ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCE

SCHOOL OF NURSING AND MIDWIFERY

ASSESSMENT OF KNOWLEDGE, UTILIZATION AND ASSOCIATED FACTORS OF MODERN FAMILY PLANNING METHOD AMONG WOMEN WITH PSYCHIATRIC DIAGNOSIS ATTENDING PSYCHIATRIC OUTPATIENT SERVICES AT AMANUEL MENTAL SPECIALIZEDHOSPITAL ADDIS ABABA, ETHIOPIA, 2018.

NAME OF STUDENT: ABDU SEID (BSC)

NAME OF ADVISORS: 1. BERHANU WORDOFA (BSC, MSC, RN)

2. JEMBERE TESFAYE (BSC, MSC)

A THESIS SUBMITTED TO GRADUATE STUDY SCHOOL OF NURSING AND MIDWIFERY COLLEGE HEALTH SCIENCE, ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN MATERNITY AND REPRODUCTIVE HEALTH NURSING

JUNE 2018

ADDIS ABABA, ETHIOPIA

APPROVAL SHEET

ADDS ABABA UNIVERSITY

COLLEGE HEALTH SCIENCE

SCHOOL OF NURSING AND MIDWIFERY

I, the undersigned MSc student, declare that I have submitted my original work on a title assessment of knowledge, utilization and associated factors of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services at Amanuel mental specialized hospital Addis Ababa, Ethiopia, for the examination.

Submitted by:

Abdu Seid _____ _____

Name of student Signature Date

This thesis work has been submitted for examination with my approval as an advisor.

Approved by:

1. BerhanuWordofa_____ _____

Name of Major Advisor Signature Date

2. Jembere Tesfaye_____

Name of Co-Advisor Signature Date

APPROVAL BY THE BOARD OF EXAMINATION

This thesis by _____is accepted in its present form by the board of examiners as satisfying thesis requirement for the degree of masters in _____

INTERNAL EXAMINER:

_____	_____	_____	_____
NAME	RANK	SIGNITURE	DATE

External EXAMINER:

_____	_____	_____	_____
NAME	RANK	SIGNITURE	DATE

RESEARCHADVISORS:

_____	_____	_____	_____
NAME	RANK	SIGNITURE	DATE

_____	_____	_____	_____
NAME	RANK	SIGNITURE	DATE

DEPARTMENT HEAD

_____	_____	_____	_____
NAME	RANK	SIGNITURE	DATE

STATEMENT OF DECLARATION

By my signature below, I declare and affirm that this thesis is my own work. I have followed all ethical principles of scholarship in the preparation, data collection, data analysis and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every effort has been made to avoid plagiarism in the preparation of this thesis.

This thesis is submitted in partial fulfillment of the requirement for a graduate degree from the Addis Ababa University at College of Health Sciences, School Nursing and Midwifery. The thesis is deposited in the Addis Ababa University Digital Library and is made available to local, national and international scientific community. I solemnly declare that this thesis has not been submitted to any other institution anywhere for the award of any academic degree, diploma or certificate.

Brief quotations from this thesis may be used without special permission provided that accurate and complete acknowledgement of the source is made. Requests for permission for extended quotations from, or reproduction of, this thesis in whole or in part may be granted by the Head of the Department or all advisers of the theses when in his or her judgment the proposed use of the material is in the interest of scholarship and publication. In all other instances, however, permission must be obtained from the author of the thesis.

STUDENT

Name: Abdu Seid Signature: _____Date: _____

RESEARCH ADVISORS:

_____ _____ _____ _____

NAME RANK SIGNITURE DATE

_____ _____ _____ _____

NAME RANK SIGNITURE DATE

ACKNOWLEDGEMENT

First my grateful gratitude and respect goes to my advisors Mr. Berhanu Wordofa (BSc, MSc, RN,Asst.Professor) and Mr.jembereTesfaye (BSc,Msc) from Addis Ababa University, School of Nursing and Midwifery for their valuable comments and scientific suggestion throughout the process of this thesis, beginning from the title to each and every aspect of the thesis.

I would like to extend my acknowledgment to Woldia University for giving me this chance to complete my Masters Degree and also for supporting me throughout this thesis by providing materials and encouragement.

Finally, I would like to thank Addis Ababa University, College of Health Science Library for their contribution in this thesis development.

TABLE OF CONTENT

Contents page

LIST OF TABLE

LIST OF FIGURE

LIST OF ABBREVIATIONS AND ACRONYMS

AOR	Adjusted Odds Ratio
BPD	Bipolar Disorder
CDC	Centers for Disease Control
CPR	Contraceptive Prevalence Rate
DMPA	Depo Medroxyprogesterone Acetate
EC	Emergency Contraception
EDHS	Ethiopian Demographic Health Survey
FP	Family Planning
HEW	Health Extension Worker
HMIS	Health Management Information System
IUD	Intrauterine Device
IUGR	Intrauterine Growth Retardation
LBW	Low Birth Weight
MCH	Maternal and Child Health
MDD	Major Depressive Disorder
OR	Odds Ratio
PMTCT	Prevention of Mother to Child Transmission.
SPSS	Statistical Package for Social Sciences
SD	Standard Deviation
STI	Sexually Transmitted Infections
UK	United Kingdom
US	United State
WHO	World Health Organization

ABSTRACT

Background: Mentally ill patients may have problem in accessing information and methods of contraception due to different factors at individual, social and service delivery levels. Therefore reproductive health needs of women with mental health problems with respect to family planning and motherhood are one way of supporting family system and providing this support is likely to help prevent adverse effects of mental illness on women and their child.

Objective: To assess knowledge, utilization and associated factors of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services at Amanuel mental specialized hospital Addis Ababa, Ethiopia 2018.

Method: Institution based cross-sectional study design was conducted to assess knowledge, utilization and associated factors of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services and 413 study subjects were selected using systematic random sampling technique. Bivariate and multivariate analysis was carried out to determine the association between an independent variable with the outcome variable among study participants during the period of the study at Amanuel mental specialized hospital in Addis Ababa, Ethiopia.

Result: All over about 63.9% of respondents scored above the mean value are knowledgeable. The major determinant Factors identified to modern family planning knowledge were higher educational level (>12 grade) [AOR (3.96(1.73-8.9)], salary employed [AOR (95% CI =3.97(1.9-8.2)], urban resident [AOR (95% CI) = 4.3 (2.4-7.66)]. About 19.4.% of the participants were used injectable, 1.5% pill, 1.7% of respondents used emergency pill as contraceptive to prevent unintended.

Conclusion: In this study, 63.9 % of women with psychiatric illness are knowledgeable and 40.3% of them currently use a modern family planning method. Male condoms and injectable were the most known type of method. Moreover, injectable was the most common currently used method. Healthcare provider should be strengthening family planning counseling to enhance knowledge and utilization of modern family planning at mental health clinic and community level.

Key words: knowledge, utilization, modern family planning, associated factors, mental illness, Addis Ababa

1. INTRODUCTION

1.1 Background

Family planning is hailed as one of the great public health achievements of the last century, and worldwide acceptance has risen to three-fifths of exposed couples. Appropriate utilization of family planning method significantly decrease maternal mortality and morbidity associated with unintended pregnancy. But, utilization of modern contraception is constrained by limited access and weak service delivery, and the burden of unintended pregnancy is still large in many countries(1).Therefore, Contraceptive knowledge is one of the crucial factors that influence the use of contraceptives. So women who are knowledgeable about contraceptive use are more likely to use it(2).

Ethiopia's population policy specifically aims to reduce TFR from 7.7 to 4.0 and to increase contraceptive use from 4.0% to 44.0% between 1990 and 2015(3).Integrating family planning services with other health services may be an effective way to reduce unmet need(4).

Family planning (FP) service should be addressed for those all women, men and/or couples with the necessary information for the free choice and effective use of contraceptive methods that better adapt to their individual conditions(5). But,psychiatric patients may have difficulty in accessing information and family planning methods so patients with mental disorder family need an information and service for counseling and contraception utilization(6).

Ethiopia's national mental health strategy mandates the integration of mental health services into the primary health care system, like MCH services and it emphasizes self-care and use of HEWs for promotion and prevention activities to increase awareness, reduce stigma, and increase use of mental health services(7). Hence Psychiatric disorders are an important factors which affect the quality of life such as employment rates, interpersonal and intra familial communications, marriage, child-bearing, parental skills, reproductive behavior and many other social cognitive areas in different ways(8).

Depression and anxiety can have adverse reproductive health outcomes, including an increased risk of unwanted pregnancy and it will have negative impact on individual and community, so effective contraception can be an important strategy to maintain and improve health and wellbeing(9). Women with unintended pregnancy will have low physical and

mental health, low self-care, poor health, high level of substance addiction, and depression during pregnancy. Additionally, fetus will be delivered by unskilled attendant, delivered as low birth weight, increased rate of hospitalization, and poor growth and inadequate immunization adversely leads to maternal and child death(10).

Mentally ill women who are taking antipsychotic medication become pregnant and pregnancies outcome involves many complications such as placental abnormalities and abruption, fetal or neonatal death, stillbirth, ante partum hemorrhage, preterm labor and fetal distress, and their infants are more likely to be small for gestational age, low birth weight and at higher risk of sudden infant death syndrome(11). Therefore, reproductive health service for mentally ill women like sex education, provision of family planning, and prevention of sexually transmitted infections are very important to prevent several complications(12). Additionally, improving reproductive health needs of women with mental health problems with respect to family planning and motherhood is one way of supporting the whole family system and providing this support is likely also to help prevent adverse effects of mental ill health in the mother on her child(13).

1.2 Statement of Problem

According to global statistics around 19 million women in developing countries and more than 15 million in Asia will have unsafe abortion in every year, it is estimated that each year about 500,000 women in developing countries die due to pregnancy complications(14). socio economic factors, behavioral change and lack of reproductive health services are contributing factors to the increase unintended pregnancy and leads to several maternal complications specially lack of knowledge and access to contraceptive methods and reproductive health service will have profound impact on every mother who do not want to have children(15).

Women with severe mental illness are having babies at an increasing rate, but continue to face a number of challenges across the prenatal period (12). The prevalence of unplanned pregnancies are high among psychiatric patients, due to the frequent lack of insight, lack of planning and behavioral control and potential medication interaction between hormonal contraceptives and some psychotropic drugs reducing contraceptive effectiveness(5). Women with psychiatric illness more likely have unwanted pregnancies, less likely to follow antenatal care while pregnant and more likely to smoke during pregnancy and face many complication(16).

Research shows that at least one quarter of adults admitted to UK adult acute inpatient settings are likely to have dependent children and that between 50–66% of people with severe mental illness may be living with children under the age of 18(17). Dispersion of parent-child attachment is strongly associated with parental substance abuse, poverty, and homelessness all of which often accompany severe mental illness and further complicate the difficult lives of parents caring for minor children(18). poor parenting outcomes in maternal psychiatric illness are strongly associated with socio-economic inequalities(19).

Women diagnosed with illnesses including schizophrenia, schizoaffective disorder, bipolar disorder, and major affective disorders sometimes become parent without adequate support from psychiatric and behavioral health providers which leads to child dependency(20). Babies born to women with untreated depression are at risk of prematurity, low birth weight, and intrauterine growth restriction. The negative consequences of untreated maternal depression might also affect childhood development(21).

Family planning in women with schizophrenic spectrum disorders, as compared to non-mentally ill women they report at least unprotected intercourse while not desiring pregnancy; have less knowledge about contraception and perceive deferent obstacles to obtain or using birth control(22).

Most women with mental illness have low social economic means which can affect negatively on utilization of contraception and service related factors, individual factors, religious and cultural based organizations may also discourage family planning knowledge and utilization(23). Additionally, advocating contraceptive consultation as a part of treatment program is only a common sense but the fact that there is still a need to evaluate and should be recognized a huge gap particularly in psychiatric practice settings(24).

Generally, the reproductive behaviors of women with psychiatric illness regarding family planning service have not been systematically investigated in Ethiopia even if it has a great impact in determining physiological, psychosocial and emotional wellbeing. Therefore, family planning knowledge and utilization are one aspects of physical and psychological health that should be addressed in women seeking mental health services.

1.3 Significance of Study

There is higher number of mentally ill women who have unintended pregnancy and suffering many complication due to different factors. Limited scientific report in Ethiopia concerning Knowledge, utilization and associated factors of modern family planning method among women with psychiatric diagnosis could be found in the literature. Hence it was deemed prudent to investigate a little attention is given to the prevention of unintended pregnancy as a strategy to prevent obstetrical complication regarding an unwanted pregnancy among mentally ill women. Therefore, the present study is aimed to fill such gaps. The result of this research will also be used to help the care and support given to mentally ill women by considering their desire for bearing children. The result of this research will be used as an input for the programmers and policy makers to Strengthen and improvement of family planning services. Moreover, the finding of this research will be used as a supplementary data in midwifery and other health professional as a baseline data for their clinical practice and further similar studies.

2. LITERATURE REVIEW

2.1 knowledge of family planning among psychiatric patients

According to research done in the university of Texas Sterilization (48.4%) was the most common method of long acting birth control known by women diagnosed with bipolar disorder, followed by DMPA (21.6%), levengestrol intrauterine system (16.5%) and CuT380A (13.4%)(25).

A research conducted on Sexual Knowledge, Attitudes, and Practices of Young Female Psychiatric Patients in Virginia shown that, average number of respondents claimed to have heard of more than seven of 14 methods (rhythm, condom, withdrawal, diaphragm, pill, jelly, suppository, foam, sponge, IUD or coil, douche, vasectomy, tubal ligation, promensual pills, celibacy or abstention(26).

A study done in turkey patients with schizophrenia group had less information on all contraceptive methods but depressive and bipolar disorder patients' level of knowledge was similar to normal population. The best-known methods were oral contraceptives, intrauterine devices (IUD), and condom and tube ligation. Patients had little information onparenteral contraceptives(6).

In Nigerian study found that contraceptive knowledge in women, attending psychiatric outpatient was 88%. The most known method were condom (68%),injectables (64%), pills (56%),IUD (37%),safe periods (23%),abstinence (19%),sterilization (16%) and traditional 4%(27).

In Kenya Nairobi Ninety nine (99%) of the women knew at least one method and most known contraceptives were pills (97.4%), injectables (96.4%), male condoms (94.1%), IUD (93.5%), implants (92.5%), female condoms (86.6%), female sterilization (85.6%), rhythm method (77.5%), male sterilization (74.8%) and emergency Contraceptive pills (72.5%)(28).

2.2 utilization of family planning among psychiatric patients

A study in US of Women with frequent mental distress reported 86% of them using contraception, but contraceptive type varied by mental distress and income(25). Other research done in US university of Washington around 19.3% of the study sample had documentation of having a contraceptive method from this 22.1% of women with mental

illness only, 14.6% of women with substance use disorder only, 18.2% of women with both diagnoses and 17.7% of women with neither diagnosis(29).

Recent studies on mentally ill women have documented that higher rates of contraceptive nonuse, misuse, and discontinuation was noted for COCs and condoms but also demonstrated for DMPA, IUDs, and implants among women with depressive, anxiety, and related stress and distress symptoms(9).

Similar studies in Psychosocial Care Service in Fortaleza, state of Cearashowed only (13.7%) of the women were used family planning method, while the others were at the risk of unplanned pregnancy. Around (91.4%) of the women were married and used contraceptive methods and those who received family planning care was significantly low, corresponding to (5.9%) and (13.7%), respectively. Among those using methods, (62.9%) used oral hormonal contraceptives (31.4%) used condom and (5.7%)used injectable contraceptives(5).

A study in England 1% of the women aged 16–49 reported using injectable contraceptives with higher (2%) levels of use among 18–34-year-olds; 28.8% of the subjects with psychosis recorded as using(30).

A research conducted in Chicago among women with schizophrenic spectrum disorders and non-mentally ill control subjects the most commonly used birth control method for both groups was tubal ligation, followed by condoms. And no women in the study were using levonorgestrel implants(22).

Similar research conducted in turkey showed that of bipolar disorder patients 60.5%, of depressives 75.5%, of schizophrenics 68.6% reported use of contraception during the last intercourse(6).

According to research done in Nigeria 27% were currently using a method and 51% had never used at all. The gap in family planning need was 61%. The most ever used method was male condom (37%), injectable (22%), pills (22%), IUD (7%) and safe period (7%) and abstenance (5%). The methods that were currently being used in were condom (10%), injectable (6%), and pills (2%)(27).

Based on a research which was conducted in Kenya, the contraceptive utilization for the sampled women was 42.2% (n=129). Modern methods were used by 41.2% while 1% of the

women used traditional methods. The most popular methods by descending order were injectables 9.2%, implants 8.5%, pills 7.8%, IUD 6.5%, female sterilization 4.6% and male condoms 2.6%. Among the respondents 53.6% (n=164) have ever used contraception. The methods that were previously used in order of prevalence were injectables 19.3%, pills 16%, IUD 5.2%, implants 5.2%, male condoms 4.2% and rhythm 1.6%. Lactational Aminoria method (LAM) and male sterilization were ever used by only 0.3% of the women for each method. One percent of the women had ever used methods classified as others(28).

2.3 factors associated with knowledge and utilization of family planning among psychiatric patients

2.3.1 Socio demographic factors

A research done in US showed among lower income women who use reversible contraception, those with frequent mental distress had lower odds of using highly [adjusted odds ratio (aOR)=0.5, 95% CI: 0.4–0.8] and moderately (aOR=0.6, 95% CI: 0.4–0.9) effective methods than less effective methods(25).

According to the study done on knowledge and contraceptive utilization in Kenya among psychiatric patients showed that, utilization of contraceptive was in decreasing order most among married (57.5%), widowed (45.5%), divorced (43.5), single (30.9%) and lastly separated (28.6% women). More of the employed (self employed 49.5%, salaried 48.7%) used contraception than the non employed (35.3%)(28).

Women who are living in urban area (52%) are much more likely utilizing modern family planning method than their rural (33%) to use any method of contraception. contraceptive prevalence rate were 56 percent in Addis Ababa. However, over all contraceptive prevalence were 36% in Ethiopia. Similarly women with more than a secondary education (55 %) were more likely utilize family planning method than women with no education (31%) (31).

2.3.2 Service related factors

A study done in Chicago sources of birth control and knowledge, only (34.1%) of the women with schizophrenic spectrum disorders reported that discussing family planning issues with a mental health professional and have gotten family planning service from nearby health facility but the rest were not discussed due to inaccessibility of family planning method and lack of integration with other health services(22).

A Study done in turkey showed that counseling about family planning from health professionals was significantly less in BPD and schizophrenic patients compared to normal populations and depressive patients due to disease factor and negligence of mental health profession so their first source of information was friends and neighbors in all groups but information from media was the most frequent used source in the BPD group. Information from health professionals was significantly less in BPD and schizophrenic patients compared to controls and depressive patients(6).

According to research conducted in Kenya among psychiatric patient around 68.1% of respondents have been counseled for FP utilization by clinician and 10.8% (n=33) of the sampled women had been visited by a field worker and discussed about contraception and a further 23.5% (n=72) were told about contraceptives when they attended clinics in the same period. Additionally majority of women (89.1%) knew that they could obtain contraception from government hospital and (5.3%) from health centre. Only (3.5%) knew they could get contraceptives from pharmacies/ chemists and (2.1%) of women knew private hospital/clinics as sources of contraception. Sixty seven point two percent (67.2%) of the women obtained the method from government hospital, 20.3% from private hospitals or clinics, 8.5% from pharmacy or chemist and 2.3% from government health centre(28).

2.3.3 Community factors

A study done in Nigeria among contraceptive users, 48% discussed family planning issues with spouses and the most common reasons for nonuse were fear of side effects perceived by the community (39.7%), indecision to use (3%) and spousal opposition (1.6%), religious and cultural inhibitions (15.4%), and other unlisted factorsalso were mentioned not to utilized family planning method (30.8%)(27).

2.3.4. Reproductive history

A study on utilization of family planning among psychiatric patients in US small proportion of women (2.1%) with frequent mental distress reported not using contraception because they were breastfeeding or postpartum and around 17% women with frequent mental distress were that the woman did not think she could get pregnant or thought she or her partner was too old for her to get pregnant and some mentally ill women ambivalent about pregnancy was also mentioned as a reason for not using contraception by 13%of women with frequent mental distress (25).

A study on family planning utilization among psychiatric patient in Nigeria showed the most common reasons for nonuse were desire for more children (33.3%) and similarly the most common reasons for use were termination of child bearing (18.5%), spacing (29.6%) and limiting the number of children (14.8%). The reasons for discontinuation following previous use were pregnancy (9.1%) and termination of sexual activity (9.1%)(27). Women with no living children (30 percent) and those with five or more children (28 percent) are the least likely to use any method of contraception(31).

Conceptual framework

KEY: relationship direction →

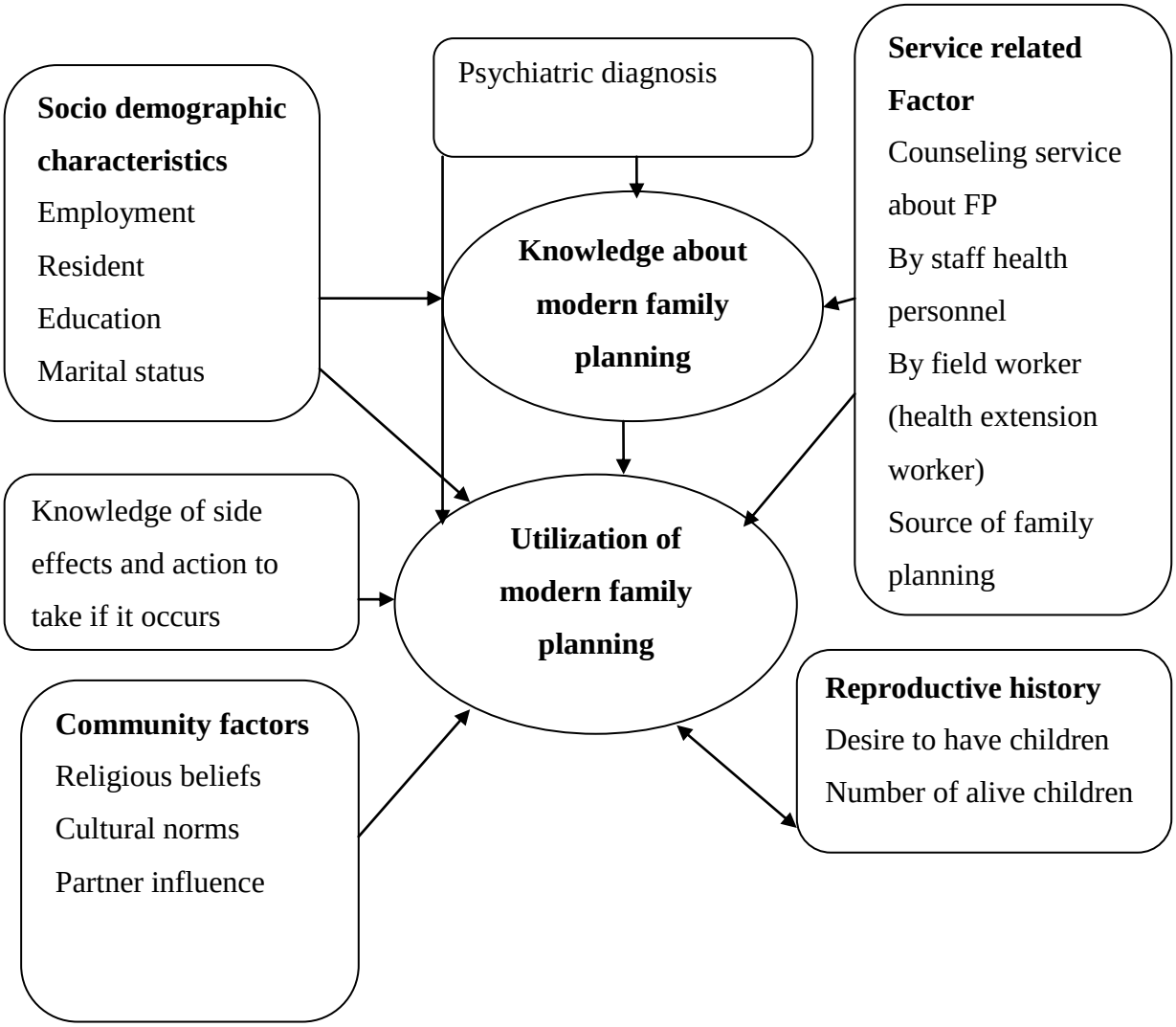

Figure 1 conceptual framework(28).

3. OBJECTIVES

3.1 General Objective

- To assess knowledge, utilization and associated factors of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services at Amanuel mental specialized hospital Addis Ababa, Ethiopia 2018

3.2 Specific Objectives

- To determine knowledge of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services
- To determine utilization of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services
- To identify factors associated with knowledge of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services
- To identify factors associated with utilization of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services

4. METHODS

4.1 Study Area

The study was conducted at Amanuel mental specialized hospital, which is found in Addis Ababa. It is the major referral hospital for psychiatric patients in Ethiopia who come from all over the country. Amanuel mental specialized hospital offers behavioral change communication, STD prevention, laboratory service comprehensive care, family planning, dental services, diagnostic investigations, and inpatient and outpatient psychiatric services. Patient management is multidisciplinary. There are ten departments have been provided the outpatient psychiatric service specifically eight adult psychiatric outpatient departments (OPD), non-psychotic case team and addiction case team.

There are around 1165 professionals and administrative workers were found in Amanuel hospital. According to reports on HMIS, total number of women in reproductive age group (18-49) who were mentally ill and visited Amanuel hospital from September to June 2009 E.C was 74168. But in 2010 E.C, the first quarter annual report of Amanuel hospital to Addis Ababa health office reported that 32500 of mentally ill who are in reproductive age group have gotten the service and almost half of them are to follow up. The average number of female psychiatric patients who have gotten services and appointed in Amanuel hospital from November 10 to December 10 /2017 was 4180.

4.2 Study Design and Period

Quantitative Institution based cross-sectional study design was conducted from February 30, 2018 to march 30, 2018.

4.3 Source of Population

All the reproductive age women, with psychiatric diagnosis attending in Amanuel mental specialized hospital during study period.

4.4 Study Population

Randomly selected women with psychiatric diagnosis attending Amanuel mental specialized hospital in the outpatient department during the study period.

4.5 Inclusion and Exclusion Criteria

4.5.1 Inclusion Criteria

- Women of reproductive age with a psychiatric illness
- Willingness to participate

- Women who have full insight

4.5.2 Exclusion Criteria

- Presence of acute physical or psychiatric illness

4.6 Sample Size Determination

The sample size was determined by using single population proportion sample size calculation formula and the proportion taken from study done in Kenya found modern family planning prevalence rate among psychiatric patients attending outpatient clinic to be 57.5%. (28)Hence the value of P above was taken as 0.57%.The calculation is shown below,

$$N = \frac{(ZA/2)^2 \times P \times (1-P)}{D^2}$$

Where;

n= required sample size

Z= the standard normal deviation at 95% confidence interval; =1.96

P= contraceptive prevalence rate for Psychiatric outpatients

d= margin of error that can be tolerated, 5% (0.05)

Therefore,

$$N = \frac{(1.96)^2 \times 0.57 \times (1-0.57)}{(0.05)^2}$$

$=375.5 \sim 376$

By considering the non-repose rate adding 10% of the sample, which is, 37 and the final sample size were**413.**

4.7 Sampling Technique

The systematic random sampling technique was applied for those who met the inclusion criteria and give consent to participate during the period of the study.

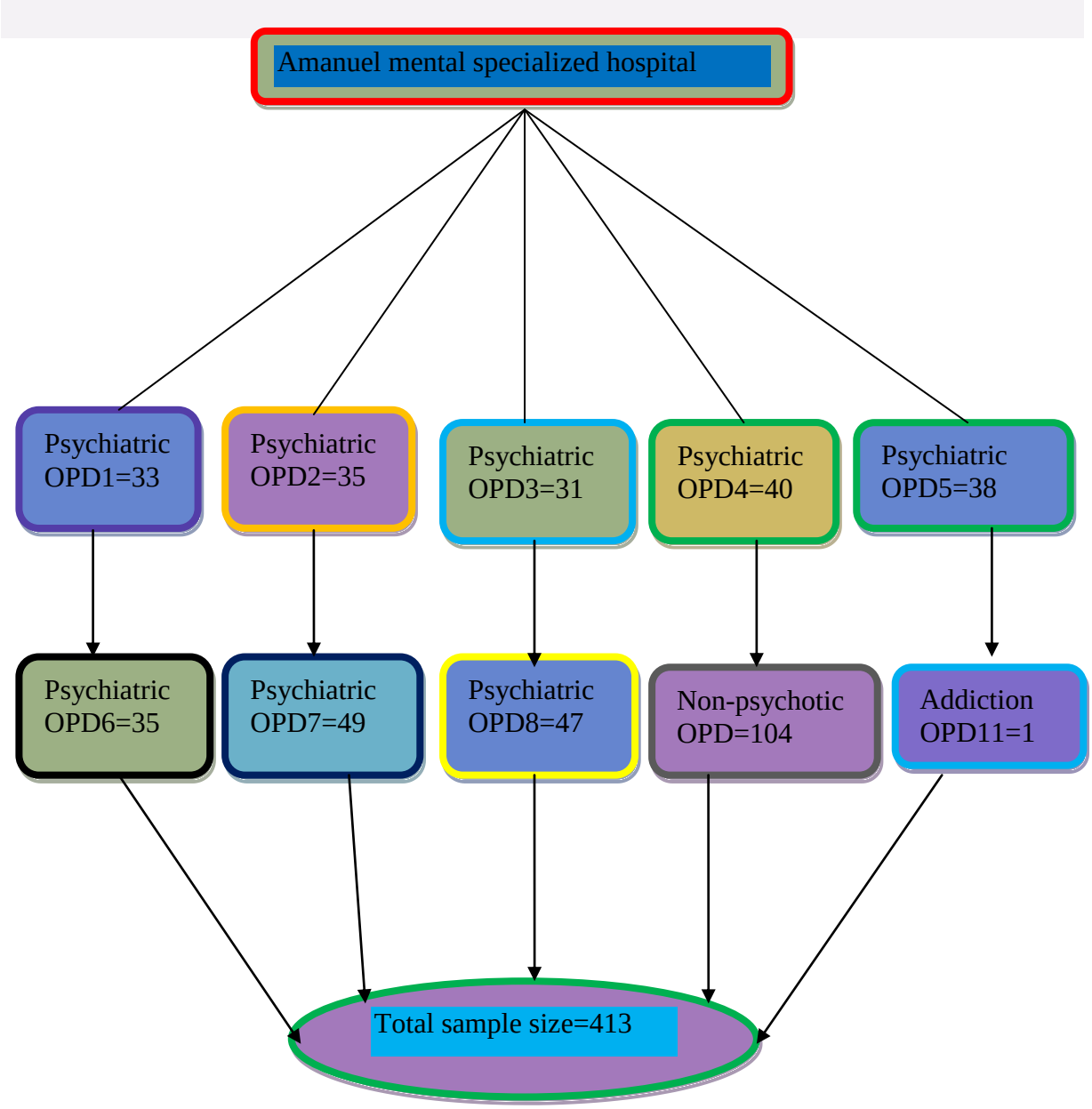

Figure 2 Schematic representation of sampling technique

4.8 Data Collection Procedures

Data collection mainly were taking place in ten psychiatric outpatient departments from Monday to Friday on working time of the hospital during the study period while patients attend their scheduled outpatient clinic. Then data collectors were introduced themselves, explained the study and consent document. They were invited them for participation. Those interested were screened for inclusion criteria. If they met the inclusion criteria, the study and

consent procedure was explained to them in more detail. All the staff in the outpatient clinic was sensitized about the study. The desired number of psychiatric clients from each case team was determined based on proportional to population size for each case team.

Around 413 study units were taken by using a systematic random sampling method. The interval between selected elements from the list was calculated by dividing the total number of mentally ill women attendees to the total sample size which will be K=4180/413~10. The starting point was selected randomly from 1–10. The data collectors/psychiatric professional were collected the data in collaboration with the assigned psychiatric nurse every 10^{th} woman they attended for possible participation in the study.

4.9 Data Collection Instrument

Questionnaires were adopted from similar study done in Kenya with accepted reliability and validity, which has four sections respectively on socio-demographic characteristics, knowledge about modern family planning, reproduction and utilization of family planning and associated factors.

4.10 Variables

4.10.1 Independent Variables

- Reproductive history of respondent(desire to have child, no of alive child)
- Psychiatric diagnosis
- Demographic characteristic of respondents (education, residential, employment, Family planning counseling for by staff health personnel
- Family planning counseling by field worker(health extension worker)
- Knowledge of modern family planning
- Religious and cultural factors
- Sexual partner influence

4.10.2 Dependent Variables

- Knowledge of modern family planning
- Utilization of modern family planning method

4.11 Data Quality Assurance

One day training was given for five data collectors with an academic background of BSC degree in psychiatry and two coordinators who were working inside the study hospitals as a

supervisor. The insight assessment training part was provided by trained psychiatric professionals who are working in Amanuel hospital and assigned as supervisor. The tool training was focused on introducing the data collection tools, the initial and end of the data collection period, how to access, insight and approach each item in the instrument, wisely using of time, data handling, and timely collection and reorganization of the collected data from respective data collectors and submission on due time. An English version of the questionnaire translated to Amharic and retranslated to its original language by third persons to cheek consistency. It conducted before the actual data collection period. The pre test was done on about 5 % of the sample and a face-to-face interview was conducted in Black lion psychiatric outpatient clinic, Addis Ababa. The purpose was to determine how long the interview might be expected to last and how questions might be rephrased to make them more user friendly. The researcher was identified areas of difficulties and discussed them with expert supervisors for solutions. Data completeness was checked, cleaned and compiled by the investigator on a daily basis.

4.12 Data Processing and Analysis

The data were cleaned for inconsistencies, missing values and amendment was considered as needed, coded, and the data were entered into the Epi-data version 3.1 then were exported to SPSS (Statistical Package for Social Science) version 22 for analysis. The analysis part consists of descriptive statistics, percentage, mean, frequency, and bivariate and multivariate logistic regression was carried out to determine the association between an independent variable with the outcome variable among study participants. The adjusted odds ratios were used to interpret the strength of the association at 95% confidence interval. Statistical test of association was considered significance at P value of< 0.05. Results were presented in the form of figures, tables, graphs and charts.

4.13 Operational Definitions

Modern Family planning utilization: Ever use of modern contraceptive when the study subjects are exposed to sexual intercourse to prevent an intended pregnancy.

Modern contraceptives: -includes male and female condoms, injectables (DepoMedroxy Progesterone Acetate (DMPA), oral contraceptive pills, diaphragm, implants, intrauterine contraceptive devices (IUCD), female tubal ligation, and male partner sterilization.

Knowledgeable about contraceptives: -response to knowledge questions were first scored and a cumulative/total score weight mean was calculated. Then the respondents who score above and below the mean value classified as knowledgeable and not knowledgeable respectively.

4.14 Ethical Consideration

Ethical clearance was sought from Addis Ababa University, college of health science school of allied health sciences, department of nursing and midwifery ethical review Committee. After this, supporting letter was written by Amanuel mental specialized hospital to conduct this research in the hospital. After explaining about the purpose and the possible benefit of the study verbal consent was obtained from the study participants. Confidentiality of information was maintained and no identifiers were on the study instruments except serial numbers. Participation was voluntary, non discriminatory and no material benefit was given. Refusal to participate was not lead to loss of any service. Patients requiring emergency treatment, contraception or counseling were referred to relevant sections.

4.15 Dissemination of the Result plan

Results of this study will be presented and communicated to the Addis Ababa university College of health science school of allied health sciences department of nursing and midwifery, Study settings, Regional health bureau, Federal Ministry of Health, local institutions and other concerned bodies through presentation hard and soft copy. Efforts will be made to present the results on international and national scientific conferences, and peer reviewed journal publications will also have considered.

5. RESULT

5.1 Socio-demographic characteristics of respondents

In this study, 413 women with different psychiatric diagnosis had interviewed. All questions in the questionnaires responded with a 100 % response rate. As it is shown in table 1 the age of study participants are ranging from 18-40 years. Respondents' age mean, and standard deviation was 28.99 ±4.82, respectively. Regarding marital status of women with psychiatric diagnosis 246(59.6%) married and the rest 167(40.4%) were unmarried. The distribution of respondents based on their religion were 199 (48.2%) orthodox, 148 (35%) Muslim, 59(14.3%) Protestant and Catholics7 (1.7%).A respondents' education level181 (43.8%) attended elementary school, attended secondary and above are 151(36.6%) and 81(19.6%) respectively.

Table 1 socio-demographic characteristic of respondents among women with psychiatric diagnosis in Amanuel mental specialized hospital, Addis Ababa

Variable	Frequency	Percentage (%)
Age		
18-24	75	18.2
25-30	202	48.9
31-36	94	22.8
>36	42	10.2
Religion		
Orthodox	199	48.2
Muslim	148	35.8
Protestant	59	14.3
Catholic	7	1.7
Marital status		
Married	246	59.6
Unmarried	167	40.4
Level of education		
Primary(1-8) grade	181	43.8
Secondary(9-12)grade	151	36.6
Higher (>12 grade	81	19.6
Resident		
Urban	201	48.7
Rural	212	51.3
Income		
<1200	46	11.1
>=1200	291	70.5
Employment		
None	178	43.1
Self employed	132	32.0
Salary employed	103	24.9
Reason for non-employment		
Illness	173	41.9
Other	240	58.1

5.2 Reproductive history of women with psychiatric illness in Amanuel mental specialized hospital

Among the women sampled, 42.1% (n=174) had ever given birth, but parenting responsibilities are present in 94.8% of those living with their children. Out of 174 mothers who faced bad reproductive outcomes for the women included own child deaths 12.6 % (n=22), miscarriages/abortion 3.1% (n=13). Among the respondents 4.1% (n=17) were pregnant. Around 70.6% (n=12) of the pregnancies were not intentional. The rest included 11.8% women who would have preferred to get pregnant later and 88.2% who did not intend to ever get pregnant in the future.

Table 2 the reproductive history of women with different psychiatric illness inAmanuel mental specialized hospital, Addis Ababa.

Variable	Frequency (N)	Percentage (%)
Have you ever given birth? N=413		
Yes	174	42.1
No	239	57.9
Do you have a child who is now living with you N=174		
Yes	165	94.8
No	9	5.2
Number of children live with you N=174		
one	68	39.1
Two	34	19.5
Three and above	72	41.4
Do you have any child who are alive but not live with you N=174		
Yes	9	5.2
No	165	94.8
Do you have a child who was born alive, but later died N=174		
Yes	22	12.6
No	152	87.4
Are you pregnant? N=413		
Yes	17	4.1
No	396	95.9
Gestational age N=17		
1-3 month	12	70.6
4-6 month	5	29.4
Did you want when you get pregnant at that time?		
Yes	5	29.4
No	12	70.6
Did you want to have babies later on or did not want any child's future? N=17		
Later	2	11.8
No more	15	88.2
Have you ever aborted or ended in still birth N=413		
Yes	13	3.1
No	400	96.9

5.3 Types of previous psychiatric diagnoses of women in Amanuel mental specialized hospital

The previous psychiatric diagnosis of the women was taken from patient chart and the result shows as 37% psychotic disorder, 17.9% mood disorder with psychosis feature, 16.2% major depressive disorder,12.1% generalized anxiety disorder, 7.7% bipolar disorder, 4.4% schizophrenia, 3.4% PTSD, 1% of women diagnosed with postpartum psychosis and 0.2% substance induced psychosis.

Table 3the previous psychiatric diagnosis of respondents in Amanuel mental specialized hospital, Addis Ababa

Psychiatric diagnosis	Frequency (N=413)	Percentage (%)
Psychotic disorder	153	37.0
Mood disorder with psychosis	74	17.9
Major depressive disorder	67	16.2
Generalized anxiety disorder	50	12.1
Bipolar disorder	32	7.7
Schizophrenia	18	4.4
PTSD	14	3.4
Postpartum psychosis	4	1.0
Substance induced psychosis	1	0.2

5.4 Knowledge of modern family planning method among women with different psychiatric diagnosis

5.4.1 Source of family planning information

Out of 413 sampled women nearly 99.8%, respondents heard information about the modern family planning method. The main source of modern family planning information was friends (51.6 %), book and magazine (13.3%), health professional (12.8%), schoolteacher (10.7%), family (6.8%) and radio/TV (4.6 %) respectively. Only 0.2% of the participants had never heard of a contraceptive method. These findings described by the figure as follows.

5.4.2 Place of known source of modern family planning method by those women with different psychiatric diagnosis

Regarding the knowledge of having modern contraceptive resources among women with psychiatric diagnosis, around 412(99.8%) of respondents were mentioned source of modern family planning method as follows.

Table 4 known modern family planning method resource by women with different psychiatric illness in Amanuel mental specialized hospital Addis Ababa

Known family planning method resource	Frequency, N =412	Percentage (%)
Health center, clinic, pharmacy and hospital	161	39.1
Health center and hospital	69	16.7
Health center and pharmacy	59	14.3
Health center and clinic	47	11.4
Pharmacy	29	7.0
Health center	22	5.3
Clinic	15	3.6
Clinic and pharmacy	4	1.0
Hospital	3	0.7
Clinic and hospital	3	0.7

Regarding the level of knowledge a series of knowledge, questions on the modern family planning method had interviewed to those women with different psychiatric diagnosis. To generate the summarized level of knowledge, the response to each question first scored and a cumulative or total score weighted mean was calculated. Then the respondents who scored

mean and above the mean value classified as knowledgeable and those who scored below mean not knowledgeable respectively. The respondent's knowledge of different type of modern contraceptive methods out of N=413 sampled women with psychiatric problem was 99.8% (412) male condom and injectable, 411(99.5%) pills, 410(99.3%) implant, 407(98.5%) emergency pill, 339(82.1%) IUCD, 281(68%) female sterilization, 278(67.3% female condom, and 272(65.9%) male sterilization. All over about 63.9% of respondents scored above the mean value are knowledgeable.

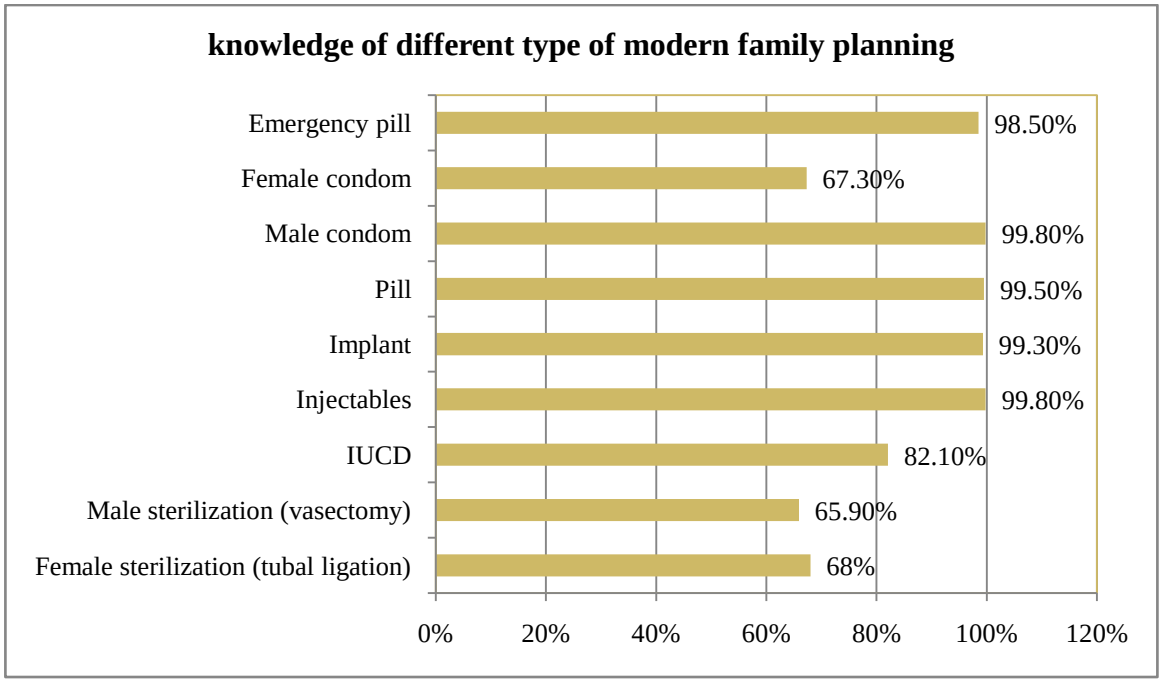

Figure 3 knowledge of different type of modern family planning among women with psychiatric diagnosis in Amanuel mental specialized hospital, Addis Ababa.

5.5 Utilization of modern family planning method among women with different psychiatric diagnosis

Of the total sampled women with psychiatric illness (40.2%) of the respondents were using modern family planning methods at the time of the study. From this, only 17.7% of the respondents were on a long acting family planning method, which is implanted. About 19.4.% of the participants were used injectable, 1.5% pill, 1.7% of respondents used emergency pill as contraceptive to prevent unintended pregnancy. The rest 247 (59.8%) of respondents were

not used any type of family planning method due to different reason among those which was mentioned as reason not to used family planning were 29.1% due to desire to have children, 30% fear of side effect, 23.1% do not have sexual exposure, 6.9% because of pregnancy, 5.7% spouse not willing and the rest 1.6% due to lack of family planning access when they needed was responded.

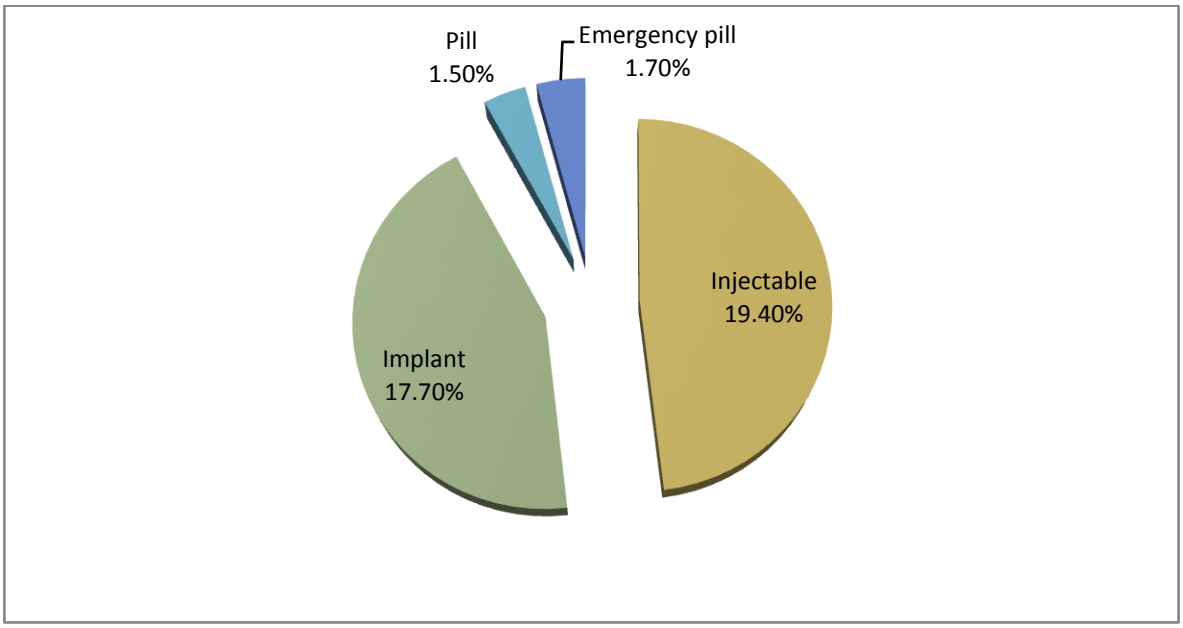

Figure 4 the utilization of modern family planning method among women with different psychiatric diagnosis.

5.5.1 Source currently used modern family planning method

Regarding source of current family planning method out of 166 women 36.7% of respondents obtained the method from health center, 31.9% from clinic, 21.7% from hospitals and the rest 9.6% of them from pharmacy.

5.5.2 Counselling about modern family planning method

Family planning counseling had given by different health care provider at the time of visiting a health facility for the care of themselves by clinicians and field worker (health extension worker) about family planning. From the sample, 90.6 % (374) of respondents ever visited a health facility for the care of themselves. In the last one year, out of sampled women, 91.8% (n=379) of sampled the women had been visited by a field worker and talked to them about modern family planning methods. Similarly, 36.1% (n=149) of sampled were told about family planning when they attended health care services as shown in the figure below.

Additionally, out of user (N=166) who was currently using modern family planning method 116 (69.9%) of women had been told side effect or problem that could have with a current method, 96(57.8%) of respondents told also what to do after experiencing side effects of current method and finally 70.5%(117) of responders told other option of modern family planning method which could access easily.

Table 5 Table counseling on modern family planning method about side effect, action and option of methods in Amanuel mental specialized hospital, Addis Ababa.

Counseling about family planning (N=166)	Frequency	%
Told about side effects	116	69.9
Told what to do if side effects happened	96	57.8
Told about another option method	117	70.5

5.6 Factors associated with knowledge of family planning among women with psychiatric illness

Binary logistic regression was done to identify significant factors with the knowledge of modern family planning method, then those factors, which showed p-value of less than 0.25 during bivariate analysis, had taken to multivariate analysis.

Bivariate analysis shows the following findings with a 95% confidence interval (CI) were employed. From the soci-demographic variables marital status, resident, educational status, employment, reason for non-employment and psychiatric diagnosis had shown a significant association with knowledge on modern family planning methods. The multiple logistic regression analysis with 95% confidence interval showed the following outcome. Resident, level of education and employment status of women with psychiatric problem independently associated with knowledge about modern family planning. A women with a mental illness who were salary employed 3.97 times more knowledgeable than women with mental illness who did not have employment [AOR (95% CI =3.97(1.9-8.2)] and this association is found to be statistically significant ($p<0.001$).

Moreover, women with mental illness who are living in urban area were 4.3 times more knowledgeable than women who are living in rural areas [AOR (95% CI) = 4.3 (2.4-7.66)] and was significantly associated ($p< 0.001$). Finally, women with a mental illness, those levels of education are higher (>12grade) were 3.96 times more knowledgeable than women with mental illness whose level of education was primary (1-8 grade) [AOR (3.96(1.73-8.9)] and an association was found to be statistically significant ($P<0.001$).

Table 6 Factors associated with knowledge of family planning among women with psychiatric illness at Amanuel mental specialized hospital, Addis Ababa

	Knowledgeable	Not knowledgeable	**COR (95%CI)**	**(AOR 95%CI)**
marital status	Frequency (%)	Frequency(%)		
Married	180(43.6)	66(16)	2.7(1.78-4.1)**	1(0.36-2.88)
Unmarried	84(20.3)	83(20.1)	1.00	1.00
Education level				
Primary (1-8	100(24.2)	81(19.6)	1.00	1.00
Secondary(9-12)	93(22.5%)	58(14)	1.99(0.8-20)	1.2(0.73-2.1)
Higher(>12)	71(17.2)	10(2.4)	5.7(2.8-11.8)**	**3.96(1.73-8.9)****
Resident				
Urban	169(40.9)	32(7.7)	6.5(4.1-10.3)**	**4.3(2.4-7.66)****
Rural	95(23)	117(28.3)	1.00	1.00
Employment				
None	91(22)	87(21.1)	1.00	1.00
Self employed	83(20.1)	49(11.9)	1.6(1.02-2.5)**	0.79(0.4-1.40)
Salary employed	90(21.8)	13(3.1)	6.6(3.4-12.7)**	**3.97(1.9-8.20)****
Reason for unemployment				
Illness	42(10.2)	131(31.7)	1.00	1.00
Other	124(30)	116(28.1)	2.6(1.7-4.00)**	1.50(0.5-4.30)
psychiatric illness				
MDD	47(11.4)	20(4.8)	1.00	1.00
Mood disorder with psychosis	52(12.6)	22(5.3)	1.0(0.48-2.10)	1.0(0.44-2.30)
Psychotic disorder	79(19.1)	74(17.9)	0.45(0.25-0.8)*	0.76(0.3-1.50)
Generalized anxiety disorder	34(8.2)	16(3.9)	0.9(0.41.99)	0.89(0.36-2.10)
PTSD	10(2.4)	4(1)	1.10(0.29-3.79)	1.30(0.30-5.60)
Schizophrenia	11(2.7)	7(1.7)	0.60(0.23-1.98)	0.84(0.25-2.80)
postpartum psychosis	3(0.7)	1(0.2)	1.30(0.12-13.0)	0.79(0.6-9.70)
Bipolar disorder	28(6.8)	4(1.0)	2.90(0.9-9.60)	1.39(0.35-5.40)

Note: 1.00=reference, *=significant at p-value <0.05, **= significant at p-value <0.001

5.7 Factors associated with the utilization of modern family planning among women with psychiatric illness

Binary logistic regression has done to identify significant factor with modern family planning, utilization then those factors, which showed p-value of less than 0.25 during bivariate analysis, taken to multivariate analysis. The bivariate analysis showed that social, demographic variables like educational status, marital status, resident, employment, reason for unemployed, psychiatric illness, and counseling about the modern family planning method by staff and health extension were assumed statistically associated. As shown in the bivariate analysis, some of the factors were associated with the utilization of modern family planning method and those factors further statically treated to find the independently associated variables using multiple logistic regression. The factors identified and used were marital status, employment, level of education, resident, and counseling by staff about modern family planning

According to the multiple logistic regressions at 95% C.I, educational level, resident, employment and counseling about family planning by staff found to be independently associated with utilization of modern family planning method. A woman with a mental illness whose level of education, higher (>12 grade) were 6.6 times more likely to utilize modern FP than a woman with a mental illness whose level of education is primary (1-8 grade) [AOR (95% C. I6.6 (3.03—14.4)] and the association were significant ($p<0.001$). Regarding place of resident women with a mental illness living in urban area, were 7.8 time more likely to utilize modern FP method than those who were living in rural area [AOR 7.8(3.9-15.58)] with statistically significance ($p<001$). Additionally, women with mental illness who were salary employed is 7.4 times more likely to utilize modern family planning method than who did not have employment [AOR 7.4(3.4-16.2)] with a significant association ($p<0.001$).Finally, women with a mental illness told about modern family planning method by a clinician or staff were 2.45 times more likely utilize modern FP method than women who did not tell about modern family planning [AOR (2.45 (1.37-4.37)] with a significant association ($p<0.001$).

Table 7 Factors associated with the utilization of modern family planning among women with psychiatric illness at Amanuel mental specialized hospital, Addis Ababa

	using modern FP Frequency (%)		**COR (95%CI)**	**AOR (95% CI)**
	Yes	No		
Marital status				
Married	133(32.2)	113(27.4)	4.80(3.5-7.80)**	**3.18(1.10-9.56)***
Unmarried	33(8)	134(32.4)	1.00	1.00
Education level				
Primary (1-8)	45(10.9)	136(32.9)	1.00	1.00
Secondary (9-12)	60(14.5)	91(22)	1.99(1.25-3.2)**	1.68(0.88-3.2)
Higher(>12 grade)	61(14.8)	20(4.8)	9.20(5.0-16.90)**	**6.60(3.03-14.4)****
Resident				
Urban	133(32.2)	68(16.5)	10.60(6.6-17.0)**	**7.80(3.9-15.58)****
Rural	33(8)	179(43.3)	1.00	1.00
Employment				
None	27(6.5)	151(36.6)	1.00	1.00
Self employed	70(16.9)	62(15)	6.30(3.7-10.67)**	**4.40(2.2-8.5)****
Salary employed	69(16.7)	34(8.2)	11.30(6.3-20.3)**	**7.40(3.4-16.2)****
Reason for unemployment				
Illness	42(10.2)	131(31.7)	1.00	1.00
Other	124(30)	116(28.1)	3.30(2.2-5.10)**	0.36(0.11-1.16)
Number of alive child				
One	30(17.2)	38(21.8)	1.00	1.00
Two	6(3.4)	28(16.1)	0.27(0.10-0.70)**	0.3(0.1-1.2)
Three & more	54(31)	18(10.3)	3.80(1.85-7.80)**	1.2(0.4-3.3)
MDD	34(8.2)	33(8)	1.00	
Mood disorder with psychosis	33(8)	41(9.9)	0.78(0.4-1.5)	
Psychotic disorder	41(9.9)	112(27.1)	0.4(0.19-0.64)**	0.86(0.38-1.93)
Generalized anxiety disorder	20(4.8)	30(7.3)	0.64(0.30-1.40)	
PTSD	8(1.9)	6(1.5)	1.3(0.4-4)	
Schizophorenia	4(1.0)	14(3.4)	0.28(0.08-0.9)*	0.31(0.06-1.54)
postpartum psychosis	2(0.5)	2(0.5)	0.98(0.1-0.73)	
Bipolar disorder	24(5.8)	8(1.9)	2.9(1.15-7.4)*	1.52(0.42-5.4)
Knowledge modern FP				
Knowledgeable	130(31.5)	134(32.4)	3.0(1.95-4.75)**	0.7(0.37-1.35)
Not knowledgeable	36(8.7)	113(27.4)	1.00	1.00
Counseled by HEW				
Yes	162(39.2)	217(52.5	5.60(1.9-16)**	3.58(0.9-14.2)
No	4(1)	30(7.3)	1.00	1.00
Counseled by staff				
Yes	77(18.6)	72(17.4)	2.10(1.4-3.20)**	**2.45(1.37-4.37)****
No	89(21.5)	175(42.4)	1.00	1.00

Note: 1.00=reference, *=significant at p-value <0.05, **=significant at p-value <0.001

6. DISCUSSION

6.1 Knowledge of modern family planning method among women with psychiatric illness

This study assessed the knowledge and utilization of modern family planning method among women with different psychiatric illness. According to this study around 63.9% of sampled participants had knowledge about modern family planning method which is lower than the findings from the study done in Nigeria (27) which was (88%), and this finding were also lower with study findings from Kenya (28) where 99% was knowledgeable who were mentioned at least one method. This variation could be due to the difference in the operationalization of variable or methodological difference, hence in this study mean scored was used to classify whether they were knowledgeable or not.

In this study, the commonest type of known modern family planning method were male condom and injectable(99.8%), pills (99.5%), implant(99.3%), emergency pill(98.5%), IUCD(82.1%), female sterilization(68%), female condom (67.3%), and male sterilization (65.9%) which was comparable with a study done in Kenya which pills (97.4%), injectables (96.4%), male condoms (94.1%), IUD (93.5%), implants (92.5%), female condoms (86.6%), female sterilization (85.6%), male sterilization (74.8%) and emergency Contraceptive pills (72.5%) (28).But higher than the study done in Nigeria, which condom (68%), injectables (64%), pills (56%),IUD (37%), (19%),sterilization (16%) and (27). This might be due to study area difference and gap of study in between in which that was done in 2012.

Different factors identified to be associated with knowledge of modern family planning method. Women with a mental illness those living in urban area had statistically significant association with knowledge of modern family planning [AOR (4.3(2.48-7.66)], (P<0.001). And this finding was consistent with a study done in Kenya where most knowledgeable lived in town followed by city and then rural residents(28). This might be explained by urban women are better than rural women in terms of educational, economic status and have more access to family planning information than rural women. In the same way a women with psychiatric illness with higher level of education (>12 grade) were [AOR (3.96(1.75-8.9)] significantly associated with knowledge of modern family planning method than those who were primarily educated. This finding is also consistent with the study done in Kenya, which

was found that higher education level were among the factors associated with knowledge of women with a mental illness than whose level of education is primary and secondary(28). This might be because educated women with psychiatric illness have a better understanding of family planning education than less educated women. Additionally, educated women might obtain information from different sources like; books, leaflets and magazines, and might have a better chance of exposure to family planning education through mass media than their counter parts.

Lastly, a woman with psychiatric illness who was employed statistically associated with knowledge of modern family planning method than who did not employ (P<0.001).This might be due to acquiring information by health extension workers and through continuous advertisement of modern family planning through media (TV and radio) in their workplace.

6.2 Utilization of modern family planning method among women with psychiatric illness

Regarding utilization of modern family planning among women with psychiatric illness in this study were 40.2%, which was comparable with studies done in Kenya, which was 41.2%(28)but this is higher as compared with a study done in Nigeria (27%) the difference might be due to small sample size in Nigerian study.

Contraceptive prevalence (CPR) rate is the percentage of currently married women using a modern family planning method(31). Those found to be 32.2% in the study. The figure is slightly lower compared 36% of EDHS 2016. As well, it is lower than the contraceptive prevalence in Addis Ababa, which was 56%. This difference might be due to lack of integration with reproductive health care service in a psychiatric clinic and disease condition(31).

In this study, the most utilized family planning methods were injectable (19.4%), implant (17.7%) emergency pill (1.7%) and pill (1.5%) to prevent unintended pregnancy. But it contradict with a study done in Chicago among women with schizophrenic spectrum disorders and non-mentally ill control subjects the most commonly used birth control method for both groups was tubal ligation (22).This is variation might be due to knowledge difference towards permanent family planning method in the study subjects. Moreover, this figure

slightly different from a study done in Kenyan women with psychiatric illness in which the commonest utilized methods by descending order were injectables 9.2%, implants 8.5%, pills 7.8%, IUD 6.5%, female sterilization 4.6% and male condoms 2.6% (28).This is because women with a psychiatric illness in this study have low knowledge towards permanent methods of family planning specifically female sterilization and long term one which is IUCD as compared with that of Kenyan women with psychiatric illness not to be utilized(28).

A factor, which affects utilization of modern family planning identified to be associated with utilization of modern family planning method. Women with psychiatric illness with higher level of education (>12 grade) had statistically significant association on utilization of modern family planning [AOR 6.6(3.03—14.4)] than women whose level of education were primary (grade 1-8). This finding is consistent with (EDHS 2016) which women with more than a secondary education were more likely utilize family planning method than women with no education(31).The possible reason might be that educated women with psychiatric illness have better knowledge of family planning and translated their knowledge to utilization of modern family planning. In the same way, women with psychiatric illness who salary employed were statistically associated on utilization of modern family planning [AOR7.4 (3.4-16.2)] than who did not have employment. This figure supported with a study done in Kenya which salaried used family planning than the non employed(28).This is might be because of that salary employed women with psychiatric illness have more knowledge on adverse effects of frequent birth out come. Additionally, women with psychiatric illness who married was strongly associated with utilization of modern family planning method [AOR (3.18(1.1-9.56)] than who did not married which is also supported with similar study done in Kenya which married women were more likely used modern family planning method than other marital category(28). This might be due to mothers who married highly engaged to sexual practice than unmarried.

Women with a psychiatric illness those living in urban area were strongly associated with utilization of modern family planning [AOR 7.8(3.9-15.58)], (P<0.001) than women with psychiatric illness living in rural area this finding is consistence with EDHS 2016 in which women who were live in urban area more likely used modern family planning(31).The possible reason might be explained by urban women are better than rural women in terms of

educational, economic status and have more access to family planning service than women who resides in rural area.

Finally, in these study women with psychiatric illness who counseled by clinician (staff health personnel) strongly associated with utilization of modern family planning [AOR (2.45(1.37-4.37))] ($P<0.001$) than who did not counseled. This finding also supported with a study done in Kenya counseling by staff at a health facility in the last one year had significant association on utilization of modern family planning methods (28).This could be explained as women with psychiatric illness who ever visited by health care provider have a better opportunity to access appropriate information and services, which ultimately increase family planning utilization.

7. STRENGTH OF THE STUDY AND LIMITATION OF THE STUDY

7.1 Strength of the study

- This study has focused on those populations at risk of many reproductive health problems where adequate information and studies are lacking. This might certainly fill some of the knowledge gaps and serve as supplementary data for future studies. Adequate sample size was employed with a high response rate.

7.2 Limitation of the study

- Cross- sectional study design used in the present study so, that we cannot formulate a cause and effect relationship.
- The study might not be free from error. It may introduce social desirability and recall bias.
- In addition, the study was not supplemented with any qualitative data.
- The study result may not generalize to all women with psychiatric illness in Ethiopia.
- The study was not supplemented with any qualitative data.

8. CONCLUSION

8.1 Knowledge of modern family planning among women with psychiatric illness

The study found that knowledge among respondents regarding modern contraceptives were 63.9 %. Thus, it could be concluded that majority of reproductive age women in the study area had knowledge of modern contraceptives. Male condoms and injectable were the most known type of method. However, this widespread knowledge did not influence use of modern family planning method.

Additionally, resident, level of education and employment status of women were the significant predictor for knowledge of modern family planning method among the women with psychiatric illness.

8.2 utilization of modern family planning among women with psychiatric illness

In this study among women with psychiatric illness (40.2%) of the respondents were using modern family planning methods. From this, only 17.7% of the respondents were on a long acting family planning method, which is implant. Injectable were the most common currently used method.

Marital status, educational status, resident, status of employment and counseling by health care provider on modern family planning method were the significant predictor for utilization of modern family planning method among the women with psychiatric illness.

9. RECOMMENDATION

Based on the findings of the study, the following recommendations are made for consideration by policy makers and health care practitioners.

1. **For health care provider**
   - Healthcare provider should be strengthening family planning counselling to enhance knowledge and utilization at mental health clinic and community level.
2. **For Government and stakeholders in the study area**
   - Current health education efforts should be strengthened to stepping-up family planning knowledge and utilization by focusing on uneducated and rural women with psychiatric illness
3. **For Researchers**
   - Further research should be conducted in the different hospital in which has a mental clinic in different parts of the country to come up with findings that are more representative. In addition, the issues need to be assessed from different community group's perspectives

10. REFERENCE

1. Tsui AO, McDonald-Mosley R, Burke AE. Family planning and the burden of unintended pregnancies. Epidemiologic reviews. 2010;32(1):152-74.
2. Moramba RC. Knowledge, Attitude and Practice of Modern Contraceptive Methods Among Unmarried Youth: A Mixed Methods Study: Swiss Tropical and Public Health Institute; 2015.
3. Tebekaw Y, Aemro B, Teller C. Prevalence and determinants of unintended childbirth in Ethiopia. BMC pregnancy and childbirth. 2014;14(1):326.
4. Kuhlmann AS, Gavin L, Galavotti C. The integration of family planning with other health services: a literature review. International Perspectives on Sexual and Reproductive Health. 2010:189-96.
5. Guedes TG ME, Almeida PC. particularities of family planning in women with mental disorders. 2009.
6. Pehlivanoglu K, Tanriover O, Tomruk N, Karamustafalioglu N, Oztekin E, Alpay N. Family planning needs and contraceptive use in female psychiatric outpatients. Turkish Journal of Family Medicine and Primary Care. 2007;1(3).
7. Baumgartner JN, Parcesepe A, Mekuria YG, Abitew DB, Gebeyehu W, Okello F, et al. Maternal mental health in Amhara region, Ethiopia: a cross-sectional survey. Global Health: Science and Practice. 2014;2(4):482-6.
8. Bursalioglu FS, Aydin N, Yazici E, Yazici AB. The correlation between psychiatric disorders and women's lives. Journal of clinical and diagnostic research: JCDR. 2013;7(4):695.
9. Hall KS, Steinberg JR, Cwiak CA, Allen RH, Marcus SM. Contraception and mental health: a commentary on the evidence and principles for practice. American journal of obstetrics and gynecology. 2015;212(6):740-6.
10. Aziz Ali S, Aziz Ali S, Khuwaja NS. Determinants of Unintended Pregnancy among Women of Reproductive Age in Developing Countries: A Narrative Review. Journal of Midwifery and Reproductive Health. 2016;4(1):513-21.
11. Gold KJ, Marcus SM. Effect of maternal mental illness on pregnancy outcomes. Expert Review of Obstetrics & Gynecology. 2008;3(3):391-401.

12. Nguyen T, Brooks J, Frayne J, Watt F, Fisher J. The preconception needs of women with severe mental illness: a consecutive clinical case series. Journal of Psychosomatic Obstetrics & Gynecology. 2015;36(3):87-93.
13. Becker T, Krumm S. Research on family planning issues in women with mental disorders. Taylor & Francis; 2006.
14. Yazdkhasti M, Pourreza A, Pirak A, Abdi F. Unintended pregnancy and its adverse social and economic consequences on health system: A narrative review article. Iranian journal of public health. 2015;44(1):12.
15. Nalenga GZ. Causes of unintended pregnancy among adolescents in Addis Abeba, Ethiopia: Norwegian University of Life Sciences, Ås; 2012.
16. Mifier L. Sexuality Pregnancy and Childrearing Among Women With Schizophrenia-Spectmm Disorders. Psychiatric services. 1996;47(5):502-6.
17. Bee P, Berzins K, Calam R, Pryjmachuk S, Abel KM. Defining quality of life in the children of parents with severe mental illness: a preliminary stakeholder-led model. PloS one. 2013;8(9):e73739.
18. Jones D, Macias RL, Gold PB, Barreira P, Fisher W. When parents with severe mental illness lose contact with their children: are psychiatric symptoms or substance use to blame? Journal of Loss and Trauma. 2008;13(4):261-87.
19. Hammond J, Lipsedge M. Assessing parenting capacity in psychiatric mother and baby units: a case report and review of literature. Psychiat Danub. 2015;27:71-83.
20. David DH, Styron T, Davidson L. Supported parenting to meet the needs and concerns of mothers with severe mental illness. American Journal of Psychiatric Rehabilitation. 2011;14(2):137-53.
21. Chan J, Natekar A, Einarson A, Koren G. Risks of untreated depression in pregnancy. Canadian Family Physician. 2014;60(3):242-3.
22. Miller L, Finnerty M. Family planning knowledge, attitudes and practices in women with schizophrenic spectrum disorders. Journal of Psychosomatic Obstetrics & Gynecology. 1998;19(4):210-7.
23. Matevosyan NR. Reproductive health in women with serious mental illnesses: a review. Sexuality and Disability. 2009;27(2):109-18.

24. Grunebaum HU, Abernethy VD, Rofman ES, Weiss JL. The family planning attitudes, practices, and motivations of mental patients. American Journal of Psychiatry. 1971;128(6):740-4.
25. Farr SL, Curtis KM, Robbins CL, Zapata LB, Dietz PM. Use of contraception among US women with frequent mental distress. Contraception. 2011;83(2):127-33.
26. Abernethy V. Sexual knowledge, attitudes, and practices of young female psychiatric patients. Archives of general psychiatry. 1974;30(2):180-2.
27. Tunde-Ayinmode MF. Current knowledge and pattern of use of family planning methods among a severely ill female Nigerian psychiatric outpatients: implication for existing service. Ann Afr Med. 2013;12(1):16-23.
28. Uon dakg-m. knowledge and utilization of contraceptives by women with mental illness attending psychiatric outpatient services at mathari national teaching and referral hospital2015.
29. Callegari LS, Zhao X, Nelson KM, Lehavot K, Bradley KA, Borrero S. Associations of mental illness and substance use disorders with prescription contraception use among women veterans. Contraception. 2014;90(1):97-103.
30. Howard LM, Kumar C, Leese M, Thornicroft G. The general fertility rate in women with psychotic disorders. American Journal of Psychiatry. 2002;159(6):991-7.
31. Ethiopia Fdro. Ethiopian demographic and health survey. 2016.

11. ANNEXES

11.1 Annex I: English version information Sheet

Information Sheet to assess Knowledge, utilization and associated factors of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services at Amanuel mental specialized hospital Addis Ababa, Ethiopia

Name of the Principal Investigator: Abdu Seid

Name of the Organization: Addis Ababa university school of nursing and midwifery

Name of the sponsor: Addis Ababa university school of nursing and midwifery

Introduction

This information sheet is prepared by the investigator whose main aim is to assess Knowledge, utilization and associated factors of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services at Amanuel mental specialized hospital Addis Ababa, Ethiopia .The investigator is MSc student from Addis Ababa university school of nursing and midwifery.

Purpose of the study:

The purpose of this research is to assess Knowledge, utilization and associated factors of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services at Amanuel mental specialized hospital Addis Ababa, Ethiopia. In addition, this study finding will helps us to increase utilization of contraceptive by identifying factors associated with contraceptive utilization.

Study Procedure:

If you agree to participate in the study, you will be expected to answer a couple of questions about contraception and how you wish family planning service should be provided for mentally ill women. The entire session will take about **25-30 minutes**.

Risk and/or Discomfort:

There is no known risk of participating in this study. However, you may feel a little discomfort to discuss contraception, which some people normally regard as a private issue. And wasting your time about 25-**30** minutes but this may not be too much.

Benefits:

You may not directly benefit from participating in this study, however information obtained from this study may be used to improve provision of contraception for mentally ill women who need the service

Incentives: You will not be provided any incentives to take part in this project.

Confidentiality and Anonymity:

Anything discussed between you and research assistants will be confidential. All recorded information will not be seen by other people outside the study and kept locked. However, the information may be seen by study supervisors, but your privacy and confidentiality will still be guaranteed as your name will not be recorded, instead unique study identification numbers (code) will be used which cannot be linked to you**.**

Right to Refuse or Withdraw:

Your participation in this study is on a voluntary basis. You are free to decline participation or withdraw from study participation and anytime. The services you receive will not be affected by your decision on whether to participate in the study or not.

Persons to contact: If you have any question you can contact any of the following individuals and you may ask at any time you want.

Abdu Seid Addis Ababa University School of Allied health science

Mobile: + 251 920489779

Email:abdus3536@gmail.com

11.2 Annex II: English version of questionnaires

Data collection form for Addis Ababa University, MSc research project on Knowledge, utilization and associated factors of modern family planning method among women with psychiatric diagnosis attending psychiatric outpatient services at Amanuel mental specialized hospital Addis Ababa, Ethiopia.

Part I- Socio-demographic characteristics		
S.no	**Questions with possible answers**	**Remark**
001	Participants ID no:	
002	Previous psychiatric diagnosis……	Chart review
003	What is your age in year? Year ……	
004	Duration of year that you had mental illness Year……	
005	Level of education 1. can't read and write 2. Primary(1-8 grade) 3. Secondary (9-12 grade) 4. Higher (≥12 grade)	
006	Marital status of the respondent 1. Single 2. Married 3. Divorced 4. Widowed 5. Separated	
007	Religion 1. Orthodox 2. Muslim 3. Catholic 4. Protestant	

	5. Others (specify)……	
008	Employment 1. None 2. Self employed 3. Salary employment	
009	Reason for non employment 1. Illness 2. retirement 3. other	
010	Do you have an income? 1. Yes 2. No	If No go to Q no 012
011	Monthly income in Ethiopian Birr …….	
Part II Reproductive history		
012	Have you ever given birth? 1. Yes 2. No	If no skip to 019
013	Do you have any children to whom you have given birth who are now living with you? 1. Yes 2. No	
014	How many children live with you? ……..	
015	Do you have any children who are alive but do not live with you? 1. Yes 2. No	
016	If yes how many children who are alive but do not live with you? ……...	
017	Do you have any children who was born alive but later died?	

	1. Yes 2. No	
018	If yes how many child were died	
019	Are you pregnant now? 1. Yes 2. No 3. Unsure	If no go to Q.22
020	How many months pregnant are you? Months……..	
021	When you got pregnant, did you want to get pregnant at that time? 1. Yes 2. No	
022	Did you want to have a baby later on or did you not want any (more) children? 1. Later 2. No more	
023	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth? 1. Yes 2. No	
Part III Knowledge about modern contraceptive		
012	Have you ever heard of modern family planning method? 1. Yes 2. No	
013	From whom or where, have you heard the information about contraceptives?(More than one answer is possible) 1. School teacher 2. family	

	3. Friends 4. Health professionals 5. Books/ magazines 6. Radio /Tv 7. Other ————	
014	Which of the following have you known to be contraceptive Methods? (more than one answer possible) 1. Pill 2. Injectable 3. Implant 4. IUCD 5. Male condom 6. Female condom 7. Female sterilization 8. male sterilization 9. Emergency contraceptive	
015	Do you know where to get contraceptive methods if you want? 1. Yes 2. No	
016	Please name all contraceptive sources you know. More than one answer is possible. You can answer more than one. 1. …… 2. …… 3. …… 4. …… 5. …….	
Utilization of modern family planning method		
029	Are you currently using anything to delay or avoid pregnancy? 1. Yes 2. No	If no go Q. 036

030	If yes, what contraceptive are you utilizing? 1. Pill 2. Injectable 3. Implant 4. IUCD 5. Male Condom 6. Female condom 7. Female sterilization 8. male sterilization 9. Emergency contraceptive	
031	When you first started using current method, where did you get it at that time? 1. Health center 2. Private clinic 3. Hospital 4. Pharmacy 5. Other specify————————	
032	At that time, were you told about side effects or problems you might have with the method? 1. Yes 2. No	
033	Were you ever told by a health or family planning worker about side effects or problems you might have with the method? 1. Yes 2. No	
034	Were you told what to do if you experienced side effects or problems? 1. Yes 2. No	

035	When you obtained current method, were you told about other methods of family planning that you could use 1. Yes 2. No	
036	If not using, contraception is there any reasons for not using contraception. 1. Spouse not willing 2. Lack of access to contraceptives 3. Want to have a child/children 4. Fear of side effects 5. Don't want to take many drugs 6. Don't have sexual partner 7. Because I am pregnant now 8. Cultural and religious inhibition	
037	In the last 12 months, were you visited by a fieldworker who talked to you about family planning? 1. Yes 2. No	
038	In the last 12 months, have you visited a health facility for care for yourself (or your children)? 1. Yes 2. No	
039	Did any staff member at the health facility speak to you about family planning methods? 1. Yes 2. No	
040	Does faith (religion) influence your use of contraceptive? 1. Yes 2. No	

41	Does culture influence your use of contraceptive methods? 1. Yes 2. No	
42	Does your sexual partner influence you in utilizing of contraceptive? 1. Yes 2. No	

11.3 Annex III: Amharic version information Sheet

<u>የአማርኛ የምርምር (ጥናት) ማብራሪያና ስምምነት መግለጫ ቅፅ</u>

የምርምር ንድፈ ሐሳቡ ርዕስ፡-

በአማኑኤል የአምሮ ስፔሻሊቲ ሆስፒታል መዲሃኒትእየወሰዱያለ-ተመላላሽ የአምሮህመም ያለባቸው ሴቶች ስለዘመናዊ የወሊድመከላከያ ያላቸው እውቀት; አጠቃቀማቸዉን እና ተጓዳኝ ምክንያቶችን መዳሰስ፡፡

የዋና ተመራማሪ ስም አብዱ ሰይድ መሃመድ

ተቋሙስም፡አዲስአበባ ዩኒቨርሲቲ የነርሲንግ እና ሚድዋይፈሪ ጤና ሳይንስ ትምህርት ክፍል

መግቢያ ይህ ማብራሪያና ስምምነት ቅፅ የተዘጋጀው በአዲስአበባ ዩኒቨርሲቲ የነርሲንግ እና ሚድዋይፈሪ ትምህርት ክፍል የድህረምረቃ (ማስተርስ) ተማሪ አማካኝነት ነዉ፡፡ የጥናቱ ዋና ዓላማ በአዲስ አበባ ከተማ በአማኑኤል የአምሮ ስፔሻሊቲ ሆስፒታል መዲሃኒት እየወሰዱ ያሉ ተመላላሽ የአምሮ ህመም ያለባቸው ሴቶች ስለዘመናዊ የወሊድ መከላከያ ያላቸው እውቀት; አጠቃቀማቸዉን እና ተጓዳኝ ምክንያቶችን መዳሰስ፡፡

የምርምር ፕሮጀክቱ ዓላማ የዚህ ጥናት ዋና ዓላማበአማኑኤል የአምሮ ስፔሻሊቲ ሆስፒታል መዲሃኒትእየወሰዱያለ-ተመላላሽ የአምሮህመም ያለባቸው ሴቶች ስለዘመናዊ የወሊድመከላከያ ያላቸው እውቀት; አጠቃቀማቸዉን እና ተጓዳኝ ምክንያቶችን መዳሰስ ሲሆን የጥናቱ ዉጤትም የቤተሰብ እቅድ አገልግሎትን ለማጠናከር ለፖሊሲ አዉጭዎች እና ለፕሮግራም ሰዎች ግብአት በመሆን ያገለግላል ፡፡የአሰራር ሂደት በዚህ ጥናት ላይ ለመሳተፍ ከተስማሙ ስምምነቱን በደንብ መረዳትና ለመሳተፍ ፍቃደኛ መሆንዎን በፊርማዎት ማረጋገጥ ይገባዎታል፡፡በመቀጠልም በጥናቱ መረጃ ሰብሳቢዎች ስለወሊድ መከላከያ ተጠቃሚነትዎ የተወሰኑጥያቄዎችን የሚጠየቁ ሲሆን እርስዎም የተጠየቁትን ጥያቄዎች በመመለስ የሚተባበሩን ይሆናል ፡፡ ሊከሰቱ የሚችሉ ስጋቶችና ምቾት መጓደሎች በዚህ ጥናት በመሳተፍዎ ምንም አይነት ችግር የማያጋጥሞ ሲሆን ምናልባትም ስለወሊድ መከላከያ ሌላ ሰዉ ጋር መወያየት ምቾት ስለማይሰጥዎ መወያየት አይፈልጉ ይሆናል ፡፡ ነገርግን እኛን በመተባበርዎ ከሚሰጠን ጥቅም ጋር ሲነፃፀር ይህ ምንም ማለት አይደለም ፡፡ መሳተፍዎ ምናልባትም ጊዜዎን ሊሻማብዎ ይችል ይሆናል:: ነገር ግን የሚቆዩትከ 25-30 ደቂቃ ብቻ በመሆኑ ይህን ያህል የሚባል አይደለም፡፡

ጥቅሞች

በዚህ ጥናት በመሳተፍዎ የተለየ ጥቅም አያገኙም፡፡ ነገርግን ከዚህ ጥናት የሚገኘዉ መረጃ የቤተሰብ እቅድ አገልግሎትን ለማሻሻል ይረዳል፡፡

ማካካሻ

በዚህ ጥናት በመሳተፍዎ ምንም አይነት ማካካሻ አይሰጥም፡፡ ነገርግን በጥናቱ በመሳተፍዎ ምስጋናችን ከፍተኛነው፡፡ ሚስጢር ስለመጠበቅ ከዚህ ጥናት የሚገኝ መረጃ ሚስጥራዊነት ለመጠበቅ ቃለ መጠየቁ የሚካሄደዉ እዚሁ ክፍል በሚሰሩ ባለሙያወች ስለሆነ በእርስዎ እና በነርሱ መካከል የሚደረገዉ ማንኛዉም ዉይይት ሚስጥራዊነት እንደተጠበቀ ይሆናል፡፡ ከዚህ ጥናት የሚሰበሰበው እርስዎን የሚመለከት ማንኛዉም መረጃ ተቆልፎ በማህደር የሚቀመጥ ሲሆን ማህደሩ በስምዎ ሳይሆን በተለየ የሚስጥር ቁጥር (ኮድ) ስለሚቀመጥ ኮዱን ከዋናው ተመራማሪ እና ከተቆጣጣሪዉ ውጪ ለማንም አይገለፅም ፡፡በጥናቱ ያለመሳተፍ ወይም እራስን የማግለል መብት ጥናቱ ላይ መሳተፍ ግዴታ ሳይሆን በፍቃደኝነት ላይ የተመሰረተ በመሆኑ ጥናቱ ላይ ላለመሳተፍ ከፈለጉ በማንኛዉም ሰዓት ጥናቱን ጥሎ መዉጣት እንዲሁም መመለስ የማይፈልጓቸዉን ጥያቄዎች አለመመለስ ይችላሉ፡፡ በዚህ ጥናት ባለመሳተፍዎ ወይም በከፊልም ሆነ በሙሉ ጥያቄዎችን ባለመመለስዎ በሚያገኙት ማንኛዉም የጤና አገልግሎት ላይ የሚያሳድረዉ ተፅእኖም ሆነ የሚያጡት የጤና አገልግሎት አይኖርም፡፡ የሚገናኟቸው ሰዎች በጥናቱ ዙሪያ ማንኛውም ጥያቄ ካሉዎት ከዚህ በታች የተጠቀሱትን ሰዎች በሚፈልጉት ጊዜ ማነጋገር ይችላሉ፡፡

አብዱ ሰይድ መሃመድ

ስልክ 0920489779

ብርሃኑ ወርዶፋ

ስልክ 0911050543

11.4 Annex IV Amharic version questionnaire

የአማርኛ መጠይቅ ቅፅ

ክፍል-አንድ:ማህበራዊ እና ኢኮኖሚያዊ ሁኔታ		
ተ.ቁ	ጥያቄ እና የመልስ ምርጫዎች	ማሳሰቢያ
001	የተሳታፊ መለያ ቁጥር:-	
002	ከዚህ በፊት የታመሙት የአምሮ ህመም አይነት	ካረዱን በማየት
003	እድሜዎት ስንት ነው?	
004	የአይምሮ ህመሙ ከጀመረዎት ምን ያክል ጊዜ ነው	
005	የትምህርትደረጃ 1. ያልተማረች (ማንበብ እና መፃፍ የማትችል) 2. አንደኛደረጃ(1-6 ክፍል) 3. ሁለተኛደረጃ(7-12 ክፍል) 4. ከፍተኛደረጃ(≥12 ክፍል)	
006	የተሳታፊየጋብቻሁኔታ 1. ያላገባች 2. ያገባች 3. አግብታ የፈታች 4. የትዳር አጋር በሞት የተለያት 5. የተለያዩ	
007	ሀይማኖት 1. ኦርቶዶክስክርስቲያን 2. እስልምና 3. ካቶሊክ 4. ፕሮቴስታንት 5. ሌላካለይገለጸ( )	

008	**የስራሁኔታ** 1. **ስራ አጥ** 2. **በግል ስራ የሚተዳደር** 3. **የወር ደመወዝተኛ**	
009	**ስራ የለኝም ካሉ ምክኒያተዎት ምንድን ነው;** 1. **ህመምተኛ ስለሆነኩ** 2. **በጡረታ ስለወጣሁ** 3. **ሌላ**	
010	**የገቢ ምንጭ አለዎት**? 1. **አዎ** 2. **የለም**	
011	**የወር ገቢዎ ስንት ነዉ በኢትዮጵያ ብር**……..	
	ፍል-ሁለት : ስነ-ተዋለዶን በተመለከተ	
012	**ልጅ/ጆች ወልደው ያውቃሉ**? 1. **አዎ** 2. **የለም**	
013	**በአሁኑ ሰአት ከእርስዎ ጋርየሚኖሩ ልጅዎች አለዎት**? 1. **አዎ** 2. **የለም**	
014	**አዎ ከሆነ ከእርስዎ ጋር የሚኖሩ ስንት ልጅ አለዎት**?.....	
015	**በህይወት ያሉ ነገር ግን ከእርስዎ ጋር የማይኖሩ ልጆች አሎዎት**? 1. **አዎ** 2. **የለም**	
016	**አዎከሆነበህይወትያሉነገርግንከእርስዎጋርየማይኖሩልጆችብዛት**… ……	
017	**በህይወት ተወልደዉ ከጊዜ በኋላ የሞቱ ልጆች አለዎት**? 1. **አዎ** 2. **የለም**	
018	**አዎ ከሆነበህይወትተወልደዉከጊዜበኋላየሞቱልጆችብዛት** ……	
019	**በአሁኑ ሰአት እርግዝና አለ**? 1. **አዎ**	

	2. **የለም**	
020	**አዎ ካለ፡ እርግዝናው ምን ያክል ወር ሆኖታል**? **ወር**…….	
021	**እርግዝናው ከተከሰተ ቡሃላ ማርገዘዎን ፈልገዎት ነበር**? 1. **አዎ** 2. **የለም**	
022	**ወደፊት ልጅ የመውለድ ፍላጎት አለዎትን** ? 1. **አዎ** 2. **የለም**	
023	**ከዚህ በፊት ጠፍቶ ወይም ሞቶ የተዎለደ ልጅ አለ**? 1. **አዎ** 2. **የለም**	
ክፍል -ሶስት :ስለዘመናዊ ወሊድ መከላከያ ያላቸው እውቀት		
024	**ስለዘመናዊ ወሊድ መከላከያ ዘዴዎች ሰምተው ያውቃሉ** 1. **አዎ** 2. **የለም**	
025	**አዎ ከሆነ ኢንፎርሜሽኑን ያገኙት ከየት ነው** 1. **ከመምህር** 2. **ከቤተሰብ** 3. **ክጓደኛ** 4. **ከጤና ባለሙያ** 5. **ከመፃሃፍት** 6. **ከመገናኛ ብዙሃን** 7. **ሌላ**	

026	**ከሚከተለ·ት የወሊድ መከላከያ ዘደዎች ዉስጥ የት·ኛው·ን ያወቃለ·(ከአንድ በላይ መልስ ይቻላል)** 1. **እንክብል** 2. **በመርፌ መልክ የሚወሰድ(ዲፖ·ፕሮቬራ)** 3. **በክንድ የሚቀበር** 4. **በማህጸን የሚቀመጥ(አይ.ዩ.ሲ.ዲ)** 5. **የወንድ ኮንዶም** 6. **የሴት ኮንዶም** 7. **የሴት የማህፀን በር ማስቀዋጠር** 8. **የወንድ የዘር ፍሬ መውጫ ቀዳዳን ማስቃዋጠር** 9. **ዲንገተኛ የወሊድ መከላከያ**	
027	**የወሊድ መከላከያ ዘደዎች·ን ሲፈልጉ ከየት ማግ·ኘት እነደሚች·ሉ ያው·ቃሉ·ን** 1. **አዎ** 2. **የለም**	
028	**አዎ ካለ· የት ሂደው ማግ·ኘት ይች·ላለ·(ከአንድ በላይ መልስ ይቻላል)** 1. …… 2. …… 3. …….. 4. ……..	
ክፍል አራት የቤተሰብ ምጣኔ አጠቃቀም·ን በተመለከተ		
029	**በአሁኑ ሰዓት እርግዝና እንዳይፈጠር ወይም እርግዝና·ን ለማዘግየት የሚጠቀሙ·ት የወሊድ መከላከያ ዘዴ አለ?** 1. **አዎ** 2. **የለም**	
030	**አዎ ከሆነ በአሁኑ ሰዓት የሚጠቀሙ·ት የወሊድ መከላከያ አይነት ምንድን ነው** 1. **እንክብል** 2. **በመርፌ መልክ የሚወሰድ(ዲፖ·ፕሮቬራ)** 3. **በክንድ የሚቀበር** 4. **በማህጸን የሚቀመጥ(አይ.ዩ.ሲ.ዲ)** 5. **የወንድ ኮንዶም** 6. **የሴት ኮንዶም** 7. **የሴት የማህፀን በር ማስቀዋጠር** 8. **የወንድ የዘር ፍሬ መውጫ ቀዳዳን ማስቃዋጠር** 9. **ዲንገተኛ የወሊድ መከላከያ**	

031	በአሁኑሰዓትምንምአይነትየወሊድመከላከያየማይጠቀሙከሆነምክንያትምምንድንነው?(ከአንድበላይመልስይቻላል) 1. የትዳርአጋሬፈቃደኛስላልሆነ 2. የወሊድመከላከያማግኘትስላልቻልሁ 3. ልጅ/ልጆችእንዲኖሩኝስለምፈልግ 4. የጎንዮሽጠንቆችንበመፍራት 5. ብዙመድኃኒትመውሰድስለማልፈልግ 6. የወሲብ ጓደኛ ስለሌለኝ 7. እርግዝና ስላለ 8. ባህልና ሀይማኖቴ ስለሚከለክለኝ 9. ሌላ	
032	አሁን እየተጠቀሙት ያለውን የወሊድ መከላከያ ዘዴ ለመጀመራያ ጊዜ ያገኙት ከየት ነው 1. ጤና ጣቢያ 2. የግል ክሊኒክ 3. ሆሰፒታል 4. ፋርማሲ 5. ሌላ ካለ ይግለፁ……..	
033	በዚያን ጊዜ በቤተሰብ እቅድ አገልግሎት ምርጫዎ ላይ እና በተጠቃሚነትዎ ላይ የቤተሰብ እቅድ አገልግሎት ዘዴዎች ያላቸው የጎንዮሽ ችግር ተነግሮዎታል? 1. አዎ 2. የለም	
034	በቤተሰብ እቅድ አገልግሎት ምርጫዎ ላይ እና በተጠቃሚነትዎ ላይ የቤተሰብ እቅድ አገልግሎት ዘዴዎች ያላቸው የጎንዮሽ ችግር በጤና ባለሙያ ወይም የቤተሰብ እቅድ አገልግሎት በሚሰጡ ባለሙያዎች ተነግሮዎታል? 1. አዎ 2. የለም	
035	የወሊድ መከላከያ የጎንዮሽ ችግር ከተከሰተ ምን ማድረግ እዳለበዎት ተነግሮዎታል 1. አዎ 2. የለም	

036	አሁን እየተጠቀሙት ካለው የወሊድ መከላከያ ወጭ ሌሎች አማራጮች ተነግሮዎታል 1. አዎ 2. የለም	
037	ባለፉት አስራ ሁለት ወራት ውስጥ በጤና ኤክስቴንሽን ባለሙያዎች ስለወሊድ መከላከያ ተነግሮዎታልን 1. አዎ 2. የለም	
038	ባለፉት አስራ ሁለት ወራት ውስጥ ለራስዎ ወይም ለልጅዎ ህክምና ወደ ጤና ተቁም ሄደው ያውቃሉ 1. አዎ 2. የለም	
039	በጤና ተቋማት ውስጥ በጤና ባለሙያዎች አማካኝነት ስለ ዘመናዊ የወሊድ መከላከያ ዘደዎች ተነግሯቸው ያወቃሉን 1. አዎ 2. የለም	

ስለተባበሩን በድጋሜ እናመሰግናለን!!