

**Addis Ababa University**

**College of Education and Behavioral Studies**

**School of Psychology**

**Burden and Coping Strategies among Caregivers of Persons with Severe  
Mental Illness: Implication for Counseling Intervention.**

**By**

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**Addis Ababa, Ethiopia**

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## **Acronyms**

APA: American Psychiatric Association

BCI: Brief Cope Inventory

MDD: Major Depressive Disorder

SMI: Severe Mental Illness

WHO: World Health Organization

ZBI: Zarit Burden Interview

## Abstract

*This study envisioned to assess the experiences of caregivers of people living with SMI by examining the burdens that they face and their coping strategies, across demographic variables. It was conducted on caregivers of people with SMI at Sitota for Mental Health Care and Lebeza Psychiatric Center. Purposive sampling was used as a sampling technique. The data was gathered from 117 participants (69 Female and 48 Male) through the use of self-report questionnaires. The questionnaire consisted of three sections which were demographic variables, Zarit Burden Interview and the Brief COPE inventory. The data were analyzed using SPSS statistical software package. The collected data were analyzed using both descriptive and inferential statistics. It used frequency and percentiles tables, independent t-test, One-way ANOVA, Person correlation and multiple linear regressions. The result indicated, 72 (61.5%) reported little or no burden, 34 (29.1%) reported mild to moderate burden, 10 (8.5%) reported moderate to severe burden and 1 (0.9%) caregiver reported severe burden. Regarding coping, caregivers used more problem-focused strategies. Specifically, religion, planning and using instrumental assistance were highly used. In terms of the correlation between burden and coping the finding indicates a moderate, positive and significant correlation. The result of the regression suggested that the coping strategies of the caregiver explained 20.8% of the variance,  $R^2=.208$ ,  $F(1,115)= 30.19$ ,  $p<.001$ . Thus, the coping strategies of the caregivers significantly predicted the caregiver's burden,  $\beta=0.81$ ,  $t=5.49$ ,  $p<.001$ . For subscales of coping strategies, the result of the regression suggested that the coping strategies of the caregiver explained 11.7% and 18% of the variance for problem-focused and emotion-focused coping strategies respectively  $p<.001$ . All the relevant demographic variable does not have significant difference with in themselves in terms of burden and coping strategies. Overall, the results demonstrated that while no burden among caregivers, coping strategy is a predictor of burden and the demographic variables do not have any difference in burden with in them. It is recommended to study burden in relation to resilience and other specific severe mental illnesses.*

*Key words; Burden, Caregiver, Coping Strategies*

## **Chapter One**

### **Introduction**

#### **1.1. Background**

Worldwide, in 1998 disability-adjusted life; which is premature mortality and years of healthy life lost due to disability; about 12% of it was because of mental illnesses (Brundtland, 2020). There were 970 million individuals worldwide who were coping with a mental illness in 2019. Again, 13% of the world's population resides among these individuals (WHO, 2022). From this, it can be seen that the prevalence of SMI such as schizophrenia and bipolar disorder was 24 million and 40 million, respectively (WHO, 2022). As the severity of the condition grows, people with SMI require caregivers.

Caregivers were defined as “anybody who provides unpaid help, or arranges for help, to a relative or friend because they have an illness or disability that leaves them unable to do some things for themselves, or because they are simply getting older. This kind of help could be with household chores or finances or with personal or medical needs. The person who needs help may live with you in a caregivers’ home, or in another place such as a nursing home.” (Donelan et al., 2002, p. 223).

Caregivers play a unique role. Both direct and indirect tasks can be categorized under these roles. Personal care tasks like assisting with bathing, grooming, toileting, or dressing; health care tasks like caring for catheters, administering injections, or tracking medication; and checking and monitoring tasks like constant supervision, routine inspection, and telephone monitoring are all examples of direct activities. Care management responsibilities such as locating where services are provided, coordinating service use, following up on how the service is going, or advocating are examples of indirect tasks. Household responsibilities include

cooking, cleaning, shopping, managing finances, taking family members to doctor appointments, daycare centers, etc. (Biegel & Schulz, 1999; Hjarthag et al., 2010). Role conflict and overload also result from the direct and indirect tasks of the caregiver (Biddle, 1986).

Burden has been defined as “the presence of problems, difficulties or adverse events which affect the life (lives) of the psychiatric patient’s significant other(s)” (Kumar & Saini, 2013, p. 274). The degree to which caregivers felt their mental or physical health, social life, and financial situation were suffering as a result of caring for their relative was another definition of burden (Zarit, Todd, & Zarit, 1986).

Subjective and objective domains can each have their own portion of the caregiver’s burden. The activities of daily life, such as doing chores around the house and other role tasks, are referred to as an objective burden. The term “subjective burden” describes the effect that mental illness has on family members, particularly caregivers, on an emotional and psychological level (Shah, Wadoo, & Lato, 2010; Ravi et.al, 2013; Abebaw, 2020).

The physical, psychological, social, and financial components of the caregiver’s life are all impacted by this burden. Other unfavorable effects of care burden include family disruption, lower level of patient care, and eventually, neglect of the patient (Menati et al., 2020). The health of caregivers of mentally ill people is frequently neglected, despite the fact that this can have catastrophic repercussions on the caregivers and expose them to a variety of illnesses (Zavagli, 2012). The family may lose their adaptive coping mechanisms during this, which results in inefficient coping (Thakur, Nagarajan, & Rajkumar, 2022).

In Ethiopia research indicated that caregivers of persons with SMI experience an elevated level of burden, particularly related to encouraging the patient and worrying about the patient (Abebaw, 2020). According to Mohammed et al. (2019), a moderate to severe level of subjective

burden is experienced by ninety-nine percent of caregivers of SMI patients. Specifically, in Ethiopia around sixty-three percent of caregivers of bipolar-I disorder and schizophrenic diagnosed patients experienced moderate to severe levels of burden (Kahsay, 2015).

The term "coping" refers to the actions and techniques a person takes to lessen or get rid of a stressful situation or event (Lazarus & Folkman, 1984). While it is a collection of intentional, planned actions people take to mitigate the adverse effects of an incident or circumstance on their physical, psychological, or social health (Carroll, 2013), Certain mental illness symptoms, as well as caregiver characteristics and their difficulties, might have an impact on coping (Tahkur, Nagarajan & Rajkumar, 2022). Problem-focused, emotion-focused, and avoidance-oriented coping mechanisms are common types of coping mechanisms (Menati et al., 2020).

According to Lazarus & Folkman (1984), an emotion-focused coping strategy is defined as a coping strategy related to emotional responses while problem-focused coping is defined as when coping is related to the management of the problem or distressing factor. The avoidance technique of coping, which can frequently be linked to negative health effects but is frequently reliant on the disorder, entails refraining from witnessing or worrying about a painful incident (Miller & Schnoll, 2000).

Rahmani et al. (2019) found that caregivers tended to employ more avoidance-based coping mechanisms that were emotion-focused. However, compared to female caregivers, male caregivers utilized more problem-focused coping techniques. On the other hand, problem-focused coping was the method that caregivers most frequently chose (Thakur, Nagarajan, & Rajkumar, 2022). The most frequent coping mechanism employed by the caregivers, however, was the collection of information, followed by encouraging communication and the patient's

involvement in social activities. The least frequent coping methods were coercion and avoidance (Mehra et al., 2022).

The relationship between burden and coping strategies indicated, an increase in burden will lead to an increase in coping strategies (Ghannam, Hamdan-Mansour & Al Abeiat, 2016; Adhikari et al., 2020). But to Rahmani et al. (2019), the relationship was inversely related. When the level of burden decreases, coping strategies increase. On the other hand, Tan et al. (2012) found no statistically significant relationship between burden and coping.

Specifically, caregivers' burden and the problem-focused coping strategies did not consistently correlate with one another (Rahmani et al., 2019). While caregiver burden and problem-solving relationship were weak (Lloyd et al., 2018). But Lloyd and his colleagues found a strong correlation between caregiver burden and emotion-focused techniques.

In terms of prediction of burden, research findings show coping strategies are a predictor of burden within different prediction extent. For instance, Kim et al, (2012), a 4.1% variance in burden is the result of coping strategies. This means that one of the factors that contribute to caregivers' burden is coping strategy. This is also found among caregivers of early-stage Alzheimer's disease. For this population, about 17% of the burden was predicted by coping strategies. A higher percent prediction was found among caregivers of eating disorder patients. Coping strategies were 48% predictors for burden.

## **1.2. Statement of the Problem**

Lelsie, Ababaw & Melliush, (2018) found that in Ethiopia, 52.7% of the samples overall were psychologically distressed. The caregiver's quality of life was also shown to be low by Habtam & Atsedemariam (2022). The global objective burden score revealed that, in terms of

burden, caring for those with SMI resulted in caregivers experiencing moderate to severe levels of burden (Mohammed et al., 2019).

Most of the time, the welfare of those who care for people with SMI has frequently been neglected. Even if, they are vulnerable due to burden and ineffective coping strategies. Additionally, there is limited research in the context of Ethiopia in terms of the relationship between burden and coping strategies. For instance, caregivers of people with SMI were studied in relation to burden (Mohammed, 2019; Abebaw, 2020); quality of life (Habtam & Atsedemariam, 2022), mental distress (Mezine et al., 2015) and stigma, subjective burden and psychological distress (Lelsie, Ababaw & Melluish, 2018). There is limited research burden and coping strategies among caregivers of people with SMI especially on coping strategies.

Additionally, very few studies have been conducted in Ethiopia on caregivers' burden. These researches are mostly focused on governmental hospitals. For instance, there was research on 58 primary hospitals in Gurage Zone in Ethiopia (Ababaw, 2020), Dessie Referral Hospital (DRH) in South Wollo Zone (Habtam & Atsedemariam, 2022), Gondar University Hospital, Ethiopia (Lelsie, Ababaw & Melluish, 2018) and Amanuel Hospital, Addis Ababa, Ethiopia (Mezine et al., 2015). This shows the existing research is more focused on governmental hospitals. Thus, it is essential to do this research from a different perspective; on the private sector.

In conclusion, it is crucial to examine the challenges experienced by caregivers of people with SMI in order to obtain insight into their burden and coping strategies. This will be useful for the clinical environment and will improve interventions and treatment outcomes.

### **1.3. Research Question**

This research addressed the following research questions:

1. What is the level of burden among caregivers?
2. What kind of coping strategies are being used among caregivers?
3. To what extent does coping strategies and its dimensions; problem-focused and emotion-focused, predict burden among caregivers?
4. Are there statistically significant differences in burden and coping strategies with respect to demographic variables (i.e., Gender, Marital Status, Education Status, Care Recipient Diagnosis, Relationship with Care Recipient)?

#### **1.4. Research Objective**

##### ***General Research Objective***

To assess the experiences of caregivers of people living with SMI by examining the burdens that they face and their coping strategies,

##### ***Specific Research Objective***

1. To determine the level of burden among caregivers.
2. To assess the kinds of coping strategies that are being used among caregivers.
3. To assess the extent to which coping strategies and its dimensions; problem-focused and emotion-focused, predict burden among caregivers.
4. To examine the statistically significant differences in burden and coping strategies with respect to demographic variables (i.e., Gender, Education Status, Diagnosis, Marital Status, Relationship with Care Recipient, Care Recipient Diagnosis).

#### **1.5. Significance of the Study**

The research results from this study will be used for a variety of objectives. It will help with a deeper grasp of the subject and with raising awareness of the burden and coping

mechanisms faced by caregivers. Both at the individual level and in the formulation of policies, the relevance is evident.

On an individual level, participants will be able to comprehend the specifics of their issues on a personal level. They will be able to comprehend the impact the burden is having on their lives as well as the types of coping mechanisms they are employing. This will enable them to modify their coping mechanisms and realize they are not the only ones dealing with these problems. The study can raise awareness of the burden and coping mechanisms as a result.

For psychologists, this research will be used by professionals that specialize in this field to develop a successful treatment strategy for the caregiver. Due to the fact that the majority of the treatment plan is centered on the individual, it will also provide them with a new perspective or angle. Care recipients will also be well assisted or taken care of by a caregiver who is in good mental health.

For rehabilitation centers, understanding the nature of the issue in this particular location and the efficacy of intervention strategies is also beneficial for rehab facilities. The same is true for policymakers who can utilize it to create policies. Finally, it can be used to provide new avenues for investigation into the subject.

In conclusion, the research findings will be useful for participants, psychologists, researchers, rehabilitation centers, treatment and intervention plans, and developing policies.

## **1.6. Limitations of the Study**

The research has some limitations. The research is limited to the objective result of burden and coping strategies, it was unable to include the subjective experience of the participants due to the research approach. Meaning, the burden is assessed but it was not explored through qualitative research. The study's sample was drawn from a particular

geographic location and was only collected from two facilities which are Sitota for Mental Health Care and Lebeza Psychiatric Center. Additionally, the facility is situated in a high-income urban neighborhood. Furthermore, because the sample was drawn from settings within a particular geographic area meaning, the generalizability of the study's findings may be constrained.

### **1.7. Delimitation of the Study**

The research focuses on caregivers of people with SMI. In terms of scope, this research work was delimited to burden and coping strategies, even if there were other variables that should be studied. The reason behind this was that the scope of the study was focused on the two variables. It was also delimited to caregivers of people with SMI, which includes schizophrenia and bipolar disorder (mania, depression), major depressive disorder and cognitive disorders (Dementia and Alzheimer's). Even though the problem and its impacts were prevalent all across the country and the globe, the research was delimited to Addis Ababa's private psychiatric clinics for the sake of convenience. Additionally, to decrease the differences between the characteristics of the caregivers; instead of government centers, the research was delimited to Addis Ababa private psychiatric clinics.

### **1.8. Operational Definitions**

The study contains some variables that should be defined. The variables have the following meaning in this research.

- **Burden:** the extent to which caregiving affected the caregivers' physical or mental health, social lives, or financial situations, as measured by the Zarit Burden Interview scale.

- **Caregivers:** Any individual who can be a family member or relative who interacts with the patient regularly, offers unpaid assistance to the patient on aspects of social, psychological, physical, and financial levels, and has mostly served as collateral in the patient's treatment.
- **Coping Strategies:** refers to the actions and routines a person engages in order to reduce or eliminate the occurrence of stressful events as measured by the Brief Cope Inventory.
- **Emotion-focused Coping Strategies:** is intended to decrease the emotional distress brought on by a stressful circumstance as measured by Brief Cope Inventory.
- **Problem-focused Coping Strategies:** is focused on finding a solution or taking action to change the source of stress as measured by Brief Cope Inventory.
- **Severe Mental Illness Strategies:** in this study refers to schizophrenia and bipolar disorder (mania, depression), disorder and cognitive disorders (Dementia, Alzheimer, Amnesic and Delirium).

## Chapter Two

### Literature Review

In the literature review, the definition of severe mental illness (SMI) and an overview of its prevalence both internationally and in Ethiopia will be provided. Then, some reviews will be included about caregivers of people with SMI. Research about caregivers' burden and coping strategies in relation to relevant theories will also be included. Empirical evidence such as Earlier International and National studies related to the burden and coping strategies among SMI and Conceptual framework will also be included.

#### 2.1. Severe Mental Illness (SMI)

##### 2.1.1. *Basic Concepts of Severe Mental Illness (SMI)*

“Mental disorder is a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities.” (APA, 2013, p. 20).

In particular, there are often three criteria that make up the concept of SMI. They both have psychiatric diagnoses, illnesses that have lasted more than two years, and functional limitations (Wiersma, 2006). A three-dimensional definition of SMI is given in another article. When a person is diagnosed with any form of non-organic psychosis, receives therapy for two years or more, and exhibits dysfunction as determined by the Global Dysfunction Scale, they are considered to have SMI (APA, 1987 cited in Ruggeri et al., 2000).

Similar to this, Parabiaghi et al., (2006) defined SMI as Patients who continue to exhibit severe dysfunction after a 2-year history of receiving psychiatric care are those to whom

interventions should be directed, being characteristics like care recipients' diagnosis, their age, and gender less explicitly implicated in the likelihood of acquiring long-term mental illness and on the burden placed on mental health care.

According to WHO (2018), a range of illnesses that includes moderate to severe depression, bipolar disorder, schizophrenia, and other psychotic disorders is referred to as SMI. Schizophrenia and bipolar disorder are among the more SMI since they are marked by a high likelihood of recurrence, higher cost of treatment, and symptoms that get worse over time (APA, 2013).

Most people with SMI view recovery as a series of incremental stages defined by a developing sense of agency. Regular participation in routines, activities, and normative life processes, like job and school, is generally regarded as a facilitator of recovery as well as an indicator of it. Additionally, they emphasize the necessity for a humane, empowering, and autonomous mental health system (Drake & Whitley, 2014).

### ***2.1.2. Prevalence of Severe Mental Illness (SMI)***

Around 12% of all disability-adjusted life years lost in 1998 were due to mental illness worldwide (Brundtland, 2020). In a 2009 WHO research 450 million people globally are estimated to be living with mental illnesses., with rates of SMI ranging from 1% to 3%. (WHO, 2009). 970 million individuals worldwide have a mental illness in 2019. This represents 13% of the global population (WHO, 2022).

According to a WHO report, schizophrenia, which affects 24 million individuals worldwide and about one in two hundred adults above the age of 20, is a top priority for mental health services worldwide. Moreover, bipolar illness, which affects 40 million people and roughly 1 in 150 adults worldwide in 2019, is a major concern for mental health services all over

the world. The working-age population is primarily impacted by both illnesses. According to the WHO, residual schizophrenia is ranked tenth, whereas a major depressive episode is sixth in terms of health impairment (WHO, 2022). The prevalence of mental problems was 15% for children and 18% for adults in Ethiopia (Sathiyasusuman, 2011).

## **2.2. Caregivers' Burden**

### ***2.2.1. Basic Concepts of Caregivers'***

Many studies use various definitions of caregivers. Also, there are other terminologies used in research. Others refer to them as “family caregivers” or “informal caregivers”. (Bastawrous, 2013). Mostly, burden is described as the major caregiver as the important one who typically gives the patient the most care and support (Awad & Voruganti, 2008)

Broadly, Caregivers were defined as “anybody who provides unpaid help, or arranges for help, to a relative or friend because they have an illness or disability that leaves them unable to do some things for themselves, or because they are simply getting older. This kind of help could be with household chores or finances or with personal or medical needs. The person who needs help may live with you in your home, in their own home, or in another place such as a nursing home.” (Donelan et al., 2002).

The caregiver is usually a family of a care recipient and the care is always ongoing. Many care recipients may not thank or even notice the aid and help they are receiving, and he or she frequently has additional obligations in the household. The care is provided due to emotional ties, obligations, the absence of other resources in the neighborhood and guilt (Kumar & Saini, 2013).

Family members who are cared for frequently need both physical and emotional help, which might limit caregivers' capacity to engage in normal social activities and reduce their

wellbeing (Wade et al., 1986). Helping the care recipient with daily duties, providing them with direct care, and managing the complex health care and social support systems are all examples of caregiving. Assistance with daily living, self-care, and mobility chores; provision of emotional and social support; advocacy and care coordination; surrogacy and health and medical treatment are some of the domains of the caregiving role (Schulz & Eden, 2016).

Differently, Biegel & Schulz (1999) distinguished between direct and indirect caregiver responsibilities. Personal care tasks like assisting with bathing, dressing, grooming, or toileting; health care tasks like caring for catheters, administering injections, or monitoring medication; and checking and monitoring tasks like constant supervision, routine inspection, and telephone monitoring are all examples of direct activities. Care management responsibilities such as locating services, coordinating service use, monitoring services, or advocacy are examples of indirect tasks. Household responsibilities include cooking, cleaning, shopping, managing finances, taking family members to doctor appointments, daycare centers, etc. In conclusion, the duty of a caregiver is one that comes with a lot of stress, responsibility, and stigma (Hjarthag et al., 2010).

### ***2.2.2. Basic Concepts of Caregivers' Burden***

After the de-institutionalization era, the idea of caregiver burden begins to gain momentum. As a result of the closure of mental hospitals, the burden of care was shifted from hospitals and institutions to the community and families of the patients. Those with SMI who would have otherwise been institutionalized were made to remain reliant on their caregivers (Honkonen, Saarinen & Salokangas, 1999; Sutherland, 2015). This generally transferred responsibility from institutions to caregivers.

The degree to which caregivers perceived their mental or physical health, social life, and financial situation were suffering as a result of caring for their relatives was the definition of burden (Zarit, Todd & Zarit, 1986). Likewise, described “caregiver burden” is the physical, psychological, emotional, social, and financial stressors that people go through as a result of giving care (George & Gwyther, 1986).

Traditionally, the burden of care was determined by considering its impacts and results on the carers. Nowadays, the idea of "burden of care" encompasses not only the emotional, psychological, physical, and economic effects but also subtle but unsettling concepts like humiliation, embarrassment, remorse, and self-blame (Awad & Voruganti, 2008).

Another way to think of burden is as either objective or subjective. The negative effects of caring on the caregiver’s regular activities are referred to as objective burden, while emotional effects are referred to as subjective burden (Abebaw, 2020).

Objective burdens are characterized as easily observable behavioral phenomena, such as adverse patient symptoms, disruption of the caregiver’s daily routine, strained family ties, limitations on social, recreational, and professional activities, financial hardships, and a detrimental effect on their own physical health. Subjective burden refers to the psychological responses that family members go through, such as the frustration brought on by changing relationships as well as feelings of worry, embarrassment, loss and sadness. There may also be grief present. This grieving may be brought on by the loss of the individual's former personality, successes, and contributions, as well as what the family loss which could be their life style. Anger and unconscious animosity may result from this grief (Shah, Wadoo & Latoo, 2010; Ravi, 2013).

### ***2.2.3. Prevalence of Caregivers' Burden***

According to WHO research, there are 349 million people who require care worldwide, of whom 101 million (29%) are elderly people 60 years of age and more and 18 million (5%), children under the age of 15, are care-dependent. Also, nearly 77% of the caregivers were female, 50% of them were spouses, and nearly 77% of the caregivers shared a home with the care recipient (WHO, 2017). The same holds true for those who care for those who have mental illnesses. Cantillo-Medina & Perdomo-Romero (2022) states that the population is primarily female (67.2%), aged 27 to 59, and consists primarily of mothers and daughters.

A different study found that 31.67% of caregivers reported feeling overworked (Cham et al., 2022). In addition, Cham et al. report that the pooled prevalence of caregiver burden was highest among care recipients who received treatment in a hospital setting was 36.06%, followed by the community setting (28.28%), and the lowest pooled prevalence of caregiver burden among care recipients who received treatment in a clinic setting (27.52%). Also, the caregivers of care receivers who had psychotic illnesses had a combined prevalence of caregiver burden that was greatest, at 35.88%. (Cham et al., 2022).

According to Ethiopian Shintayew (2015), the number of caregivers of people with SMI at Amanuel Mental Specialized Hospital who report experiencing mental distress is 56.67, indicating a higher prevalence. In line with other researchers, Abebaw (2020) discovered that the majority of caregivers in Ethiopia were females (52.5%) and primarily first-degree relatives (84.7%), including the patient's spouse, children, siblings, and parents. These relatives also lived in the same home as the patient. According to a study conducted at DRH in South Wollo, Ethiopia, men caregivers make up 61.8% of the workforce.

#### ***2.2.4. Factors that increase Caregivers' Burden***

The relationship between the patient and the caregiver was classified by George & Gwyther (1986) into three categories: spouse caregivers, caregivers of adult children, and other relatives (e.g., siblings, grandchildren). In general, it is anticipated that providing care for a close relative will result in reduced well-being.

The patients' living arrangements could include living with the caregivers, in a nursing home, or with someone else. All caregivers had full-time or nearly full-time caregiving responsibilities, but those who lived with the patient full-time have a higher burden. Due to them, the burden from other people's living arrangements could potentially increase (George & Gwyther, 1986). In contrast, Moller-Leimkuhler & Wiesheu (2012) contend that sharing a residence with the care recipient does not significantly increase the stress experienced by caretakers.

Apart from the living arrangement, caregiver burden was related to patient characteristics and care recipient characteristics (Abebaw, 2020). The two caregiver traits linked to a high burden score were being a female caregiver and having experienced mental distress. Severe clinical symptoms and care recipient impairment were linked to higher caregiver burden in relation to care recipient features (Abebaw, 2020). Similar to George & Gwyther (1986), who claim that the duration of the illness (measured in months) and the severity of the patient's symptoms increase the burden on the caregiver. Once more, Moller-Leimkuhler & Wiesheu (2012) contend that the length of the sickness and the intensity of the symptoms have no bearing on the stress experienced by the caretakers.

In fact, according to Moller-Leimkuhler & Wiesheu (2012), care recipients' problems with family life and irregular work of the patient result in a moderate rise in caregiver burden.

Moreover, a higher objective caregiver burden is linked to a higher sense of stigma among SMI caregivers (Mehra et al., 2022).

### ***2.2.5. Empirical Evidence of Caregivers' Burden***

The position of a woman in caregiving is typically seen as an enlargement of her traditional duties as a wife or daughter. According to several qualitative studies, the decision many females are changing and not being controlled by traditional roles contrasts with the caregiver role (Zarit, Todd & Zarit, 1986).

Cantillo-Medina & Perdomo-Romero (2022) estimates that 67.2% of the population is made up primarily of mothers and daughters. Only 46.11% of the caregivers in the Cheah et al., (2020) study were men. According to Mehra et al., research from 2022, there was a small difference in that 51.7% of caregivers were men. Male caretakers made up 65% of the workforce in Ethiopia, according to Mohammed et al. (2019), and 61.8%, according to Habtam & Atsedemariam (2022). Yet, according to Mezinew et al. (2015), 54.9% of caregivers were women. Notwithstanding the disparity between the frequency of male and female caregivers According to Lelsie, Mastewal, and Steve (2018), there are no appreciable differences in subjective burden. Gender and the risk of mental distress don't correlate in the same way for men and women (Mezinew et al., 2015).

According to Cantillo-Medina & Perdomo-Romero (2022), the caregivers were adults because they ranged in age from 27 to 59. The average age of the caretakers in Ethiopia, according to Mehra et al. (2022), was 45.1. According to Mohammed et al. (2019), the average age of the caregivers was 38.45 12.03 years, with the range being between 19 and 65 years. In Cantillo-Medina's & Perdomo-Romero's research, this range's lowest age groups were separated by an 8-year gap. A different study by Habtam & Atsedemariam (2022) and Mezinew et al.

(2015), shows that the average age is between 37.43 and 42 years old. A positive association between the burden and the caregiver's advanced age can be seen (Janevic & Connell, 2001). Mohammed et al. (2019), also discovered that the burden of caregiving increases with caregiver aging. On the other hand, a study of Latino caregivers found that burden was more strongly correlated with younger age (Magaa et al., 2007).

Mohammed et al. (2019), discovered that caregiver burden decreased in direct proportion to caregivers' economic level. This is consistent with Andren & Elmstahl's (2007) study, which found a negative correlation between low income and caregiver income. Inadequate social support, dysfunctional families, and unfavorable prognoses are also associated with the quality of the caregiver's life (Caqueo-Urzar, Gutiérrez-Maldonado, & Miranda-Castillo, 2009). In the Ethiopian context, the most difficult challenges for family members included paying for costs incurred directly by the patients due to the damage done to household items as a result of the care recipients' destructive and violent behavior, costs for transportation to healthcare facilities, and costs for treatment. Above all, providing care for individuals with SMI causes caregivers to experience financial loss (Mohammed et al., 2019).

The degree of caregiver burden also depends on educational status. Janevic & Connell (2001) found that the burden of finding states and the amount of education were mutually exclusive. It was assumed that income and higher education were positively correlated. More education, therefore, resulted in higher income, which lessens the caregiver's burden. The caregiver's ability to handle challenging circumstances is also improved by a greater level of education. In contrast, several states found that caregivers without a college degree or higher had a lower burden score than those who had (Mohammed et al., 2019).

### ***2.2.6. Theories of Caregivers' Burden***

In this section, two theories that are pertinent to caregiving: stress theory and role theory are reviewed. While many theories can be utilized to guide studies that examine “caregiver burden,” these two are the focus of the current review. Research that uses the term “caregiver burden” is intrinsically concerned with the stress and strain that comes with providing care for others, whether that be in addition to other responsibilities they have or in numerous roles (Bastawrous, 2013).

#### ***2.2.6.1. Caregiver Burden' in the Context of Role Theory***

According to role theory, human behavior is variable and predictable depending on the demands and circumstances of the social role that they are assuming (Biddle, 1986). According to the scarcity hypothesis, role conflict and role overload occur when people do not share the same expectations for their roles and there is a lack of time and resources (Goode, 1960). Role overload occurs when people don't have enough time or resources to carry out all of the responsibilities that come with each of their roles (Goode, 1960). Role conflict happens when an individual's expectations for their various roles diverge (Biddle, 1986). When talking about how caregivers experience “burden,” role overload and role conflict are especially crucial.

The amount of time and energy available to devote to other family activities (such as caring for a spouse or parent) would decrease as the objective caregiver burden (i.e., the time and energy spent on caregiving chores) rises, leading to higher feelings of family-role overload. The theory of role dynamics also supports the notion that the impression of subjective caregiver burden is correlated with the number of times caregivers feel they cannot meet expectations (their own or others') for the quality or quantity of care (e.g., feelings of guilt or concern for the care recipient). Such emotions can eventually lead to higher degrees of perceived family-role

overload when coupled with a lack of time and/or energy (Halinski, Duxbury & Stevenson, 2019).

#### **2.2.6.2. *Caregiver Burden' in the Context of Stress Theory***

Being the first stress-focused paradigm with broad cultural applicability, the stress and coping theoretical framework developed by Lazarus and Folkman (1984) has been applied to this study. In order to better understand the stress and coping mechanisms experienced by caregivers of Alzheimer's patients, Pearlin, et al. (1990) developed a conceptual model of caregiving stress. Each of the four domains that make up the stress process has a number of elements. The domains of stress include its cause and context, stressors, mediators of stress, and its effects. Alternatively put, the backdrop and setting of the stress, the stressors, the mediators of stress, and the result of stress are the domains. It had been shown that primary and secondary stressors were sources of stress (Pearlin et al., 1990).

When used in reference to caring, "caregiver burden" assumes the form of a primary stressor that is influenced by the caregiver's history and the context of the caregiving. The secondary stressors of role strains and internal psychological issues interact with "caregiver burden," which functions as a primary stressor (i.e. self-esteem, mastery, etc). Secondary stressors have an impact on outcomes like sadness and anxiety. Coping mechanisms and social resources operate as mediators in this model's explanation of the relationship between primary stressors, secondary stressors, and outcome stresses (Pearlin et al., 1990).

While Pearlin et al. (1990) regarded "caregiver burden" as a primary stressor, others have argued that broken down into subjective and objective components, burden should be viewed as a secondary stressor because it is synonymous with a subjective burden assessment (such as loss of or low level of self-esteem) (Yates, Tennstedt, & Chang, 1999). The main stressors in this

scenario would be more objective (i.e., quantifiable) in nature and would include things like the level of impairment of the care recipient (e.g., score on a cognitive assessment or a functioning assessment). The primary stressor from the Pearlin model, “number of hours spent caring for,” would then become a primary appraisal of the impact of the care-recipient impairment and would be correlated with “caregiver burden” (a secondary appraisal variable) and well-being (the outcome) (Yates et al., 1999). Secondary stressors typically include things like the perceived caregiver burden, whereas primary stressors are things that are more objective. (Yates, Tennstedt, & Chang, 1999; Bastawrous, 2013).

### **2.3. Caregivers’ Coping Strategies**

#### ***2.3.1. Basic Concepts of Coping Strategies***

The term “coping” refers to the actions and techniques a person takes to lessen or eliminate a stressful situation or incident (Lazarus & Folkman, 1984). The strategies for controlling the stress of providing home care are referred to as coping within the caring setting (Gabel & Adabbo, 2011; Pearlin et al., 1990). Moreover, Tahkur, Nagarajan and Rajkumar (2022) described a coping strategy as a way of problem-solving that may aid in avoiding, reducing, or tolerating stress or conflict. As well as, coping is a series of deliberate, purposeful behaviors people take to lessen the negative effects of an incident or circumstance on their physical, psychological, or social health (Carroll, 2013). Certain mental illness symptoms, as well as caregiver factors and their responsibilities, can have an impact on coping (Tahkur, Nagarajan & Rajkumar, 2022).

Coping mechanisms will lessen the impact of unpleasant stimuli and their negative repercussions. The elimination, adjustment, or avoidance of problems; the perceptual regulation, or reinterpretation of meanings of experience in a way that neutralizes tension; and the

preservation of emotional effects of problems within controllable boundaries were found to be three significant protective coping functions (Pearlin & Schooler, 1978).

### ***2.3.2. Types of Coping Strategies***

Psychologists often make a distinction between two different categories of coping mechanisms, namely problem-focused coping mechanisms and emotion-focused coping mechanisms (Folkman & Lazarus, 1980, McCarthy, 2019). After a while, Endler and Parker incorporated Avoidance-Oriented coping techniques by modifying three scale model of Folkman & Lazarus (Endler & Parker, 1994).

***Emotion-Focused Coping.:*** Emotion-focused coping is defined as “coping that is directed at regulating emotional responses to the problem” (Lazarus & Folkman, 1984). The majority of emotion-focused strategies, according to Lazarus and Folkman (1984), are intended to lessen emotional pain. They include techniques like distancing, selective attention, minimization, making positive comparisons, avoidance, and deriving meaning from unpleasant situations. Additionally, there are a variety of emotion-focused coping techniques designed to make people feel worse.

This method of coping is broken down into four aspects. Escapism, behavior of putting oneself in a situation that is more comfortable and satisfying, like eating and sleeping, as well as being skewed by smoking and drinking alcohol, is the first aspect of this method of coping. It is a behavior of avoiding problems by putting oneself in these situations. The second is minimization, which refers to how a difficulty is approached and how much lighter it is handled than it actually is. Self-blame is the third technique, which is more passive and focused on the issue at hand rather than on finding a solution. The fourth strategy is looking for significance,

which involves a cycle in which people look for a reason for their own perceived failure and try to identify features they think are important in their lives.

***Problem-Focused Coping.*** Problem-focused coping is defined as “coping that is directed at managing or altering the problem causing the distress” (Lazarus & Folkman, 1984). The majority of problem-focused coping techniques are geared toward an external source of stress and focus on “identifying the problem, developing possible solutions, weighing the alternatives in terms of their costs and advantages, choosing among them, and acting” (Lazarus & Folkman, 1984). Yet, inwardly directed coping techniques can be a part of problem-focused coping strategies. According to Lazarus and Folkman (1984), inwardly directed problem-focused techniques decreasing ego involvement, finding alternative sources of fulfillment, include increasing aspiration, developing new behavioral norms, or picking up new techniques and skills. (Lazarus & Folkman, 1984).

***Avoidance-Focused Coping.*** Lazarus & Folkman’s classification gained a new coping type thanks to Endler and Parker’s work. The avoidance technique of coping entails keeping oneself from experiencing or worrying about a traumatic incident, and it is frequently influenced by the disorder but is frequently related to negative health results (Miller, & Schnoll, 2000). For instance, avoidant coping entails distraction, denial, or using drugs or alcohol (Carver, Scheier, & Weintraub, 1989; Endler, & Parker, 1994).

### ***2.3.3. Caregivers Coping Strategies***

Among caregivers, religion, acceptance, active coping, instrumental support, planning, and positive reframing were the coping strategies most frequently used. Self-distraction, complaining, and emotional support came next. Substance use, behavioral disengagement,

humor, denial and self-blame were the least employed coping mechanisms (Walke, Chandrasekaran, & Mayya, 2018).

A study of caregivers for schizophrenic patients revealed that caregivers lean to employ more emotion-focused coping mechanisms and avoided conflict the most (Rahmani et al., 2019). The study's key conclusion is also that caregivers employed the tactic of looking for information about the patient's condition and care at the lowest level. Male caregivers utilized problem-focused coping mechanisms more frequently than female caregivers per Rahmani et al., (2019) findings. Age and coping methods were positively and significantly associated, with older caregivers using more problem-focused coping mechanisms (Rahmani et al., 2019). Similarly, the caregivers' preferred method of coping was problem-focused coping (Thakur, Nagarajan & Rajkumar, 2022).

Moreover, there was a favorable association between caregiver coping and education level. It might be justified on the grounds that caregivers with greater levels of education might be able to find better employment opportunities, access more resources for support, and earn higher income. According to the study's findings, caregivers resorted to coercion, avoidance, and resignation more frequently than other types of coping mechanisms. They utilized knowledge collecting as their least-used coping mechanism (Rahmani et al., 2019).

The acquisition of information by Mehra and his colleagues was the caregivers' go-to coping strategy, followed by encouraging communication and the patient's participation in social activities. The least frequent coping methods were coercion and avoidance (Mehra et al., 2022).

#### ***2.3.4. Theories of Coping Strategies***

An evaluation framework for methods of coping is provided by the transactional model of stress and coping, according to Lazarus and Folkman (1984). Stressful situations are seen as

interactions between people and their environments. The waves of the external stressor have an impact on these interactions. In other words, a person under stress first assesses the situation and gives it meaning before considering the resources at his disposal to manage the situation. This is made possible by first the person's appraisal of the stressor and secondly by the individual and cultural resources at a person's disposal. The resources could be cultural or social (Lazarus & Cohen, 1977).

The transactional approach calls for a practical interpretation of effectiveness in handling emotionally charged situations. With the elimination or modification of the stress-inducing factors or the maintenance of the emotional impacts within acceptable bounds, adaptive coping assists in safeguarding us from a particular situation. The effectiveness of coping in this context focuses on maximizing the benefits of adaptation (Lazarus, 1993). The idea behind adaptive or functional coping behavior is that it acts as a "buffer" to lessen the impact of traumatic events, protecting the individual from the immediate, harmful effects of stress as well as from physical disruption and emotional anguish. Also, it increases the likelihood that someone will "stand up to the challenge" and make the most of whatever personal advantage the situation offers. On the other perspective, maladaptive behavior falls short of adequately resolving the crisis and may potentially make the person's issues worse (Zeidner, Matthews, & Roberts, 2006).

#### **2.4. Burden and Coping Strategies**

Understanding the caregiver's coping strategies is especially crucial because the burden has an impact on not only the caregiver's day-to-day functioning and is a constant source of stress, but also the course of the care recipients' illness and their chances of recovery. In order to continue performing a healthy caregiving role, caregivers can be assisted in adopting more effective coping mechanisms if maladaptive coping strategies are found (Kumar & Saini, 2013).

The following was discovered in cross-sectional research among SMI caregivers with the aim of identifying how personality traits, expressive emotion, and coping methods affect carers' burden (Ghannam, Hamdan-Mansour & Al Abeiat, 2016). The study was collected from 196 caregivers. According to the analysis, there was a moderate, positive and significant correlation between emotional coping methods and burden, which suggests that as burden increases it leads to an increase in emotional focused coping strategies (Ghannam, Hamdan-Mansour, & Al Abeiat, 2016).

Correlation research, as reported by Rahmani et al. (2019), demonstrates the burden decreased as the mean coping strategy score increased. Another study that looked at the relationship between caregivers' burden and problem-focused coping among clinically stable people with schizophrenia and bipolar affective disorders revealed that the two variables did not always correspond with one another. The association varies depending on different assessments made throughout a six-month period (Chadda, 2007).

According to Lloyd et al. (2018), there is a strong correlation between caregiver burden and emotion-focused strategies. They also observed that emotion-focused coping strategies tended to behave differently from other types of coping strategies, such as problem-focused coping and dysfunctional coping, in terms of how they interacted with caregiver's burden. When examining the methods of coping strategies of caregivers of schizophrenia and bipolar type I patients, another study discovered a weak negative correlation between caregivers' burden and problem-solving (Abbaslou et al., 2023). Tan et al. (2012), on the other hand, showed no statistically significant association between burden and coping strategies.

The same outcome has been observed by research that aims to describe caregivers' perceived burden and coping in early-stage Alzheimer's disease. It has been discovered that

coping strategies predict burden (Zucchella et al., 2012). Research that examines caregivers' burden and coping strategies among eating disorder patients found that burden was predicted 32 % percent of the variance in burden with coping strategies (Coomber & King, 2011).

Coping strategies were evaluated as a predictor factor in different descriptive research on the multidimensional determinants of caregivers' burden in individuals with dementia. Nationally representative data were employed in the study. According to the findings, caregivers' who employed more coping strategies experienced greater levels of burden (Kim et al., 2012).

Additionally, cross-sectional research among SMI caregivers with the aim of identifying how personality traits, expressive emotion, and coping methods affect caregivers' burden revealed coping strategies are significant predictors of burden. (Ghannam, HamdanMansour & Al Abeiat, 2016).

In relation to gender, Sharma, Chakrabarti, and Sandeep (2016), state there is a difference in the result of caregiver's burden researches. The majority of caregivers were female, and the burden was highest for them (Shamsaei, Cheraghi & Bashirian, 2015). This is similar to other studies in Ethiopia (Mohammed et.al, 2019).

Yee and Schulz (2000) demonstrate that the vast majority of these researches in a seminal narrative-review reported that women experienced higher levels of caregiver-burden than men on caregiver burden. Meta-analytic investigations, however, have reached rather different results. The meta-analytic investigation reports there was no difference in relation to burden.

Di Lorenzo et.al (2021), explained the higher level of burden among females depending on roles. Females are predisposed to taking on the position of caregivers for physically or

mentally ill family members and friends, according to Di Lorenzo et al. (2021). Additionally, compared to male caregivers who tend to adopt a more managerial style approach to detach themselves from difficult situations, female caregivers bear a greater emotional, social, financial, and relationship burden.

In a different meta-analysis study, the researchers discovered that female caregivers carried a heavier burden and had worse physical and subjective health than males did, although these differences were small and hardly barely reached the threshold of practical significance. In light of the evidence at hand, they came to the conclusion that male and female caregivers are more similar than different with regards to burden. They explained the difference that was observed due to methodological differences (Pinquart & Sorensen, 2006).

According to several research, women caregivers employ emotion-focused coping more often than males, as well as other ineffective coping mechanisms such as imagination, wishful thinking denial, escape, or avoidance. In contrast, men utilise more effective coping strategies like problem-solving, acceptance, detachment, and distancing more frequently than women (Sharma, Chakrabarti, & Sandeep, 2016).

Male caregivers used problem-focused coping techniques more frequently than female caregivers, according to Rahmani et al. (2019) findings. Caregivers reports of similar disparities in gender in terms of managing schizophrenia and mood disorders have been observed (Yee & Schulz, 2000). Geriani et al. (2015), on the other hand, observed no distinction between male and female coping techniques.

Regarding marital status, Udoh et al. (2021) state that divorced and widowed caregivers bear a higher burden than married and single caregivers. Furthermore, compared to married or single caregivers, separated caregivers also faced a higher burden. Receiving support

or assistance from a spouse may be helpful as a source of financial support as well as tangible support for caregivers (Mulud & Geraldine McCarthy, 2016). However, there is no variation in coping Strategies based on marital status (Geriani et al., 2015).

High levels of education are associated with a higher caregiver burden (Shamsaei, Cheraghi, and Bashirian, 2015). The reason may have been higher education contributed to a clearer understanding of the difficulties involved in providing care. According to Yazici et al. (2016), younger and more educated people will experience reduced caregiver burden when caring for patients with schizophrenia. In contrast, Kizilirmak & Kucuk (2015) discovered that caregivers with low levels of education experienced higher levels of burden. It has been noted that the burden on caregivers rises as their level of education declines.

## **2.5. Conceptual Framework**

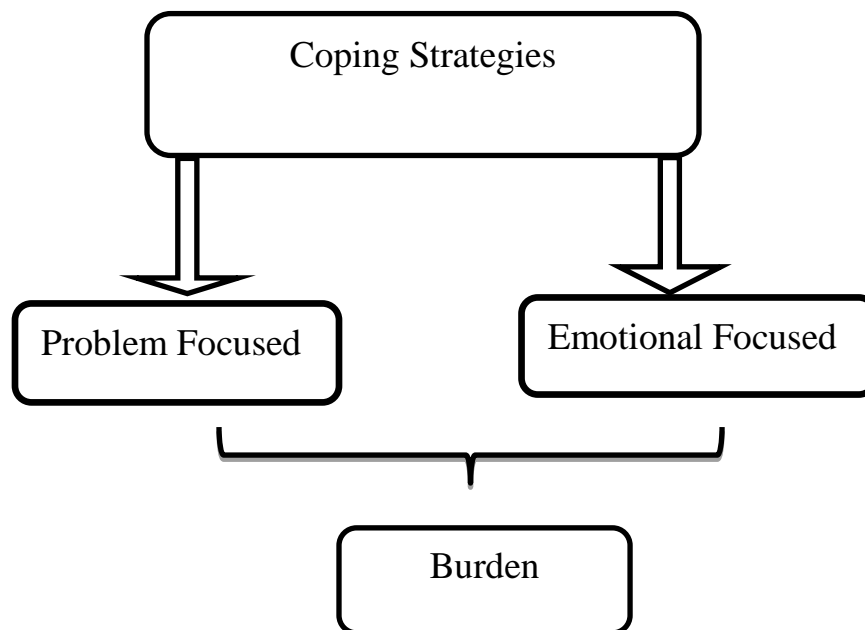
In 2000, Rungreangkulkij and Gilliss provided a theoretical framework for the burden of family caring. Many characteristics of the care recipient relative, such as age, gender, socioeconomic level, ethnicity, and relationship, have been discovered in this model as predictors of caregiver burden. Social support and coping strategies were included as reported mediating variables (Rungreangkulkij & Gilliss, 2000).

This framework was modified to fit the study's objectives. According to the premise behind the family caregiving burden perspective, there is a caregiving burden associated with looking after a family member who has an SMI, and the severity of the burden will vary depending on other conditions. The patient's characteristics, primarily their diagnosis, symptoms, and year of treatment, are the other variables. Contrarily, a caregiver's characteristics include marital status, religion, level of education, occupation, monthly income, relationship with the care recipient, and number of years in a caring role. Throughout the modification, social

support is also excluded from the framework because it is not a focus of the study. Again the demographic variables were removed since they are not conceptual ideas. Additionally, the specific types of coping strategies which are problem-focused and emotional focused coping strategies were added.

**Figure 1**

**Conceptual Framework of the Study**



## 2.6. Summary and Implication

In summary, a mental disorder is a disturbance in the cognition, emotion or behavior of an individual. These disturbances cause a dysfunction in the psychological, biological, or developmental processes. There are mental illnesses that are considered severe mental illnesses which include moderate to severe depression, bipolar disorder, schizophrenia, and other psychotic disorders. Caregivers are people who take care of a family member or friend when they are unable to look after themselves. Caregivers have direct and indirect responsibilities.

The direct responsibilities are taking care of personal care tasks such as bathing, dressing, toileting, or administering injections. While the indirect are care management responsibilities such as monitoring, advocacy, or coordinating service use. After the mental institutions started to close down, the burden of care shifted to the family members of the patients. Role theory says that when caregiving tasks increase then time and energy to do other family activities decreases. This results in family role overload.

Coping strategies are systems that caregivers use to tolerate, reduce, or avoid stress. The main strategies are problem-focused, emotion-focused and avoidance-focused coping mechanisms. Caregivers use different coping strategies such as religion, acceptance, denial, complaining and such. The most common used coping strategy among caregivers is problem-focused. The findings of this research will assist caregivers in finding more suitable coping strategies that are not harmful to them. In conclusion, this literature review emphasizes on the burden faced by those who care for people with SMI and their coping strategies.

## **Chapter Three**

### **Research Methodology**

#### **3.1. Research Design**

In this research, a cross-sectional quantitative research design was used to examine the burden and coping mechanisms faced by caregivers of people with SMI. This research design was also used by researchers who studied about burden and coping mechanisms faced by caregivers of people with SMI (Lelsie, Mastewal & Steve, 2018; Thakur, Nagarajan & Rajkumar, 2022). To put it another way, cross-sectional research was employed to analyze and contrast various subgroups that share similarities in a particular dimension.

#### **3.2. Population and Sampling**

##### ***3.2.1. Population***

The population of this study was consisting of all those who provide care for those with SMI. Any caregivers of patients with SMI who sought professional assistance in private psychiatric facilities of Sitota for Mental Health Care and Lebeza Psychiatric Center would specifically be the target population. the target population are anyone who comes to these two centers with a caregiving role.

##### ***3.2.2. Study Site***

###### ***Sitota Mental Health Clinic***

Sitota Center for Mental Health care was opened in 2010 G.C. It is Ethiopia's first psychiatric mental health facility offering a total solution to people suffering from mental illness. Their program ranges from short-term to long-term outpatient and in-patient treatment. The inpatient service has 80 beds. It is located around Soste Kuter Mazorya, Kolfe Keranyo, Addis Ababa, Ethiopia.

### ***Lebeza Psychiatric Center***

Lebeza Psychiatric Center was opened in 2016 G.C. It is one of Ethiopia's psychiatric mental health facilities offering mental health services. have both inpatient and outpatient treatment programs. The inpatient service has 35 beds. There is a recovery treatment that sustains clients requiring longer-term treatment. It is located around Urael, Addis Ababa, Ethiopia.

#### ***3.2.3. Sampling Technique***

The sample was chosen from all of the private psychiatric care sectors. In Addis Ababa, from ten private mental health facilities; two were chosen by using purposive sampling techniques. These centers are Sitota for Mental Health Care and Lebeza Psychiatric Center.

#### ***3.2.4. Sample Size Determination***

Anyone who visited Sitota for Mental Health Care and Lebeza Psychiatric Center within the period of four and half weeks which is from April 9 to May 14. Depending on this time frame, the total population is 117 caregivers. Thus, the sample size for this study was determined by using the formula employed by Krejcie & Morgan (1970).

$$S = \frac{x^2 NP(1 - P)}{d^2(N - 1) + x^2 P(1 - P)}$$

***Whereas,***

S- Sample size

X<sup>2</sup>- Chi-Square for specified confidence level at 1 degree of freedom

N- Size of the population

P- Proportion of the population

d<sup>2</sup>- Margin of error

Therefore, the sample size for this study was 86. Since the number of samples was low, 31 participants were included in the study. The justification behind this was having a low number of participants increased error. To minimize the error additional sample size were found to be important. Additionally, having a bigger number of items in scale also affects the error and the sample size taken. Thus, the sample size was 117 in total.

### ***3.2.5. Inclusion and Exclusion Criteria***

Caregivers who have been with the care recipients without any payment were included in this research. The reason for this was any one who gets payment takes the caregiving role as a job which is out of the scope of the research. All participants were above the age of 18 years. Nonetheless, caregivers with a history of SMI were excluded. Caregivers with severe physical conditions were excluded from the research.

## **3.3. Data Collection Instrument**

### ***3.3.1. Demographic Factors***

Some socio-demographic factors were included in the questionnaire's first page. This part included socio-demographic parameters that are believed to be significantly related to the variables. It will include information on the patient's gender, religion, age, marital status, level of education, socioeconomic status, place of residence, occupation and relationship to them. It also included information on their living situation, type of treatment (outpatient or inpatient) and known medical conditions.

### ***3.3.2. Zarit Burden Interview (ZBI)***

To measure the sense of main caregiver burden, Zarit created the instrument in 1980 (Bachner & O'rourke, 2007). It is a self-report scale. The questions are written subjectively, emphasizing on the caregiver's emotional response (Kumar & Gupta, 2014). On a 5-point Likert

scale, respondents are asked to assess items from 0 (never) to 4 (nearly always). Each degree of stress has a cut-off score of 20, 40, or 60, and the overall score runs from 0 to 88. (Kumar & Gupta, 2014; Yu et al., 2018).

First, it was created as a unidirectional scale to evaluate the burden experienced by caregivers of dementia patients. The ZBI has since evolved into a multidimensional measure that includes factors like "personal strain," "role strain," "intolerance," "patient dependency," "caregiver's guilt," and "intervention in personal life" (Udoh, 2021). Although another research has mentioned a five-dimensional model (Li et al., 2017). In this research, the unidirectional scale was used.

The Chinese version of ZBI, according to Yu et al. (2018), demonstrated strong internal consistency with a 0.89 Cronbach's alpha. Cronbach's alpha is 0.93 in Nigerian studies (Iyidobi et al., 2022). Furthermore, internal consistency values of 0.83 and 0.89 were reported by Bedard (Bedard et al., 2001).

### **3.3.3. *Brief Cope Inventory***

Brief Cope Inventory (BCI) was used to assess the coping strategies. It is a self-report scale. According to Ghannam, Hamdan-Mansour & Al Abeiat (2016), BCI is an abbreviated version of the COPE Inventory (Coping Orientation to Problems Experienced Inventory). It was developed by Carver, Scheier, and Weintraub in 1989.

Each of the BCI's 14 subscales evaluates the extent to which a respondent employs a particular coping mechanism. Acceptance, active coping, behavioral disengagement, denial, humor, planning, positive reframing, religion, self-blame self-distraction, substance use, using emotional support, using instrumental assistance and venting are all measured on these scales. The 14 scales each have two items on them. These subscales fall within the categories of the two

main subscales, problem- and emotion-focused coping (Ong, Ibrahim &Wahab, 2016; Kamarulbahri, et al., 2022).

A 4-point Likert scale was used by respondents to rate items, with 1 representing never, 2 representing occasionally, 3 representing mostly but not always, and 4 representing always. Each scale's total score can be anywhere between two and eight. The more frequently that a given coping method is used, the higher the subscale scores on each item are. By adding the relevant items for each scale, the total scores for each scale are determined. This shows the complete scale's possible range, which is between 28 and 112. (Adhikari et al., 2020). 0.73 was the Cronbach's Alpha (Hamdan-Mansour et al., 2014).

#### ***3.3.4. Translation of the Scales***

The one-way or expert translation method was used to translate Zarit Burden Interview (ZBI) and Brief Cope Inventory (BCI) from the English language to the Amharic Language. With this method, a bilingual person with demonstrated knowledge of the target language, experience using it, and familiarity with the subject completes the instrument translation from the source language to the target language (Capitulo et al., 2001). The language expert works in the area of translation for 20 years in the profession of pedagogy. The language expert reported his mother tongue was Amharic and learned English through pedagogy. Additionally, the translated version was reviewed by another content expert and language expert. The content expert is a university instructor with PhD in the Psychology field.

#### ***3.3.5. Pilot Test***

The pilot test's main objective was to assess the reliability of the instruments used in the main data collection. On the basis of the pilot data, the data analysis techniques were also

assessed, and it was decided whether the study questions were written in a specific and quantifiable manner.

The pilot study was conducted among caregivers of SMI at Eka Kotebe General Hospital. Participants for the pilot study were selected because they have identical characteristics to the target population. Eka Kotebe General Hospital's Ethical Clearance (Appendix A) was obtained in order to protect the participants' rights and welfare. The hospital's research and training team approved the study because it poses no risk to the participants.

In the pilot study, 30 caregivers were included through purposive sampling. The pilot test procedure of data collection was administered in exactly the same way as the main data collection procedure. Participants in the survey were required to fill out the Amharic versions of a demographic profile and the three scale instruments (ZBI and BCI) after providing verbal informed consent. Participants were questioned regarding any elements that they found unclear or challenging to understand at the end. The data collector also looked for any issues they had while completing the questionnaire. After participants reported that they had trouble understanding a particular topic, some BCI questions were revised. For instance, the first question of BCI was revised from “ከነገሮች ለማሸሽ ትኩረቴን ወደ ሥራ ወይም ወደሌሎች እንቅስቃሴዎች ሳደርግ ነበር” to “ሐሳቤን ከነገሮች ለማሸሽ ትኩረቴን ወደ ሥራ ወይም ወደሌሎች እንቅስቃሴዎች ሳደርግ ነበር።”

Table 1:

Alpha Value of ZBI and CBI Instruments in the Pilot test (N=30) and Main Studies (N=117)

Scale	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
ZBI	.929	.930	22
CBI	.883	.874	28

Note: ZBI is for Zarit Burden Interview and BCI is for Brief Cope Inventory.

As can be seen from Table 1, for Zarit Burden Interview (ZBI) and Brief Cope Inventory (BCI), Cronbach's alpha resulted in 0.93 and 0.88 respectively. Depending on George and Mallery's (2003) coefficient criteria, Cronbach's alpha for ZBI and BCI has excellent reliability and good reliability respectively. For more information, the pilot test is briefly explained in appendix 8.

### **3.4. Data Collection Procedure**

The first step before gathering data was going to the School of Psychology to obtain the letter of support. Upon receipt of the letter of support, a meeting was scheduled with the assigned person of Sitota and Lebeza Mental Services to inform them of the project, secure formal approval to conduct it, and set a date for data collection.

Questionnaires were used to get the necessary data for examining the burden and coping mechanisms faced by caregivers of people with SMI in order to better understand their experiences. The initial step was to set a time frame to collect the data. During the data collection time, the data was collected in the waiting room. Participants were requested to complete the questionnaires. The participants were made fully aware of their choice to participate or not. No one would know who they were. The participants were also informed of the study's purpose and importance before receiving the questionnaire. The participants were informed research is to understand their experience this encouraged them to answer the questionnaires honestly. The questionnaires were then given to the participants. The data collector addressed any queries during the time of filling out questionnaires. The most commonly raised question was if the last part of the questionnaire; meaning CBI, was answered in relation to their experience or the care recipient. The questionnaire was collected after the participants have completed answering it and declared completion. During the data collection, four participants were unable to finish the

questions which led to the dismissal of the data because the care recipient had finished the treatment for the day.

### **3.5. Data Analysis**

Both descriptive and inferential statistics were used to analyze the data of 117 participants. SPSS version 27 was used to analyse the data. The specific methods of data analysis employed are briefly described as follows.

#### ***3.5.1. To determine the level of burden among caregivers.***

In order to determine the burdens and coping mechanisms of caregivers of people living with SMI, descriptive statistics like mean, percentile, and standard deviation were used to analyze demographic features. The particular research design used in this research was an appropriate method since it allows to understand the levels clearly.

#### ***3.5.2. To assess the kinds of coping strategies that are being used among caregivers.***

In order, to explore the kinds of coping strategies that are being used among caregivers, descriptive statistics like mean and standard deviation were used.

#### ***3.5.3. To assess the extent to which coping strategies and its dimensions; problem-focused and emotion-focused, predict burden among caregivers.***

A simple linear regression was utilized to assess the extent to which coping strategies and its dimensions; problem-focused and emotion-focused, predict burden among caregivers. Additionally, Pearson correlation was used as a preliminary analysis.

**3.5.4. *To examine the statistically significant differences in burden and coping strategies with respect to demographic variables (i.e., Age, Gender, Education Status, Diagnosis, Marital Status, and Relationship with Care Recipient).***

Independent t-test and one-way ANOVA were used to examine the statistically significant differences in burden and coping strategies with respect to demographic variables (i.e., Age, Gender, Education Status, Diagnosis, Marital Status, Relationship with Care Recipient). Specifically, for caregivers' gender and care recipient independent t-test was used. While for other demographic variables one-way ANOVA was administered.

**3.6. Ethical Considerations**

The option to engage in the research or not was given to the participants. To reassure the caregivers, a few conditions were mentioned and defined which are purpose, confidentiality and consent. After confirming verbal consent, the research purpose was disclosed to participants. Participants were informed of the research's goal and how it might be used, after proper analysis and conclusion, to help youth problems. Even if there are changes to the research, all relevant information were still described. Additionally, they were also informed that their identity was kept confidential and won't be disclosed to anyone else. So that, they can feel secure about the information they provide for this study. The data was only used for this research and was kept secret regardless of what happens in the future to reassure the caregiver's concern. Informants who may have requested that their names appear in the article will not obtain their wish due to ethical considerations, and this will be kindly explained to them.

## Chapter Four

### Results

In this section, the results of the study will be outlined in detail. They were discovered through the data analysis methods detailed in the previous section on data analysis. The results of the study, which involved 117 caregivers as a sample are described. The results from the analyses are presented in the order of the research questions. All of the analysis was done by using SPSS statistical software package version 27.

#### 4.1. Demographic Characteristics of the Participants

In this section, participants were asked to report general information about caregivers and care recipients. Their response is summarized in two different tables.

According to the sample of caregivers (Appendix B), there are 69 female (59%) and 48 male (41%) participants in the study (N=117). The average age of the caregivers was 40 with a standard deviation of 12.658. Regarding place of residence, 103 (88%) were from the urban side of the country while 14 (12%) people were from the rural side of the country. Regarding religion, 63 (53.8%) were Orthodox, 2 (1.2%) were Catholic, 29 (22.6%) were Muslim and 23 (23.8%) were Protestant. Additionally, 70.9% (83) of caregivers were married.

Regarding education status, 59 (50.4%) attended secondary level education and only 7 (6%) furthered their education above degree. In relation to occupation, 38 are unemployed, 9 work in government offices, 67 work in private settings and 3 work as a laborer. Concerning monthly income, 27 (23.1%) caregivers reported no income. On the other side, 30 (25.6%) caregivers reported above 10,000.

Regarding caregiver relationship with the patient, 27 (23%) were mothers, 7(8.3%) were fathers, 11(9.4%) were sisters, 16 (13.7) were brothers, 14 (12%) were sons (daughters), 11

(9.4%) were husband (wife) and 21 (17.9%) were other relatives. Currently, the participants who are living with the care recipient 73 (62.4%) and 44 (37.6%) live in a different house.

*Table 2*

*Demographic Characteristics of the Care Recipient (N=117)*

<b>Variables</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Site</b>	Lebeza	18	15.4
	Sitota	99	84.6
<b>Client Type</b>	Inpatient	30	25.6
	Outpatient	87	74.4
<b>Care Recipient</b>	Male	72	61.5
	Female	45	38.5
<b>Care Recipient Age</b>	<= 25	31	26.5
	26 - 35	37	31.6
	36 - 45	19	16.2
	46+	30	25.6
<b>Care Recipient Medical Diagnosis</b>	Schizophrenia	18	15.4
	Bipolar	19	16.2
	MDD	33	28.2
	Substance Use	21	17.9
	Alzheimer	6	5.1
	Delirium	2	1.7
	Other	18	15.4
<b>Care Recipient on Treatment (In years)</b>	<1	12	14.3
	1-5	52	61.9
	6-10	7	8.3
	11-15	4	4.8
	16-20	4	4.8
	>20	5	6.0

Table 2 describes about the characteristics of care recipient. About 99 (84.6%) of care recipients were from Sitota for Mental Health Care while 18 (15.4%) were from Lebeza Psychiatric Center (N=117). 30 (25.6%) were attending inpatient programs while 87 (74.4%) were attending outpatient programs. Around 72 (61.5%) were male care recipients and 45 (38.5%) were female. Also, 37 was the average age for care recipients.

In terms of medical diagnosis, 18 (15.4%) were diagnosed with schizophrenia, 19 (16.2%) were diagnosed with bipolar, 33 (28.2%) were diagnosed with MDD, 21 (17.9%) were diagnosed with substance-related disorders, 6 (5.1%) had Alzheimer, 2 (1.7%) had delirium and 18 (15.4%) had other diagnosis. Regarding the number of years in treatment, most of the care recipients had been in treatment from one to five years (61.9%) of N=117.

#### 4.2. The Level of Burden among Caregivers

*Table 3*

*Level of Burden among Caregivers (N=117)*

Variables	Category	Frequency	Percentage	Total
Burden (ZBI)	Little or No (0-20)	72	61.5	Mean= 19.76 SD=13.8
	Mild-Moderate (21-40)	34	29.1	
	Moderate-Severe (41-60)	10	8.5	
	Severe (61-88)	1	0.9	
		177	100	

Table 3 presents the level of burden among caregivers. The descriptive study was carried out to determine the level of burden among caregivers. Accordingly, from 117 participants, 72 (61.5%) reported little or no burden, 34 (29.1%) reported mild to moderate burden, 10 (8.5%) reported moderate to severe burden and 1 (0.9%) caregivers reported severe burden.

#### 4.3. Coping Strategies among Caregivers.

*Table 4*

*Coping strategies among Caregivers (N=117)*

Variables	Category	Mean	D
Coping (BCI)	Problem Focused Strategies	2.35	53
	Emotion Focused Strategies	1.78	49

Caregivers' coping strategies are reported in Table 4. The descriptive study was carried out to explore the types of coping strategies that are being used among caregivers. From the two coping strategies, caregivers used more problem-focused strategies with a mean of 2.38 (SD=.53). On the other hand, the caregivers reported less emotional-focused strategies with a mean of 1.78 (SD=.49).

*Table 5*

*Subscales of Coping Strategies among Caregivers (N=117)*

<b>Coping Strategies</b>	<b>Category</b>	<b>Mean</b>	<b>SD</b>
<b>Problem Focused Strategies</b>	Using Emotional Support	2.24	.95
	Using Instrumental Assistance	<b>2.47</b>	.86
<b>Emotion Focused Strategies</b>	Acceptance	2.40	.99
	Religion	<b>3.15</b>	.97
	Positive Reframing	2.28	.79
	Active Coping	2.32	.92
	Planning	<b>2.60</b>	.89
	Humor	1.34	.65
<b>Problem Focused Strategies</b>	Self-Distraction	1.82	.73
	Venting	2.09	.81
	Behavioral Disengagement	1.68	.76
	Denial	1.99	.88
	Self-Blame	1.80	.93
	Substance Use	1.30	.61

Table 5 presents coping strategies among caregivers in relation to the specific subscales. The descriptive study was conducted to explore the types of coping strategies that are being used among caregivers. All highly used coping strategies were from problem-focused strategies. Those were religion, planning and using instrumental assistance with mean of 3.15 (SD=.97), 2.60 (SD=.89) and 2.47 (SD=.86) respectively.

#### 4.4. The Relationship between Burden and Coping Strategies.

Table 6

*Simple Linear Regression between Burden and Coping Strategies (N=117)*

Variables	B	SE	95% CI		B	P
			LL	UL		
(Constant)	.017	.017	-.046	.079		.596
Coping Strategies <sup>a</sup>	.081	.081	.052	.110	.456	.000

Note: the predictors variable is burden

The link between the predictors was investigated using a Pearson correlation coefficient (Table 7) to make sure there was no multicollinearity. The coefficient indicated that the presumption was upheld. Moreover, the tolerance level is above 0.1 and the variance inflation factors are below 10, which indicates multicollinearity is not violated. Additionally, in Durbin-Watson statistics, residual values are independent, suggesting that the assumption was upheld (1.95). A scatterplot (Appendix C) also indicated the assumption of homoscedasticity was not violated. The assumption of normal distribution was also checked by the P-P plot (Appendix D). Finally, Cook's Distance values were cleared from any influential cases biasing the model since the result is below one (0.0).

Simple linear regression was used to assess if coping strategies are predictors of caregiver burden. The result of the regression suggested that the coping strategies of the caregiver explained 20.8% of the variance,  $R^2=.208$ ,  $F(1,115)= 30.19$ ,  $p<.001$ . Thus, the coping strategies of the caregivers significantly predicted the caregiver's burden,  $\beta=0.81$ ,  $t=5.49$ ,  $p<.001$ .

Table 7

*Pearson Correlation between Burden and Coping Strategies among Caregivers (N=117)*

	Burden	Coping Strategies
Burden	.	.46**
Coping Strategies	.46**	.

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

The assumptions of Pearson correlation were ensured. An inspection of histograms suggested that the assumption of normality was not violated (Appendix E). In line with this, Shapiro-Wilk tests suggested that burden,  $W(117) = 0.98$ ,  $p = .06$ , and coping strategies,  $W(117) = .98$ ,  $p = .09$ , were normally distributed. Additionally, an inspection of a scatterplot suggested that there was no linear relationship between burden and coping strategies (Appendix F).

According to Table 7, A Pearson correlation was conducted as a preliminary analysis of regression. The analysis indicates that there was a moderate, positive and statistically significant correlation between burden and coping strategies,  $r_s = .46$ ,  $n = 117$ ,  $p < .001$ . This indicates that an increase in burden will lead to an increase in coping strategies.

Table 8

*Simple Linear Regression between Burden and Problem-focused and Emotional focused Coping Strategies (N=117)*

Variables	B	SE	95% CI		B	P
			LL	UL		
(Constant)	.070	.031	.010	.131		.023
Problem Focused Coping Strategies <sup>a</sup>	.050	.013	.024	.075	.342	.000
(Constant)	.068	.024	.020	.117		.006
Emotion Focused Coping Strategies <sup>a</sup>	.066	.013	.040	.092	.425	.000

Note: the predictors variable is burden

The link between the predictors was looked at using a Pearson correlation coefficient in order to rule out multicollinearity. The coefficient indicated that the assumptions have been validated. Additionally, the tolerance level is higher than 0.1, and the variance inflation factors are lower than 10, which shows multicollinearity is not violated for both problem-focused and emotional-focused coping strategies. Additionally, Durbin-Watson statistics shows that the residual values are independent, suggesting that the assumption was upheld (1.91) for problem-focused coping strategies and (1.99) for emotional-focused coping strategies. The assumption of homoscedasticity was not broken, according to a scatterplot (Appendix G). P-P plot was another tool used to verify the assumption of normal distribution (Appendix H). Since the outcome is below one (0.0), Cook's Distance values were lastly freed from any significant cases that would have biased the model.

Simple linear regression was used to assess if problem-focused and emotional-focused coping strategies are predictors of caregiver burden. For problem-focused coping strategies, the result of the regression suggested that the coping strategies of the caregiver explained 11.7% of the variance,  $R^2=.117$ ,  $F(1,115)= 15.19$ ,  $p<.001$ . Thus, the coping strategies of the caregivers significantly predicted the caregiver's burden,  $\beta=0.50$ ,  $t=3.89$ ,  $p<.001$ . For emotional-focused coping strategies, the result of the regression suggested that the coping strategies of the caregiver explained 18% of the variance,  $R^2=.18$ ,  $F(1,115)= 25.32$ ,  $p<.001$ . Therefore, the coping strategies of the caregivers significantly predicted the caregiver's burden,  $\beta=0.66$ ,  $t=5.03$ ,  $p<.001$ .

Table 9

*Pearson Correlation between Burden and Major Subscales Coping Strategies among Caregivers*

(N=117)

	Burden	Problem-Focused Coping Strategies	Emotion-Focused Coping Strategies
Burden	.	.34**	.43**
Problem-Focused Coping Strategies	.34**	.	
Emotion-Focused Coping Strategies	.43**		.

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

The assumptions of Pearson correlations were ensured. An inspection of histograms suggested that the assumption of normality was not violated (Appendix C). In line with this, Shapiro-Wilk tests suggested that burden,  $W(117) = 0.98$ ,  $p = .06$ , and coping strategies,  $W(117) = .84$ ,  $p = .09$ , were normally distributed. Additionally, an inspection of a scatterplot suggested that there was no linear relationship between burden and coping strategies (Appendix I).

According to Table 9, A Pearson correlation was conducted as a preliminary analysis of regression. The analysis indicates that there was a moderate, positive and statistically significant correlation between burden and emotional-focused coping strategies,  $r_s = .43$ ,  $n = 117$ ,  $p < .001$ . This indicates that an increase in burden will lead to an increase in emotional-focused coping strategies. Differently, the analysis indicates that there was a low, positive and statistically significant correlation between burden and problem-focused coping strategies,  $r = .34$ ,  $n = 117$ ,  $p < .001$ . This indicates that an increase in burden has a weak tendency to an increase in problem-focused coping strategies.

## 4.5. The differences in Burden and Coping Strategies with respect to Demographic Variables

### 4.5.1. The differences in Burden and Coping Strategies with respect to Gender

Table 10

*Independent t-test between Burden, Coping Strategies, Problem Focused and Emotional Focused Coping Strategies and Caregivers' Gender (N=117)*

	Female		Male		t	P	Cohen's d
	M	SD	M	SD			
Burden	.19	.09	.18	.08	-.39	.69	.08
Coping Strategies	2.11	.45	2.09	.45	-.31	.75	.44
Problem Focused	2.35	.54	2.34	.52	-.11	.92	.54
Emotion Focused	1.80	.48	1.76	.52	-.45	.65	.49

Note: the dependent variables are not related.

The assumption of normality was not violated (Appendix C). The Levene statistics also indicates a test of homogeneity of variance is not violated. An independent-samples t-test was conducted to compare between burden and caregiver's gender. There was not a significant difference between males ( $M = .18$ ,  $SD = 0.08$ ) and females ( $M = 0.19$ ,  $SD = 0.9$ ),  $t(115) = -.39$ ,  $p = .08$ . Similarly, Table 10, There was not a significant difference between male ( $M = 2.09$ ,  $SD = 0.45$ ) and female ( $M = 2.11$ ,  $SD = 0.9$ ) among coping strategies,  $t(115) = -3.1$ ,  $p = .44$ . The same result was found for both problem-focused and emotion-focused coping Strategies as presented in Table 10.

Table 11

*Independent t-test between Burden, Coping Strategies, Problem Focused and Emotional Focused Coping Strategies and Care recipient Gender (N=117)*

	Female		Male		t	p	Cohen's d
	M	SD	M	SD			
Burden	.19	.07	.19	.08	.04	.97	.08
Coping Strategies	2.07	.40	2.12	.46	.57	.57	.44
Problem Focused	2.34	.50	2.35	.56	.16	.87	.54
Emotion Focused	1.724	.43	1.82	.53	1.06	.29	.49

Note: the dependent variables are not related.

The assumption of normality was not violated (Appendix C). The Levene statics also indicates a test of homogeneity of variance is not violated. An independent-samples t-test was conducted to compare between burden and caregiver's gender. There was not a significant difference between males (M = .19, SD = 0.08) and females (M = 0.19, SD =0.7),  $t(115) = .04$ ,  $p = .97$ . Similarly, There was not a significant difference between male (M = 2.07, SD = 0.4) and female (M = 2.12, SD =0.46) among coping strategies,  $t(115) = 5.7$   $p = .44$ . The same result was found for both problem-focused and emotion-focused coping Strategies as presented in Table 11.

#### 4.5.2. *The differences in Burden and Coping Strategies with respect to Caregivers'*

##### *Marital Status*

Table 12

*One Way ANOVA between Burden, Coping Strategies, Problem Focused and Emotional Focused Coping Strategies and Caregivers' Marital Status (N=117)*

	Married		Not Married		Divorced		Widowed		ANOVA		
	M	SD	M	SD	M	SD	M	SD	F	p	$\eta^2$
Burden	4.19	1.60	3.88	1.77	3.35	2.82	5.20	2.89	.87	.46	.02
Coping Strategies	2.08	.44	2.20	.37	1.63	.54	2.44	.30	2.82	.04	.07
Problem Focused	2.29	.53	2.54	.46	1.83	.65	2.71	.52	3.43	.02	.08
Emotion Focused	1.79	.48	1.77	.52	1.38	.45	2.13	.51	1.38	.25	.03

Note:  $p < .001$

The purpose of this study was to determine whether there are significant differences in the burden and coping strategies of individuals across different caregivers' marital status. In terms of burden, the result reveals no significant difference among caregivers with different marital status,  $F(3,113) = .87$ ,  $p > .001$ . In conclusion, there is no difference between, married caregivers, not-married caregivers, divorced caregivers and widowed caregivers in terms of burden.

In terms of coping strategies, the result indicated no significant difference among caregivers with different marital status,  $F(3,113) = 2.82$ ,  $p > .001$ . Meaning, there is no difference between, married caregivers, not-married caregivers, divorced caregivers and widowed caregivers in terms of coping strategies. The same result was found for both problem-focused and emotion-focused coping strategies as presented in Table 12.

**4.5.3. The differences in Burden and Coping Strategies with respect to Caregivers' Education Status**

*Table 13*

*One Way ANOVA between Burden, Coping Strategies, Problem Focused and Emotional Focused Coping Strategies and Caregivers' Education Status (N=117)*

	Basic		Primary		Secondary		BA		Above		ANOVA		
	M	SD	M	SD	M	SD	M	SD	M	SD	F	p	$\eta^2$
Burden	4.16	1.24	4.53	4.53	4.29	4.29	3.50	3.50	4.54	4.54	1.45	.22	.05
Coping Strategies	1.24	.58	2.14	2.14	1.66	1.66	1.70	1.70	1.60	1.60	.78	.54	.03
Problem Focused	2.13	.60	1.87	1.87	2.12	2.12	2.11	2.11	2.16	2.16	.78	.54	.06
Emotion Focused	.58	.57	.45	.45	.43	.43	.39	.39	.34	.34	1.67	.16	.03

Note:  $p < .001$

The purpose of this study was to determine whether there are significant differences in the burden and coping strategies of individuals across different caregivers' education status. In terms of burden, the result reveals no significant difference among caregivers with different education status,  $F(4,112) = .05$ ,  $p > .001$ . In conclusion, there is no difference between caregivers' education status in terms of burden.

In terms of coping strategies, the result indicated no significant difference among caregivers with different education status,  $F(4,112) = .78$ ,  $p > .001$ . Meaning, there is no difference between caregivers' education status in terms of coping strategies. The same result was found for both problem-focused and emotion-focused coping strategies as presented in Table 13.

**4.5.4. The differences in Burden and Coping Strategies with respect to Caregivers' Relationship with Care recipient**

*Table 14*

*One Way ANOVA between Burden, Coping Strategies, Problem Focused and Emotion Focused Coping Strategies and Caregivers Relationship with Care recipient (N=117)*

Independent Variables	Burden		Coping Strategies		Problem Focused		Emotion Focused	
	M	SD	M	SD	M	SD	M	SD
Mother	4.23	2.06	2.14	.48	2.27	.53	1.95	.55
Father	3.98	1.04	2.15	.59	2.50	.73	1.69	.58
Sister	4.04	1.79	2.17	.38	2.45	.41	1.79	.49
Brother	4.5	1.85	2.06	.31	2.33	.45	1.72	.44
Son (Daughter)	4.49	1.18	2.23	.37	2.48	.49	1.88	.51
Husband (Wife)	4.12	1.61	2.14	.25	2.52	.22	1.62	.37
Other	3.78	1.78	1.92	.52	2.11	.66	1.67	.47
ANOVA	F							
		.28		.95		1.4		1.09
	p	.35		.48		.22		.37
	$\eta^2$	.02		.05		.07		.06

The purpose of this study was to determine whether there are significant differences in the burden and coping strategies of individuals across different caregivers' relationship with care recipient. In terms of burden, the result reveals no significant difference among caregivers with different relationship between caregivers and care recipients,  $F(6,110) = .28$ ,  $p > .001$ . In conclusion, there is no difference between caregivers' education status in terms of burden.

In terms of coping strategies, the result indicated no significant difference among different relationship between caregivers and care recipients,  $F(6,110) = .95$ ,  $p > .001$ . Meaning, there is no difference between caregivers' relationship between caregivers and care recipients in terms of coping strategies. The same result was found for both problem-focused and emotion-focused coping strategies as presented in Table 14.

**4.5.5. The differences in Burden and Coping Strategies with respect to Care Recipient Diagnosis**

*Table 15*

*One Way ANOVA between Burden, Coping Strategies, Problem Focused and Emotional Focused Coping Strategies and Care Recipient Diagnosis (N=117)*

Independent Variables	Burden		Coping Strategies		Problem Focused		Emotion Focused	
	M	SD	M	SD	M	SD	M	SD
Schizophrenia	4.22	1.87	2.03	.46	2.27	.51	1.69	.53
Bipolar	4.32	1.35	2.05	.33	2.31	.44	1.73	.37
MDD	3.51	1.81	2.04	.46	2.26	.54	1.74	.52
Substance Use	4.10	1.84	2.10	.51	2.27	.62	1.87	.55
Alzheimer	5.17	1.26	2.28	.35	2.61	.61	1.84	.30
Delirium	5.04	.07	2.91	.42	3.00	.35	2.76	.32
Other	4.39	1.51	2.18	.31	2.50	.44	1.75	.44
ANOVA	F	1.32	1.69		1.28		1.66	
	p	.25	.13		.065		.083	
	$\eta^2$	.067	.085					

The purpose of this study was to determine whether there are significant differences in the burden and coping strategies of individuals across different care recipient diagnosis. In terms of burden, the result reveals no significant difference among caregivers with a different relationship between caregivers' burden and care recipient diagnosis,  $F(6,110) = 1.32, p > .001$ . In conclusion, there is no difference between caregivers' burden and care recipient diagnosis.

In terms of coping strategies, the result indicated no significant difference among caregivers with a different relationship between caregivers' burden and care recipient diagnosis,  $F(6,110) = 1.69, p > .001$ . Meaning, there is no difference between caregivers' coping strategies and care recipient diagnosis. The same result was found for both problem-focused and emotion-focused coping strategies as presented in Table 15.

## Chapter Five

### Discussion

The study's key findings are explored in connection to earlier empirical investigations in this chapter. The major purpose of this study was to explore the experiences of caregivers of people living with SMI by examining the burdens that they face and their coping strategies. In particular, the study assessed the level of burden experienced by caregivers and their coping mechanisms, as well as the relationship between demographic factors and burden and coping mechanisms. It also examined the extent coping strategies predict burden.

#### 5.1. Level of Burden among Caregivers

In this research, from 117 participants, 72 (61.5%) reported little or no burden, 34 (29.1%) reported mild to moderate burden, 10 (8.5%) reported moderate to severe burden and 1 (0.9%) caregivers reported severe burden. The level of burden among caregivers is found to be a little bit for most of the participants. There is no report on severe burden. The burden among caregivers, in general, was lower than expected, probably due to the intervention programs in the centers which is a group counseling for caregivers.

Similar research done on coping and burden among caregivers of patients with SMI attending the majority of caregivers experienced a moderate level of the burden (Thakur, Nagarajan, & Rajkumar, 2022).

Moreover, another hospital-based research with the aim of assessing the level of burden and coping among caregivers of SMI patients found out the majority of caregivers had severe burden, others had moderate to severe burden or mild to moderate burden (Adhikari et al., 2020). The explanation for the difference in result might be due to the treatment delivery mechanism

which is inpatient program (hospitalization). Dominantly, in this research, around 75% of the care recipient were in outpatient programs.

Research examining the level of burden and coping mechanisms among caregivers of SMI patients admitted to teaching hospitals indicated more caregivers reported moderate to severe burden, whereas more than 50% reported mild, little, or no burden (Subba et al., 2022). The possible explanation for the difference between this research and Subba and her colleagues' results is the same as Adhikari and his colleague's results.

A descriptive study was conducted among 32 caregivers in a tertiary care hospital to assess the burden of caregiving for patients with schizophrenia (Kumar, & Saini, 2013). According to Kumar and Saini's (2012) research, of the caregivers, 43.8% reported a moderate burden, 31.3% a severe burden, and 25% a low burden. The difference between Kumar & Saini (2013) and this research might be due to the patient's diagnosis. The most common diagnosis in this research was MDD and Substance use rather than schizophrenia; which was the most common diagnosis in this specific research sample (Kumar, & Saini, 2012). This possibly leads to the caregiver's burden being likely lower. The burden on caregivers could become more severe as a result of the negative symptoms of schizophrenia.

Similar results were observed in cross-sectional research of caregivers of people with SMI, which examined the predictive value of coping mechanisms, personality traits and expressed emotion on the burden of caregiving (Ghannam, Hamdan-Mansour & Al Abeiat, 2016). 50% of the caregivers had a burden level under 47.0, 25% had a burden level beyond 55.0, and 25% had a burden score of less than 39.5. The findings showed that the burden level among caregivers was somewhat above normal for half of them. The difference between Ghannam, Hamdan-Mansour & Al Abeiat (2016) and this research might be due to the

occupation of the caregivers. According to Ghannam, Hamdan-Mansour & Al Abeiat (2016), 70% of caregivers were not working therefore spending much of their time with the care recipient. Whereas in this research, only 32.5% were unemployed.

In Ethiopia, Abebaw (2020) studied the level of caregiver burden among caregivers of people with SMI among 300 caregivers in rural areas of Ethiopia. It indicated that caregivers of persons with SMI experience an elevated level of burden, especially when it comes to motivating and worrying for the patient. However, the cutoff point was not established. The findings of Abebaw(2020) might be inconsistent with this research due to the residency of participants. In Abebaw(2020) research, the focus area was rural while the participants of this research are dominantly from urban areas.

## **5.2. Coping Strategies among Caregivers**

Different coping mechanisms are employed by carers to manage the burden they bear. Our research result indicates from the two coping strategies, caregivers used more problem-focused strategies. On the other hand, the caregivers reported less emotional focused strategies. The research has identical results to Kate and her colleague's (2013) research. Their research aimed to assess the connection between the burden of caregiving, coping mechanisms, social support, quality of life and psychological morbidity for those caring for people with schizophrenia. Correspondent research by Adhikari et al. (2020) and Thakur, Nagarajan, & Rajkumar, (2022) also indicated the approach applied by the caregivers most frequently was problem-focused coping.

A preliminary study with the purpose of comparing the coping strategies of caregivers of schizophrenia and bipolar patients found similar results. According to the research, caregivers employed a variety of coping mechanisms. However, it appeared that both schizophrenia and

bipolar patients' caregivers were employing problem-focused techniques. The research concluded that problem-focused methods were employed more frequently than emotion-focused strategies (Chakrabarti, & Gill, 2002).

On the other hand, research that studies the use of coping skills and how they relate to sociodemographic details, psychological distress, and social support among individuals who care for people with schizophrenia came to a different conclusion. The most common coping strategy was emotion-focused coping followed by problem-focused coping and avoidance coping (Kamarulbahri et al., 2022). The use of emotion-focused coping strategies was discovered to be more used by caregivers of schizophrenia patients in another study (Rahmani et al., 2019). Subba et al. (2022) attained the same result in their research study.

Coping strategies are not limited to problem-focused and emotional-focused strategies. Brief Coping Inventory has 14 subscales. In this research, the findings indicate all highly used coping strategies were from problem-focused strategies which are religion, planning and using instrumental assistance. The least used coping strategy was substance use. This result was correspondent to Kamarulbahri et al. (2022), which indicated that the most popular coping strategy is religion, while the least popular coping strategy is using drugs. The difference was that the other two highest coping strategies used were positive reframing and acceptance.

Apart from a few rare cases, caregivers of patients with schizophrenia and bipolar disorder appeared to employ adaptive, problem-focused strategies more often than emotion-focused ones, problem-focused strategies are positive communication, increasing the patient's social involvement, seeking information, and talking with friends were among these while such as coercion, collusion, resignation, avoidance, etc. are emotional focused strategies (Chakrabarti & Gill, 2002).

Moreover, several studies that looked at the relationship between coping and other factors among caregivers came to the same conclusion. According to Ong (2016) research, one of the most popular coping mechanisms was religion. Substance abuse and behavioral disengagement were uncommon coping mechanisms. Active coping, positive reframing, and acceptance was also included as highly used strategies which makes it different from this research. The same applies for behavioral disengagement (Ong, 2016).

While assessing the burden of caregivers of mentally ill individuals and their coping mechanisms, Walke, Chandrasekaran & Mayya, (2018), found out the most frequently used coping styles were religion, planning, active coping, acceptance, positive reframing and instrumental support. This was followed by self-distraction, emotional support and venting. The least used coping style was denial, self-blame, behavioral disengagement, substance use and humor. In another research by Adhikari et al. (2020), religion, acceptance, and self-distraction were the next most common coping mechanisms, were active coping and then self-distraction. On the other hand, behavioral disengagement is the least used coping strategy among caregivers. This research also indicates denial, behavioral disengagement, self-blame, humor, and substance use were one of the least used coping strategies.

Consistently, qualitative research on caregivers of schizophrenic patients also indicated caregivers were using healthy coping strategies such as religious support (Ganguly, Chadda, & Singh, 2010). The majority of participants, especially women, used traditional religious practices and worship as a form of coping. They employed spiritual and religious practices as coping strategies in addition to seeking medical and psychological assistance, such as praying (Oriya, & Alekozai, 2022).

Another qualitative research that intended to discover and analyses the coping strategies used by caregivers to deal with their mentally ill relatives also identified consistent findings. The caregivers coping strategies include acceptance, religious coping being involved in recreational activities, emotional coping, and using conventional healing to assist them deal with their mentally ill family members. Due to variations in research design, the latter two coping mechanisms were not discovered in our study (Azman, Singh, & Sulaiman, 2017).

### **5.3. The Prediction of Burden with Coping Strategies**

In this research, coping strategies are found to be predictors of burden. Both problem-focused and emotion-focused coping strategies were found to be predictors of burden. This is similar to the research finding of Kim and his colleagues. The study used nationally representative data to examine the multidimensional factors of caregiver burden in those who care for people with dementia. According to their findings, caregivers who employed more coping mechanisms experienced greater levels of burden (Kim et al., 2012). Therefore, coping strategies account for 4.1% of the burden variance.

The same outcome has been observed by another study that sought to describe carers' perceptions of burden and coping in early-stage Alzheimer's disease. The use of coping strategies was revealed to be a 17.6% predictor of burden (Zucchella et al., 2012). The research's findings are the same in this research as well.

Additionally, cross-sectional research among SMI caregivers to determine how personality traits, expressive emotion, and coping techniques affect caregivers' burden also assessed if coping is a predictor for burden. The analysis revealed that personality and coping are important predictors of burden (Ghannam, HamdanMansour & Al Abeiat, 2016).

Similar to this research, research that studied caregiver burden and copings strategies among eating disorders found caregivers' burden was predicted 32% of the variance in burden with expressed emotion and carer needs being significant unique predictors (Coomber & King, 2011). But there is a significantly higher prediction percent than the finding of this research. This might be due to the difference between the care recipient's diagnosis.

### ***5.3.1. The Relationship between Burden and Coping Strategies***

According to the Pearson correlation done in this research, there was a moderate, positive and significant correlation between burden and coping strategies which indicates that an increase in burden will lead to an increase in coping strategies. Similarly, the burden of being a caregiver was positively correlated with statistically significant coping mechanisms. (Adhikari et al., 2020). Gupta & Sharma (2013) also reported the same result.

Similarly, cross-sectional research among caregivers of SMI with the goal was to identify how personality characteristics, expressive emotion, and coping mechanisms affect carers' burden found the following (Ghannam, Hamdan-Mansour & Al Abeiat, 2016). The study was collected from 196 caregivers. The analysis indicated that there was a moderate, positive and significant correlation between burden and emotional-focused coping strategies, this indicates that an increase in burden will lead to an increase in emotional-focused coping strategies. Differently, the analysis of this research indicated that there was a low, positive and significant correlation between burden and problem-focused coping strategies indicating that an increase in burden will not lead to an increase in problem-focused coping strategies.

Differently to Rahmani et al. (2019), correlation analysis using Pearson product-moment correlation coefficient revealed that all Family Coping Questionnaire subscales had significantly negatively correlated with burden (ranging from 0.32 to 0.41), showing that burden decreased as

the mean coping strategy score increased. This might be caused by the two studies' different levels of caregiver burden. Rahmani et al. (2019) reported a higher burden level, however, this research's findings indicated no to little burden.

Another research that examined the association between burden and coping among caregivers of clinically stable individuals with schizophrenia and bipolar affective disorders likewise came to diverse conclusions. Caregivers' burden and the problem-focused coping strategies did not consistently correlate with one another. At one of the assessments, there were also some other notable correlations between a few of the burden factors and coping strategies. For instance, the burden factor of spouse-related and problem-focused coping had a negative connection during the six-month assessment in the schizophrenia group. In general, these correlations were not consistent across all of the assessments (Chadda, 2007).

Additionally, Chadda (2007) provided correlational statistics on the association between several burden elements and coping mechanisms. In the case of groups with schizophrenia and bipolar affective disorders, the use of avoidance coping techniques was positively correlated with numerous burden characteristics and the overall burden score.

According to Chakrabarti, & Gill (2002), the more frequent use of problem-focused and emotion-focused techniques by carers of bipolar patients and carers of schizophrenia patients, respectively, may be largely explained by levels of caregiver-burden and carer assessment.

Another study showed that the employment of unhealthy coping mechanisms enhanced carers' feelings of burden. This study employed the COPE (Coping Orientations to Problems Experienced) scale, which has three separate subscales: emotion-focused coping, problem-focused coping, and dysfunctional coping. Additionally, there is a strong correlation between caregiver burden and emotion-focused techniques. In terms of their interactions with caregiver

burden and other caregiver burden aspects, they also noted that emotion-focused coping strategies tended to behave differently from other types of coping strategies (Lloyd et al., 2018). In this research, it also indicates a positive correlation with emotional-focused strategies. In other words, there is a favorable link with emotional-focused methods in this study.

Abbaslou et al. (2023) discovered that there was a weak negative association between caregiver burden and problem-solving when assessing the coping strategies of caregivers of schizophrenic and bipolar type I patients. The Pearson coefficient found no connection between the burden, emotionally driven coping, and less effective coping.

On the other hand, Tan et al. (2012) found no statistically significant relationship between burden and coping. However, when caregivers took care of their loved ones who had schizophrenia, there were substantial correlations between caregivers' burden and coping strategies. Poor management by caregivers led to frequent arguments with their ailing relatives, which caused distress and suffering.

#### **5.4. The Differences in Burden and Coping Strategies with Respect to Demographic Variables**

##### ***5.4.1. The Differences in Burden with Respect to Demographic Variables***

The finding of this research indicates there is no significant difference in burden with in the demographic variables which are caregiver gender, education status, marital status, relationship with care recipient, care recipient diagnosis and care recipient gender.

The results of this study are in line with another study that found no significant differences in the burden with in age, educational attainment, occupation, socioeconomic status, family structure, or religion, but found highly significant differences in the burden within marital status (Bhandari et al., 2015). According to Abbaslou et al. (2023), no difference was

found between burden and different disorders. The total caregiver's burden had no significant difference in age, sex, marital status, education, occupation, or relationship with the patient of the carers, either (Menti et al., 2020).

Additionally, another research that used ANOVA and independent t-test found there was no significant difference between age, gender of the mentally ill and the areas of burden (Ravi et al, 2012). Inversely, for significant differences between the type of mental illness and its impact on marital relationships. In some results, the similarity is observed with this research's variables except for type of mental illness and marital status.

Differently, the level of burden is higher among female caregivers (Schneider et.al, 2011). Females have more burden because of ongoing gender role differences and females mostly take on the caregiving role (Mohammed et al., 2019). According to Lelsie, Ababaw & Melliush, (2018), there are no appreciable differences in subjective burden in terms of gender. According to that, there was no significant gender difference in the burden. But for financial burden was found to be higher among male caregivers.

In relation to caregivers' relationship with the care recipient has differences within the population. Being a parent increases caregivers' burden as compared to spouses, siblings, sons or daughters, and other relatives. Caregivers who care for their child have more burden (Mohammed et al., 2019). This was completely different from this research finding.

In terms of education status, caregivers who had no formal education had lower burden scores as compared to those who had college and above educational level. It might be that educated patients may have better insight into their illness and seek help and treatment early, resulting in lesser caregivers burden (Navidian, & Bahari, 2008). On the other hand, Adeosun (2013), found out a higher level of education is linked to a higher level of burden. These results

are completely different from this research. This might be due to the level of burden was found no or little overall. This might lead not to observing significant differences in education status.

Additionally, Janevic & Connell (2001), found that the burden of finding states and the amount of education were mutually exclusive. It was assumed that income and higher education were positively correlated. More education, therefore, resulted in higher income, which lessens the caregiver's burden. The caregiver's ability to handle challenging circumstances is also improved by a greater level of education.

#### ***5.4.2. The Differences in Coping Strategies with Respect to Demographic Variables***

The finding of this research indicates there is no significant difference in coping strategies with in the demographic variables which are caregiver gender, education status and marital status, relationship with care recipient, care recipient diagnosis and care recipient gender.

Similarly, Adhikari et al, (2020), the difference between caregivers' coping strategies and selected demographic variables shows that there is no statistically significant between Caregiver's coping strategies and selected demographic variables. Another descriptive study conducted in Mumbai found that there was no difference between the selected demographic variable and the caregivers' coping strategies. The demographic variables include gender, education status and relationship with the patient (Batra, Ghildiyal & Mathews, 2014). Specifically, Geriani et al. (2015), found no difference between male and female coping strategies.

Differently, Sharma, Chakrabarti & Sandeep (2016), found that coping strategies, women use emotion-focused coping more frequently than men. Rahmani et al., (2019) findings also state male caregivers utilized problem-focused coping mechanisms more frequently than female caregivers. Similar gender differences in coping have occasionally been reported among

caregivers of patients with schizophrenia and mood disorders (Yee & Schulz, 2000). In contrast, men have used more effective coping strategies such as problem-solving, acceptance, detachment or distancing more frequently. In contrast, the result of this research there is no difference in the use of emotion-focused and problem-focused strategies.

## Chapter Six

### Summary, Conclusion and Recommendation

A summary of the study's key findings is offered in this chapter, followed by a discussion of the key conclusions that were reached. Finally, suggestions for practical applications or additional research are made.

#### 6.1. Summary

The purpose of this study was to assess the experiences of caregivers of people living with SMI by examining the burdens that they face and their coping strategies, across demographic variables. The study applied a quantitative research approach and cross-sectional research design. A purposive sampling technique was used to select the samples for the study. The sample was selected from Sitota for Mental Health Care and Lebeza Psychiatric Center. 117 participants were included in the study.

The data from 117 participants were examined using both descriptive and inferential statistics. Descriptive statistics like mean, percentile, and standard deviation were employed to study demographic variables in order to examine the burdens and coping mechanisms of caregivers of people living with SMI. A specific study topic about the difference between burden and coping methods with respect to demographic variables was examined by using One way ANOVA and independent t-test depending on the demographic variable's characteristics. The simple linear regression test was employed to what extent coping strategies predict burden. Pearson correlation was also used as a preliminary analysis.

According to the result of the research, the level of burden among caregivers was little to no burden. Regarding coping, caregivers used more problem-focused strategies. Specifically, religion, planning and using instrumental assistance were highly used. In terms of the correlation

between burden and coping the finding indicates a moderate, positive and significant correlation. The result of the regression suggested coping strategies of the caregivers significantly predicted the caregiver's burden. The same result was found for subscales of coping strategies. Finally, all the relevant demographic variable does not have significant difference with in themselves in terms of burden and coping strategies.

## **6.2. Conclusion**

The following conclusions are based on the aforementioned results and studies.

When it comes to mental health care, caregivers are frequently forgotten because the focus is frequently on the care recipient. Not all caregivers feel burdened, but some do. The study's findings indicated that:

- The level of burden among caregivers is very little to no burden.
- Caregivers employed more problem-focused coping techniques. Particularly, planning, use of instruments, and religion were heavily utilized.
- Coping strategies of the caregivers significantly predicted the caregiver's burden and there is a moderate, significant, and positive correlation between burden and coping.
- There are no statistically significant differences in burden and coping strategies with respect to demographic variables (i.e., Gender, Marital Status, Education Status, Care Recipient Diagnosis, and Relationship with Care Recipient).

The burden among caregivers, in general, was lower than expected, probably due to the intervention programs in the centers which is a group counseling for caregivers. Since the level of burden was no or little, it is expected to have no differences in burden and coping strategies with respect to demographic variables.

### **6.3. Implication of the Study**

The following implications were drawn from this study based on the discussions and conclusions. The implication will be stated in relation to caregivers, rehabilitation centers and policy makers.

#### ***Caregivers***

Based on the research results, it can be inferred that caregivers may experience a low level of burden in caregiving. This may have several implications for individual caregivers. For instance, understanding coping is predictor of burden will help them understand how to manage their coping strategies. It will also help them decrease the level of burden. Overall, the research suggests that reducing the burden of caregiving may have significant positive implications for individual caregivers, both in terms of their personal well-being and the quality of care they are able to provide to their loved ones.

#### ***Rehabilitation Centers***

According to the findings, caregivers are not under much burden. Some caregivers might not feel the same level of burden as others. Through assessment and screening, it is crucial to find caregivers who could be at risk of experiencing an increase in burden. By doing so, coping strategies can be improved and the level of burden can be controlled.

Moreover, the research's finding that burden and coping have a positive correlation suggests that caregivers who might feel a higher burden may benefit from focused therapies. Counselling services can be customized to meet the unique requirements and situations of caregivers who are finding it difficult to handle their caregiving responsibilities. The intervention should focus on skills of coping strategies. Counsellors can offer caregivers customized

counseling by concentrating on their particular struggles, objectives, and coping mechanisms. This will enable caregivers to better manage their burden in the long run.

Counselling interventions can also be very helpful in preparing caregivers with a variety of coping mechanisms, including ways for problem-solving, stress management, and emotional control. Counselling can help caregivers become more flexible and adaptable in how they handle their caregiving responsibilities, which will lessen the burden they might feel. It can also emphasize encouraging self-care behaviors, educating people on the value of preserving their physical and mental health, and helping caregivers find and connect with the right tools and support systems.

#### *Policy makers*

It is important to examine the impact of policy changes for major implications. It is also important to develop policies that encourage the use of existing programs and services that support caregivers, such as respite care, support groups, and caregiver training programs. This requires allocating resources. Additionally, creating public awareness campaigns and educational initiatives to decrease stigmatization of caregiving for people with severe mental illness and increase understanding among family members and society of how caregiving impacts families and communities.

#### **6.4. Recommendation of the Study**

The recommendations are given in the following paragraphs based on the discussions and results.

It is advised that more research be done to examine the possible effects of counselling on caregiver burden. While the current study emphasizes the relationships between the different burden and coping strategies, it is crucial to investigate, if any, how counselling,

psychoeducation, and training affect the burden on caregivers. Additionally, it is advised that future studies look into potential obstacles to caregiver training, psychoeducation, and counselling services. And, studying on identifying and removing the barriers that keep some carers from using the resources that are available.

Future studies should investigate caregivers' resilience levels and how it affects their capacity to manage the stress of caregiving. The development of interventions aimed at improving resilience and preventing burden escalation can be informed by an understanding of the protective variables and processes that contribute to caregivers' resilience. Assessing burden in relation to a particular SMI is also another important advice.

Methodologically, it is suggested that future studies build on this work by enlisting caregivers from various regions or areas and using a bigger sample size. This will increase the findings' generalizability and validity and provide us with a more thorough grasp of the burden of being a caregiver and coping mechanisms. It is also advised to do mixed-method or qualitative research to account for the caregiver's subjective experiences.

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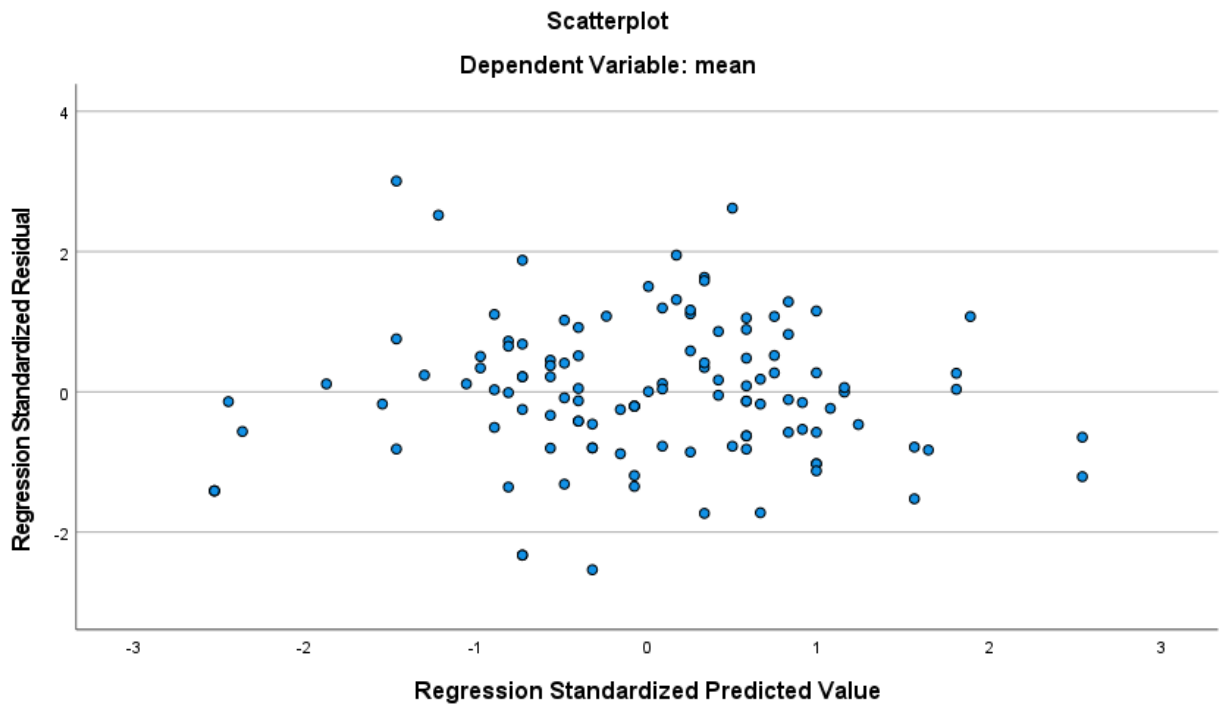


**Appendix B: Demographic Characteristics of the Participants***Table 16 Demographic Characteristics of the Participants*

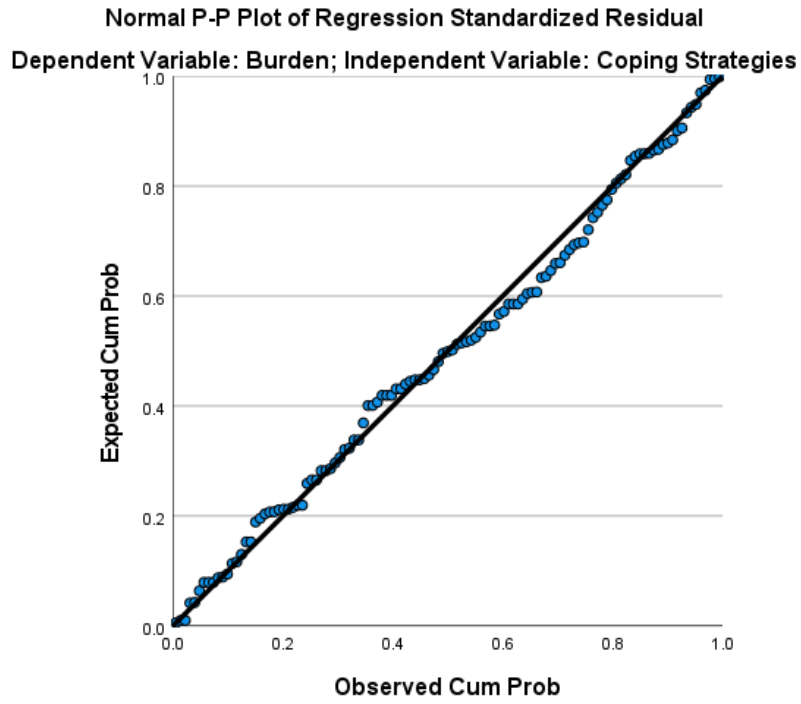
<b>Variables</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Caregiver Gender</b>	Male	48	41.0
	Female	69	59.0
	Total	117	100.0
<b>Caregiver Age</b>	≤30	28	23.9
	31 – 40	41	35.0
	41 – 50	20	17.1
	51+	28	23.9
	Total	117	100.0
<b>Caregivers Residence</b>	Urban	103	88.0
	Rural	14	12.0
	Total	117	100.0
<b>Caregivers Religion</b>	Orthodox	63	53.8
	Catholic	2	1.7
	Muslim	29	24.8
	Protestant	23	19.7
	Total	117	100.0
<b>Caregivers Marital Status</b>	Married	83	70.9
	Not Married	27	23.1
	Divorced	3	2.6
	Widowed	4	3.4
	Total	117	100.0
<b>Caregivers Education Status</b>	Basic Writing and Reading	10	8.5
	Primary	10	8.5
	Secondary	59	50.4
	BA	31	26.5
	Above	7	6.0
	Total	117	100.0
<b>Caregivers Occupation</b>	Unemployed	38	32.5
	Government	9	7.7
	Private	67	57.3
	Laborer	3	2.6
	Total	117	100.0
<b>Caregivers Income</b>	None	27	23.1
	<1000	5	4.3
	1000-5000	31	26.5

	5000-10000	24	20.5
	>10000	30	25.6
	Total	117	100.0
<hr/>			
<b>Caregiver Relationship</b>	Mother	27	23.1
	Father	11	9.4
	Sister	16	13.7
	Brother	17	14.5
	Son (Daughter)	14	12.0
	Husband (Wife)	11	9.4
	Other	21	17.9
	Total	117	100.0
<hr/>			
<b>Caregiver and Patient Living Condition (House)</b>	Together	73	62.4
	Different	44	37.6
	Total	117	100.0
<hr/>			
<b>Caregiver Care Providing (in year)</b>	<1	17	14.5
	1-5	65	55.6
	6-10	20	17.1
	11-15	7	6.0
	16-20	1	.9
	>20	7	6.0
	Total	117	100.0
<hr/>			

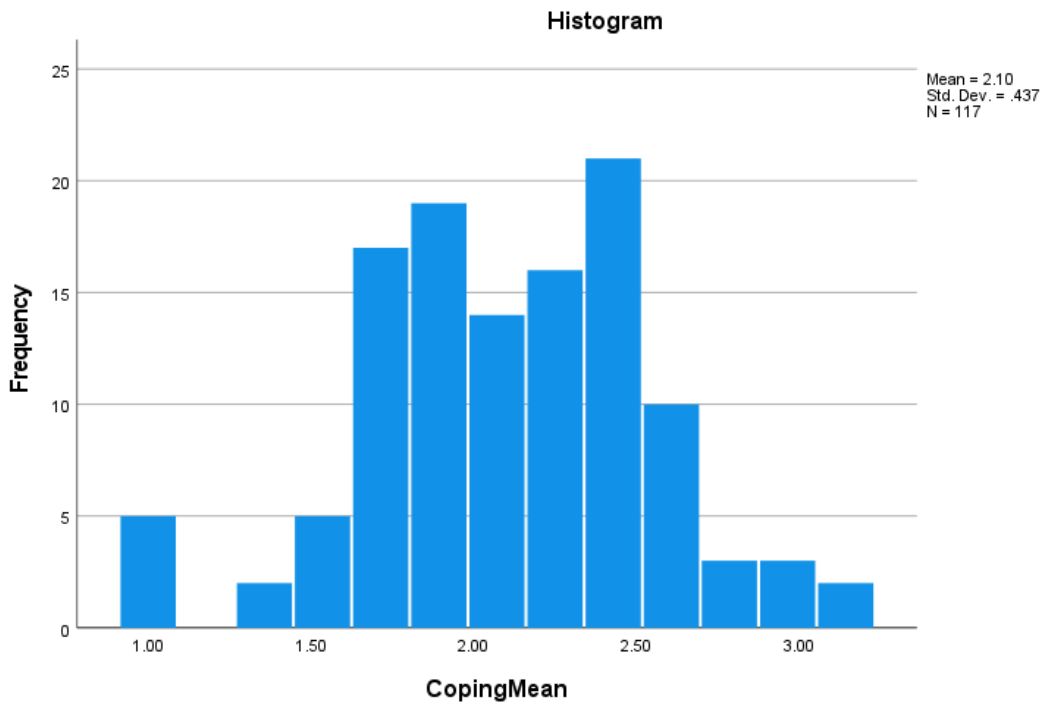
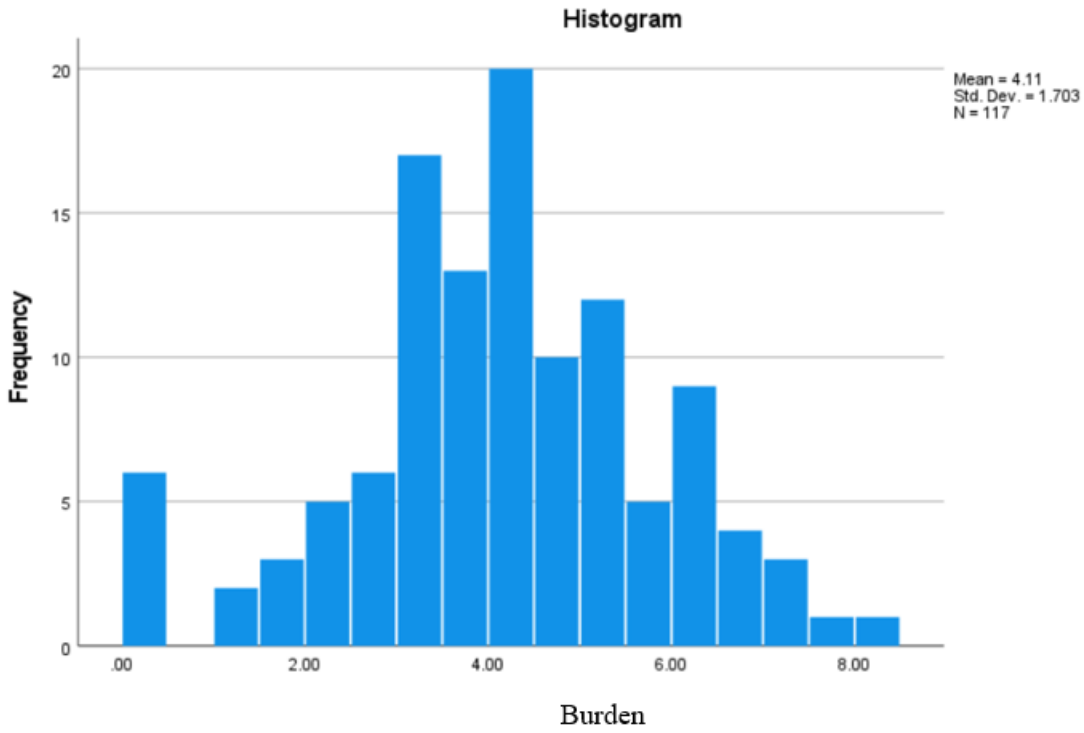
**Appendix C: Scatter Plot of Burden and Coping Strategies**



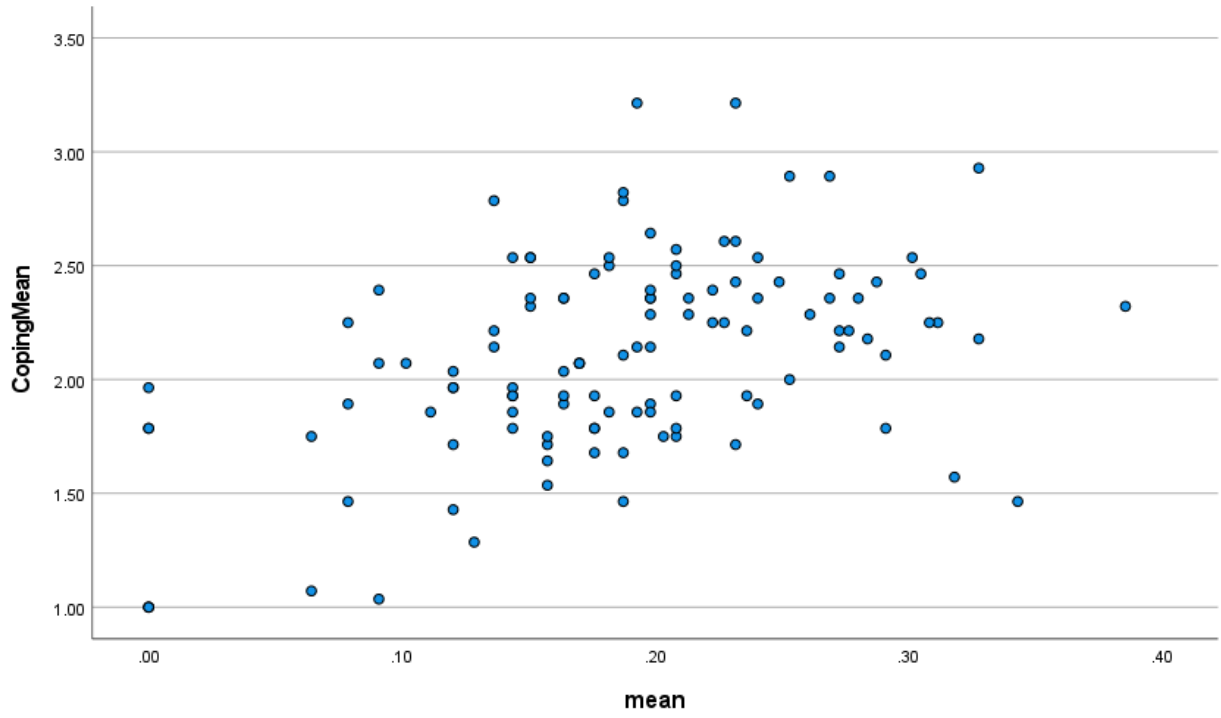
### Appendix D: P-Plot of Burden and Coping Strategies



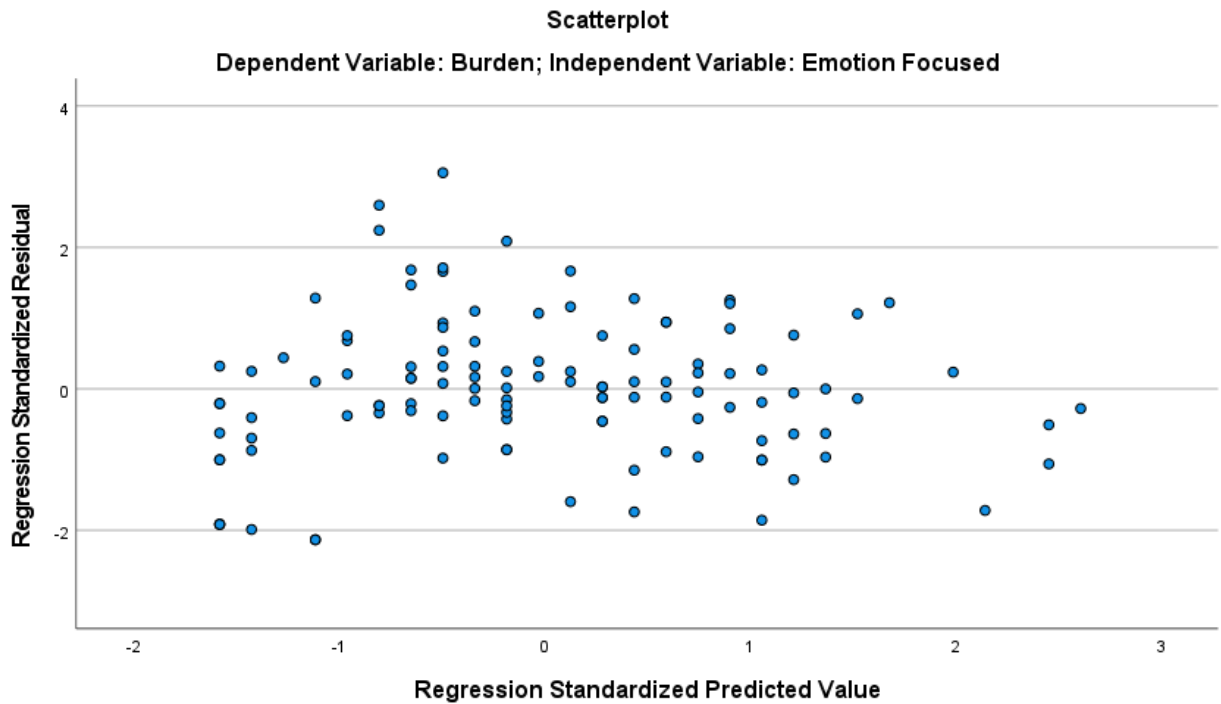
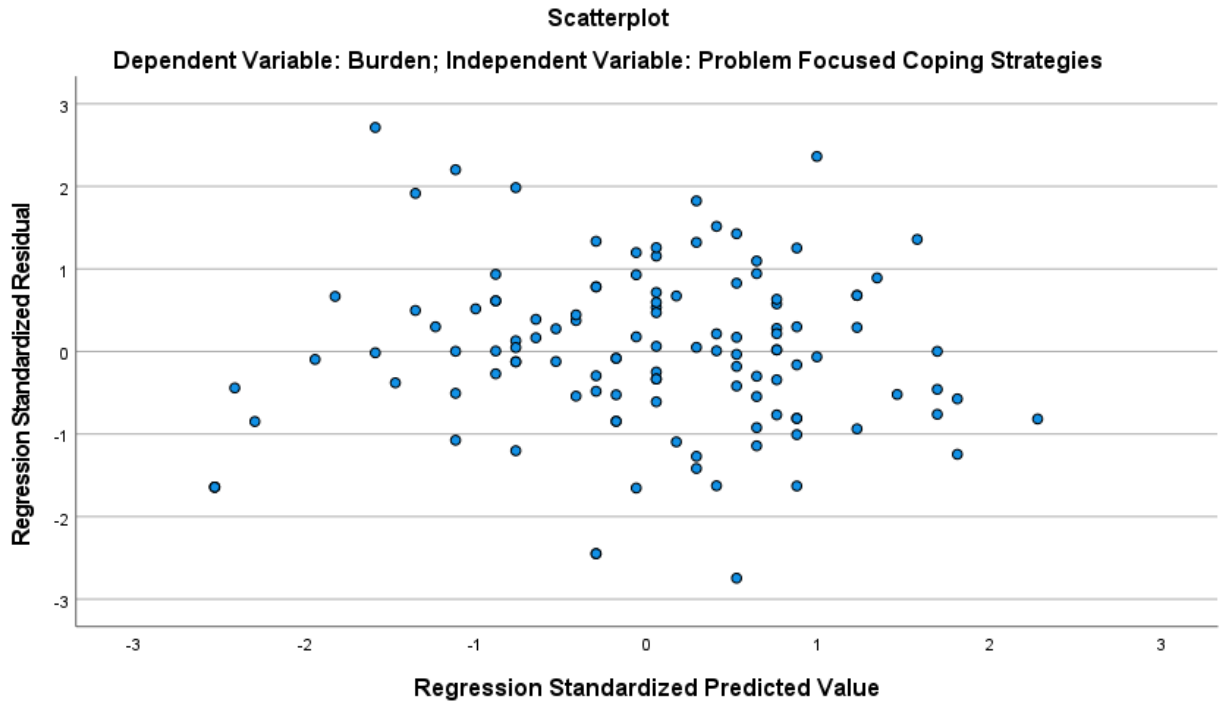
### Appendix E: Histogram of Burden and Coping Strategies



**Appendix F: Scatter Plot of Burden and Coping Strategies**

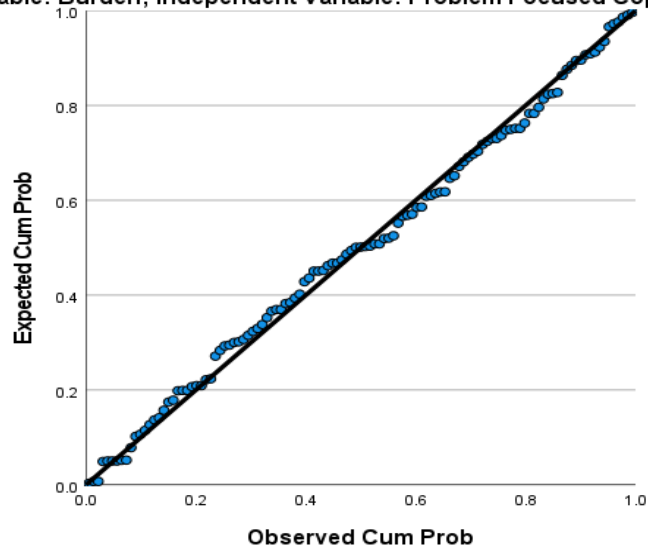


### Appendix G: Scatter Plot of Burden and Problem focused and Emotion Focused Coping Strategies

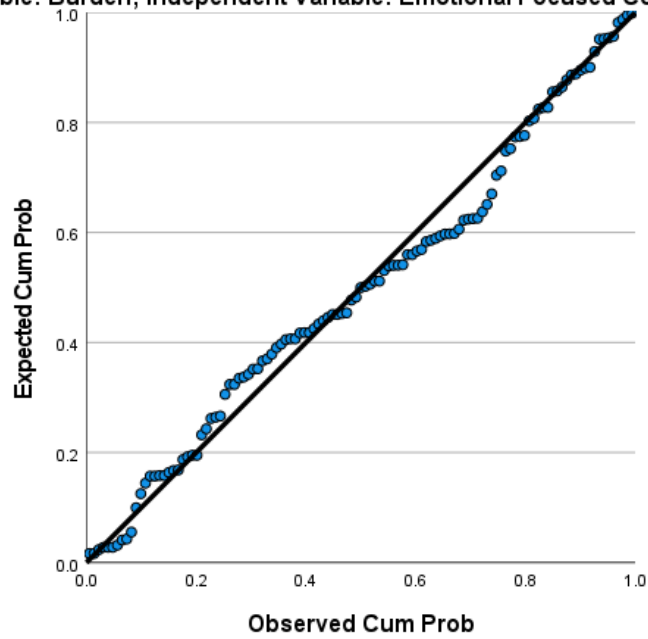


Appendix H: P-Plot of Burden and Problem Focused and Emotional focused Coping Strategies

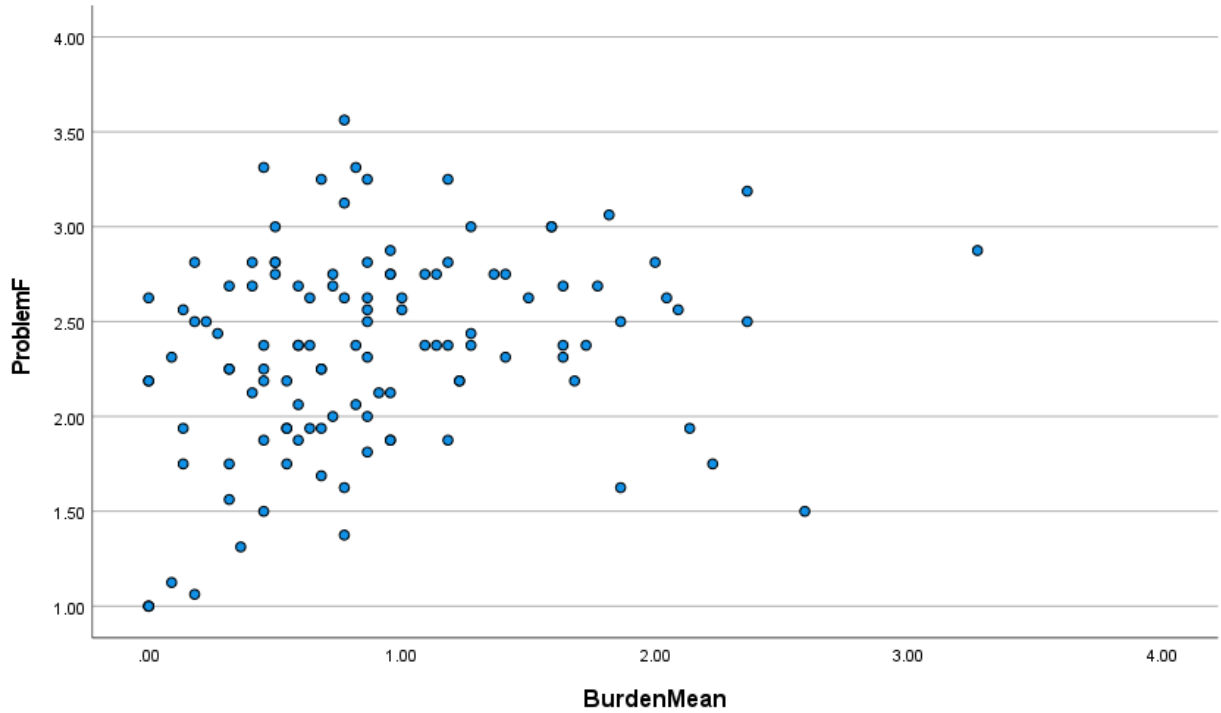
Normal P-P Plot of Regression Standardized Residual  
Dependent Variable: Burden; Independent Variable: Problem Focused Coping Strategies



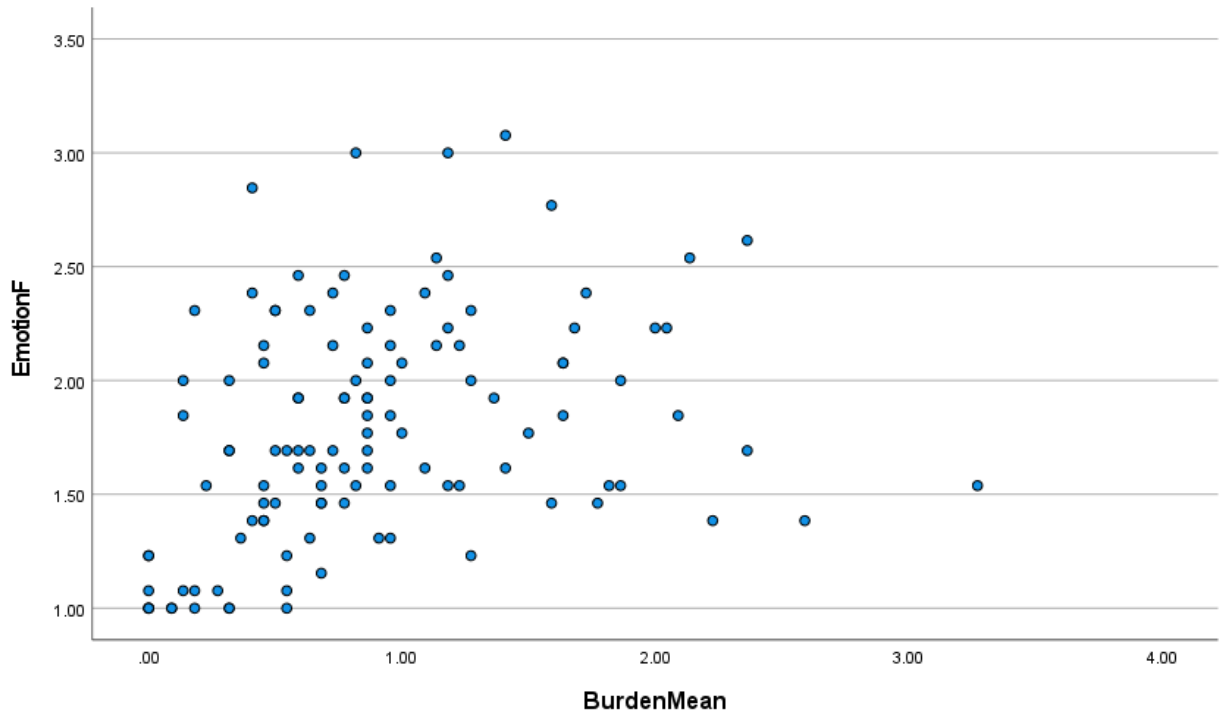
Normal P-P Plot of Regression Standardized Residual  
Dependent Variable: Burden; Independent Variable: Emotional Focused Coping Strategies



### Appendix I: Scatter Plot of Coping Strategies and Caregivers Demographic Variable



Scatter Plot of Burden and Problem Focused Coping Strategies



Scatter Plot of Burden and Emotion Focused Coping Strategies

**Appendix J: English Version of the Questionnaire****Addis Ababa University****College of Education and Behavioral Studies****School of Psychology**

This questionnaire is prepared to gather information for research titled “Burden and Coping Strategies among Caregivers of Persons with Severe Mental Illness: Implication for Counseling Intervention.” The findings from this study may contribute efforts to improve the lives of family caregivers.

Any information you provide will be kept confidential and will only be used for the stated purpose. Please also note that your participation in the study is voluntary and hence you are free to opt out of the study anytime with no negative repercussions to you whatsoever. I would like to thank you in advance for your willingness to be part of this study and complete the questionnaire.

**Part One: Background Information**

**Direction:** Please indicate your answer by putting a tick mark (√) in the box provided next to each response or write your answer on the space provided.

**About yourself:**

1. Age \_\_\_\_\_
2. Sex: Male  Female
3. What is your religion?  
 Orthodox Christian  Muslim  Catholic  Protestant   
 Others Specify \_\_\_\_\_
4. Education level: basic Primary secondary Diploma Degree Above
5. Marital Status: Married Divorced In a relationship Single Widowed
6. Address: Rural area Urban area
7. Occupation: None Government Private Laborer
8. Income: ≤1000\_\_\_ 1000--5000\_\_\_ 5000-10000\_\_\_ ≥10000\_\_\_
9. Relationship with care receiver: Mother Father Sister Brother Other
10. Living Condition with care receiver: in the same house different house
11. Duration of care: 1 year 1-5 year 5-10 years 10-15 years 15-20 years above 20 years

**About your relative**

1. Age \_\_\_\_\_
2. Sex: Male  Female
3. Diagnosis: Schizophrenia Bipolar I Bipolar II Major Depressive Disorder Substance use  
 Alzheimer Dementia Delirium other
4. Duration of Treatment: 1 year 1-5 year 5-10 years 10-15 years 15-20 years above 20 years

## Part 2: Zarit Burden Interview

**Direction:** Please read each item and choose the most your answer from the response alternatives given at the right by circling the number assigned to your response. The questionnaire is a burden inventory. The responses are represented by numbers “0” means Never, “1” means Rarely, “2” means Sometimes, “3” means Quite Frequently and “4” means Nearly Always.

	Question	Score
1	Do you feel that your relative asks for more help than he/she needs?	0 1 2 3 4
2	Do you feel that because of the time you spend with your relative that you don't have enough time for yourself?	0 1 2 3 4
3	Do you feel stressed between caring for your relative and trying to meet other responsibilities for your family or work?	0 1 2 3 4
4	Do you feel embarrassed over your relative's behavior?	0 1 2 3 4
5	Do you feel angry when you are around your relative?	0 1 2 3 4
6	Do you feel that your relative currently affect sour relationships with other family members or friends in a negative way?	0 1 2 3 4
7	Are you afraid what the future holds for your relative?	0 1 2 3 4
8	Do you feel your relative is dependent on you?	0 1 2 3 4
9	Do you feel strained when you are around your relative?	0 1 2 3 4
10	Do you feel your health has suffered because of your involvement with your relative?	0 1 2 3 4
11	Do you feel that you don't have as much privacy as you would like because of your relative?	0 1 2 3 4
12	Do you feel that your social life has suffered because you are caring for your relative?	0 1 2 3 4
13	Do you feel uncomfortable about having friends over because of your relative?	0 1 2 3 4
14	Do you feel that your relative seems to expect you to take care of him/her as if you were the only one he/she could depend on?	0 1 2 3 4

	Question	Score
15	Do you feel that you don't have enough money to take care of your relative in addition to there stof your expenses?	0 1 2 3 4
16	Do you feel that you will be unable to take care of your relative much longer?	0 1 2 3 4
17	Do you feel you have lost control of your life since your relative's illness?	0 1 2 3 4
18	Do you wish you could leave the care of your relative to someone else?	0 1 2 3 4
19	Do you feel uncertain about what to do about your relative?	0 1 2 3 4
20	Do you feel you should be doing more for your relative?	0 1 2 3 4
21	Do you feel you could do a better job in caring for your relative?	0 1 2 3 4
22	Overall, how burdened do you feel in caring for your relative?	0 1 2 3 4

### Part 3: Brief Cope Inventory

**Direction:** Please read each item and choose the most accurate answer for you from the response alternatives given at the right by circling the number assigned to your response. The responses are represented by numbers "1" means Not at all, "2" means Little bit, "3" means Medium amount and "4" means Doing a lot.

	Question	Score
1	I've been turning to work or other activities to take my mind off things.	1 2 3 4
2	I've been concentrating my efforts on doing something about the situation I'm in.	1 2 3 4
3	I've been saying to myself "this isn't real."	1 2 3 4
4	I've been using addictive behaviors or substances to make myself feel better.	1 2 3 4
5	I've been getting emotional support from others.	1 2 3 4

	<b>Question</b>	<b>Score</b>
<b>6</b>	I've been giving up trying to deal with it.	1 2 3 4
<b>7</b>	I've been taking action to try to make the situation better.	1 2 3 4
<b>8</b>	I've been refusing to believe that it has happened.	1 2 3 4
<b>9</b>	I've been saying things to let my unpleasant feelings escape.	1 2 3 4
<b>10</b>	I've been getting help and advice from other people.	1 2 3 4
<b>11</b>	I've been using alcohol or other drugs to help me get through it.	1 2 3 4
<b>12</b>	I've been trying to see it in a different light, to make it seem more positive.	1 2 3 4
<b>13</b>	I've been criticizing myself.	1 2 3 4
<b>14</b>	I've been trying to come up with a strategy about what to do.	1 2 3 4
<b>15</b>	I've been getting comfort and understanding from someone.	1 2 3 4
<b>16</b>	I've been giving up the attempt to cope.	1 2 3 4
<b>17</b>	I've been looking for something good in what is happening.	1 2 3 4
<b>18</b>	I've been making jokes about it.	1 2 3 4
<b>19</b>	I've been doing something to think about it less, such as going to movies, watching TV, reading, day dreaming, sleeping, or shopping.	1 2 3 4
<b>20</b>	I've been accepting the reality of the fact that it has happened.	1 2 3 4
<b>21</b>	I've been expressing my negative feelings.	1 2 3 4
<b>22</b>	I've been trying to find comfort in my religion or spiritual beliefs.	1 2 3 4

<b>23</b>	I've been trying to get advice or help from other people about what to do.	1 2 3 4
<b>24</b>	I've been learning to live with it.	1 2 3 4
<b>25</b>	I've been thinking hard about what steps to take.	1 2 3 4
<b>26</b>	I've been blaming myself for things that happened.	1 2 3 4
<b>27</b>	I've been praying or meditating.	1 2 3 4
<b>28</b>	I've been making fun of the situation.	1 2 3 4

**Thank you for your Cooperation!!!**

**Appendix K: Amharic Version of the Questionnaire**

**አዲስ አበባ ዩንቨርሲቲ**

**የትምህርት እና ባሕርይ ጥናት ኮሌጅ**

**ሶይኮሎጂ ትምህርት ክፍል**

ይህ መጠይቅ የተዘጋጀው "ከባድ የአእምሮ ህመም ያለባቸውን ሰዎች በሚንከባከቡ ቤተሰቦች ላይ የሚደርሰው ጫና፣ መቋቋሚያ መንገዱና በCounseling Intervention ላይ የሚያሳድረው ተፅዕኖ" በሚል ርእስ ለሚደረገው ጥናት መረጃ ለመሰብሰብ ነው። የዚህ ምርምር ውጤት የተንከባካቢዎችን ሞያዊ ሕይወት ለማሻሻል አስተዋጽኦ ያደርጋል የሚል እምነት አለ። እርስዎ የሚሰጡን የትኛውም ሐሳብ በምስጢር የሚያዝ ሲሆን ጥቅም ላይ የሚውለው ከላይ ለተጠቀሰው ዓላማ ብቻ ነው። በተጨማሪም በዚህ ጥናት ላይ የሚያደርጉት ተሳትፎ በፈቃደኛነት ሲሆን ተሳትፎዎን ማቋረጥ ከፈለጉም በፈለጉበት ወቅት ማቋረጥ እንደሚችሉና በእርስዎ ላይ ምንም አይነት አሉታዊ ውጤት እንደማይኖረው እንዲገነዘቡልን በአክብሮት እንጠይቅዎታለን። የዚህ ጥናት አካል ለመሆንና ጥያቄውን ለመመለስ ፈቃደኛ በመሆንዎ ላመሰግንዎ እወዳለሁ።

**ክፍል አንድ: መሠረታዊ መረጃ**

**መመርያ:** እባክዎ መልስዎን ከእያንዳንዱ ጥያቄ ፊት ለፊት በተቀመጠው ሳጥን ውስጥ የ(✓) ምልክት በማድረግ ወይም በተሰጠው ቦታ መልስዎን በመጻፍ ይመልሱ። የመጀመርያው ክፍል ሁለት ክፍሎች እንዳለው ይገንዘቡ። የመጀመርያው ክፍል የያዘው እርስዎን የሚመለከቱ ጥያቄዎችን ሲሆን ሁለተኛው ክፍል የያዘው የሚንከባከቡትን ሰው የሚመለከቱ ጥያቄዎችን ነው።

**ስለራስዎ:**

1. እድሜ \_\_\_\_\_ 2. ፆታ \_\_\_\_\_
3. ሀይማኖት: ኦርቶዶክስ \_\_\_\_\_ ካቶሊክ \_\_\_\_\_ ሙስሊም \_\_\_\_\_ ፕሮቴስታንት \_\_\_\_\_ ሌላ \_\_\_\_\_
4. የትምህርት ደረጃ: ማኅበብ እና መፃፍ \_\_\_\_\_ አንደኛ ደረጃ (1-8) \_\_\_\_\_ ሁለተኛ ደረጃ (9-12) \_\_\_\_\_ ዲፕሎማ \_\_\_\_\_ ዲግሪ \_\_\_\_\_ ከዛ በላይ \_\_\_\_\_
5. የጋብቻ ሁኔታ: ያገባ \_\_\_\_\_ ያላገባ \_\_\_\_\_ በግንኙነት ውስጥ \_\_\_\_\_ የተፋታ \_\_\_\_\_ ብቸኛ \_\_\_\_\_ የትዳር አጋር በሞት የተለየው \_\_\_\_\_
6. ነዋሪነት: በከተማ \_\_\_\_\_ በክፍለ-ሀገር \_\_\_\_\_
7. ሥራ: የለኝም \_\_\_\_\_ የመንግሥት \_\_\_\_\_ የግል \_\_\_\_\_ የጉልበት ሥራ \_\_\_\_\_
8. ወርሀዊ ገቢ: ≤1000 \_\_\_\_\_ 1000--5000 \_\_\_\_\_ 5000-10000 \_\_\_\_\_ ≥10000 \_\_\_\_\_
9. ከሚንከባከቡት ሰው ጋር ያለዎት ግንኙነት: እናት \_\_\_\_\_ አባት \_\_\_\_\_ እህት \_\_\_\_\_ ወንድም \_\_\_\_\_ ሌላ \_\_\_\_\_
10. የኑሮ ሁኔታ: ከሚንከባከቡት ሰው ጋር በአንድ ቤት \_\_\_\_\_ በተለያዩ ቤቶች \_\_\_\_\_
11. የተንከባከቡበት ዓመታት: 1ዓመት \_\_\_\_\_ 1-5 ዓመት \_\_\_\_\_ 5-10 ዓመት \_\_\_\_\_ 10-15 ዓመት \_\_\_\_\_ 15-20 ዓመት \_\_\_\_\_ 20 ዓመት በላይ \_\_\_\_\_

**ስለሚንከባከቡት ሰው**

1. እድሜ \_\_\_\_\_
  2. ፆታ \_\_\_\_\_
  3. በሐኪም የተረጋገጠ የጤና ችግር: ስኪዞግራኒያ \_\_\_\_\_ ባይፖላር 1 \_\_\_\_\_ ባይፖላር 2 \_\_\_\_\_ ድፕረሽን \_\_\_\_\_ ሱስ \_\_\_\_\_ አልዛይመር \_\_\_\_\_ ዲሊሪየም \_\_\_\_\_ ሌላ \_\_\_\_\_
- በህክምና ክትትል ላይ ለምን ያህል ጊዜ ቆየ/ች: 1ዓመት \_\_\_\_\_ 1-5 ዓመት \_\_\_\_\_ 5-10 ዓመት \_\_\_\_\_ 10-15 ዓመት \_\_\_\_\_ 15-20 ዓመት \_\_\_\_\_ 20 ዓመት በላይ \_\_\_\_\_

**ክፍል 2: የዛሪት የጫና መጠይቅ**

**መመርያ:** መጠይቁ የዛሪት የጫና መጠይቅ በመባል ይታወቃል። እባክዎ እያንዳንዱን ጥያቄ ያንቡና ከጥያቄዎቹ በስተቀኝ ከተሰጡት አማራጭ ምላሾች መካከል ለእርስዎ ትክክለኛ የሆኑትን ለምላሽ የተመደቡትን ቁጥሮች በመክበብ ይምረጡ። ጥያቄው የጫና መጠይቅ ነው። ምላሾቹ 0 - በፍፁም ፣ 1 - አልፎ አልፎ ፣ 2 - አንዳንድ ጊዜ ፣ 3 - በተደጋጋሚ እና 4 - ሁሉም በሚባል ደረጃ

	<b>ጥያቄ</b>	<b>0 በፍፁም</b>	<b>1 አልፎ አልፎ</b>	<b>2 አንዳንድ ጊዜ</b>	<b>3 በተደጋጋሚ</b>	<b>4 ሁሉም</b>
1	የሚንከባከቡት ሰው ከሚያስፈልገው/ ከሚያስፈልጋት ድጋፍ በላይ ይጠይቃል/ትጠይቃለች የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
2	ከሚንከባከቡት ሰው ጋር ብዙ ጊዜ ስለሚያሳልፉና ለራስዎ በቂ ጊዜ እንደሌለዎት ይሰማዎታል?	0	1	2	3	4
3	የሚንከባከቡትን ሰው ለመንከባከብና የቤተሰብና የሥራ ንላፊነቶችዎን ለመወጣት በሚያደርጉት ጥረት የተነሳው ጥረት ይሰማዎታል?	0	1	2	3	4
4	በሚንከባከቡት ሰው ባሕርይ ሐፍረት ይሰማዎታል?	0	1	2	3	4
5	ከሚንከባከቡት ሰው ጋር ሲሆኑ የቁጣ ስሜት ይሰማዎታል?	0	1	2	3	4
6	የሚንከባከቡት ሰው ከቤተሰብዎና ከጓደኞችዎ ጋር ያለዎትን ግንኙነት አሉታዊ በሆነ መልኩ ተጽዕኖ እያሳደረ ነው የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
7	የሚንከባከቡት ሰው መጪ ወይም የወደፊት ሁኔታ ያስፈራዎታል?	0	1	2	3	4
8	የሚንከባከቡት ሰው በእርስዎ ላይ ጥገኛ ሆኗል የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
9	ከሚንከባከቡት ሰው ጋር ሲሆኑ የመድከም ስሜት ይሰማዎታል?	0	1	2	3	4

	ጥያቄ	0 በፍፁም	1 አልፎ አልፎ	2 አንዳንድ ደቂቅ	3 በተደጋጋሚ	4 ሁሉም
10	ከሚንከባከቡት ሰው ጋር ያለዎት ግንኙነት ጤንነቱ ላይ ችግር አስከትሏል የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
11	በሚንከባከቡት ሰው የተነሳ በሚፈልጉት መጠን የግሌ ሕይወት የለኝም የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
12	የሚንከባከበውን ሰው በመንከባከብ የተነሳ ማኅበራዊ ሕይወቱ ተስተንጉሏል የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
13	በሚንከባከቡት ሰው የተነሳ እንግዶችን ወይም ጓደኛዎን መጋበዝ ምቹት የማሳጣት ስሜት ይሰማዎታል?	0	1	2	3	4
14	የሚንከባከቡት ሰው በእርስዎ ላይ ብቻ ጥገኛ የሆነ ይመስል እርስዎ ብቻ እንዲንከባከቡት ይጠብቃል/ ትጠብቃለች የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
15	የምንከባከበውን ሰው ለመንከባከብ ክሌሎች ወጪዎቼ በተጨማሪ የማወጣው በቂ ገንዘብ የለኝም የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
16	ከእንግዲህ የምንከባከበውን ሰው ልንከባከበው አልችልም የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
17	ከምንከባከበው ሰው ሕመም በኋላ ሕይወቴን መቆጣጠር ተስኖኛል የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
18	የሚንከባከቡትን ሰው ሌላ ሰው እንዲንከባከበው ተመኝተዋል?	0	1	2	3	4
19	የሚንከባከቡትን ሰው በተመለከተ ማድረግ የሚኖርብኝን እርግጠኛ አይደለሁም የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
20	የምንከባከበውን ሰው በሚመለከት የበለጠ መሥራት ይኖርብኛል የሚል ስሜት ይሰማዎታል?	0	1	2	3	4
21	የምንከባከበውን ሰው እንክብካቤ በሚመለከት የተሻለ ሥራ መሥራት እችላለሁ የሚል ስሜት ይሰማዎታል?	0	1	2	3	4

22	በአጠቃላይ ለሚንከባከቡት ሰው በሚያደርጉት እንክብካቤ የተነሳ የተፈጠረብዎ ጫና ምን ያህል ተስምቶታል?	0	1	2	3	4
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**ክፍል 3: አጭር ጫናን የመቋቋሚያ መንገዶች መጠይቅ**

**መመሪያ:** መጠይቁ አጭር ጫናን የመቋቋሚያ መንገዶች መጠይቅ በመባል ይታወቃል። እባክዎ እያንዳንዱን ጥያቄ ያንቡና ከጥያቄዎቹ በስተቀኝ ከተሰጡት አማራጭ ምላሾች መካከል ለእርስዎ ትክክለኛ የሆኑትን ለምላሽ የተመደቡትን ቁጥሮች በመክበብ ይምረጡ። ጥያቄው የጫና መጠይቅ ነው። ምላሾቹ 1 - በፍፁም ፣ 2 - በትንሹ ፣ 3 - በተደጋጋሚ እና 4 - አብዛኛውን ጊዜ ናቸው።

	<b>ጥያቄ</b>	<b>1 በፍፁም</b>	<b>2 በትንሹ</b>	<b>3 በተደጋጋሚ</b>	<b>4 አብዛኛውን ጊዜ</b>
1	ሐሳቤን ከነገሮች ለማሸሽ ትኩረቴን ወደ ሥራ ወይም ወደሌሎች እንቅስቃሴዎች ሳደርግ ነበር።	1	2	3	4
2	ያለሁበትን ሁኔታ በሚመለከት አንድ ነገር ለማድረግ አተኩራ ስጥር ነበር።	1	2	3	4
3	ለራሴ "ይህ እውን አይደለም" እያልኩ እነግረው ነበር።	1	2	3	4
4	ጥሩ ስሜት እንዲሰማኝ ሱስ የሚያሰዙ ባሕርያችን እተገብር ወይም ንጥረ ነገሮችን እጠቀም ነበር።	1	2	3	4
5	ከሌሎች ስሜታዊ ድጋፍን ሳገኝ ነበር።	1	2	3	4
6	ችግሩን ለማስተናገድ መጣር ትቼ ነበር።	1	2	3	4
7	ያለሁበትን ሁኔታ ማሻሻል ለመሞከር እርምጃ ስወስድ ነበር።	1	2	3	4
8	ችግሩ መከሰቴን ማመንን አቅቶኝ ነበር።	1	2	3	4
9	የሚሰሙኝ መጥፎ ስሜቶችን ለማስወገድ ነገሮችን ለሰው ስናገር ነበር።	1	2	3	4
10	ከሌሎች ሰዎች ድጋፍና ምክር ሳገኝ ነበር።	1	2	3	4
11	ካለሁበት ሁኔታ ለመውጣት እንዲረዱኝ አልኩል ወይም ሌሎች እዎችን እጠቀም ነበር።	1	2	3	4
12	የበለጠ አዎንታዊ መስሎ እንዲመስል ለማድረግ በተለየ መንገድ ለማየት እየሞከርኩ ነበር።	1	2	3	4

13	ራሴን እየወቀስኩ ነበር።	1	2	3	4
14	ምን ማድረግ እንደሚገባኝ ዕቅድ ለማውጣት እየሞከርኩ ነበር።	1	2	3	4

	ጥያቄ	1 በፍፁም	2 በትንሹ	3 በተደጋጋሚ	4 አብዛኛውን ጊዜ
15	ምቶት የሚሰጠኝና የሚረዳኝ ሰው ነበር።	1	2	3	4
16	ጫናውን ለመቋቋም መሞከሩን ትቼዋለሁ።	1	2	3	4
17	እየሆነ ካለው ነገር ውስጥ አንድ መልካም ነገር እየፈለግኩ ነበር።	1	2	3	4
18	በሁኔታው እየቀለድኩ ነበር።	1	2	3	4
19	ስለሁኔታው ብዙ ላለማሰብ፣ ወደሲኒማ ቤት መሄድ፣ ቴሌቪዥን ማየት፣ ማንበብ፣ የቀን ሕልም ማለም፣ መተኛት ወይም ወደገበያ መሄድ የመሳሰሉትን ተግባራት እያከናወንኩ ነበር።	1	2	3	4
20	ሁኔታው የመከሰቱን እውነታ ተቀብዬው ነበር።	1	2	3	4
21	አሉታዊ ስሜቴን እየገለፅኩ ነበር።	1	2	3	4
22	ከሃይማኖቱ ወይም ከመንፈሳዊ እምነቴ መፅናኛን ለማግኘት እየሞከርኩ ነበር።	1	2	3	4
23	ማድረግ ስለሚገባኝ ነገር ከሌሎች ሰዎች ምክር ወይም እርዳታ ለማግኘት ስሞክር ነበር።	1	2	3	4
24	ከችግሩ ጋር አብሬው መኖርን እየተማርኩ ነበር።	1	2	3	4
25	ስለምወስደው እርምጃ በጥንቃቄ እያሰብኩ ነበር።	1	2	3	4
26	ለሆኑት ነገሮች ሁሉ ራሴን ተጠያቂ እያደረግኩ ነበር።	1	2	3	4
27	እየፀለይኩ ወይም በጥምና እያሰብኩ ነበር።	1	2	3	4
28	በሁኔታዎቼ እያሾፍኩ ነበር።	1	2	3	4

ስለትብብርዎ አመሰግናለን!!!

## **Appendix L: Pilot Test**

### **Objective of Pilot Test**

The main purpose of conducting a pilot test was to evaluate the reliability of the instruments used for collecting data in the main study. Additionally, the techniques of data analysis were also assessed and evaluated based on the pilot data. This helped in determining whether the study questions were written in a specific and quantifiable manner. The pilot test was conducted to ensure that the main study is efficient and reliable, and that the data collected meets the required standards. The pilot test provided valuable insights into the accuracy and validity of the instruments used for data collection.

### **Population and Sampling**

#### **Study Site**

Eka Kotebe General Hospital is located in Yeka sub-city Woreda 12, around Kotebe Mesalmya. The hospital is currently used as an active treatment center as a general medical center and psychiatric center. The ward of medical center and psychiatric ward are in different areas. The psychiatric ward has its own emergency room and OPD's. This specific pilot test study area was chosen to ensure the representativeness of the sample, the participants were selected based on their similar characteristics to the target population.

#### **Sample and Sampling Technique**

In the initial stages of this research, a pilot sample was collected from Eka Kotebe General Hospital. The sample included caregivers who were selected via purposive sampling method. The number of participants who participated in pilot test were found to be 30. In essence, the chosen sample size was based on the minimum participant needed to administer a pilot study.

### **Data Collection Procedure**

The pilot test procedure of data collection was administered in exactly the same way as the main data collection procedure.

The first step before gathering data was going to the School of Psychology to obtain the letter of support. Upon receipt of the letter of support, a meeting was scheduled with the assigned person of Eka Kotebe General Hospital. The proposal was sent to the research and training team of the hospital via email for ethical clearance. After the approval of ethical clearance, the data collection started which lasted for a week.

During the data collection time, the data was collected in the waiting room. Participants were requested to complete the questionnaires. The participants were made fully aware of their choice to participate or not. No one would know who they were. The participants were also informed of the study's purpose and importance before receiving the questionnaire. The participants were informed research is to understand their experience this encouraged them to answer the questionnaires honestly. The questionnaires collected after they report completion. Participants were questioned regarding any elements that they found unclear or challenging to understand at the end. The data collector also looked for any issues they had while completing the questionnaire.

### **Ethical Consideration**

The study received ethical approval from the hospital's Ethics Committee, as outlined in Appendix 1, to guarantee the protection of the participants' rights and welfare. Furthermore, the research and training team at the hospital gave their approval for the study, indicating that it posed no risk to the participants. Participants were informed about the research. They were also informed their identity would be kept confidential and won't be disclosed to anyone else. So,

they would feel safe concerning the information they give for this research. The information would be hidden no matter what happens later on and they would only be used for this research.

### Result

The results of the pilot test, which involved 30 caregivers as a sample are described. All of the analysis was done by using SPSS statistical software package version 27.

The measure of reliability of the Amharic versions of Zarit Burden Interview (ZBI) and Brief Cope Inventory (BCI) was examined by computing Cronbach's alpha. The results of the alpha tests show that the items used to measure each construct were consistent. Additionally, all of the constructs are regarded as acceptable if their respective Alpha values are all 0.70 or higher, which fall within the acceptable range of internal consistency for a study (George & Mallery, 2003). The reliability of Zarit Burden Interview (ZBI) and Brief Cope Inventory (BCI) reported in the next table.

According to the reliability test for Zarit Burden Interview (ZBI) and Brief Cope Inventory (BCI), Cronbach's alpha resulted in a 0.93 and 0.88 respectively. Additionally, for CBI, the reliability of the subscales was .84 and .77 for problem focused and emotional focused coping strategies respectively.

### Table

*Alpha Value of ZBI and CBI Instruments (N=30).*

Scale		Cronbach's Alpha	N of Items
CBI	Problem Focused	.84	16
	Emotion Focused	.77	12

*Note: BCI is for Brief Cope Inventory.*

Depending on George and Mallery's (2003) coefficient criteria, the Cronbach's alpha for ZBI and BCI has excellent reliability and good reliability respectively. Hence, these versions of the instruments were appropriate for use in evaluating the relevant variables among the study's target population.

After users reported that they had trouble understanding a particular topic, some BCI questions were revised. For instance, the first question of BCI was revised from “ከነገሮች ለማሻሻል ትኩረቴን ወደ ሥራ ወይም ወደሌሎች እንቅስቃሴዎች ሳደርግ ነበር” to “ሐሳቤን ከነገሮች ለማሻሻል ትኩረቴን ወደ ሥራ ወይም ወደሌሎች እንቅስቃሴዎች ሳደርግ ነበር።”

Additionally, participants found it difficult to answer questions which were in a new page. The reason was in the new pages the Likert answer (“1” means Not at all, “2” means little bit, “3” means medium amount and “4” means Doing a lot.) were not included. This observation led to addition of Likert answers in each page.

### **Summary and Conclusion**

The pilot study demonstrated to assess reliability of the Amharic versions of the instruments which are Zarit Burden Interview (ZBI) and Brief Cope Inventory (BCI). The result shows Zarit Burden Interview (ZBI) and Brief Cope Inventory (BCI), Cronbach's alpha resulted in a 0.93 and 0.88 respectively. In conclusion, the reliability finding indicated the instruments are suitable to measure caregivers' burden and coping strategies.

### **Appendix M: Plagiarism Index**

# Burden and Coping Strategies among Caregivers of Person with Severe Mental Illness: It's Implication on Counseling Intervention.

*by Mahlet Worku*

Burden and Coping Strategies among Caregivers of Person with Severe Mental Illness: It's Implication on Counseling Intervention.

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