

KNOWLEDGE, ATTITUDE ,PRACTICE TOWARDS MENTAL HEALTH  
AND ASSOCIATED FACTORS AMONG HEALTH CARE WORKERS IN  
PRIMARY HEALTH CARE UNIT IN WOLAITA ZONE, SOTHERN  
ETHIOPIA



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*A Research submitted to college of Health Sciences, Jimma University Department of Epidemiology in partial fulfillment for the requirement of Master's Degree in Public Health (MPH).*

*KNOWLEDGE,ATTITUDE,PRACTICE TOWARDS MENTAL HEALTH AND ASSOCIATED FACTORS AMONG HEALTH CARE WORKERS IN PRIMARY HEALTH CARE UNIT IN WELAYTA ZONE, SOUTHERN ETHIOPIA*

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## **Abstract**

**Background:** - Mental disorders account for five percent of the total burden of disease and nineteen per cent of all disability in Africa. Approximately one out of four people in Africa may experience what the World Health Organization refers to as Common mental disorders such as anxiety or depression. In Ethiopia in general and no studies in Wolaita zone have been done to assess the knowledge, attitude and practice towards mental health among health care workers in primary health care unit before. Therefore, this study was aimed to fill this research gaps and assumed to give important information for program managers and health professionals.

**Objective:** To assess knowledge, attitude and practice towards mental health among health care workers in primary health care unit Wolaita Zone, Southern Ethiopia, 2016.

**Methods:** A cross-sectional study was conducted among 264 health care workers from 21 health centers in Wolaita zone, southern Ethiopia from February to April 2016. Structured questionnaires were used to collect information from health care workers. The collected data were entered in to Epi-data and exported to SPSS Version-16 for window and analyzed using ordinary regression to determine predictors of knowledge, attitude and practice.

**RESULT:** A total of 264 health care workers were studied with a response rate of 94.9%. The mean age of the respondents were 27.57 with SD of 5.47. majority of them were females (52.3%), diplomas (53.8%), married (54.5%), Wolaita ethnic group (81.4%) and protestant Christians (66.7%). Majority of study participant had low level of knowledge about mental illness (52.3%). more than three out of ten (37.5%) of the respondent reported as a supernatural factors were the causes of mental illness. Many of them (49.2%) expressed a negative attitude towards mentally ill people. More than four out of ten (43.2%) reported either strongly agree 17.8% or agree 25.4% with the stereotype that people with mental illness are dangerous. Majority (51.9%) of study participant had poor practice. *having* experience of regular contact with mentally ill people has been shown to be a potent factor in reducing stigmatizing attitudes.

**Conclusion:** in-service training pertaining to mental health problems should be given to HCWs to change their low knowledge and negative views.

**Key words:** mental illness, causes of mental illness, treatment, health care workers, knowledge, attitude, practice and wolaita zone.

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## **Acronyms**

KAP-----Knowledge Attitude Practice

LMIC----- Low Middle Income Country

MDD -----Major Depressive Disorders

PHC----- Primary Health Care

PHCU----- primary Health Care Unit

SNNPRS: -----Southern Nations Nationalities People Regional State

SPSS----- Statistical software Package for Social Sciences

WHO----- World Health Organization

# **1: INTRODUCTION**

## ***1.1. Background***

Mental health is defined as “... a state of complete physical, mental and social well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community(1).Mental illness is a diseased condition, which is deemed undesirable for both the affected Individual and the society because it affects adversely the normal functioning of the mental, Psychological and emotional make-up of the individual and so it makes the capacity for insight, orientation, judgment, thought, mood and perception blurred(2,3). The role of primary health care workers is crucial. Research suggests that many health care workers do not receive adequate training on mental health issues or developed frank stigmatic attitudes. In most countries, primary care worker training ranges from a few hours to a maximum of one or two weeks. In fact, the professional literature suggests that negative attitudes on the part of health professionals is most toxic, since their attitudes related to the prognosis, recovery and social inclusion of people with illnesses may have a crucial impact on the lives of their patients(4,5). Misunderstandings about the nature of mental health problems, prejudice against people with mental disorders, and inadequate time to evaluate and treat psychiatric disorders in clinical settings are other contributing factors. For example, a recent study indicates that 98.5% general practitioners providing mental health services care in a primary care setting feel the need to be properly trained and oriented in the management of patients with psychiatric disorders to improve the overall quality of health care (6). However, although non-psychiatric workers in general medical facilities may acknowledge responsibility for this pivotal role in these interventions, they may miss diagnoses of mental illnesses due to lack of knowledge and time when evaluating patients presenting with psychiatric symptoms(7) Missing a diagnosis of mental disorder within a general health facility has been associated with negative stereotypes and stigmatizing attitudes reported among hospital staffs who have sufficient knowledge about schizophrenia and depression(8).

## ***1.2. Statement of the problem***

Research findings indicate that 30 percent of the global population each year has a mental disorder and up to 2/3 of them will not get adequate treatment (9). “Mental disorders account for 5 percent of the total burden of disease and 19 percent of all disability in Africa (10). Mental illness covers 14% to the global burden of disease worldwide. World Health Organization reported that, 154 million people globally suffered from depression, 25 million people from schizophrenia, 91 million people from alcohol use disorders, and 15 million from drug use disorders. Around 25% of individuals, in both developed and developing countries develop one or more mental or behavioral disorders at some stage in their life (11). This means that the loss of productivity (disability-adjusted life years) and risk for physical disease continue to increase due to depression, anxiety and other neuropsychiatric disorders (e.g., schizophrenia, bipolar and substance-use disorders) (12). These problems impact individuals on a day-to-day basis, especially vulnerable groups such as women, children and the poor. A systematic review of 10 studies of children’s mental health problem in 6 countries of Sub-Saharan Africa indicated a prevalence rate of 14.3 % (13). The prevalence of mental illness in Ethiopia is reported as 15% for adults and 11% for children (14). Other research finding also reported the same reports by the years 2000 to 2008, the rates augmented by 3% for adults and 4% for children. From this acceleration, among every five persons, at least one will be affected by mental illness at some stage in life (14). Social beliefs that include lack of knowledge, negative attitudes and perceived stigma about mental illness, may keep those who suffer from mental illness away from treatment. Mental illness stigma is a serious concern, due to its impact on patients’ willingness to seek treatment, their quality of life and the discrimination that mentally ill individuals face (15). By activating uninformed and negative responses from members of society and threatening individuals’ self-esteem and self-efficacy, stigma thwarts the growth and potential of individuals and families suffering from mental illness (16). Sartorius noted that stigma extends to the institutions, health care workers and even mental health specialists who provide treatment. One result is that “stigma makes community and health decision-makers see people with mental illness with low regard, resulting in reluctance to invest resources into mental health care”. Missing a diagnosis of mental disorder within a general health facility has been associated with negative stereotypes and stigmatizing attitudes reported among hospital staffs who have sufficient knowledge about schizophrenia and depression (8, 17). One of the strongest stereotype

beliefs of the general public towards psychiatric patients holds that psychiatric patients have a tendency to cause injury or harm to others and to property (18, 19). As indicated by Muga and Jenkins, even if primary health care workers are capable of handling psychiatric problems, they prefer such patients to be managed by specialist mental health institutions (20). The negative stereotyped mindset of society towards people with mental illness leads to behaviors that worsen the burden of illness of the sick person. The burden of illness as stated by the World Health Organization (WHO) ranges from the economic difficulties faced by the mentally ill person and his/her family (discrimination against carrying out any livelihood activities) to emotional reactions to the illness, the stress of coping with disturbed behaviour, the disruption of household routine and restriction from participating in social activities(21). In many African societies, psychiatric illness is believed to be either an outcome of a familial defect or the 'handiwork of evil machinations' (demons, evil spirits) (22). These negative beliefs result in psychiatric patients being seen as outcasts and people who should be quarantined (22). Another common societal belief is that psychiatric patients are responsible for their illness, especially when it is an alcohol and/or substance related problem. This stigmatization denies psychiatric patients the empathy and understanding traditionally bestowed on the sick in the African society (19, 22). Having knowledge of mental illness does not always reduce the stigmatizing attitudes of primary health care workers (23). Prejudice towards people with mental illness has been shown to correlate with societal ignorance that such Persons are dangerous and unpredictable, less competent and unable to live productive lives. This in turn increases stigma towards persons with mental disorders despite increased knowledge in mental health recognition, diagnosis and management by health workers (24). Expressed negative opinions towards consumers of mental health services still occur – possibly due to the majority of the non-psychiatric health workers lacking the understanding of biological and environmental factors that cause mental illnesses (25). In Ethiopia in general and no studies in Wolaita zone have been done to assess the knowledge, attitude and practice towards mental health among health care workers in primary health care unit before. Therefore, this study was carried out to fill this research gaps and assumed to give important information for program managers and health professionals.

## 2: LITERATURE REVIEW

A study was conducted on the knowledge and attitude towards mental illness in Abuja.

The result revealed that 96.5% of subjects perceived that people with mental illness were dangerous, 82.7% expressed fear to converse with mentally ill persons, and only 16.9% showed agreement regarding the marriage of mentally ill persons (26).

Research conducted among nurses yield similar results of stigmatizing attitudes. Shyangwa, etal conducted a survey to assess the knowledge and attitude about mental illness among nursing staff in Nepal and found that a substantial number of those interviewed felt that mentally ill were 'insane' 'violent' and 'dangerous'(27).In another study conducted by Deribew(28) among Ethiopian nurses, a similar perception of dangerousness was evident. For this study Deribew employed a self-administered KAP survey among nurses working at twelve local health centers to assess their attitude towards persons with mental health problems. in addition one out of seven nurses still thought that supernatural power (evil spirits, God's will) could causes mental health problems (28). The study done in Nepal majority had showed their knowledge about causes of mental illness as genetic or inherited (65.4%) and biochemical disturbances (90.0%) (27).

Attitudes of primary health care providers towards people with mental illness: evidence from two districts in Zambia showed that large proportion of primary health care providers interviewed endorse negative stereotypes towards mentally sick persons. For example, more than 4 out of ten (43.2%) of the respondents either strongly agreed (15.3%) or agreed (27.9%) with the statement that all people with mental illness have some strange behavior. The stereotype that people with mental illness have strange behavior was endorsed by 43.2% while 36% agreed with the stereotype that people with mental illness are dangerous and 64.8% of the respondent either strongly agree (15.3%) or agreed (49.5%) with the statement it's easy to identify who has a mental illness by the characteristics of their behaviour(29).

Primary health care (PHC) in developing countries continues to rely heavily on paramedical personnel. Using a structured questionnaire, 207 PHC workers in Nigeria were assessed on the concept, attitude to, detection and treatment of mental disorders. PHC workers without previous exposure to mental health training were significantly more likely to hold on to traditional views on the etiology of mental disorders. Most of the health workers (82%) indicated that mental disorders accounted for 5% or less of their patient load. Detection rate for the vignette on neurosis as a case of mental disorder was poorer than that for psychosis (36% vs. 71

% of respondents respectively). Psychopharmacological knowledge of the PHC workers was found to be poorest for antidepressant medication. Only 30% of the health workers could suggest specific types of mental health programme that could be introduced at PHC level. Many of them (72%) expressed a generally negative attitude towards mentally ill patients. Suggestions are made on the short and long term training requirements of the PHC workers in order to ensure the successful integration of mental health care into the primary health care programme in Nigeria (30).

A study conducted in Zambia had assessed Attitudes of primary health care providers towards people with mental illness: evidence from two districts in Zambia showed that a large proportion of primary health care providers interviewed endorse negative stereotypes towards mentally sick persons. For example, more than 4 out of ten (43.2%) of the respondents either strongly agreed (15.3%) or agreed (27.9%) with the statement that all people with mental illness have some strange behavior. The proportions either strongly agreeing or just agreeing with other negative stereotypes range from about 31.5% to approximately 40% (39.6%). The stereotype that people with mental illness have strange behavior was endorsed by 43.2% while 36% agreed with the stereotype that people with mental illness are dangerous(29).

Study conducted in India had assessed Knowledge and attitudes of doctors regarding the provision of mental health care in Doddaballapur Taluk, Bangalore Rural district, Karnataka showed that almost one third of the participants (28.0%, n = 13) had not received any training in caring for patients with mental health problems, including during their university study(31).

Perceived challenges and opportunities arising from integration of mental health into primary care: a cross-sectional survey of primary health care workers in south-west Ethiopia revealed that Diploma level PHC workers were significantly more likely to endorse supernatural causes and risk factors for mental illness when compared to degree level workers (32). One in 20 PHC workers (4.6%; n = 7) responded that traditional healers were more effective in treating mental illness than modern medicine, and 2.6% (n = 4) responded that mentally ill persons should not receive mental health care in the health centre setting. Just over one quarter (25.2%) of respondents reported that treating persons with MNS disorders in the health centre would put other patients at risk and none of the respondents had participated in any in-service training in mental health care since graduating. (32).

Several studies have investigated the knowledge, or “mental health literacy” of health care providers Chaudhary and Mishra explored the knowledge and practice of general practitioners regarding psychiatric disorders in Ludhiana (India) and its surrounding areas. Of the sample of 158 general practitioners, 95% knew the etiology of mental disorders and, were familiar with the available possible treatment options. However, 79.6% of the general practitioners did not know the criteria for diagnosing mental illness and had not received any form of training to deal with mental illness (33). These findings may not be surprising since researchers have suggested that many healthcare workers lack sufficient training on mental health (34). Similarly, a recent study carried out in India found that 98.5% of general practitioners providing mental health services in primary health care settings feel there is need for more training and orientation in the management of patients with psychiatric disorders in order to improve quality of health care (33).

Researchers have carried out studies in LAMIC, investigating the attitudes of healthcare providers towards people living with mental illness. The majority of studies focused on medical students and doctors (35, 36). And very few considered general healthcare workers, including nurses (37).

The health workers’ attitudes have been associated with a number of factors. Health Care providers who were older hold more positive attitudes towards mental illness Compared to the younger ones (38, 39).

Regarding gender there are mixed findings documented. In some studies, women were reported to have lower levels of stigmatizing attitudes as compared to men (38, 39), yet the contrary was reported by Panayiotopoulos et al who found that men were more optimistic about the capabilities of patients with mental illness(40). Higher levels of education and posts held have been reported to be associated with low levels of stigma among nurses (41, 42). On the contrary, other researchers have found that health workers who had a postgraduate degree had more negative stereotypes and were less positive about the capability of a patient with mental illness compared to those who had a lower level of education (40).

Additionally, evidence has shown that regular Contact with individuals living with mental illness is strongly associated with a more Positive attitude (42).

A study conducted in US, where majority (82.4%) respondents believed that symptoms of mental illness are associated with potential violence (43). A study conducted by Mitsuko Yamada et al. who investigated nursing students' attitudes toward people with mental disorders and showed that nursing students having the experience of contact with people with mental disorders had positive attitudes toward them(44). And another study by Nikolaos Kazantzis, found that respondents with high levels of prior contact with people who have a mental illness were more comfortable in interacting with people who have a mental illness (45).



## ***2.2. Significance of the Study***

Nowadays, where the mental health integration into primary care is about to come to realization, there is a need to assess whether primary care providers, which will serve as the main gatekeepers for mental health conditions, have the adequate mental health knowledge and attitudes. The findings of this study would serve as source of information for Zonal health department to develop action plan and benefit different stakeholders like, public health practitioners, program planners and decision makers for further utilization. Interested Researchers in the area can use the information generated from the study as a baseline.

### 2.3 .Conceptual Framework

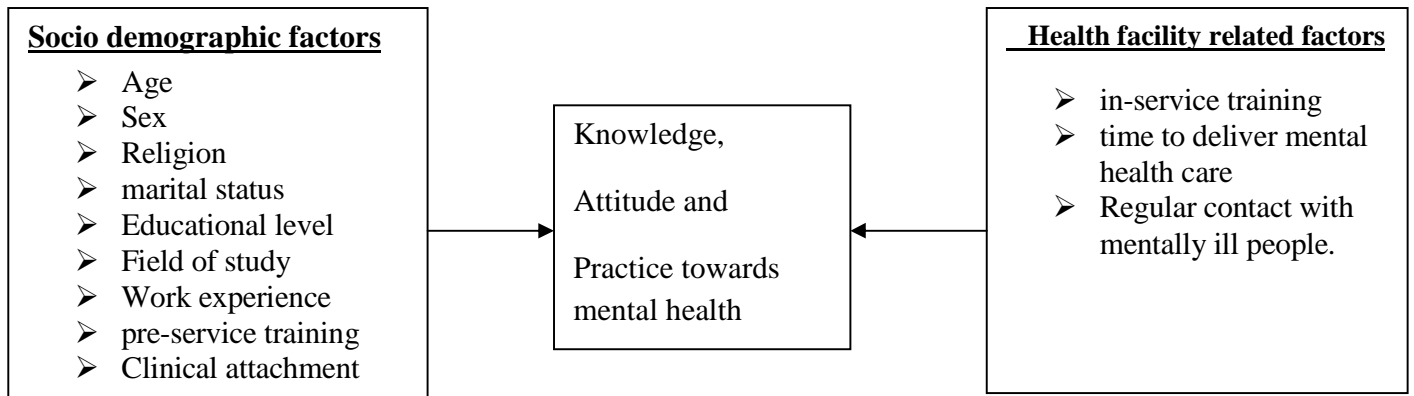


Figure 1. Conceptual framework Adapted from different literature to determine KAP towards mental health among health care workers in primary health care unit, Wolaita Zone, Southern Ethiopia



### **3: OBJECTIVE**

#### ***3.1. General Objective***

To determine Knowledge, attitude and practice towards mental health and associated factors among health care workers in primary health care unit Wolaita Zone, Southern Ethiopia, February-April 2016.

#### ***3.2. Specific Objectives***

- To determine the health care workers level of knowledge towards mental health
- To assess the health care workers attitude towards mentally ill persons
- To determine the level of practice with regards mental health among health care worker
- To identify factors associated with knowledge, attitude and practice towards mental health among health care workers in the study area.

## **4: METHODS AND MATERIALS**

### ***4.1. Study area and Periods***

The study was conducted in Wolaita zone SNNPR. Soddo is the main town of the zone located 327 kms and 164kms south of Addis Ababa and Awassa town respectively. The boundaries of Wolaita zone bordered in the north by Hadiya and Sidama zone and in the South by Gamo Gofa and Dawuro zone. It has Dega, Woina dega and Kolla agro climatic zones accounting 35%, 56% and 9% respectively. Based on projection from 2007 population & Housing census report, the total population in 2013/14 was estimated to be 1,851,452 of which 49.92% were females. The majority (95%) were Wolaita by ethnic group. Administratively the zone is divided into 12 Rural Woredas and 3 Administrative towns. There are 342 kebeles in the zone having 70 governmental health centers, 334 health posts, 3 governments district hospital, 2 Private Hospital, 1 Wolaita University Teaching and Referral Hospital, 27 private Rural drug vender, 3 private pharmacies, 43 private drug store, 122 private primary clinic, and 12 private medium clinic. Which are providing curative and preventive health care services to the population and potential health service coverage is 94.5%, 98% for health center and health post respectively(46). The study period was from February to April 2016.

### ***4.2. Study design***

- A facility based cross sectional study design.

### ***4.3. Population***

#### **4.3.1. Source Populations**

- Includes all health officers, Nurses and midwifery in Wolaita zone working at health centers.

#### **4.3.2. Study Population**

- Health officers, Nurses, midwifery who are working in selected health centers of Wolaita zone.

## **4.4. Inclusion and Exclusion Criteria**

### **4.4.1. Inclusion criteria**

- All health officers, nurses and midwifery on active duty in selected health centers Wolaita Zone.

### **4.4.2. Exclusion Criteria**

- Health officers, nurses and midwifery who were not in the study area during data collection.

## **4.5. Sample size and Sampling Techniques**

The sample size was determined by using single population proportion formula considering the following parameter;

P = an estimate of workers knowledge, attitude & practice proportion 50% since there is no study done on KAP about mental health among health care workers in primary health care unit.

Z-score at 95% with confidence interval of = 1.96

d= Acceptable margin of error = 5% the formula for calculating the sample size (n) was:

$$n = \frac{(Z\alpha/2)^2 p (1-P)}{d^2}$$
$$n = \frac{(1.96)^2 \times 0.5(1-0.5)}{(0.05)^2} = n = \underline{\underline{384}}$$

Since the source population is 850 that is below 10,000. therefore finite population correction is needed

$$nf = \frac{n}{1+n/N}$$

nf =  $\frac{384}{1+384/850} = 265$  By considering the non response rate 5%, the final sample size was 278.

#### 4.5. 2. Sampling techniques

From total of 70 health centres in wolaita zone, 21 health centres were selected using simple random sampling (lottery method). Each health center had given a code (1 to 70), and these numbers were written on small pieces of paper. All of them were put in a box, and then the box was shaken vigorously, to ensure randomization. Then, 21 papers were taken out of the box, and the numbers were recorded. Health care workers belonging to these selected health centers were studied.

**Table 1: shows selected health centers by simple random sampling (lottery methods)**

S. No	Selected health centre	Bsc/diploma nurse	Health officer(HO)	Midwifery	TOTAL health care workers	Selected health care worker
1	Tebela health centre	19	3	2	24	24
2	Abela health centre	8	2	1	11	11
3	Abaya health centre	6	2	1	9	9
4	Galicha health centre	7	2	0	9	9
5	Wondo health centre	7	2	1	10	10
6	Hobicha health centres	8	2	2	12	12
7	Sodo health centres	9	9	8	26	26
8	Geneme health centres	8	2	4	14	14
9	Wadu health centre	7	4	4	15	10
10	Jage health centres	5	2	2	9	9
11	Wagara health centres	6	0	2	8	8
12	A/charake health centre	5	3	1	9	9
13	Gacheno health centres	7	3	2	12	12
14	Buge health centre	7	4	2	13	13
15	Wandara Gale health.ce	6	4	2	12	12
16	Areka.K.HC	16	6	3	25	25
17	Tome Gerera .HC	6	3	2	11	11
18	Guligula .HC	7	2	1	10	10
19	Dalibo.HC	8	2	2	12	12
20	Bakulo Sagno.HC	6	2	2	10	10
21	Boditi K.HC	15	4	3	22	22
22	TOTAL	173	63	47	283	278

Schematic presentation of sampling procedure

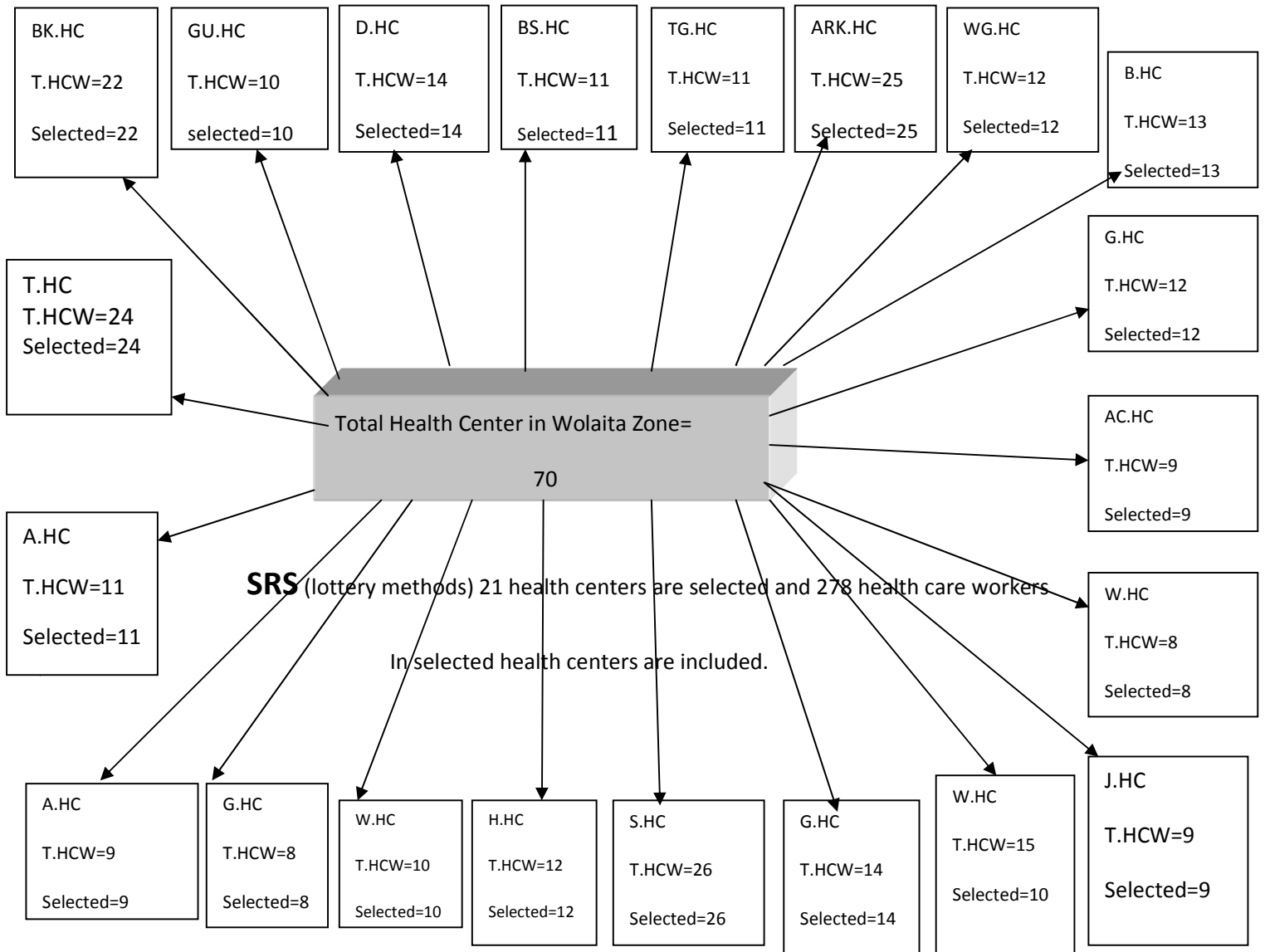


Figure 2. Schematic presentation of sampling procedure on assessment of KAP towards mental health among health care workers in primary health care unit Wolaita Zone; Southern Ethiopia.



#### ***4.6. Data collection procedures***

Self-administered structured questionnaire was prepared in English then translated in to Amharic and translated back in to English to check for consistency. The questionnaire was adapted from different literature related to mental health and included socio- demographic characteristics, health facility related information, knowledge, attitude and practice about mental health. Data collections were carried out from February to April 2016 by two diploma level professionals who are fluent in Amharic and English. Two trained health officers were assigned as supervisors throughout the study period.

#### ***4.7. Measurement variables***

##### **The dependent variable**

- Knowledge, Attitude and Practice towards mental health

##### **Independent (explanatory) variables:**

- *HCW Socio demographic related factors*

- ✚ Age, Sex, Religion, marital status, Educational level, Field of study, Work experience, pre-service training and Clinical attachment

- *health facility related factors*

- ✚ in-service training

- ✚ time to deliver mental health care

- ✚ Regular contact with mentally ill people.

#### ***4.8. Analysis procedures***

The data was entered in to Epi-Data 3.1 statistical software and then exported to SPSS version-16 for further analysis Simple descriptive statistics such as frequency and percentage were used to summarize the results, and Ordinary regression Analysis were used to identify the association between predictors and ordinal outcome variables. P-value < 0.05 was considered as statistically significant association.

#### **4.9. Data quality management**

The quality of data were assured through careful design, translation, back translation and pretest of the questionnaire was done on 5% of non selected health centers, proper training of the data collectors and supervisors, close supervision of the data collecting procedures, proper categorization and coding of the data, careful entry of the data and cleaning after entrance.

#### **4.10. Operational Definition**

**Knowledge:** knowledge towards mental health was determined using 14 points. There were four open ended questions that carried a total of 14 correct responses. Each correct response was given a score of 1 and a wrong response a score of 0. Total points to be scored were 14 and the minimum will be 0. Points were about mental illness cause/risk factors to chose from the list given (2 points), the 2<sup>nd</sup> questions is to list at least 4 types of mental illness (4 points), the 3<sup>rd</sup> question is to list at least 4 types of mental disorders with their symptoms (4points), the 4<sup>th</sup> questions will be to list at least 4 types of treatment for mental illness (4 points) On assessment, Bloom cut off points were used (47). A score of 80 – 100% of correct responses meant high level knowledge, a score of 60 – 79% put a scorer in a level of moderate knowledge and low level knowledge was for the respondents with a score less than 59% of the correct responses. Therefore, the scores with their respective knowledge levels will be (see annexes)

Score	description
○ 11 – 14(80%-100%)	high level
○ 8 – 10 (60%-79%)	moderate level
○ 0-7 ( $\leq$ 59%)	low level

**Attitude:** Attitude was assessed by 15(1-15) negatively worded and 4(16-19) positively worded statements with a total of 19 questions put on Likert's scale. The highest score was expected to be 76 and the lowest score to be 0. The questions on Likert's scale had positive and negative responses that ranged from strongly agree, agree, neutral, disagree and strongly disagree. The scoring system used with respects to respondents' responses was as follows for negatively worded statement towards mentally ill people: strongly agree scored 0, agree 1, neutral 2, disagree 3, strongly disagree 4 and the reverse is true for scoring positively worded statement, meaning strongly agree 4, agree 3, neutral 2, disagree 1, strongly disagree 0 . The responses were summed up and a total score was obtained for each respondent. Based on Bloom cut off points (47):

- Negative attitude- those HCWs having overall attitude score below 45points
- Neutral Attitude: those HCWs having an overall attitude score between 46-60 points
- Positive attitude (favorable): those HCWs having total attitude score between 61-76points

**Practice:** The practice was assessed by 8 Yes or No questions towards mental health care, those who said yes response got 1 point and those who said no got 0 points. The responses were summed up and a total score was obtained for each respondent. The overall practice towards mental health is said to be (good, fair and poor) based on the same criteria (Bloom’s cut off point were used (47).

Score	description
○ 0---4 points(≤59%)	poor practice
○ 5---6 points (60%---79%)	fair practice
○ 7—8 points (80%---100%)	good practice

**Supernatural factors:** HCW who report from the given list of perceived causes of mental illness at least one supernatural factor was answered, he/she has believed supernatural agents as causes for mental illnesses.

**Psycho-social factors:** HCW who report from the given list of causes of mental illness at least one psycho-social factor was answered, he/she has considered psycho-social factors as a causes for mental illness.

**Biological factors:** HCWs who report from the given list of causes of mental illness at least one biological factor was answered, he/she has taken as biological factors as a causes for mental illness.

**Health care workers:** In these particular study Health officers, Nurses and Midwives are only said to be HCWs.

**Educational level:** Diploma, Bachelor Degree, postgraduate degree.

**Primary health care unit:** in this particular study Primary Health Care Unit includes only Health Centres.

**Pre-service training:** HCWs who took psychiatric course during college training.

**In-service training:** HCWs who took on job training about psychiatry.

#### ***4. 11.Ethical considerations***

Ethical clearance was obtained from Jimma University College Health Sciences and Permission letter was also obtained from Wolaita Zonal Health department and District Health office. Verbal Informed consent was obtained from each respondent after explanation of the study objective. The right to withdraw from the research process at any point in time was respected. Privacy and confidentiality was maintained during the interview process.

#### ***4.12. Disseminations and communication of the findings***

The results of the study will be presented and submitted to Department Epidemiology Jimma University. After having approval from the Department, it will be communicated to concerned bodies through reports. The findings will also be disseminated to different organizations like Ministry of Health, SNNPRS Health Bureau, Zonal Health Department, and stake holders or partners that will have a contribution to mental health program, especially in primary health care unit. The findings will be also presented in various workshops and conferences and an attempt will be made to publish the research article in scientific journals

## **5. Results**

A total of 278 HCWs who were available during the period of data collection were reached; of whom 264 of them agreed to participate and giving the ultimate response rate 94.9%. Sodo town health center comprised larger proportion 23 (8.7%) of the respondents; followed by Tebela health center which encompassed 21 (7.9%). The minimum numbers of participants were from Wagara health center which comprised 4 (1.5%).

### ***5.1. Socio demographic characteristics of study participants***

The age of the study participants ranged from 20 to 55 years with the mean age 27.57. The age group 20-29 constituted the largest part that comprised 192 (72.7%) of the respondent. Almost half, 138(52.3%) of the study participants were female. Majority 145 (54.9%) of the study participants were married followed by unmarried 117 (44.3%). One hundred seventy six (66.7%) participants were protestant; while 63 (23.9%) and 16(6.1%) of them were orthodox and catholic respectively. With regards to their professional characteristics, 135 (51.1%) were nurses, followed by health officers 86 (32.6%) and midwifery 41 (15.5%). Majority 142 (53.8%) of them were diploma holders. Regarding the work experience 118 (44.7%) of the study participants had greater than five years of experience (Table 2).

**Table 2. Socio demographic information of health care workers in selected primary health care unit Wolaita Zone, Southern Ethiopia, May 2016.**

<b>Characteristics</b>		<b>Frequency</b>	<b>percent</b>
<b>Age(n=262)</b>	20-29	191	72.3
	30-39	61	23.1
	40-49	6	2.3
	50-59	4	1.5
<b>Sex(n=264)</b>	Female	137	51.9
	Male	127	48.1
<b>Religion(n=264)</b>	Protestant	176	66.7
	Orthodox	63	23.8
	Muslim	9	3.4
	Catholic	16	6.1
<b>Marital status(263)</b>	Unmarried	119	45.1
	Married	144	54.5
	Divorced	1	0.4
<b>Ethnicity(n=262)</b>	Wolaita	215	82.1
	Amahara	25	9.5
	Others	22	8.4
<b>Educational level(n=264)</b>	Diploma	142	53.8
	Degree	90	34.1
	Postgraduate degree	32	12.1
<b>Field of Study(n=264)</b>	Diploma clinical Nurse	106	40.2
	Degree clinical nurse	29	11
	Health officer	88	33.3
	Diploma midwifery	36	13.6
	Degree midwifery	5	1.9
<b>Pre-service training(n=264)</b>	Yes	222	84.1
	No	42	15.9
<b>from where you get(n=222)</b>	from Collage	222	100.
<b>Clinical Attachement(n=222)</b>	Yes	47	21.2
	No	175	78.8
<b>Work experience(n=262)</b>	<3 years	94	35.9
	3-5 years	49	18.7
	>5 years	119	45.4

With regards to regular contact with mentally ill people (50.4%) said had contact. Around one hundred eighty six (70.5%) reported that there is no time to deliver mental health care. all of the study participants reported that they had never attained In-service training on mental health. (Table 3)

**Table 3. Health facility related information in selected primary health care unit Wolaita Zone, Southern Ethiopia, May, 2016.**

Characteristics		Frequency	Percentage
<b>Regular contact with mentally ill people(264)</b>	Yes	133	50.4
	No	131	49.6
<b>Presence of time to deliver mental health care(n=264)</b>	Yes	78	29.5
	No	186	70.5
<b>In-service training in mental health(n=264)</b>	Yes	0	0
	No	264	100

Regarding the causes and risk factors for mental illness, 99 (37.5%) of the PHC workers considered supernatural or spiritual factors to be important. However, two hundred five (77.7%) reported psychosocial causes and 214 (81.1%) responded biological factors played a role. from reported supernatural causes the most responded factors is evil spirit by 60(22.7%) followed by magic 54(20.5%).in the case of psychosocial factors frequently equally reported are unemployment and physical illness by one hundred forty four (54.5%) followed by loss of loved one 137(51.9%) respectively. Regarding biological causes use of psychoactive substance responded by one hundred seventy one (64.8%), followed by Neurochemical imbalance 160(60.6%).See table 4

**Table 4 Primary health care workers Knowledge about causes of, and Risk factors for mental illness in selected primary health care unit, Wolaita Zone, Southern Ethiopia, May, 2016 (N=264)**

<b>Characteristics</b>	<b>N (%)</b>
<b>Supernatural causes</b>	99(37.5)
<b>Evil Sprit</b>	60(22.7)
<b>Sin Committed</b>	24(9.1)
<b>Attack from evil Sprit</b>	49(18.6)
<b>Magic</b>	54(20.5)
<b>will of God</b>	25(9.5)
<b>Curse</b>	40(15.2)
<b>Evil eye</b>	29(11)
<b>Psychosocial factors</b>	205(77.7)
<b>Unemployment</b>	144(54.5)
<b>Divorce</b>	135(51.1)
<b>Work overload</b>	111(42)
<b>loss of loved one</b>	137(51.9)
<b>conflict in marriage</b>	118(44.7)
<b>Physical illness</b>	144(54.5)
<b>Financial Constraint</b>	101(38.3)
<b>physical or sexual abuse</b>	132(50)
<b>Biological factors</b>	214(81.1)
<b>Use of psychoactive substance</b>	171(64.8)
<b>Neurochemical imbalance</b>	160(60.6)
<b>Genetic exposure</b>	126(47.7)

When asked to list all the mental illnesses that they knew of, 70 (26.5%) of respondents did not list any mental illness. The most frequently identified mental illness was schizophrenia 136 (51.5%) followed by depression 103 (39%), mania or bipolar disorders 96 (36.4%) and anxiety 70 (26.5%). (See table 5. below)



**Table 5. Health care workers knowledge about types of mental illness in selected primary health care unit Wolaita Zone Southern Ethiopia, May, 2016.**

Characteristics	frequency	Percentage
<b>Depression</b>	103	39
<b>Anxiety</b>	70	26.5
<b>Schizophrenia</b>	136	51.5
<b>Mania and Bipolar disorders</b>	96	36.4
<b>psychotic Disorders</b>	42	15.9
<b>Dementia</b>	41	15.5
<b>Mood Disorders</b>	48	18.2
<b>Others</b>	10	3.8
<b>Not listed types of mental illness</b>	70	26.5

When asked to list mental disorders and their symptoms about 59(22.35%) listed some of the symptoms, 205(78%) did not list any symptoms, indicating a low level of awareness. Of those who listed symptoms of depression, the most frequently identified symptoms were lack of interest and sad mood 10(3.8%), feeling depressed or fearful 9 (3.4), loss of interest 8(3.03) and loss of appetite 6 (2.27%). In those who listed symptoms of psychotic disorders, 7(2.65%) respondents identified delusions and 8(3.03%) identified hallucinations as being characteristic symptoms and signs with regard to symptoms of Schizophrenia 11 (4.17%) reported disordered thinking and speech as a distinguished sign and symptoms(see table 6. below).

**Table 6: reported mental disorders with their sign and symptoms in selected primary health care unit Wolaita Zone, Southern Ethiopia, May, 2016.**

Characteristics	Reported Sign and symptoms	Frequency	Percentage
<b>Depression</b>	lack of interest and sad mood	10	3.8
	feeling depressed or fearful	9	3.4
	loss of interest	8	3.03
	loss of appetite	6	2.27
<b>Schizophrenia</b>	disordered thinking and speech	11	4.17
<b>psychotic disorders</b>	Delusion	7	2.65
	Hallucination	8	3.03
<b>Not listed types mental disorders with their sign and symptoms</b>		205	77.65

When asked to identify medications used in mental health care, the majority could not identify either an antipsychotic or antidepressant medication: chlorpromazine was identified by 107(40.5%), haloperidol by 89(33.7%) and Amitriptyline by 54(20.5%), diazepam by 134(50.8%) and phenobarbitone 149(56.4%) are reported medical treatment for mental disorders. (See table7 below)

**Table 7 Health care workers knowledge about types of treatment for mental illness in selected Primary health care unit, Wolaita Zone, Southern Ethiopia, April, 2016.**

Treatment types reported	Frequency	Percentage
<b>Diazepam</b>	134	50.8
<b>Phenobarbitone</b>	149	56.4
<b>Amitriptyline</b>	54	20.5
<b>Haloperidol</b>	89	33.7
<b>Chlorpromazine</b>	107	40.5
<b>Others</b>	49	18.6
<b>Don't know</b>	68	25.7

### ***5.2. Level of knowledge of health care workers towards mental health***

The overall knowledge score ranged from 0 to 13 with a mean of 7.2. Figure 6.1 shows the proportion of the study participants whose score fall into three categories as per Bloom's cut off point (60%-80%).about the majority 138(52.3%) of the study participants fall under the category of "low level knowledge score" while 64 (24.2%) were found to have medium knowledge score and 62(23.3%) of the study participants were high level of knowledge.

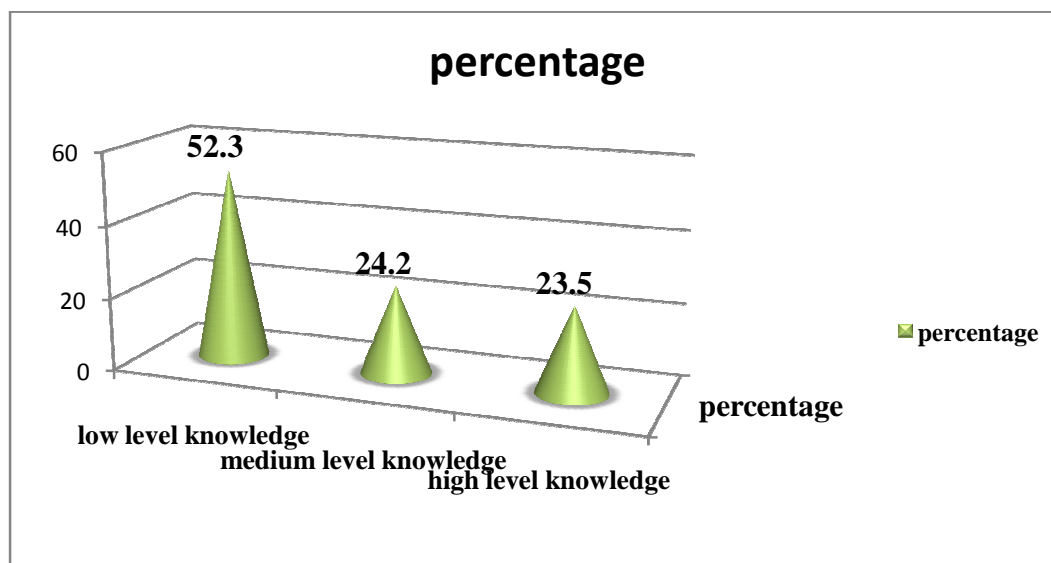


Figure 3 Percentages of the study participants whose total knowledge score fall under the three categories of knowledge scores, in selected primary health care unit Wolaita Zone, Southern Ethiopia, April 2016

### ***5.3. Level of Attitude of health care workers towards mental health***

A number of questions were asked in order to examine the attitudes of primary health care workers towards people with mental illness. Study participants were asked to indicate on a 5-point Likert type scale the extent to which they agreed or disagreed with certain statements. For example, more than 7 out of ten (78%) of the respondents either strongly agreed (33.3%) or agreed (44.7%) with the statement that all people with mental illness have some strange behavior. while 25.4% agreed with the stereotype that people with mental illness are dangerous. more than two-thirds (67.1%) of the respondents either strongly agreed (16.3%) or agreed (50.8%) with the idea that All people with mental illness have some strange behavior. Also, almost half (49.3%) of the respondents strongly agreed (18.6%) or agreed (30.7%) with the notion that mentally ill patients should not be treated in the same health centre as general patients. In addition, 37.9% and 21% of respondents agreed or strongly agreed that mentally ill people should not be allowed to work or to have children, respectively. just one fourth (25.3%) of the respondents strongly agreed (6.4%) or agreed (18.9%) with the idea of handcuffing violent mental patients where as in the case of detaining mental patients in a solitary place less than half(43.6%) of the respondents either strongly agreed (16.3%) or agreed (27.3%). on other hand

more than 7 out of ten(77.6%) of the respondents moreover strongly disagreed(35.5%) or disagreed with the idea of traditional healers are better in effectiveness than our medical care. More than 6 out of ten (64.4%) respondents agreed with the statement that mentally sick persons are entitled to the same attention in the health center as general patients, while 26.1% thought that it was not. In addition, about 58% either agreed (30.3%) or strongly agreed (27.7%) with the statement that Mental illness is a problem for Ethiopia and 26% not supported the statement. Nine out of ten (90.1%) respondent agreed with the statement that mental health care is important; while 6.4% thought it was not. furthermore 85.7% of the respondent either agree strongly (52.7%) or agree (33%) with the statement that As far as possible mental health services should be provided through community-based facilities (See Table 8 below).

**Table 8. Attitude of HCW towards mentally sick persons in selected primary health care unit, wolaita zone, Southern Ethiopia, April 2016**

<b>Characteristics</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>undecided</b>
<b>People with mental illness have unpredictable behavior(n=262)</b>	88(33.3%)	118(44.7%)	38(14.4%)
<b>If people become mentally ill once, they easily become ill again(n=262)</b>	39(14.8%)	102(38.6%)	56(21.2%)
<b>People with mental illness are dangerous</b>	47(17.8%)	67(25.4%)	63(23.9%)
<b>It's easy to identify who has a mental illness by the characteristics of their behavior</b>	69(26.1%)	141(53.4%)	24(9.1%)
<b>All people with mental illness have some strange behavior(n=664)</b>	43(16.3%)	134(50.8%)	29(11%)
<b>Find it hard to talk to someone with mental health problems(n=663)</b>	47(17.8%)	77(29.2%)	64(24.2%)
<b>Even after treatment, I would be doubtful to be around people who has been treated for mental illness(n=663)</b>	18(6.8%)	41(15.5%)	48(18.2%)
<b>Mental patients should not be treated in the same health center with other people(n=662)</b>	49(18.6%)	81(30.7%)	29(11%)
<b>People with mental illness should not be allowed to work(n=264)</b>	35(13.3%)	65(24.6%)	40(15.2%)
<b>Political and individual rights of mentally ill persons should be suspended while on treatment to help them(n=264)</b>	25(9.5%)	39(14.8%)	13(4.9%)
<b>Those with mental illness should not have children(n=264)</b>	24(9.1%)	31(11.7%)	23(8.7%)
<b>Violent mental patients should be handcuffed(n=264)</b>	17(6.4%)	50(18.9%)	44(16.7%)
<b>Detention in a solitary place should be considered for people with mental illness(n=264)</b>	47(16.3%)	72(27.3%)	31(11.7%)
<b>I would not want to live next door to someone who has been</b>	18(6.8%)	25(9.5%)	17(6.4%)

<b>mentally ill(n=264)</b>			
<b>traditional healers are better in effectiveness than our medical care(n=264)</b>	14(5.3%)	15(5.7%)	30(11.4%)
<b>Mentally sick persons are entitled to the same attention in the health center as general patients(n=264)</b>	90(31.1%)	88(33.3%)	17(6.4%)
<b>Mental illness is a problem for Ethiopia(n=264)</b>	73(27.7%)	80(30.3%)	41(15.5%)
<b>Mental health care is important(n=262)</b>	150(56.8%)	88(33.3%)	7(2.7%)
<b>As far as possible mental health services should be provided through community-based facilities(n=262)</b>	139(52.7%)	87(33%)	11(4.2%)

The overall attitude score for all items was computed for each participant, and the minimum attitude score was 18 and the maximum was 69 with mean attitude score of 43.44. Greater proportion 130(49.2%) of the respondents was found to have negative attitude and 93 (35.2%) of them had neutral attitude and 41(15.5%) had positive attitude towards mental illness. Figure 6.2 depicts the proportion of the study participants whose total score fall under the categories of negative, neutral and positive attitude score.

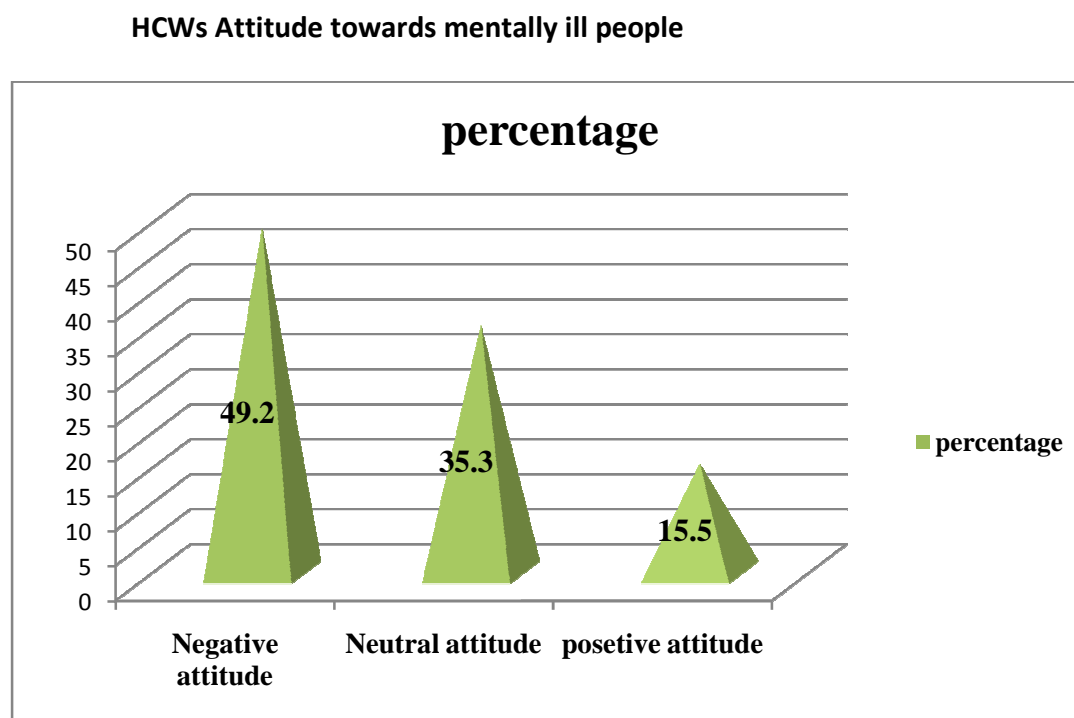


Figure 4. Percentages of the study participants whose total attitude score fall under the three categories of attitude scores, in selected primary health care unit Wolaita Zone, Southern Ethiopia, May 2016

#### **5.4. Practice of health care workers towards mental health**

Regarding practice of health care workers towards mental health service 138(52.3%) said it is hard to talk to someone with mental health problem. On the other hand 116(43.9%) of the respondent said they were not comfortable with attending to people with mental illness. two out of ten (20.5%) of the survey respondent reported they have ever provided treatment to a person with mental illness in their health instution.199 (75.4%) of the respondent reported that they have ever referred anyone with mental illness for treatment. from those who referred someone with mental illness 23(35.38%) got feedback on the patients they had referred. More than nine out of ten (92.8%) of the respondent thought that they did not believe that they receive sufficient support from the mental health services to build their capacity.246(93.2%) did not think that the health facility where they work can accommodate the care of persons with mental illness. The entire respondent reported ever supervised by mental health specialist.

**Table 9. Health care workers practice towards mental health in selected primary health care unit Wolaita Zone Southern Ethiopia, May, 2016.**

Characteristics	Response n (%)	
	Yes	No
1 Is it hard to talk to someone with mental health problems?	<b>138(52.3)</b>	<b>122(47.7)</b>
2 Are you comfortable with attending to people with mental illness?	<b>148(56.1)</b>	<b>116(43.9)</b>
3` Have you ever provided treatment to persons with mental illness in your health center?	<b>54(20.5)</b>	<b>210(79.5)</b>
4 Have you ever referred anyone with a mental illness for treatment?	<b>65(24.6)</b>	<b>199(75.4)</b>
5 Did you receive feedback on the patients you have referred?	<b>23(35.38)</b>	<b>42(64.62)</b>
6 Do you believe that you receive sufficient support from the mental health services to build your capacity?	<b>19(7.2)</b>	<b>245(92.8)</b>
7 Do you think that the health facility where you work can accommodate the care of persons with mental illness?	<b>18(6.8)</b>	<b>246(93.2)</b>
8 Have you ever supervised by mental health specialist?	<b>0(0%)</b>	<b>264(100%)</b>

The overall practice score for all items was computed for each participant, and the minimum practice score was 0 and the maximum was 7 out of 8 points with mean practice score of 3.03. Majority of study participant had poor practice 137(51.9%) which were below Bloom's cut off point, 60%-80%. while 67(25.4%) fair practice and 60(22.7%) good practice.

## Overall practice about MH

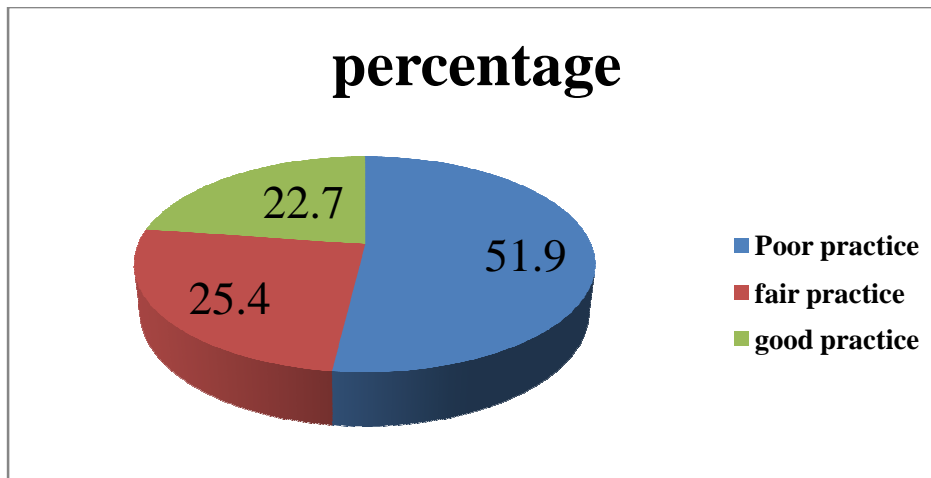


Figure 5. Percentages of the study participants whose total practice score fall under the three categories of practice scores, in selected primary health care unit Wolaita Zone, Southern Ethiopia, May 2016

### *5.5. Predictors of knowledge among HCWs*

Ordinal regression analysis was conducted to identify predictors of knowledge among HCWs. The significance of the test for sex and regular contact with mentally ill people were found with p-value less than 0.05. Both Sex and regular contact with mentally ill people had opposite effect where they estimate by negative. This means that as sex of female increases the probability of being in one of the higher categories decrease and as no experience of regular contact with mentally ill people increases the probability of being in one of the higher categories decrease.

Table 10. Explanatory variables associated with the knowledge towards mental health based on the ordinal regression model with negative log-log link, in selected PHCU of Wolaita zone, Southern Ethiopia, April, 2016.

		Parameter Estimates					95% Confidence Interval		
		Estimate	Std. Error	Wald	Df	Sig.	Lower Bound	Upper Bound	
Threshold	[Level of knowledge = 0]	-1.973	1.528	1.668	1	.197	-4.968	1.021	
	[Level of knowledge = 1]	-.918	1.528	.361	1	.548	-3.912	2.076	
Predictors	Age	-1.121	.725	2.390	1	.122	-2.543	.300	
	0. 20-29 years	-.773	.686	1.270	1	.260	-2.117	.571	
	1. 30-39 years	-.780	.959	.662	1	.416	-2.659	1.099	
	2.40-49 years	0 <sup>a</sup>	.	.	0	.	.	.	
	3.50-59 years								
	Sex	0.female	-.611	.212	8.302	1	<b>.004</b>	-1.027	-.195
	1.male	0 <sup>a</sup>	.	.	0	.	.	.	
	Religion	0.protestant	-.444	.422	1.106	1	.293	-1.272	.383
	1.orthodox	-.945	.502	3.540	1	.060	-1.929	.039	
	2.musilim	-.809	.752	1.159	1	.282	-2.283	.664	
	3.catholic	0 <sup>a</sup>	.	.	0	.	.	.	
	Marital status	0.unmarried	.683	.237	8.288	1	.784	.218	1.148
	1.married	0 <sup>a</sup>	.	.	0	.	.	.	
	Ethnicity	0.wolaita	-.758	.385	3.882	1	.069	-1.512	-.004
	1.amahara	-.108	.386	.079	1	.779	-.865	.649	
	2.others	0 <sup>a</sup>	.	.	0	.	.	.	
	Educational level	0.diploma	1.038	1.199	.750	1	.386	-1.311	3.388
	1.degree	-.067	.423	.025	1	.874	-.896	.761	
	2.Postgraduate degree	0 <sup>a</sup>	.	.	0	.	.	.	
	Field study	0.diploma clinical nurse	-1.446	1.455	.988	1	.320	-4.297	1.406
1.Bsc clinical nurse	-.261	1.369	.036	1	.849	-2.945	2.422		
2.health officer	-.097	1.307	.006	1	.941	-2.660	2.465		
3.diploma.M.wifery	-2.035	1.047	3.779	1	.052	-4.087	.017		
4.Bsc M.wifery	0 <sup>a</sup>	.	.	0	.	.	.		
Pre-service training	0.No	.568	.998	.323	1	.570	-1.389	2.524	
1.yes	0 <sup>a</sup>	.	.	0	.	.	.		
Clinical attachement	0.No	.303	.265	1.310	1	.252	-.216	.821	
1.Yes	0 <sup>a</sup>	.	.	0	.	.	.		
Work experience	0. <3 years	.768	.304	6.371	1	.072	.172	1.364	
1.3-5 years	.228	.291	.615	1	.433	-.342	.798		
2.>5 years	0 <sup>a</sup>	.	.	0	.	.	.		
Contact mental patient	0.No	-.639	.213	9.013	1	<b>.003</b>	-1.055	-.222	
1.Yes	0 <sup>a</sup>	.	.	0	.	.	.		
Time to deliver M.H.care	0.N0	-.365	.201	3.277	1	.070	-.759	.030	
1.yes	0 <sup>a</sup>	.	.	0	.	.	.		

Link function: Negative Log-log.

a. This parameter is set to zero because it is redundant.

## 5.6. Predictors of Attitude among HCWs

Ordinal regression analysis was conducted to identify predictors of attitude towards mentally ill people among HCWs. The significance of the test for regular contact with mentally ill people was found with p-value less than 0.05. Regular contact with mentally ill people has opposite effect where it estimates by negative. This means that no experience of regular contact with



mentally ill people increases the probability being in one of the higher categories (favorable attitude) decreases.

**Table 11. Explanatory variables associated with HCWs Attitude towards mental health based on the ordinal regression model with negative log-log link, in selected PHCU of Wolaita zone, Southern Ethiopia, April, 2016.**

		Parameter Estimates					95% Confidence Interval		
		Estimate	Std. Error	Wald	Df	Sig.	Lower Bound	Upper Bound	
Threshold	[Level of attitude = 0]	-.955	1.537	.386	1	.534	-3.967	2.057	
	[Level of attitude = 1]	.535	1.540	.121	1	.728	-2.484	3.554	
Predictors	Age	-.398	.748	.284	1	.594	-1.865	1.068	
	0. 20-29 years	-.534	.725	.543	1	.461	-1.954	.887	
	1. 30-39 years	-1.828	1.249	2.142	1	.143	-4.277	.620	
	2.40-49 years	0 <sup>a</sup>	.	.	0	.	.	.	
	3.50-59 years	0 <sup>a</sup>	.	.	0	.	.	.	
	Sex	0.female	-.340	.202	2.837	1	.092	-.735	.056
	1.male	0 <sup>a</sup>	.	.	0	.	.	.	
	Religion	0.protestant	-.675	.387	3.047	1	.081	-1.433	.083
	1.orthodox	-.610	.446	1.868	1	.172	-1.484	.265	
	2.musilim	-.443	.779	.324	1	.569	-1.970	1.083	
	3.catholic	0 <sup>a</sup>	.	.	0	.	.	.	
	Marital status	0.unmarried	-.091	.216	.178	1	.673	-.515	.332
	1.married	0 <sup>a</sup>	.	.	0	.	.	.	
	Ethnicity	0.wolaita	.452	.431	1.098	1	.295	-.393	1.297
	1.amahara	.456	.458	.993	1	.319	-.441	1.354	
	2.others	0 <sup>a</sup>	.	.	0	.	.	.	
	Educational level	0.diploma	-1.045	1.157	.815	1	.367	-3.313	1.223
	1.degree	-.211	.405	.272	1	.602	-1.005	.583	
	2.Postgraduate degree	0 <sup>a</sup>	.	.	0	.	.	.	
	Field study	0.diploma clinical nurse	.482	1.579	.093	1	.760	-2.614	3.577
1.Bsc clinical nurse	-.573	1.337	.183	1	.668	-3.194	2.048		
2.health officer	-.394	1.289	.094	1	.760	-2.920	2.131		
3.diploma.M.wifery	1.042	1.287	.655	1	.418	-1.482	3.565		
4.Bsc M.wifery	0 <sup>a</sup>	.	.	0	.	.	.		
Pre-service training	0.No	-.499	.887	.317	1	.574	-2.237	1.239	
1.yes	0 <sup>a</sup>	.	.	0	.	.	.		
Clinical attachement	0.No	.339	.277	1.505	1	.220	-.203	.882	
1.Yes	0 <sup>a</sup>	.	.	0	.	.	.		
Work experience	0. <3 years	.455	.279	2.652	1	.103	-.093	1.002	
1.3-5 years	.239	.260	.840	1	.359	-.272	.749		
2.>5 years	0 <sup>a</sup>	.	.	0	.	.	.		
Contact mental patient	0.No	-.480	.197	5.942	1	.015	-.867	-.094	
1.Yes	0 <sup>a</sup>	.	.	0	.	.	.		
Time to deliver M.H.care	0.N0	-.190	.197	.932	1	.334	-.576	.196	
1.yes	0 <sup>a</sup>	.	.	0	.	.	.		

Link function: Negative Log-log.

a. This parameter is set to zero because it is redundant.

## 5.7. Predictors of Practice among HCWs

Ordinal regression analysis was conducted to identify predictors of practice among HCWs. No significant association were found among predictors of ordinal outcome variables

**Table12.Explanatory variables associated with HCWs practice towards mental health based on the ordinal regression model with negative log-log link, in selected PHCU of Wolaita zone, Southern Ethiopia, April, 2016.**

		Parameter Estimates					95% Confidence Interval		
		Estimate	Std. Error	Wald	Df	Sig.	Lower Bound	Upper Bound	
Threshold	[Level of practice = 0]	10.371	1.360	58.190	1	.000	7.707	13.036	
	[Level of practice = 1]	11.496	1.348	72.751	1	.000	8.854	14.138	
Predictors	Age	0. 20-29 years	-.927	.698	1.762	1	.184	-2.296	.442
		1. 30-39 years	-.905	.668	1.836	1	.175	-2.215	.404
		2.40-49 years	-.680	.858	.628	1	.428	-2.362	1.002
		3.50-59 years	0 <sup>a</sup>	.	.	0	.	.	.
	Sex	0.female	.206	.211	.955	1	.328	-.207	.619
		1.male	0 <sup>a</sup>	.	.	0	.	.	.
	Religion	0.protestant	.334	.428	.609	1	.435	-.505	1.172
		1.orthodox	.163	.506	.103	1	.748	-.829	1.155
		2.musilim	-1.786	1.110	2.591	1	.108	-3.961	.389
		3.catholic	0 <sup>a</sup>	.	.	0	.	.	.
	Marital status	0.unmarried	.323	.234	1.906	1	.167	-.135	.780
		1.married	0 <sup>a</sup>	.	.	0	.	.	.
	Ethnicity	0.wolaita	-.732	.373	3.858	1	.089	-1.462	-.002
		1.amahara	-.142	.396	.128	1	.720	-.919	.635
		2.others	0 <sup>a</sup>	.	.	0	.	.	.
	Educational level	0.diploma	-2.524	1.166	4.681	1	.052	-4.810	-.238
		1.degree	-.110	.378	.085	1	.771	-.852	.632
		2.Postgraduate degree	0 <sup>a</sup>	.	.	0	.	.	.
	Field study	0.diploma clinical nurse	13.495	1.093	152.316	1	.068	11.352	15.638
			12.662	1.097	133.225	1	.061	10.512	14.812
		1.Bsc clinical nurse	12.187	1.076	128.297	1	.059	10.078	14.296
		2.health officer	-1.349	1.062	1.615	1	.204	-3.430	.731
		3.diploma.M.wifery	0 <sup>a</sup>	.	.	0	.	.	.
	Pre-service training	0.No	15.307	.000	.	1	.	15.307	15.307
1.yes		0 <sup>a</sup>	.	.	0	.	.	.	
Clinical attachement	0.No	-.442	.255	3.004	1	.083	-.943	.058	
	1.Yes	0 <sup>a</sup>	.	.	0	.	.	.	
Work experience	0. <3 years	-.550	.311	3.130	1	.077	-1.159	.059	
	1.3-5 years	-.508	.322	2.487	1	.115	-1.139	.123	
	2.>5 years	0 <sup>a</sup>	.	.	0	.	.	.	
Contact mental patient	0.No	-.114	.209	.299	1	.585	-.524	.296	
	1.Yes	0 <sup>a</sup>	.	.	0	.	.	.	
Time to deliver M.H.care	0.NO	.004	.211	.000	1	.985	-.410	.418	
	1.yes	0 <sup>a</sup>	.	.	0	.	.	.	

Link function: Negative Log-log.

a. This parameter is set to zero because it is redundant.

## 6. Discussion

This study assessed the knowledge, attitudes and practice towards mental health among HCWs in selected primary health care unit of Wolaita Zone in Southern Ethiopia .In this study, nearly about 138(52.3%) of the study participants fall under the category of “*low knowledge score*” while 64(24.2%) were found to have medium knowledge score and the rest 62(23.5%) of the study participants were high level of knowledge. twenty three and twenty one percent of health care workers said that causes/risk factors for mental illness were evil spirit and magic respectively. Almost more than one out of ten (15.9%, n= 42) of study participants had not received pre-service training in psychiatry caring for patients with mental health problems, including during their collage study. The finding of this study is lower than the study done in India (28%, n=13) the difference might be due to educational curriculum or different sample population (31). More than eight out of ten (84.1%, n=222) had received pre-service training on mental health However, of these, only 21.2 %( n = 47) reported having a clinical attachment in mental health care during their training, the majority (78.8%, n=175) were not. And all of study participant reported that they had not taken in-service training since graduating from college. Our finding is also parallel with study done in Ethiopia Jimma zone and higher than the study done in India 79.6% of the general practitioners did not know the criteria for diagnosing mental illness and had not received any form of training to deal with mental illness in India (32,33).In this study the majority of respondents believed that mental illness could be caused by use of psychoactive substance (64.8%, n=171), Neurochemical imbalance in the brain (160, n=60.6%), genetic exposure (47.7%, n=126) and financial constraints (38.3%, 101), this finding is lower than the study done in Nepal, these difference might be due to different sample population(27). our health care workers reported supernatural causes of mental illness; their perception on the causes of mental health problems may not go with that of the public because of their training. However, more than three out of ten (37.5%) health care workers still thought that supernatural power such as evil spirit, sin committed, attack from evil spirit, magic, will of God, curse, and evil eye could causes mental health problems, which is higher than the study done in Ethiopia Jimma zone, the difference might be due to deep rooted negative cultural beliefs towards people with mental health problem since health care workers are from the community even though they have medical knowledge background(28).Concerning to least types of mental disorders with their sign and symptoms majority of the respondent (77.65%; n=205) not listed. From those they

listed depression were reported 10(3.8%) said lack of interest and sad mood; 9(3.4%) said feeling depressed and fearful, 8(3.03%) reported loss of interest and 6(2.27%) said loss of appetite. in those who listed symptoms of schizophrenia 11 (4.17%) said disordered thinking and speech and for psychotic disorders 7(2.65%) said delusion and 8(3.03%) reported hallucination. The finding of this study revealed that When asked to identify medications used in mental health care, the majority could not identify either an antipsychotic or antidepressant medication: chlorpromazine was identified by 107(40.5%), haloperidol by 89(33.7%) and Amitriptyline by 54(20.5%), diazepam by 134(50.8%) and phenobarbitone 149(56.4%) are reported medical treatment for mental disorders where as 68(25.7%) of the respondent not listed types of treatment for mental illness indicating poor awareness about pharmacological knowledge and this indicting us the need for training for primary health care workers.

Mental illness stigma is a serious concern, due to its impact on patients' willingness to seek treatment, their quality of life and the discrimination that mentally ill individuals face (15). By activating uninformed and negative responses from members of society and threatening individuals' self-esteem and self-efficacy, stigma thwarts the growth and potential of individuals and families suffering from mental illness (16). Sartorius (15) noted that stigma extends to the institutions, health care workers and even mental health specialists who provide treatment. One result is that "stigma makes community and health decision-makers see people with mental illness with low regard, resulting in reluctance to invest resources into mental health care". Missing a diagnosis of mental disorder within a general health facility has been associated with negative stereotypes and stigmatizing attitudes reported among hospital staffs who have sufficient knowledge about schizophrenia and depression (17). The finding of this study suggested in line with that, more than six out of ten (49.2%) study participant expressed a generally negative attitude towards mentally ill patients. this study lower than with the study done in Nigeria, the difference might be different sample population(30). this finding also identified, more than seven out of ten (78%) of the respondents either strongly agreed (33.3%) or agreed (44.7%) with the statement that all people with mental illness have some strange behavior, this study higher than from Zambian study the difference might be due to lack of training and deep rooted cultural belief(29). more than four out of ten (43.2%) reported either strongly agree 17.8% or agree 25.4% with the stereotype that people with mental illness are dangerous, this finding is parallel with the study done in Zambia(29). A sizeable number

210(79.5%) had felt that , It's easy to identify who has a mental illness by the characteristics of their behavior 'insane' 'violent' and 'dangerous' indicating their negative view. Similar view was found in a study conducted in US, where majority (82.4%) respondents believed that symptoms of mental illness are associated with potential violence (43). our finding is higher than the study done in Zambia (29). It can have implication in patient care and overall outlook to the discipline.

Our finding revealed that Majority of study participant had poor practice 137(51.9%) which were below Bloom's cut off point, 60%-80%. while 67(25.4%) fair practice and 60(22.7%) good practice. Regarding practice of health care workers towards mental health service 138(52.3%) said it is hard to talk to someone with mental health problem. On the other hand 116(43.9%) of the respondent said they were not comfortable with attending to people with mental illness. two out of ten (20.5%) of the survey respondent reported they have ever provided treatment to a person with mental illness in their health institution. 199 (75.4%) of the respondent reported that they have ever referred anyone with mental illness for treatment.

Having no experience of regular contact with mentally ill people increases the probability of being in one of the higher /favorable attitude/ categories decrease. This support the previous findings, for example those from Mitsuko Yamada et al. who investigated nursing students' attitudes toward people with mental disorders and showed that nursing students having the experience of contact with people with mental disorders had positive attitudes toward them(42,44). And another study by Nikolaos Kazantzis, found that respondents with high levels of prior contact with people who have a mental illness were more comfortable in interacting with people who have a mental illness (45).

## **7. Limitation and Strength of the study**

### ***7.1. Limitation of the study***

- Presence of unanswered knowledge questions, especially the open ended ones meant some insights could not be captured.
- The self-administered nature of the questionnaire meant that responses could not be investigated further with follow up questions as would be the case of an interview.
- It is better if this study was supported by qualitative methods.
- Generalization of the findings of this study in other settings needs careful consideration due to geographical and infrastructural differences.
- Lack of Practice related literature which is done on primary health care unit was also one of the major challenges that we faced during the study period.

### ***7.2. Strength of the study***

- This study explored knowledge, attitude and practice of health care workers on mental health perspective by covering study participant from health centers, which were from rural and urban town.

## **8. Conclusion and Recommendation**

### ***8.1. Conclusion***

From the findings of the study, the following conclusions were made

1. Generally participant had low level of knowledge towards mental health
2. Majority of health care workers were reflected negative attitude towards mentally ill people.
3. more than half of health care workers had poor practice towards mental health care
4. Sex and having experience of regular contact with mentally ill people were found predictors of knowledge.
5. Having experience of regular contact with mentally ill people was found predictors of attitude.

### ***8.2. Recommendation***

Based on the study findings and the above conclusions the following recommendations were forwarded.

- ✓ Training should be given to improve HCWs knowledge, attitude and practice towards mental health.
- ✓ It should be better if HCWs have experience of regular contact with mentally ill people since; it has been shown to be a potent factor in reducing stigmatizing attitudes.
- ✓ Our work continues to add weight to the argument that stigma towards mental illness exists across the globe, including Ethiopia where unique culturally appropriate interventions will need to be developed by local government and concerned body.
- ✓ Further qualitative research is needed to better understand the culturally specific thinking of causes of mental illness.
- ✓ Policy makers in the area of health should take the result of this study as an input in the future.

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## ***Annexes***

### ***A: Consent form for the study***

Hello, my name is Bezabih Belay and I am a student at Jimma University College Health Sciences, currently conducting a research to assess Knowledge, Attitude and Practice towards mental health among health care workers of Wolaita Zone. Thus, I am requesting your cooperation to fill out the survey question which will take about 20 minutes to complete. Participation in this survey will be voluntary, and if you don't want to participate or if there is any question you don't want to answer you can skip to the next, or if you choose not to participate you could withdraw at any time. I assure all information that you provide will remain strictly private, and confidentiality of responses would be maintained during and after data collection. Only numbers will be assigned to each copy and no name will be required on the questionnaire. The numbers would facilitate data entry and analysis, so no one can link your identity with the registration numbers. Your individual answers will not be discussed with the staff members. Findings from this research are believed to serve practitioners to design evidence based programs. Moreover studies in similar topics which may be conducted in a different scale and depth can make use this study as a spring board. I hope you will participate in the survey as your feedbacks are important. Thank you for your willingness to be my study participant and taking time to fill study questionnaire.

*If you have any questions & concerns about the study you should contact:*

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***B: Questioners for the study***

Questioners to determine knowledge, attitude, and practice about mental health among health care workers in primary health care unit Wolaita Zone, Southern Ethiopia,2016.

<b>SECTION 1: Questions to assess Socio Demographic Information</b>			
NO.	QUESTIONS AND FILTERS	CODING CATEGORY	Remarks
001	How old are you?	Age in years-----	
002	What is your gender?	1.male 2.female	
003	Marital Status	1.Single 2.Married 3.Divorsed	
004	Which ethnic group would you belong?	1. Wolaita 2.Gamo 3. Sidama 4.Gurage. 5.Oromo 6.Amahara 7.Tigre 8.others-----	
005	What is your educational level?	1.Diploma 2.Degree e 3.postgraduate degree	
006	What is your field of study?	1.Diploma Nurse 2.Bsc Nurse 3.Health officer 4.Midwifery	

007	Have you taken pre service training in mental health?	1.Yes 2.No 3.I don't know	
008	If yes, where do you get?	1.from collage 2.from health professional 3.others_____	
009	If yes for Qua.No 008, is there clinical attachment?	1.Yes 2.No    3.I don't know	
010	What is your work experience?	In years_____	
011	In which Woredas the health facility you work is found	Name_____	
012	In which Health center you work?	Name_____	

<b>Section 2:Health facility related information</b>			
	Questions	Answers	Remarks
201	Do you have time to deliver mental health service in your health center?	1. Yes      2.No	
202	Have you taken in- service training in mental health?	1.Yes      2.No	
203	Do you have experience of regular contact with mentally ill people	1.Yes      2.No	

<b>SECTION 3: Questions to assess Knowledge of the Respondent</b>			
No	Questions and filters	Coding category	Remark
301	What do you think causes/risk factors of mental illnesses?(circle one or all that apply	1.evil sprit    2.due to sins committed 3. Attack from the devil 4.magic      5.will of God 6.unemployment 7.Divorce    8.genetic exposure 9.work overloud    10.loss of loved one 11.confilct in marriage 12.Non mental illness 13.financial constraint 14.physical or sexual abuse 15.Curse 16.Evil eye 17.use of psychoactive substance 18.Nuerochemical imbalance	
302	Please list at Least 4 types of mental illness that you know?		

303	Please List at least 4 mental disorders with their symptoms?		
304	Please Mention types of medication for mental illness at list 4		

<b>SECTION 4: Questions to assess attitude of the respondent</b>						
(negatively worded statement from question 401—415, where as positively worded statement from questions 416-419)						
S.N	Questions	Agree strongly	Agree	Undecided	Disagree	Disagree strongly
401	People with mental illness have unpredictable behavior					
402	If people become mentally ill once, they easily become ill again					
403	People with mental illness are dangerous					
404	It's easy to identify who has a mental illness by the characteristics of their					



	behavior					
405	All people with mental illness have some strange behavior					
406	Find it hard to talk to someone with mental health problems					
407	Even after treatment, I would be doubtful to be around people who has been treated for mental illness					
408	Mental patients should not be treated in the same health center with other people					
409	People with mental illness should not be allowed to work					
410	Political and individual rights of mentally ill persons should be suspended while on treatment to help them					
411	Those with mental illness should not have children					
412	Violent mental patients should be handcuffed					
413	Detention in a solitary place should be considered for people with mental illness					
414	I would not want to live next door to someone who has been mentally ill					
415	traditional healers are better in					

	effectiveness than our medical care					
416	Mentally sick persons are entitled to the same attention in the health center as general patients					
417	Mental illness is a problem for Ethiopia					
418	Mental health care is important					
419	As far as possible mental health services should be provided through community-based Facilities					

<b>SECTION 5: Questions to assess Practice of the Respondent</b>			
S.NO	Questions	Answers	Remarks
501	Is it hard to talk to someone with mental health problems?	1.yes 2.No 3.I don't know	
502	Are you comfortable with attending to people with mental illness?	1.yes 2.No 3.I don't know	
503	Have you ever provided treatment to persons with mental illness in your health center?	1.yes 2.No 3.I don't know	

504	Have you ever supervised by mental health specialist?	1.yes    2.No 3.I don't know	
505	Have you ever referred anyone with a mental illness for treatment?	1.yes    2.No 3.I don't know	If No, skip to question 407
506	Did you receive feedback on the patients you have referred?	1. yes    2.No 3.I don't know	
507	Do you believe that you receive sufficient support from the mental health services to build your capacity?	1.yes    2.No 3.I don't know	
508	Do you think that the health facility where you work can accommodate the care of persons with mental illness?	1.yes    2.No 3.I don't know	

**C: Amharic version Consent form for study**

በወላይታ ዞን ጤና መምሪያ የመጀመሪያ ደረጃ አገልግሎት ሰጭ የህዝብ ተቋማት ሥር የምስሩ የጤና ባለሙያዎች በአይምሮ ጤና ላይ ያላቸውን እውቀት፤ ግንዛቤና አጠቃቀም ሁኔታ ለመገምገም የተዘጋጀ መጠይቅ

**የስምምነት ማረጋገጫ ቅፅ**

ጤና ይስጥልኝ፣እኔ በዛብህ በላይ በጅም ዩኒቨርሲቲ የህብረተሰብ ጤና አጠባበቅ የማስተርስ ድግሪ ተማሪ ነኝ። ይህ ጥናትና ምርምር በወላይታ ዞን ጤና መምሪያ የመጀመሪያ ደረጃ አገልግሎት ሰጭ የህዝብ ተቋማት ሥር የምስሩ የጤና ባለሙያዎች በአይምሮ ጤና ላይ ያላቸውን እውቀት፤ ግንዛቤና አጠቃቀም ሁኔታ ለመገምገም የተዘጋጀ መጠይቅ ነው።ከዚህ ጥናትም የሚገኘው ውጤት ለባለሙያዎችም በማስረጃ የተደገፈ ዕቅድ ለማቀድና በዚህ ዙሪያ ተመሳሳይ ጥናት ለማከናወን ለሚፈልጉ አጥኚዎች እንደመደርደሪያነት ያገለግላል ተብሎ ይታሰባል። ይህንን በፍቃድኝነት ላይ የተመሰረተ መጠይቅ ለመሙላት 15 ደቅቃ የሚፈጅብዎት ሲሆን ለመሳተፍ ካልፈለጉ አይገደዱም፤እንዲሁም መሳተፍ ከጀመሩ በኋላ በማንኛውም ጊዜ አቋርጠው መውጣት ይችላሉ።

ለጥያቄዎቹ የሚሰጥዎቸው መልሶች በሙሉ ሚስጥራዊነታቸው የተጠበቀ ይሆናል። ስለዚህ ስለማንነተዎ እና ስለሚሰጥዎቸው መልሶች በምስጥር መጠበቅ ምንም አይነት ስጋት አይግባዎም። የእርስዎ በዚህ ጥናት ውስጥ ተሳታፊ መሆን ለጥናቱ በተሳካ ሁኔታ መጠናቀቅ ብቻ ሳይሆን በአይምሮ ጤና አገልግሎት መሻሻል ከፍተኛ አስተዋፅኦ ስለሚኖረው በዚህ ጥናት ውስጥ እንዲሳተፉ በአክብሮት እጠይቃለሁ።

ለተጨማሪ መረጃ በስልክ ቁጥር 0913301967/0964978752 ወይም ኢሜይል beza545@gmail.com ልያገኙኝ ይችላሉ።

በጥናቱ ለማሳተፍ ፈቃደኛ ናት?

እሳተፋለሁ \_\_\_\_\_

አልሳተፍም \_\_\_\_\_

ለመሳተፍ ፍቃደኛ ከሆኑ ወደ ቀጣዮቹ ጥያቄዎች ይለፉ።ለመሳተፍ ፈቃደኛ ካልሆኑ ደግሞ አመስግነው ጥያቄውን ያቋርጡ።

**D: Amharic version of the questionnaire for the study**

ክፍል 1: የተጠያቂው አጠቃላይ የማህበራዊ መረጃ የተመለከተ መጠይቅ

ተራቁ	ጥያቄዎች	መልስ	አለፍ
001	እድሜዎ ስንት ነው?	-----ዓመት	
002	ጾታዎ ምንዴ ነው?	1. ሴት 2. ወንድ	
003	የጋብቻዎ ሁኔታ ምንዴ ነው?	1. ያላገባ      2. ያገባ 3. የተፋታ	
004	በሌረሰቦዎ ምንድ ነው?	1. ወላይታ    2. ጋሞ 3. ስዳማ    4. ጉራጌ 5. አሮሞ    6. አማራ    7. ትግሬ ለሎች-----	
005	የሙያዎ ደረጃ ምንድ ነው?	1. ዲፕሎማ 2. ዲግሪ 3. ከዲፕሎማ ወደ ድግሪ ያደገ (postgraduate Degree).	
006	የሙያዎ አይነት ምንድነው ?	1. ነርስ 2. ጤና መኮንን 3. አዋላጅ ነርስ	
007	በሙያዎ ከመስራቶዎ በፊት በአይምሮ ጤና ላይ ስልጠና ወስደዋል?	1. አዎ 2. አይ	መልሱ አዎ ከሆነ ጥያቄ ቁ.08 ይመልሱ
008	ከየት ስልጠናውን አገኙ?	1. ከኮሌጂ 2. ከጤና ባለሙያ 3. ከሌሎች ይጠቀሱ-----	
009	ስለ ስነ-አይምሮ ህክምና ምርመራ (clinical attachment)	1. አዎ 2. አይደለም	

	ከሥልጠናው በኋላ ስር?		
010	በሙያዎ በጠቅላላው ለምን ያህል ጊዜ አገልግለዋል?	-----	
011	የሚሰሩበት ወረዳ ስም	-----	
012	የሚሰሩበት ጤና ጣቢያ ስም	-----	

ክፍል 2: የጤና ድርጅት (healthy facility related) የተመለከተ መረጃ

Section 2: Health system related information			
	ጥያቄ	መልስ	አስተያየት
201	የአይምሮ ህመማንን ለማከም በቂ ጊዜ አለ/ሽ?	1.አለ 2.የለም	
202	ስለ አይምሮ ጤና በሚመለከት የሥራ ላይ ስልጠና (In-service training) ወስደው ያውቃሉ?	1.አዎ 2.አይደለም	
203	በማህበረሰቡ ውስጥ ወይም በጤና ተቋማት ውስጥ ሥራ ስሪ የአይምሮ በሽተኛ ጋር በአካል ተገናኝተው ያውቃሉ	1.አዎ 2.አይደለም	

ክፍል 3: የአይምሮ ጤና የእውቀት ደረጃን የሚዳስስ መጠይቅ

ተራ.ቁ	ጥያቄዎች	መልስ	እለፍ
301	<p>ከሚከተሉት ምርጫዎች ውስጥ ለአይምሮ ህመም የሚያጋልጡ ምክንያቶችን/መንስኤ/ምረጥ?</p>	<ol style="list-style-type: none"> <li>1. እርኩስ መንፈስ</li> <li>2. ሐጥያት ከመሥራት የተነሳ</li> <li>3. ከእርኩስ መንፈስ ጥቃት የተነሳ</li> <li>4. ከመተት የተነሳ</li> <li>5. ከእግር ፈቃድ የተነሳ</li> <li>6. ከሥራ አጥነት የተነሳ</li> <li>7. ከትዳር መፋታት የተነሳ</li> <li>9. ከሥራ ጫና የተነሳ</li> <li>10. የምያፈቅረውን ሰው በሞት ማጣት</li> <li>11. በትዳር ውስጥ መጣላት</li> <li>12. ከሌሎች በሽታዎች የተነሳ</li> <li>13. ከገንዘብ እጥረት የተነሳ</li> <li>14. አካላዊ ወይም የታዊ ትንኮሳ የተነሳ</li> <li>15. ከእርግጫ የተነሳ</li> <li>16. ከቡዳ አይን የተነሳ</li> <li>17. አይምሮን የሚያነቃቁ እዎችን ከመጠቀም የተነሳ</li> <li>18. በአይምሮ ውስጥ ያሉ ከሚካሎች (Neurochemical imbalance) አለመጣጣም</li> <li>19. genetic exposure</li> </ol>	
302	<p>እባከዎን ከምያውቁት የአይምሮ ህመም (mental illness) አይነቶች ቢያንስ አራቱን (4) ይጥቀሱ?</p>		

303	<p>እባክዎን ከምያውቁት የአይምሮ መዛባት(mental disorders) አይነቶች ቢያንስ አራቱን(4) እስከ ምልክቶች ይጥቀሱ</p>		
304	<p>የአይምሮ ህመምን ለማከም ከምያገለግሉ መዲሐኒት አይነቶች ቢያንስ አራቱን (4) ይጥቀሱ?</p>		



**ክፍል 4 :ተሳታፊው ስለ አይምሮ ጤና ያላቸው አመለካከት የተመለከቱ ጥያቄዎች**

ተራ.ቁ	ከሚከተሉት ነጥቦች የሚሰማዎትን ይመልሱ	በጣም እስማማለሁ	እስማማለሁ	መካከለኛ	አልሰማማም	በጣም አልሰማማም
401	የአይምሮ ህመም ያለባቸው ሰዎች የማይገመት ባህሪ አለባቸው					
402	ሰዎች አንደዉኑ በአይምሮ ህመም ከተጠቁ በቀላሉ በተደጋጋም ይታመማሉ					
403	የአይምሮ ህመም ያለባቸው ሰዎች አደገኞች ናቸው					
404	የአይምሮ ህመም ያለባቸውን ሰዎች በቀላሉ ከምያሳዩት ባህሪ ተነስተን መለየት እንችላለን					
405	ሁሉም የአይምሮ ህመም ያለባቸው ሰዎች የተለየ ባህሪ ያሳያሉ					
406	የአይምሮ ህመም ካለባቸው ሰዎች ጋር ማውራት በጣም ከባድ ነው					
407	ከህክምና ቦኃላም ቢሆን እንኳን አጠገባቸው መሆን በጣም ያስፈራል					
408	የአይምሮ ህመም ያለባቸው ሰዎች ከሌሎች በሽተኞች ጋር ሆነው በአንድ ጤና ጣቢያ መታከም የለባቸውም					
409	የአይምሮ ህመም ያለባቸው ሰዎች ሥራ እንድሰሩ መፈቀድ ተገቢ አይደለም					
410	የአይምሮ ህመም ያለባቸው ሰዎችን ለማከም ስባል የፖለቲካና የግል መቢታቸው መከበር የለበትም					
411	የአይምሮ ህመም ያለበት ሰው ልጅ ልኖረው አይገባም					
412	የምረብሽ የአይምሮ በሽተኛ በሰንሰለት መታሰር አለበት					
413	የአይምሮ በሽተኞች ለብቻቸው በተዘጋጀላቸው ቦታ መቆየት አለባቸው					

414	የአይምሮ በሽተኛው ቤቱ እኔ ከምኖርበት ቤት አጠገብ ከሆነ አልኖርም					
415	የአይምሮ በሽተኛ ለማከም ከዘመናዊ ህክምና ይልቅ የባህል ህክምና የተሻለ ነው					
416	የአይምሮ በሽተኞች እንደሌሎች በሽተኞች በጤና ጣቢያ ውስጥ በእኩል መታየት አለባቸው					
417	የአይምሮ ህመም በእትዮጵያ የህብረተሰብ ጤና ችግር ነው					
418	የአይምሮ ጤና ህክምና አስፈላጊ ነው					
419	የአይምሮ ጤና አገልግሎት በተቻለ መጠን ህብረተሰቡን ባማከለ ጤና ተቋም መሰጠት አለበት					

**ክፍል 5 :ተሳታፊዉ ስለ አይምሮ ጤና ህክምና ተግባሪ የተመለከቱ ጥያቄዎች**

ተራቁ	ጥያቄዎች	መልስ	አለፍ
501	የአይምሮ ጤና ችግር ካለበት ሰው ጋር ማውራት ከባድ ነው?	1.አዎ 2.አይደለም	
502	የአይምሮ ህመም ያለባቸውን ሰዎች ተከታትለው ማከም ይመቻታል?	1.አዎ 2.አይደለም	
503	በጤና ጣቢያው ውስጥ የአይምሮ ህመምተኛን መርምራ አድርገው ያውቃሉ?	1.አዎ 2.አይደለም	
504	በስነአይምሮ ጤና ስፔሻልስት ስለአይምሮ ህክምና ድጋፍና ክትትል ተደረገው ያውቃል?	1.አዎ 2.አይደለም	
505	የአይምሮ ህመም ያለበትን ሰው የተሻለ ህክምና ወደ ሚዳኒን በት ሪፔር አድርገው ያውቃሉ?	1.አዎ 2.አይደለም	መልሱ አዎ ከሆነ የሚቀጥለውን ይመልሳል
506	ሪፔር ስላደረጉት በሽተኛ ግብረ መልስ ደርሶት ያውቃል?	1.አዎ 2. አይደለም	
507	ስለ አይምሮ ህክምና አገልግሎት በምመለከት ተገቢውን ድጋፍ ከሚመለከተው አግንቻለሁ ብለው ያስባሉ?	1.አዎ 2.አይደለም	
508	እርሶዎ የምስሩበት ጤና ጣቢያ የአይምሮ ህመምተኛን ለማስተናገድ በቂ ነው ብለው ያስባሉ	1.አዎ 2.አይደለም	

## ***I: Bloom's cut off point and coding of the scores***

### **Knowledge section**

A correct answer was given 1 score and 0 score for wrong answer. The scores vary from 0-14 points and were classified into 3 levels as follows: Bloom's cut off point, 60%-80%.

#### **Scores Descriptions**

- 11-14 (80-100%) High levels
- 8-10 (60-79%) Moderate levels
- 0- 7 ( $\leq 59\%$ ) Low levels

#### **Attitude section**

The rating scale for attitude questions on a Likert's scale which include both positive and negative was scored as follow:

Positive statement		Negative statement	
Options	Score	Options	Score
Strongly Agree	4	Strongly Agree	0
Agree	3	Agree	1
Neutral	2	Neutral	2
Disagree	1	Disagree	3
Strongly Disagree	0	Strongly Disagree	4

The scores were classified into 3 levels (Positive, Neutral and Negative Attitude).

- Positive Attitude 61-76 scores (80%-100%)
- Neutral Attitude 46-60 scores (60%-79%)
- Negative Attitude 0-45 scores ( $\leq 59\%$ )

**The practice section:** the overall practice status towards mental health is said to be (good, fair and poor) based on the same criteria (Bloom's cut off point, 60%-80%).

Score	description
<input type="radio"/> 7—8 (80%---100%)	good practice
<input type="radio"/> 5---6 (60%---79%)	fair practice
<input type="radio"/> 0---4 ( $\leq 59\%$ )	poor practice