና አነቃቂ ከሆኑ ነገሮችን አይጠቀሙም				
ክፍለ-የተሃድሶ IV (PHASE IV)				
1. ጭንቀትን መቀነስ				
2. ህመሙ እንዳያገረሽ ለመከላከል የሚያስችሉ እቅዶችን ማዘጋጀት				
3. ህመሙ እንዳያገረሽ የሚያስችሉ እቅዶችን ማዘጋጀት				

አባሪ -2: የስሜት መለዋወጥ ህመም ሽቅለት ወቅት የሚታዩ ምልክቶች

የጤና ባለሙያዎችን ለሚያሰለጥኑ ሰዎች፡ አሁን የስሜት መለዋወጥ ህመም ያለባቸው ሰዎች ሽቅለት ወይም ከፍተኛ የሆነ ስሜት በሚኖራቸው ወቅት የሚያሳዩትን ምልክቶች እነግራችኋለሁ። በመጀመሪያ የአልማዝን ታሪክ ልንገራችሁ።

አልማዝ የ28 ዓመት ሴት ስትሆን የስሜት መለዋወጥ ህመም እንዳለባት በህክምና የተረጋገጠው የ 17 ዓመት ወጣት እያለች ነበር። ለመጀመሪያ ጊዜ ህመሟ የጀመራት የ12ኛ ክፍል ብሄራዊ ፈተና በወደቀች በሶስተኛው ቀን ነበር። በታመመችበት ወቅት አልማዝ የስሜት መቀያየር የነበራት ሲሆን የመጀመሪያ ጊዜ ሲጀምራት የእንቅልፍ መረባበሽ ነበራት። በተጨማሪ ተከታታይ የሆነ የመደሰት ስሜት የነበራት ሲሆን ሳቂታ ነበረች። ምንም የሚያስጨፍር ወይም የሚያዝናና ነገር ሳይኖር ትዘፍንና ትጨፍር ነበር። ምንም እንኳን ለሊት ለሊት በቂ እንቅልፍ ባትተኛም የድካም ስሜት አይታይባትም ነበር። ደስተኛ በነበረችበት ወቅት ወደፊት ስላለው ጊዜ የነበራት ተስፋ እና በራስ የመተማመን ስሜቷ ከፍተኛ ነበር። ብዙ ማውራት እና ስታወራ በጣም ትፈጥን ነበር። ነገር ግን ትግስት ማጣት እና በቀላሉ መበሳጨት ነገር ነበራት። ከጊዜ በኋላ ወደ ውጪ መሮጥ፣ እንዳንድ ጊዜ ልብስ አለመልበስ ነገር ስለነበራት ቤተሰቦቿ ሌላ ሰው አጋጣሚውን ተጠቅሞ አካላዊ ወይም ፆታዊ ጥቃት ሊያጠቃት ይችላል ብለው ይጨነቁ ነበር። አንዳንድ ጊዜ አልማዝ ሀሳቧን መሰብሰብ እና ትኩረት አድርጋ ስራዋን መስራት ትቸገራለች። አልፎ አልፎም ስታወራ በድንገት የማይገናኙ ነገሮችን ትቀላቅላለች በሌላ ጊዜ ደግሞ የፈለገችውን ነገር ለማድረግ የተለየ ሀይል ወይም እውቀት እንዳላት ትናገራለች።

ለአሰልጣኞች፡ የጤና ባለሙያዎችን የሚከተሉትን ጥያቄዎች ጠይቅ

- በአልማዝ ታሪክ ውስጥ ምን ምን ምልክቶችን ለማየት ቻላችሁ?
- አሁን በአልማዝ ታሪክ ውስጥ የሰማናቸውን ምልክቶች እናንተ ህመምተኞቻችሁን በምታክሙበት ወቅት ነግረዋችሁ ያውቃሉ/ሰምታችሁ ታውቃላችሁ?

በመቀጠል እያንዳንዱ ምልክቶች ላይ ገለጻ ያድርጉ: በተለያየ የህመም ወቅት የተለያዩ ምልክቶች ሊሮራቸው እንደሚችል ጨምረው ይግለፁ

አባሪ -3: የስሜት መለዋወጥ ህመም በድባቴ ወይም ድብርት ወቅት የሚታዩ ምልክቶች

አሁን ደግሞ ስለ አቶ ሽምሱ ታሪክ እነግራችኃለሁ

አቶ ሽምሱ የ31 ዓመት እና የሶስት ልጆች አባት ናቸው። አቶ ሽምሱ ወደ ጤና ጣቢያ የመጡት እራሳቸውን መርዝ በመጠጣት ለማጥፋት ሲሞክሩ በታላቅ ወንድማቸው እና ባለቤታቸው ተይዘው ነበር። እራሳቸውን ለማጥፋት ከመሞከራቸው አንድ ሳምንት በፊት አቶ ሽምሱ ከጎረቤታቸው ጋር መጣላታቸውን ባለቤታቸው ገልፀዋል። ነገር ግን ህመማቸው ለመጀመሪያ ጊዜ የጀመረው ከሁለት ዓመት በፊት ሲሆን በዚያን ጊዜ የጀመራቸው አንድ ወንድማቸው ከሞተ በኋላ እንደሆነ ቤተሰቦቻቸው አስረድተዋል።

ላለፉው አንድ ወር አቶ ሽምሱ ቶሎ ቶሎ ማልቀስ እና ልጆቻቸውን ለማሳደግ እና ለመመገብ የሚረዳቸውን የማህበራዊ ህይወት ተሳትፎ እና የስራ ፍላጎት ማጣት ይታይባቸዋል። ባአጠቃላይ የእለት ተእለት ተግባራት ላይ ምንም ፍላጎት የላቸውም። በተጨማሪም በሀዘን ስሜት፣ ድካም እና ተነሳሽነት ማጣት ምክንያት ብዙ ጊዜያቸውን የሚያጠፉት አልጋ ላይ ነው። ብዙ ጊዜያቸውን የሚያጠፉት አልጋ ላይ ቢሆንም ድካም እንዳላባቸው ሁልጊዜ ይናገራሉ። አቶ ሽምሱ በቤተሰባቸው ወይም በእሳቸው ላይ ለሚከሰተው ወይም ለተከሰተው ማንኛውም ችግር እሳቸው ጥፋተኛ እንደሆኑ አድርገው ያስባሉ ፣ ይፀፀታሉ ። ባለቤታቸው አቶ ሽምሱ ሀሳባቸውን የመሰብሰብ እና ነገሮች ላይ

ለአሰልጣኞች፡ የጤና ባለሙያዎችን የሚከተሉትን ጥያቄዎች ጠይቅ

- በሽምሱ ታሪክ ውስጥ ምን ምን ምልክቶችን ለማየት ቻላችሁ?
- አሁን በሽምሱ ታሪክ ውስጥ የሰማናቸውን ምልክቶች እናንተ ህመምተኞቻችሁን በምታክሙበት ወቅት ነግረዋችሁ ያውቃሉ/ሰምታችሁ ታውቃላችሁ?

በመቀጠል እያንዳንዱ ምልክቶች ላይ ገለጻ ያድርጉ: በተለያየ የህምም ወቅት የተለያዩ ምልክቶች ሊሮራቸው እንደሚችል ጨምረው ይግለፁ

አባሪ -4: የስሜት መቃያየር ህመም፣ መንስኤ እና ህመሙን ሊያሽሉ ወይም ሊያባብሱ ስለሚችሉ ነገሮች ሁኔታዊ ገላጭ

የአልማዝ ታሪክ

አልማዝ በገጠር አካባቢ ነዋሪ ስትሆን ከእናቷ ጋር በመሆን ትንንሽ እቃዎችን እየሸጠች እራሷንና ቤተሰቦቿን ትረዳለች፡፡ እንደ አልማዝ አገላለፅ ህመሟ በተለያየ ጊዜ የሚያገረሸው ወይም የሚመለስባት ስለስራዋ በምትጨነቅበት ጊዜ ፣ በተለያዩ ጊዜ በሚኖሩ ማህበራዊና ባህላዊ ዝግጅቶች ጊዜ በቂ የሆነ እንቅልፍ በማጣት ወይም ዘመድ በሞት በሚለይበት ጊዜ በሀዘን ምክንያቶች ነው፡፡ ነገር ግን ቤተሰቦቿ የህመሟ ምክንያት በእርኩስ መንፈስ ምክንያት ነው ብለው ያምናሉ፡፡ አልማዝ ወደ ጤና ጣቢያ ስትመጣ መድሐኒት የሚያልፈልገው ችግር አለብኝ ብላ ስላላመነች መድሐኒቷን ማቋረጧን ተናግራለች ፡፡

መሪ/ጠቋሚ ጥያቄዎች፡

- በአልማዝ ታሪክ ውስጥ የትኞቹን ስነ-ልቦናዊ፣ ማህበራዊ እና ስነ-ህይወታዊ ምክንያቶች/ነገሮች ለያችሁ?
- የአልማዝ ህመምን እንዲያገረሽ የሚያደርጉት ምክንያቶች ሊሻሻሉ/ሊስተካከሉ የሚችሉ ምክንያቶች ናቸው ብላችሁ ታስባላችሁ?

አሁን ደግሞ ስለሽምሱ ተጨማሪ ታሪክ ልንገራቹ

ሽምሱ አርሶ አደር እና ማህበራዊ ህይወትና የቡድን ስራ በከፍተኛ ሁኔታ ዋጋ በሚሰጥበት መንደር ነዋሪ ነው፡፡ የሽምሱ ቤተሰቦች ህመሙ የሚያገረሽበት ምክንያት የተለያየ እንደሆነና አንድ የተወሰነ ምክንያት እንደሌለው ይናገራሉ ነገር ግን ጫት ሲቅምና ደህና በሚሆንበት ጊዜ መድሐኒት ማቋረጡ ህመሙ እንዲቀሰቀስ/እንዲያገረሽ ምክንያት ነው፡፡ እነሱ እንደገለፁት ሽምሱ ጫት ሲቅም ባህሪው ይቀየራል ተቆጭና ሀይለኛ ይሆናል እንቅልፍም በደንብ አይተኛም፡፡ አንዳንድ ጊዜም የሽምሱ ህመም ከቤተሰብ ጋር ወይም ከጎረቤት ጋር ትንሽ አለመስማማት ሲኖር ይቀሰቀሳል፡፡ በዚህም ምክንያት የሽምሱ ቤተሰቦች መድሐኒቱን በተከታታይ እንዲወስድና ጫት እንዳይቅም ያበረታቱታል/ ያግዙተል፡፡

መሪ/ጠቋሚ ጥያቄዎች፡

- በሽምሱ ታሪክ ውስጥ የትኞቹን ስነ-ልቦናዊ፣ ማህበራዊ እና ስነ-ህይወታዊ ምክንያቶች/ነገሮች ለያችሁ?
- የሽምሱ ህመምን እንዲያገረሽ የሚያደርጉት ምክንያቶች ሊሻሻሉ /ሊስተካከሉ የሚችሉ ምክንያቶች ናቸው ብላችሁ ታስባላችሁ?

አባሪ -5: መድሐኒት በአግባቡ መከታተል /ፅኑ እምነት ሁኔታዊ ገላጭ

የጤና ባለሙያ: እንደነገርሽኝ መድሐኒት መውሰድ አቁመሻል
አልማዝ፡ አዎ
የጤና ባለሙያ: ለምንድው ነው መድሐኒት መውሰድ ያቆምሽው? ባለፈው ጊዜ ስንገናኝ በጣም እየረዳሽ እንደሆነ ነግረሽኝ ነበር።

አልማዝ፡ ስለተሻለኝ እና ምንም አይነት የህመም ምልክቶች ሳይኖረኝ መድሐኒት መውሰድ ወደፊት ሌሎች ችግሮች ሊያመጣብኝ ይችላል ብዬ ሰግቼ ነው። እንደሰማሽው አንዳንድ ጊዜ ደህና እሆናለሁ ሌላ ጊዜ ደግሞ ህመሙ ያገረሽብኛል በዚህም የተነሳ ከቤተሰቦቼ ከመንፈስ ጋር የተገናኘ ነው ብለው ያምናሉ።

የጤና ባለሙያ: ብዙ ጊዜ መድሐኒት የሚወስዱ ሰዎች የማይወዱት የጎንዮሽ ጉዳት አለው። በዚህ ምክንያት መድሐኒት ሊያቋርጡ ወይም የጎንዮሽ ጉዳቱን ሊቀንሱ ይችላሉ። ሁለተኛ አንቺ እንዳደረግሽው ሰዎች ጤናማ የሆነ ስሜት በሚሰማቸው መድሐኒት መውሰድ እንደማያስፈልጋቸው ያስባሉ። ልክ እንደ ፓራስታሞል "የራስ ምታት ሲኖረን እንወስዳለን እራስ ምታቱ ሲተወን እናቆማለን" ሌሎች ሰዎች ደግሞ መድሐኒታቸውን መውሰድ ይረሳሉ።
አልማዝ፡ ጤናማ የሆነ ስሜት እና የመድሀኒትን የጎንዮሽ ጉዳት መፍራት የተያያዙ ችግሮች ናቸው፡ መድሐኒት ያስፈልገኛል ብዬ አላስብም።

የጤና ባለሙያ፡ እሱን እኔም እረዳለሁ ነገር ግን ለአንቺ ይህን ማወቅ በጣም አስፈላጊ ነው አልማዝ መድሐኒት መውሰድሽ የተሻለ ስሜት እንዲሰማሽ ይረዳሻል፣የህመሙን ምልክቶች ይቆጣጠራል፣ ህመሙ እንዳይባባስ ይከላከላል እና በተለያየ ጊዜ ህመሙን ለመቀነስና ተመልሶ እንዳይመጣ ለመከላከል ይረዳሻል። አሁን የተሻለ ስሜት እንዲሰማሽ ካደረጉ ምክንያቶች አንዱ ምናልባት መድሐኒት መውሰድሽ ነው። ምክንያቱም መድሐኒት ስለማያስፈልግሽ አይደለም. ። ይህ እነዴት ሊሆን እንደሚችል ትረጃለሽ

አልማዝ፡ አዎ፣ ነገር ግን ቀን መውሰድ አሰልቺ ነው። የህመሜን ምልክቶች ሲብሱ እንደገና መውሰድ እችላለሁ፡

የጤና ባለሙያ: እኔም እረዳለሁ። መድሀኒት ለመውሰድ መፍራት የተለመደ ነው። ነገር ግን ፍራታችንን የምንቆጣጠርበት መንገድ ካልፈለግን መድሀኒት እንድናቆም ሊያደርገን ይችላል። አንቺ የምትወስጂው መድሀኒት የስኳር ህመም ወይም የደም ግፊት ያለባቸው ሰዎች ከሚወድዱት መድሀኒት ጋር ተመሳሳይ ነው። አንዳንድ ጥናቶች እንደሚያመለክቱት በቅፅበት መድሀኒት የሚያቋርጡ ሰዎች ህመማቸው ይባባሳል ወይም ደግሞ አንዳንድ ሰዎች ላይ መድሐኒቱ እንደ በፊቱ ውጤታማ ላይሆን ይችላል።

አልማዝ፡ ፡ እህ....... በእውነቱ መድሀኒቱ መጥፎ አደለም አልወደውም እንጂ

የጤና ባለሙያ: ደህና፣ ያንን ሁሉም ይረዳል። ነገር ግን ምን ያህል ሰዎች ጤናቸውን ለመጠበቅ ብለው መድሀኒት እንደሚወስዱ ብታቂ ልትደነቂ ትችያለሽ። ሰዎች የግድ ስለሱ ላያወሩ ይችላሉ።

አልማዝ፡ እሺ .... ለወደፊቱ ሁልጊዜ እወስዳለሁ።

Annex-I: Psychosocial intervention Fidelity Scale

Date_________________________

Name of assessor = ___________________

Signature: ______________________

Please record each rating next to the item. Overall Session Quality is calculated as an average of all other 1-5 rating scores.

Items that need to be assessed for all sessions.

No.	Items	Score
1	Explained aim of the session	
2	Start the session with a general question related to the topic	
3	Uses time efficiently to meet session goals	

1. **Items that need to be assessed for all sessions.**

No.	Items	Assessor
Session one: Need assessment and Goal setting		
1	Done need assessment	
2	Set the goal in discussion with the participants	
Session two: Awareness about Bipolar Disorder		
1	Described bipolar disorder and the sign and symptoms of BD	
2	Described how to recognize early sign and symptoms of BD	
3	Discussed about how to identify influencing factors ion with participants on	
Session three: Treatment		
1	Described the treatment of the bipolar disorder	
2	Described the side-effect of medication	
3	Define treatment adherence	
4	Identify /understand the reasons for non-adherence from the people with BD and their caregivers	
Session four: Promoting Wellbeing of People with Bipolar Disorder:		
1	Discussed sleep problems and sleep hygiene techniques	
2	Define about stressful situations and effect on illness	
3	Discussed techniques used to manage interpersonal problems	
Session 5: Anxiety management and substance use prevention		
1	Discuss on coping mechanisms/anxiety management	
2	Describe about the importance relapse prevention action plan & its components?	

ዋቢ መጽሀፍት

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Appendix Q: Service user leaflet

የስሜት መለዋወጥ ህመም (የሽቅለት ህመም) ህክምና

ለስሜት መለወወጥ ህመም በመድሀኒት እና በስነልቦና ህክምና ሲኖረው በአጠቃላይ ሁለት የህክምና ደረጃዎች/ሂደቶች አሉት..."

1ኛ በህመሙ ወቅት የሚሰጥ ህክምና ሲሆን ይህ ህክምና የህመሙን ምልክቶች ለመቀነስ እና የታካሚውን ጤና ለማሻሻል የሚሰጥ ነው

2ኛ ቀጣይ የሆነ ህክምና ሂደት፡ ይህ ደግሞ የህመሙን ምልክቶች ከጠፉ ወይም ከቀነሱ በኃላ ህመሙ እንዳያገረሽ ወይም ጤናማ ሆነው የሚቆዩበትን ጊዜ ረጅም ለማድረግ የሚደረግ ህክምና ነው፡

ህክምናን በተገቢ ሁኔታ መከታተል ምን ጥቅም አለው?

- የተሻለ ስሜት እንዲኖር
- ህመሙ ያለባቸውን ሰዎች ጤንነትን ለማሻሻል
- ወደ ተለመደው የዕለት ተለት እንቅስቃሴ ለመመለስ
- የህመሙን እንዳያገረሽ ለመከላከል
- በህመሙ ምክንያት ሆስፒታል የመተኛት ለመቀነስ
- እራስን በማጥፋት ምክንያት የሚከሰትን ሞት ለመቀነስ
- በህመሙ ምክንያት የሚመጡ ተፅእኖዎችን ለመቀነስ

መድሐኒትን ለማቋረጥ ምክንያቶቹ ምንድን ናቸው?

- በኢኮኖሚ ችግር መድሐኒት መግዛት አለመቻል
- ጤናማ የሆነ ስሜት
- የመድሐኒት የጎንዮሽ ጉዳት መኖር ወይም ፍራቻ
- በመድሀኒት የሚጠብቁትን ለውጥ አለማግኘት
- መድሐኒት ለረጅም ጊዜ ስለሚወሰድ መሰልቸት
- መርሳት
- ከሰዎች በቂ የሆነ ድጋፍ አለማግኘት
- ህመሙ የመጣው በመንፈስ ምክንያት ነው ብሎ ማመን
- መድሐኒት በመውሰድ የሚመጣ የመገለል ስሜትን ለመከላከል

የሽቅለት ህመም ያለባቸውን ሰዎች እንዴት መርዳት ይቻላል?

- ጫጫታ ባልበዛበትና ከአደጋ ነጻ በሆነ ቦታ ማቆየትናማረጋጋት፣ አለመከራከር
- ከአደጋ መጠበቅ
- ቶሎ ወደ ህክምና መስጫ ተቋም መውሰድ
- ገንዘባቸውን መቆጣጠር
- የታዘዘላቸውን መድሃኒት እንዲወስዱ መደገፍ
- የህክምና ክትትል እንዲያደርጉ ማበረታታት፡

የስሜት መለዋወጥ ህመም (የሽቅለት ህመም) ምንድን ነው?

ጥር 2012

አዲስ አበባ፤ ኢትዮጵያ

የስሜት መለዋወጥ ህመም (የሽቅለት ህመም) ምንድን ነው?

- ከአእምሮ ህመም አይነቶች አንዱ ውስጥ አንዱ ሲሆን ዋና መገለጫዎቹ የስሜት መቀያየር እና በመሀል ጤነኛ ጊዜ መኖሩ ነው
- ጥናቶች እንደሚያመለክቱት ብዙ ጊዜ ህመሙ በወጣትነት እድሜ የሚጀምር ሲሆን ከመቶ ሰዎች ውስጥ አንድ ሰው የዚህ ህመም ይያዛል

የህመሙ ምልክቶች ምንድን ናቸው?

- ይህ ህመም ያለባቸው ሰዎች ለተወሰነ ጊዜ ከፍተኛ የሆነ የመነቃቃት(Mania) ስሜት ውስጥ ይገቡና ከተወሰነ ጊዜ በኋላ ከባድ የድባቴ (Depression) ሥሜት ይኖራቸዋል

የሽቅለት ወቅት የሚኖሩ ምልክቶች

በድባቴ/ድብርት ወቅት የሚኖሩ ምልክቶች

የህመሙ መንስኤወቾች ምንድን ናቸው?

- አንድ ግለሰብ በዚህ ህመም ለምን እንደሚያዝ ሙሉ በሙሉ አይታወቅም። ተጠቃሽ ይሆናሉ ከሚባሉ ምክንያቶች መካከል
- በተለያዩ ምክንያት አንጎላችን ውስጥ ንጥረ-ነገሮች ሚዛናቸውን ሲያጡ ሊከሰት ይችላል።
- በእርግዝና ጊዜ ኢንፌክሽን
- በወሊድ ጊዜ የተያያዙ ችግሮች
- በልጅነት ጊዜ የሚደርስ የጭንቅላት ላይ ጉዳት/ አደጋ/
- ማህበራዊ ምክንያቶች፣ ለምሳሌ፡- የዘመድ ሞት፣ ሥራ ማጣት፣ ጭቅጭቅ

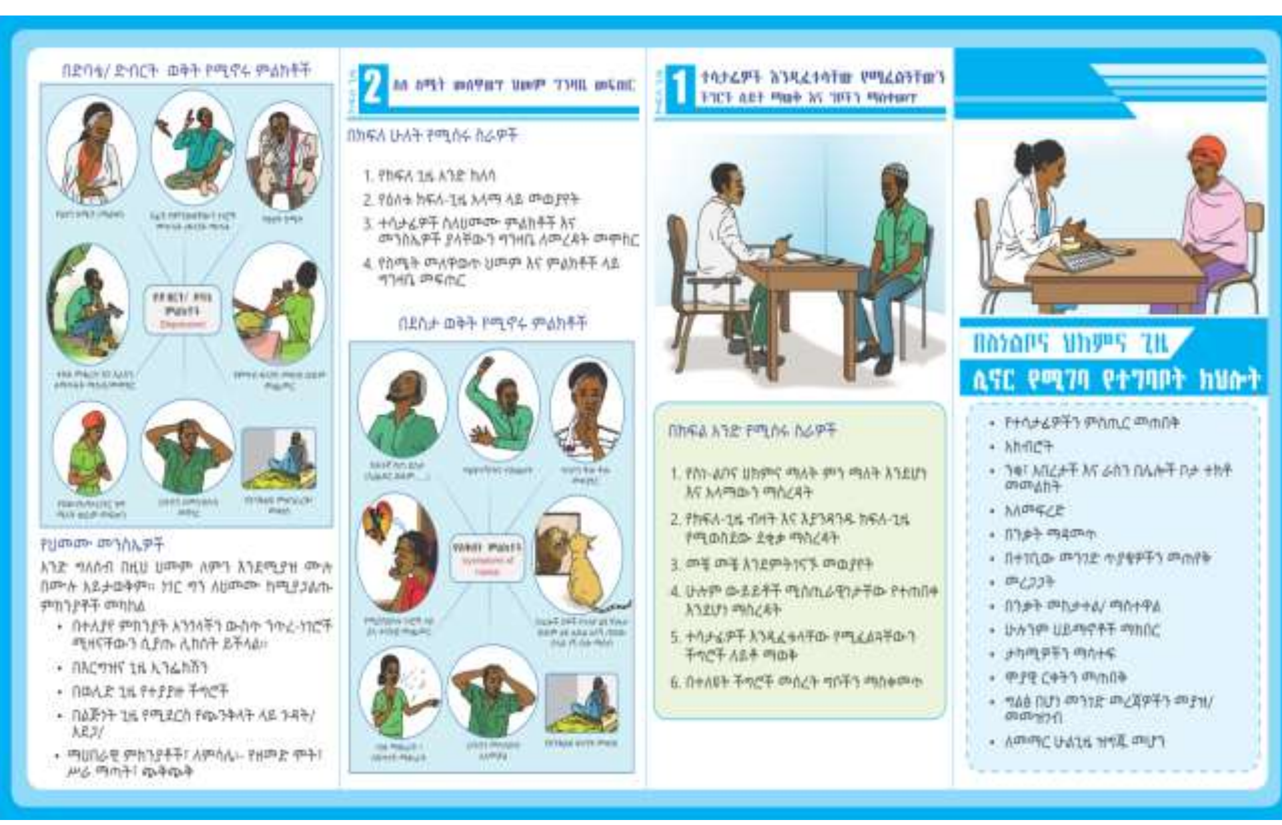
ህመሙ እንዲያገረሽ ወይም እንዲባባስ የሚረዱ ነገሮች

- የእንቅልፍ መረበሽ
- ከሰዎች ጋር አለመግባባት /መጨቃጨቅ
- የማህበራዊ ድጋፍ ማጣት
- የኢኮኖሚ ችግር
- ስራ ማጣት
- ሰው ሰራሽ እና ተፈጥሮአዊ አደጋ
- ማጣት/ የሚወዱትን ሰው በሞት ሐዘን/ ህመም
- አደንዛዥና አነቃቂ ነገሮች (ጠላ፣ ጠጅ፣ አረቄ፣ ቢራ፣ ሲጋራ/ትንባሆ እና ጫት)
- መድሀኒትን ማቋረጥ እና በባለሙያ የሚሰጡትን ምክሮች አለመተግበር

ህመሙ እንዳያገረሽ ወይም እንዳይባባስ የሚረዱ ነገሮች

- ተመሳሳይ የሆነ እለት ተእለት እንቅስቃሴን መከተል
- ከቤተሰብ፣ ከልጅ፣ ከትዳር አጋር፣ ከጎረቤት፣ ከአስተማሪ፣ ከጓደኛ እና ከሌሎች ሰዎች ድጋፍ ማግኘት
- የተግባቦት እና ችግርን የመፍታታት ክህሎት
- የጤና ባለሙያዎችን ማማከር
- በመደበኛነት እንቅስቃሴዎችን /እስፖረቶችን መስራት
- አደንዛዥና አነቃቂ ነገሮች (ጠላ፣ ጠጅ፣ አረቄ፣ ቢራ፣ ሲጋራ/ትንባሆ እና ጫት) አለመጠቀም

Appendix R: Intervention providers' leaflet



Appendix-S: LETTER FOR DECLARATION (Dissertation work)

I, the undersigned, declared that this is my original work, has never been presented in this or any other University, and that all the resources and materials used for the dissertation, have been fully acknowledged.

Name: Mekdes Demissie Challa

Signature:

Date: October 11, 2021

Place: Addis Ababa

Date of submission: October 11, 2021

This dissertation has been submitted for examination with my approval as University Supervisor.

Name: ____

Signature: ____

Date: ____