COLLEGE OF HEALTH SCIENCE AND MEDICINE

DEPARTMENT OF PUBLIC HEALTH

KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS TUBERCULOSIS AMONG CLIENTS VISITING WORABE COMPREHENSIVE SPECIALIZED HOSPITAL INTERNAL MEDICINE OUTPATIENT DEPARTMENT, 2021

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Declaration

The undersigned agrees to accept responsibility for the scientific, ethical and technical conduct of the research project and for provision of required progress reports as pre terms and conditions of the research and publications office of the Wolkite University.

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Acronyms and abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CI	Confidence Interval
EPTB `	Extra Pulmonary Tuberculosis
HIV	Human Immunodeficiency Virus
KAP	Knowledge, Attitude, Practice
OPD	Out Patient Department
SNNPR	Southern Nation National People Regional
TB	Tuberculosis
TV	Television
WCSH	Worabe comprehensive specialized hospital
WHO	World Health Origination
WKU	Wolkite University

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Abstract

Background: - Ethiopia remains to be one of the 30 countries with high burden of tuberculosis, Tuberculosis and Human immunodeficiency virus for 2021-2025 in the world. Lack of appropriate knowledge and attitude of peoples about TB affects the health seeking of patients and sustain the transmission of the disease, one of the bottlenecks in decreasing the disease burdens.

Objectives: - to assess knowledge, attitude and practice towards TB among clients visiting worabe comprehensive specialized hospital medical outpatient department 2021

Methods: -Institutional based cross sectional study was conducted in Worabe comprehensive specialized hospital, worabe town among 172 randomly selected participants. A structured questionnaire was used to collect the data by a face-to-face interview October 2021.the collected data was checked daily for completeness and consistency then data were entered into SPSS version 20 for descriptive analysis

Results: A total of 172 (83%) respondents have heard about TB, while (83.7%) respondents said cough as symptoms of tuberculosis. Only 9.3% of participants mentioned bacteria as the cause of the diseases and 77.3% considered that the transmission during TB patients coughs or sneeze. The majority (70.3%) of participants responded that its transmission is preventable and overall 42.5% had high overall knowledge about TB. 51.3% of the participants were having a favorable attitude towards tuberculosis. But only 38.4% had good practice in preventing tuberculosis.

Conclusion: compared to many national and international studies, knowledge, attitude and practice towards tuberculosis was not satisfactory. Strengthening of awareness creation and health education program towards tuberculosis is needed

Chapter one

1. Introduction

1.1. Back ground

Tuberculosis (TB) is a communicable disease that is a major cause of ill health including Ethiopia, one if the top 10 cause of death worldwide and the leading cause of death from a single infectious agent (ranking above HIV/AIDS) (1).It is caused by the bacillus *Mycobacterium tuberculosis* and characterized pathologically by inflammatory infiltration, formation of tubercles, cassation, necrosis, abscesses, fibrosis and calcification (2).

TB primarily affect the lung (pulmonary TB which account 80%) but the disease can spread to other organs (extra pulmonary TB 20% of cases) including the gastrointestinal and genitourinary tracts, bones, joints, nervous system, lymph node and skin. The bacilli spread by lymphatic and blood stream and reach extra pulmonary organs (2) and TB is transmitted person to person when people who are sick with TB expel bacteria into air; for example, by coughing, sneezing or speaking.(1)

About a quarter of the world's population is infected with *Mycobacterium tuberculosis.* TB can affect anyone anywhere, but most people who develop the disease are adults, there are more cases among men than women, and 30 high TB burden countries(including our country) account for almost 90% of those who fall sick with TB each year(1). and also Co infection with HIV/AIDS, malignancies, chronic disease, treatment with steroid and malnutrition are important risk factors for development of the disease(2)

Its clinical features are Productive cough of whitish or blood streaked sputum that persists more than 2 weeks, intermittent fever, night sweating, loss of appetite, and weight loss … are the most important features. TB is diagnosed by acid fast bacilli microscopy of the sputum like the other communicable disease it is preventable and treatable disease (2).

TB is curable and preventable. About 85% of people who develop TB disease can be successfully treated with a 6 month drug regimen; treatment has additional benefit of curtailing onward transmission of infection, since 2000, TB treatment has averted more than 60 million deaths, although with access still falling short of universal health coverage (UHC), many millions have also missed out on diagnosis and care. By implementing easy preventive method we can reduce TB (1).

TB is a disease of poverty, and economic distress, vulnerability, marginalization, stigma and discrimination are often faced by people affected by TB (1). But good public awareness about TB, its cause, mode of transmission, treatment and prevention is considered to be important for prompt health care seeking adherence to treatment and reduction of stigma associated with the disease. Ethiopia is facing high tuberculosis burden even if it is preventable and curable. Individuals KAP toward the disease are one of the bottlenecks in decreasing the disease burdens (3). Therefore, the current study will be undertake in worabe comprehensive specialized hospital to assess the KAP towards TB

1.2. Statement of the problem

Tuberculosis is a major public health problem in Ethiopia posing significant deleterious health impact by affecting the productive segment of population and resulting serious burden of health system and exploiting the individual/household economy (4).Additionally, people who suffer from other conditions that impair immune system (HIV) are at high risk of developing TB. The HIV pandemic presents a massive challenge to the control of TB at all levels. The synergy between TB &HIV/AIDS is strong. In high HIV prevalence, TB is the leading cause of morbidity and mortality, and HIV is driving the TB epidemic in many countries, especially in developing countries (5).

In 2019 world health organization estimated that 10.0 million new cases of TB globally, including 815,000 new cases in people living , although active TB is treatable and curable in most cases ,an estimated of 1.4 million people who died from TB, and 208,000 were HIV positive(6) .In 2004, Ethiopia started TB/HIV collaborative activities and have succeeded in saving lives of hundreds of thousands of affected citizens. Despite this, Tuberculosis (TB) remains to be the leading causes of death of people with HIV, accounting for around 40% of AIDS-related deaths. Both diseases together form a lethal combination, each speeding the other's progress (4).According to the data from Global WHO report in 2020, in 2019 10,000 people living with HIV fell ill with TB and around 2800 people died were HIV positive.(1)

Each year an individual with active TB can infect up to 5-15 other people through close contact over the course of a year. Moreover, in a community with low level of awareness about the cause, mode of transmission and preventive methods, the spreading of TB could be high .the estimate for the year 2019 global TB incidence rate were 130 new cases per 100,000 populations. The vast majority of cases and death occur in recourse limited countries (6)

Ethiopia remains to be one of the 30 countries with high burden of TB, TB/HIV for 2021-2025 in the world. In 2019 Ethiopia register 157,000 cases and it’s case detection rate 71% in the same year and it’s incidence of TB rate was 140 cases per 100,000 populations although treatment

success rate of TB patients had increased steadily up to 88%. TB related mortality accounts 16,000-34,000 (1)

The reason behind the high burden of TB in Sub Saharan Africa including Ethiopia is delay in seeking health care and poor treatment compliance (7). Most country in sub Saharan Africa is also experiencing a great burden of HIV infection and hence the high degree of overlap between TB and HIV infection has also increased the risk of tuberculosis infection in Africa country (7).Studies from the developing country have shown that delayed care is closely related with patient's demographic characteristics(8) knowledge of TB and traditional believes (9), the use of multiple alternative traditional care (10) and fear of stigmatization(11) lacking knowledge of TB among the general population could contribute to prolong delayed in seeking TB care.

Although there is an effort to reduce and curve the transmission rate of TB in Ethiopia still a lot has to be done to reach the intended goal in country like Ethiopia where the prevalence of TB and HIV co infection is very high there should be continues research program need to be in place and the country develop TB road map operational research program. Our country problem of TB will be very high as compared to developed country where the life style of people is highly inevitable for high transmission of TB and also one of the 30 high burden country so continuously our community exposed to TB cases due to inadequate knowledge, poor attitude and practice of TB preventive and treatment measures to avoid the spread to others. (12)

1.3. Significance of study

Previously study has not been conducted to assess knowledge, attitude and practice towards TB among clients visiting worabe comprehensive specialized hospital medical outpatient. The study was undertaken to have better understand TB-related knowledge, attitudes, and practices (KAPs) on the study participant so the result which obtained from this study can be base line for future study. Governmental and nongovernmental organizations can utilize the finding for intervention program and finally health professionals may use the result obtained from this study for health education especially for promoting good public awareness of TB, its cause and symptom, mode of transmission, treatment and prevention methods and for other intervention programs.

Chapter Two

2. Literature review

2.1 knowledge toward tuberculosis

TB is inequitably distributed and clustered among disadvantaged and socioeconomically deprived population groups. TB is primarily a disease of the poor and its magnitude is high in socially disadvantaged population or people residing in poor living condition, which are characterized by lack of education, poor housing, inadequate nutrition, overcrowding, and socioeconomic factors which leads to delay in health care seeking due to lack of knowledge about symptoms of TB and of prevention measures. Generally, TB related knowledge vary across countries, ranging from an understanding of its infectious cause to the belief that its cause is the evil eye. Those who had adequate knowledge about TB are expected to contribute improved health seeking behavior (3).

A community based cross sectional studies conducted in India show that most of the people (93.2%) had heard of TB, 96% did not know the causatives agent of TB as bacteria or germ, 52% had significant knowledge about the predisposing factors, only 21% know how TB is spreading and 68.4% consider TB as a big problem; however the preventable measure was low (13).

Another community based study conducted in Tanzania reported that most of the respondents (100%) know the symptom of pulmonary TB, 67% know TB is treatable and 32% thought PTB is causes by punishment from GOD. (14)

In a study conducted in America on Immigrants from Ethiopia reported that most of the respondents mentioned exposure to cold temperature as a cause of pulmonary TB, egg yolks and a mixture ofaged butter and honey use as a cure from pulmonary TB. (15)

A similar study conducted in Arbaminiche (community based) showed that most of the respondents (87.8%) had heard of PTB, only cough was well know by (95%) of the respondents, 86.4% did not know the cause of PTB as bacteria, 62% had wrong believe on the mode of transmission of pulmonary TB, 93% believed that pulmonary TB is curable with modern drugs

and 98.9% reported pulmonary TB as a series disease. About 32% of the respondent knows that pulmonary TB and HIV/AIDS are related to each other (16).

Another community based cross sectional study conducted in Afar region showed that only 0.3% of the respondents know that pulmonary TB is caused by bacteria or germs .Cold air (45.9%), shortage of food (38%) and dusts (21.8) were frequently mentioned a factor as the causes of pulmonary TB. The majority (87.7%) know that pulmonary TB is treatable with modern drugs. Coughing or breathing (80.6%) and sharing cups (77.6%) with the patients were frequently mentioned as a route of transmission for pulmonary TB. Majority of the respondents (82.5%) reported that transmission of pulmonary TB would be preventable mainly by avoiding sharing cups (94%) with a known pulmonary TB patient, using separate rooms (70.5%) and covering their mouth by cloths during coughing (53.2%) (17).

In a study conducted IN Gilgele Gibe showed that most of the respondents (83%) had ever heard of PTB, 50.4% mentioned ‘evil eye’ as a causes of pulmonary TB (18).

Another community based cross sectioned study conducted in Tigray region, Northern Ethiopia, shows that almost all of the respondents (86.8%) had heard about pulmonary TB from health professionals (41), friends (34.3%) and relatives (14.5%), public radio (3.2%) and television (0.6%) for the 1st time. Exposure to cold (37%), germ/virus (9.6%), malnutrition (4.5%) and poor sanitation 4.7 % were regarded as a primary cause of pulmonary TB while 33.3% of respondents did not know any cause of pulmonary TB. Most respondents (67.9) believe it could be transmitted from pulmonary TB patient to healthy by coughing (62.5%), milk (35.7%), eating together (40.3%) and inherited from parent to child (33.2%). Cough loss of Weight and night sweats were mentioned as symptoms of PTB by 71.5%, 66.5% and 33.5% of the respondents respectively. Majority of the respondents (88%) believe that tuberculosis is a deadly disease, 69.4% of the respondents also state that the disease is curable with modern therapy. Isolation from the diseased (25.1%), proper sanction (13.2%) and vaccination (13.9%) were modalities of prevention of PTB mentioned by the respondents. (19)

Another study conducted in general population of Ethiopia finding from national cross sectional survey shows 95.5% study participant had heard about TB and 25.8% knew that TB is caused by bacteria. However, 47% of the participant did not know the cause of TB .cough or sneezing was reported as a means of TB transmission by 70.4% of the respondents .the commonest symptoms were cough in 85.5%, chest pain in 17.2%, fever in 17.1%, and other symptoms (weight loss, poor appetite, night sweats, blood in the sputum, shortness of breath, fatigue, or body swelling) in 67.6% of participants.

Most of the study participant 75.9% knew that anyone could get TB. Lung and bone were mentioned to be affected most by 80% and 23.3% of participants respectively.85.3% knew that TB could be cured by taking medicine. In this study Gambella and oromia had higher knowledge than other regions, while amhara region had lower knowledge compared to other regions. There was no significant difference whether the participant were from urban or rural kebeles. Generally knowledge scores were higher in families of TB patients and TB patients compared to the general population (3).

2.2 Attitude toward Tuberculosis

Attitudes about TB and health care–seeking are shaped by educational status, knowledge, and socioeconomic conditions The level of community awareness about TB shapes the perceptions of the community about TB and affects health care–seeking behavior, the type of support the patient receives from the household or community, adherence to treatment, and future engagement in TB prevention and control effort. a study conducted about global cultural variations in knowledge, attitudes and health responses to tuberculosis stigma showed that TB is experienced as embarrassing and shameful in Congo, Zambia, the United States and Malaysia. This ‘dirty’ disease is believed to affect poor people; patients with TB feel less respected by others or inferior in Ethiopia and Viet Nam, with women in Bangladesh feeling shame and rejected by others Discrimination was reported in South Africa, Indonesia and Nepal. In Brazil,

TB is perceived as difficult and isolating, changing a person’s perception. Fear of infection was reported in Ghana, South Africa, Zambia and Colombia and in North Carolina, United States.

Cough is extremely stigmatizing in Bangladesh and India. Greater TB stigma is experienced by Thai patients if they have more symptoms, in Ghana if they have more physical frailty, and in Nigeria if they have weight loss or a history of smoking or drinking. Different societies have different levels of acceptance for patients with TB. People with TB may be ostracized; others are fearful of physical contact with persons with TB in Ethiopia and Pakistan. However, family and friends in Malaysia or the United Kingdom believe that TB is socially acceptable and do not feel threatened (20).

Social isolation for patients with TB has been reported in Congo, Ethiopia, South Africa, Pakistan and Croatia, and among Samoans and African Americans in the United States. Women fear isolation in India and Viet Nam, and loneliness is reported by Turkish patients. Loss, sadness and dissatisfaction are common among patients with TB in Brazil. Marriage prospects are affected as a result of TB in Ghana, Pakistan, India and China. Ethnic identity is negatively associated with TB among Haitians in the United States. Adults who were tested for TB in Ecuador reported feeling stigmatized just by undergoing testing (20).

A study conducted in Malaysia 31%, showed positive attitude by strongly disagree when they were asked if they will feel embarrassed if they have TB but a few respondents (10%) who strongly disagree that they would not mingle with TB patients. Only 1% respondent strongly agreed that they were at high risk of getting TB and about 17% of respondents agreed that people other than their family members were at high risk of TB infection. Besides, about 15% of respondents believe that TB infection can infect certain people only, while 38% and 34% respondents showed positive attitude about covering their mouth when they coughed and sneezed, respectively, to avoid from spreading TB. 54% of the respondents agreed that they will go to the health centers if they have TB (21).

On the other hand, regarding the attitude or stigma towards TB patients, only 15% of respondents strongly disagreed with TB patients should not be mixed with other people even under treatment. Although, 57% of respondents strongly disagreed that TB can only infect poor people. Again, only 18% of respondents strongly agreed that TB cannot only affect dirty people.

Merely 10% and 17% respondents said that they were not afraid to mingle with TB patients and did not mind to touch TB patients or their stuff, respectively. 34% of the respondents strongly disagreed with firing their employees who have TB or treated patients, while 21% and 27% of respondents strongly disagree that they will not marry TB patients and will stay away from their spouses who have TB, respectively (21)

A national wide survey stigma and attitude toward tuberculosis in Ethiopia showed that 64.5% of the study participant reported that they could cope with TB BUT 31.9% expressed fear. When asked who they would tell 82.7% of the participants reported that they would inform a doctor while 21.5% would tell a spouse, 16.5% close friends and 25.7% family members. The majority 95.8% of the participants reported that they would go to public facilities while 14% reported that they would go to private facilities.

More than two thirds (68.5) of the community felt compassion for TB patients but 20.5% stated that TB patients are rejected by the community. Some participants 11,9% would keep TB disease secret, but 84.5 % disclose their status, and if they did so 84.6% would tell family members. From the participants 18.1% reported that the community would think less of them, 24.2% said the community would avoid them 15.1% said they would be asked to stay away, 14.9% would be ashamed .and 9% of the participant reported of TB patients that they would not disclose TB disease to a confidant 16.4% would think less of them, and 6.5 % expected that family would think less of them (22).

Among family members of TB patients 63.1% reported that they could get TB and 68.5% reported that that they would cope with if they did and 84% reported they would like to talk to medical personnel if they had TB ,8.9% reported that they would not disclose their status even to confidant, 78.2% reported that they would feel compassion and want to help them and from the participants around 25.2% and 21.6% indicated that the community avoided and rejected them respectively furthermore 18.6% and165 reported that others thin less of them if they had TB respectively (22).

In another national survey about KAP toward tuberculosis in Ethiopia reported that, the community was supportive of TB patients within the household and helped patients to adhere to treatment. This could be due to the low prevalence of HIV, socio cultural values of communal living, and lower awareness about TB transmission in rural settings. Among the study participants interviewed, 76% were heads of households or their spouses. This might have contributed to the creation of supportive communities. Studies from urban areas, however, indicate that there are negative perceptions about TB due to high HIV prevalence and its associations (3).

Most of the study participants mentioned that they could cope with TB if they acquired it. Compared to the report from Nigeria that reported depression as high as 45% among patients and 13.4% among family members, we found only about 5% of people with reactions that included surprise, shame, embarrassment, sadness, or hopelessness. This could be due to the lack of awareness about the risk of acquiring TB, as 49% of our respondents did not know that anyone can get TB (3).

2.3 practice on prevention and control of tuberculosis

Data on national survey in Ethiopia show that regarding the practice, from those who had a window in their home (71%), only 30% opened their window regularly and only 32.5% opened car window during traveling. These practices are bad in the area where TB is prevalent like in Ethiopia and particularly in the study area as these practices facilitate the transmission of the TB. The study also pointed out that only 20.5% had screened for TB. Such practice is not only limited to the study area as it was previously reported from studies done in the Mecha district (19.4%) and Thailand (18.6%).In this study respondent who received health education was only 17.5% and who covered their mouth and nose during coughing were 15%. The finding regarding covering mouth and nose while sneezing or coughing is much lower than studies done in the Mecha district20 in which 65.5% practiced such behavior and Mongolia in which 42.9% covered their mouth and nose during coughing and sneezing. Overall, participants with good practice in

the prevention of TB were 44.4%, which is in line with studies done in Iran in which 42.6% had a good practice (3).

In this study identified that the majority (82.5%) of the participants did not receive any health education about TB during their visit to the health facility. This could affect the participants' habit in the prevention and control of TB and this finding is not supported by CDC as it suggests providing training and education for patients, community groups, and the general public is on of strategy in the prevention and control of TB. Again, not receiving health education could affect the treatment-seeking behavior of participants as the study suggests providing health education strategies like delivering basic information about signs/symptoms of TB to individual or group can shorten the diagnosis and delayed treatment which decreases the transmission rate in the community. Continuous education regarding some aspects of TB to clients visiting the health facility which may be in the morning before the beginning of routine hospital work is one of educational strategy in the prevention and control of TB (3).

Chapter Three

3. Objectives

3.1. General Objective

The aim of these studies is to assess the knowledge, attitude and practice toward TB among clients visiting internal medical outpatient department in worabe comprehensive specialized hospital, worabe, Ethiopia in 2021

3.2. Specific Objective

- To assess the knowledge of the clients visiting medical OPD in worabe comprehensive specialized hospital towards TB
- To assess their attitude towards TB cause, treatment (modern, traditional) and PTB patients.
- To assess practice on prevention and control of TB.

Chapter Four

4. Method and Materials

4.1. Study area and period

The study was conducted in worabe comprehensive specialized hospital, worabe town from August 11/2013E.C up to October 2014E.C.Worabe is a town in south central Ethiopia, which is found in the silte zone of the Southern Nations, nationalities and people region (SNNPR). It has a latitude and longitude $8^{0}1$'N$38^{0}20$'E with an elevation of 2113 meters above sea level. Worabe comprehensive specialized hospital is one of referral center and it is located in worabe town which is 170Km far from south of Addis Ababa. The hospital provide OPD services in four major wards that is internal medicine , surgery, gynecology and pediatrics and also serve minor wards for Eye clinic, Dental clinic and Psychiatry room. The staff members who give the overall health care services are 6 sub specialists 40 specialists , 53 general physicians, 2 dentist ,3 public health officers, 151 BSC nurses, 52 midwiferys,11 psychiatrists, 7 ophthalmologists ,24 anesthetists, 6 radiologist, 4 biomedical workers, 69 clinical nurses, 40 laboratory technician , 41 pharmacy professional , 7 masters, and 4 environmental health professionals which makes a total of 520 health care workers are dedicated in giving health care services.

The common diseases at worabe comprehensive specialized hospital in the internal medicine department are hypertension ,diabetes mellitus, tuberculosis ,pneumonia, asthma, stoke, cardiac cases like(congenital heart diseases, congestive heart failure…) malnutrition ,meningitis , peptic ulcer disease , retro viral infection found in major wards and also in OPD. The patient flow is very high in medical OPD and the physician always there to give the services.

4.2. Study design

Institutional based cross sectional study was under taken.

4.3. Population

4.3.1. Source population

Adult clients who visit medical outpatient department of the worabe comprehensive specialized hospital in 2021

4.3.2. Study population

Adult clients who visited medical outpatient department of the worabe comprehensive specialized hospital who was eligible for the study sample at the time of data collection

4.4. Inclusion and exclusion criteria

4.4.1. Inclusion criteria

Adult clients who visit medical outpatient department of worabe comprehensive specialized hospital in 2021

4.4.2. Exclusion criteria

Those children (<18 years old), unconscious, unable to hear or speak and those with psychiatric disorder.

4.5. Sample size determination

The sample size was determined by using a standard formula for a single population proportion. A non respondent rate of 5% was calculated and this number was included in the study by using 95% confidence on interval and 5% margin of error the sample size was determined as follows.

No= Z^2 (Pq)/W^2

Where

No: sample size of population assuming more than 10,000 total population.

P: 0.853…. (3)

W: 0.05 (margin error between the sample and population)

Z: 1.96 (critical value at 95% confidence interval)

q: 0.5(1-p)

Therefore

No= $(1.96)^2(0.853)\ (0.147)/\ (0.05)^2$ = 193

Since the target population which is less than 10,000 the actual sample size (n) will be calculated as

$$n = \frac{No}{1 + \frac{No}{N}}$$

N= actual sample size

No= sample size in population more than 10,000

N= target population

N= $\frac{193}{1+\frac{193}{1071}}$ =164

None response rate=164x5%=8

164+8=172hence, a total 172sampletaken.

4.6. Sampling procedure

A systematic sampling technique was apply to collect data from participants. To determine the sampling interval (k-th) one month maximum number of clients who visited medical outpatient department before the actual data collection taken which is 1071. the sampling interval for this study is 6. Throughout 1 to 6, number 2 randomly selected. This was the starting point to collect the data

4.7. Study variables

Dependent variables

- Knowledge about TB
- Attitude towards TB and TB patients
- Practice towards TB control and prevention

Independent variable

- Age
- sex,
- marital status
- ethnicity
- religion
- occupation
- family income
- educational status
- family size
- Ownership of radio/TV
- Housing condition; - number of window, door…..

4.8 Operational definition

Good Knowledge; If the study participant got mean score and above on questions designs to assess the knowledge

Poor knowledge; If the study participant got less than mean score on questions designs to assess knowledge

Favorable attitude; if the study participant got mean score and above on the questions designs to assess the attitude

Unfavorable attitude; if the study participant got less than on the mean score questions design to assess the attitude

Good practice; If the study participant got mean score and above on questions designs to assess the practice

Poor practice; if the study participants got less than on the mean score questions designs to assess the practice

4.9. Data collection tool and procedure

Structured interview questionnaires were used to collect data, first, the questionnaire prepared in English and translated to Amharic .the questionnaire contain questions related to socio demographic, knowledge, attitude and practices toward TB The questionnaire develop by adapting from previous similar studies and reviewing of different literatures. Pretesting of questionnaire undertaken before the actual data collection takes place. The interview was face to face by interviewing of the study subject by using interviewer administer structured questionnaire. Data collected by investigators and checked for completeness and consistency every day.

4.10. Data quality control measures

The questionnaires were first prepared in English translated to Amharic for actual data collection then translated questionnaires were retranslated to English. The investigators conducted this and the necessary modification was done when appropriate, each day the data checked for completeness and consistency refilled if any. Prior to the actual data collection questionnaire 10% of the questionnaire pretested to evaluate reaction of the respondent to the research procedure data collection tools, sampling the procedures, and activities of research team, procedure for data processing and analysis ,the proposed work plan and budget for research activities

4.11. Data processing and analysis

After data collection, each questionnaire was checked for completeness and code was given during data collection. Data was cleaned for missed values and inconsistencies and analyzed by using SPSS version 20 and it was presented by using tables and charts and interprets by comparing the prevalence in other studies with what was found in our study

4.12. Ethical consideration

Formal written permission letter for all possible supports was written from department of public health of department, college of health science and medicine, Wolikite University to worabe

comprehensive specialized hospital. After Permission obtain each respondent was asked for verbal consent, cultural and religious norms and values was respected throughout the course of the study. After a full explanation about the purpose of the study, consent was obtained from the study subjects. The respondents have the right to refuse or agree to participate in the study after being informed about it. Privacy during data collection and confidentiality of the collected data was ensured

4.13 Dissemination plan

The result of our study was presented at WKU, for college of health science, department of Public health and then the hard copy submitted to department of public health. In addition, the hard copy of the finding also would sent to worabe comprehensive specialized hospital. The dissemination of the finding is not referring specific respondent but the general source population.

Chapter Five

5. Result

5.1Socio demographic characteristics of the study participant

A total of 172 respondents, 95(55.2%) were male and 77(44.8%) were female involved the study made a response rate of 100%. In this study 90.7% of the respondents were age less than 50 and from this 48.8% of them with the range of 18 and 24 years and also 41.9% of the with the range of 25 and 49 years the remaining 9.3% of the respondent 50 and above. The mean age of the respondents was 32 year.

Table 1 Socio-Demographic Characteristic of the Respondents in worabe comprehensive specialized hospital, Ethiopia 2021

Variables	Category	Frequency	Percent
Marital status	Married	87	50.6
	Single	35	20.3
	Divorce	34	19.8
	Widow	16	9.3
Religion	Orthodox	22	12.8
	Muslim	139	80.8
	Protestant	11	6.4
Educational status	Illiterate	16	9.3
	1-8	69	40.1
	9-12	54	31.4
	Higher education	33	19.2

The majority (80.8%) of respondents were Muslim by religion while 120 (69.9%) participants were silite by ethnicity and about 69 (40.1%) participants attended their primary school.in our study the results shows that 21.5% of the participants were merchant, 19.2% of them farmer ,20.9% of them house wife and 10.5% of them students. the remaining of the participants were laborer and employer 8.7% and 9.3% respectively but only 9.9% of the participants were unemployed.

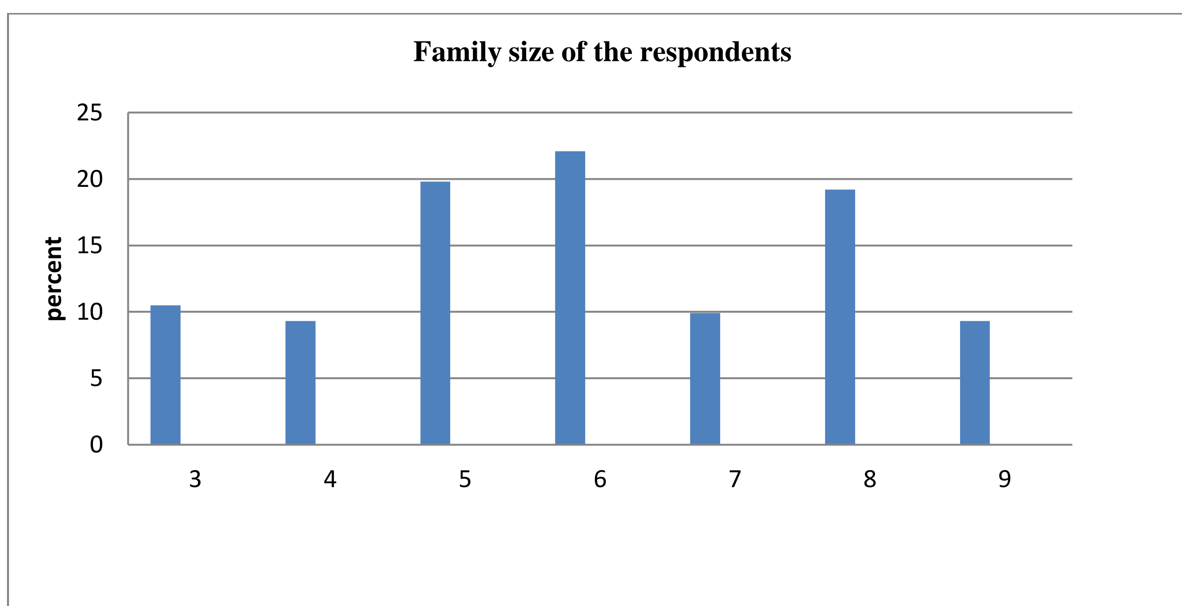

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Figure i showing participants family size of the respondent in WCSH Ethiopia 2021

The result of this study shows that 51(29.7%) of the family have an income of between 500 and 1500ETB,53(30.8%) have an income of between 1501-3500 ETB ,19.2% of the participant had an income between 3501 and 5000ETB. The remaining 20.3% participant has an income of greater than 5000ETB

5.2 Knowledge towards TB

Among the participants, 155(90.1%) had heard information about TB. About 85(49.4%) respondents get the information from health worker and 30.8% of them get from TV.

Table 2 Showing Participants' Source of Information about TB in WCSH, Ethiopia 2021

Variable		Frequency	Percent
Heard about TB	Yes	155	90.1
	No	17	9.9
Source of information	Radio	68	39.5
	TV	53	30.5
	Health care worker	85	49.4
	Other	82	47.7

Regarding each knowledge item, only 16 (9.3%) study participants mentioned bacteria as the cause of the diseases , while 28 (16.3%) did not know the sign and symptoms of TB.

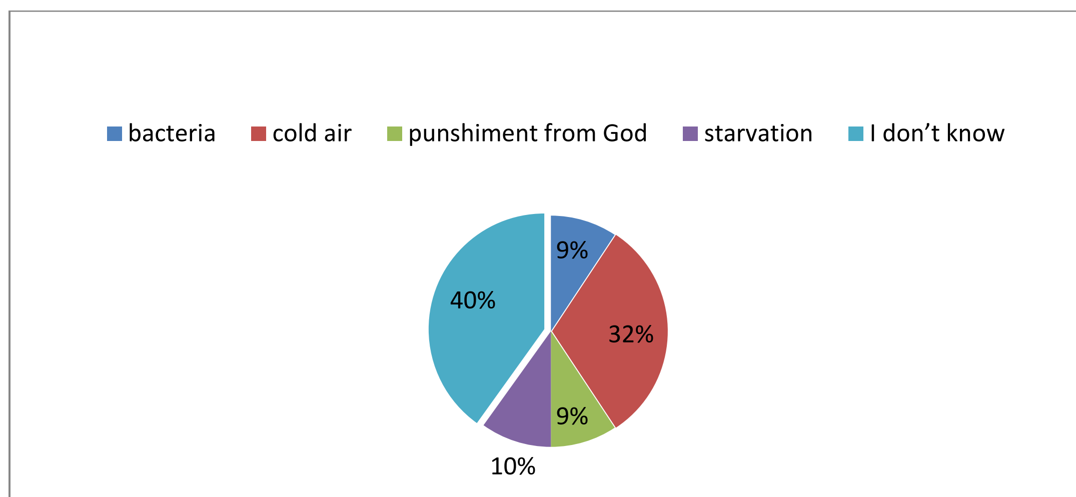

Figure ii Participants' response to the causes of tuberculosis in WCSH, Ethiopia 2021

One hundred thirty three (77.3%) of participants responded the mode of transmission as through the air when a person with TB s cough, the majority (86.6%) said TB can be transmitted from person to person. The majority (70.3%) of participants responded that its transmission is preventable, and all of them replayed that covering the mouth and nose while coughing or sneezing is a possible method to prevent the transmissions.

Table 3 Showing Participants' Knowledge about Signs/Symptoms, Transmissibility, Mode of Transmission, Prevention, Method of Prevention for TB in WCSH, Ethiopia 2021

	Category	Frequency	Percent
Who can be infected with TB	Anyone	119	69.2
	HIV infected people only	37	21.5
	Poor people	16	9.3
Body parts affected by TB	Lung	139	80.8
	Intestine	11	6.4
	Lymph node	14	8.1
	Bone	15	8.7
	All body part	16	9.3
	I don't know	17	9.9
Do you know predisposing factor	Yes	155	90.1
	No	17	9.9
Predisposing factors	Malnutrition	35	20.3
	Overcrowding	138	80.2
	Immune compromised	16	9.3
	Other	33	19.2

Do you think TB is communicable	Yes	149	86.6
	No	23	13.4
Mode of transmission	Cough	133	77.3
	Sharing cups	85	49.4
	Drink raw milk	14	8.1
	Other	4	2.3
Do you know any symptom of TB	Yes	144	83.7
	No	28	16.3
Symptom of TB	Cough	144	83.7
	Fever	36	20.9
	Night sweating	48	27.9
	Loss of appetite	45	26.2
	Weight loss	16	9.3
	Other	31	18
Do you know prevention method	Yes	121	70.3
	No	34	22.1
	I don’t know	13	7.6
Prevention methods	Covering mouth	121	70.3
	Avoid sharing cups	37	21.5
	Ventilation	51	29.7
	Use separate room	34	19.8
	Vaccination	3	1.7
	Other	17	9.9

Do you think TB is curable disease	Yes	138	80.2
	No	34	19.8
Treatment	Drug therapy	105	61
	Holy water	52	30.2
	Traditionally	16	9.3
	I do not know	17	9.9

138 (80.2%) of the respondents said it is curable, and majority (61%) mentioned the modern drugs as the means for curability. The mean knowledge score was 1.66 and 73 (42.5%) of participants had scored above the mean and were considered as having high overall knowledge about TB.

5.3 Attitude toward TB

Regarding to individuals attitude toward tuberculosis, 61% of study participants stated that they could get TB and majority of them 48.8% of the participants stated that cope with it if they acquired TB.

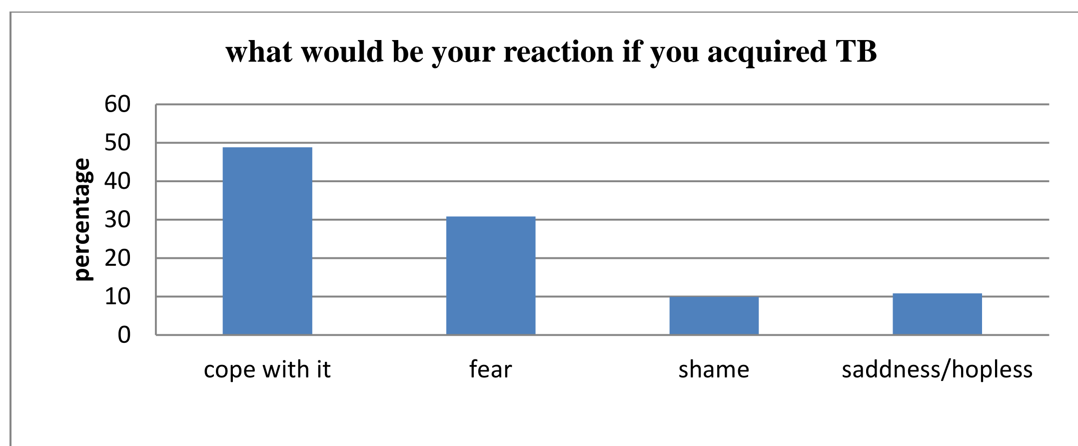

Figure iii Showing Participants' reactions if they acquired TB in WCSH, Ethiopia 2021

The study identified that majority of the respondents would tell to others if they had TB. From this 136 (79.1%) of the participant would tell to their doctor, 118(68.6%) of them would tell to

their children and 103(59.9%) would tell to their parents. The remaining would tell to their spouse, family members and to their close friends 70(40.7%), 50(29.1%),and 33(9.2%) respectively but our study shows that 9.9% of them would not tell to other if they had TB because of fear of stigmatization and shame around 89.5% and 10.5%of the study participant respectively.

Table 4 showing participant's attitude toward TB patients in WCSH, Ethiopia 2021

Variables		Frequency	Percent
Are you afraid of TB patients	Yes	105	61
	No	67	39
Would you continue friendship with TB patients	Yes	123	71.5
	No	49	28.5
Would you provide care to TB patients	Yes	121	70.3
	No	51	29.7
Do you allow your daughter(son)to marry cured TB patients	Yes	65	37.8
	No	105	62.2

Based on our finding the mean attitude score, 88(51.3%) of study participants were scored an attitude score above the mean and considered as having a favorable attitude towards TB.

5.4 Practice toward TB

The majority of study participants (72.1%) had a window at their home, amazingly from those having windows only 54 (31.4%) opened their window regularly, while 71(41.3%) did not open car window during traveling and as shown the below figure the participants stated that 69 (40.1%) of the participants would help TB patients to go to hospital.

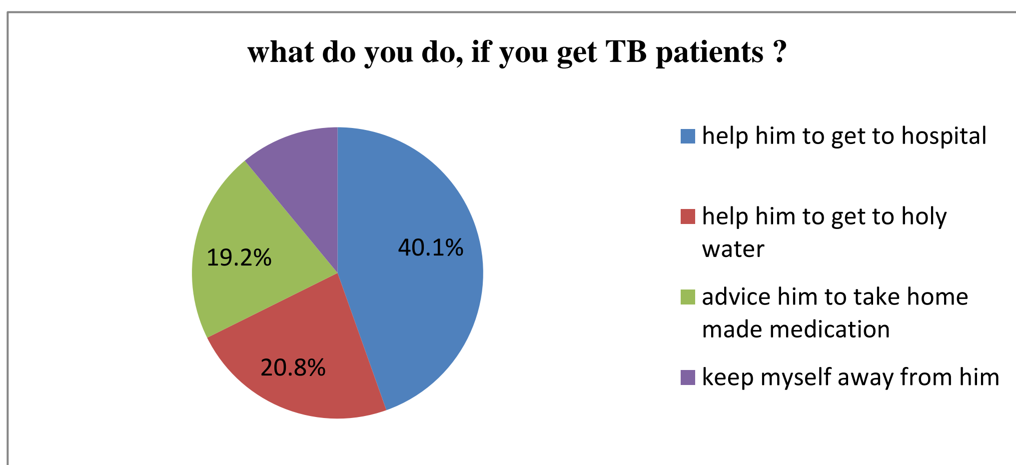

Figure iv showing participants responses what they do if they develop TB in WCSH,Ethiopia 2021

105 (61%) of the participant reported that they would go to hospital if they developed TB, 19.2% of them go to the traditional healer and 9.9% of the participants either they would go to holy water or they keep it secret. In this study, the mean practice score was 1.65 with a minimum of 1 and a maximum of 2.20 practice scores. One hundred six (61.6%) of study participants was scored below the mean practice score and were considered as having a poor practice about TB prevention.

Chapter Six

6. Discussion

The present study assessed knowledge, attitude, and practice towards TB. In this study majority (90.1%) of the participants had heard information about TB which is comparable with the study conducted in Holeta shows that 90.2% of the respondents have heard about TB(23).our finding also better than the study conducted in study conducted in Tepi general hospital(83%) of the participant (24) and studies done in mecha district where 87.8% of participants had information about TB (25)but the present finding is lower than study done in Shinile town in which 94.2% had heard information about TB (26)and lower Awash Valley of Afar region where 95.6% of participants had information about TB (17). furthermore studies done on the national survey of Ethiopia 95.2%(3).

As it was expected that, having information may raise the level of knowledge among participants, however, in this study about 42.5% of the participants had high overall knowledge about TB. This finding is better than a study done in northern Ethiopian prisons located in tigray, where 24% had good knowledge regarding TB (27). It is also better than a study done in Thailand, where 25.8% had good knowledge (28). However, this finding is lower than a study done in Iran in which 62% of the participants had good knowledge (29) and also study conducted in Tepi general hospital which is 56.9% of the participant (24) In addition to these studies from Mecha district (54%) (25) And Shinile town (54.4%) shows high overall knowledge (26).

The finding revealed that only 16 (9.3%) of participants knew the etiology of the diseases as Bacteria. This finding is similar to studies conducted in tepi general hospital 9.9% (25) and also this finding also better than the study conducted in itang special district (30) However, in this study, participants who mentioned the exact cause of TB are lower than the study conducted among the general population of Ethiopia from a national cross-sectional survey(25.8%) (3), Pakistan and Shinile town (31)(26).In this study The finding also with the majority (40.1%) stating don't know the cause of TB and also the Ethiopian national survey showed that 47%

participants don't know the cause of TB (3).However, a study conducted in diga town is only 4.6% of participant didn't know the cause of TB (32)..

In this study Most of the study participants, 119 (69.2%), knew that anyone could get TB. This finding comparable with studies done in eastern amhara region (60.4%) (33) and better than studies done in selam public health center (35.2%)(34). However this finding is lower than a study done from a national cross-sectional survey (3). The finding depicted that Lung were mentioned to be affected most by 80.8% (139) This finding is in line with studies performed a national cross-sectional survey (3). The finding also indicated that only 9.3% (16) of them knew that all body parts can be affected by TB which is lower than studies done in selam public health center (34). Based on the results obtained 90.1% of the respondent know the predisposing factor from this majority 90.1% participants mentioned overcrowding.

The finding also showed that 80.3% of participants answered they know the correct sign and symptoms of TB, more specifically 83.7% replayed sign and symptoms as cough more than 2 weeks, 27.9% stating night sweating while 20.9% mentioned as fever, 26.2% mentioned as loss of appetite, and only18 % and 9.3% stated as other symptoms and weight loss respectively. However, a study conducted in Tepi general hospital shows as only 50.5% of the respondents know coughing is the signs and symptoms of TB (24). These differences may be due to the awareness that has been increased on TB in our Hospital currently and also this finding is not consistent with studies done in Shinile (26), northeast Ethiopia and Philippines(17)(35)

Having information about the sign and symptoms of the disease is crucial for early treatment-seeking which could decrease the transmission in the community. When we see the respondents knowledge towards the mode of transmission of TB, 133(77.3%) respondent know as it is transmitted during coughing, This finding is also better than studies conducted in kuyuu hospital(31.6%) and tigray (62.5%) .(19)(36) The finding also shows the remaining 49.4% participant responds TB transmitted by drinking with the same cup and 8.1% of respondents by drinking raw milk.

According to our result out of 172 respondents 121(70.3%)of them knew that TB can be preventable .The study results indicated that (70.3%) cover their mouth during coughing to prevent the transmission of TB and 51(29.7%) of mentioned ventilation as one of the prevention method,21.5% also replied avoiding sharing cups and only 1.7%and 19.8% stated as vaccination and using separate room respectively. this finding also better than study conducted in kuyu hospital (50.9%) cover their mouth during coughing to prevent the transmission of TB. However, in Jimma and Hosanna's study, results show that 77.5% of the respondents cover their mouth during coughing and use ventilation to prevent the transmission (36).

Most of the study participants, 80.2% (138) knew that TB could be cured. This finding is similar to studies from Tepi general hospital 79.5% (24) however this finding lower than studies done in Ethiopia national survey(88.9%)%(3). In this study the result shows that 61% of the participants know that modern drug therapy can treat tuberculosis this result better than studies conducted in tepi general hospital 51% and also preference for visiting traditional method and holy water 9.3% and 30.2% respectively (24). However, the study conducted in Nigeria shows that 20.6% of the respondents used traditional methods to control TB transmission these option for treatment is considerable (37) . This should keep in mind that these practices are still bottlenecking for the prevention and control of TB in many parts of Ethiopia.

The study noted that 61% of study participants stated that they could get TB. This finding better than study conducted in yirgacheffe town 49.2% (38). However, in our study 30.8% considered that they would fear and 48.8 % they would cope with it if they had TB in addition to this 90.1% would tell to others if they had TB but this finding better than study conducted in diga town, oromia 70%(32) . Moreover the study showed that 71.5% respondents would continue friendship with TB Patients but this finding lower than studies conducted in diga town, oromia (32). Furthermore 70.3% of participants would provide care for TB patient's .when we compare this results from diga town it showed that 57.1%participants only provide care for TB patients (32).

Overall, participants with a favorable attitude towards TB in this study were 51.3% which were more or less similar to studies done in Thailand in which 47.9% had a high attitude level (28)

and in tepi general hospital 53.3% (24) below than study done in Mecha district, where 68% had high levels of attitude (25)

Regarding the practice, from those who had a window in their home (72.1%), only 31.4% opened their window regularly which is in line with studies done in tepi 71% and 30% respectively and in this study only 41.3% opened car window during traveling. This finding is better than studies done in Tepi general hospital which is 32.5% (24). In our study also indicated that 40.1 % of the participant would help TB patients to go to clinic and 9.9% stated that they would keep themselves away from the TB patients. This finding lower than studies conducted in diga town in which 65.7% would help TB patients to go to clinic.

however in this study out of 172 participant 105(61%) of them would go to hospital if they had tuberculosis sign and symptom. this finding better than studies done in diga town which is 55% %(32). Overall, participants with good practice in the prevention of TB were 38.4%, this finding is below than studies conducted in Mecha district where 48% had good preventive practices (25), Tepi general hospital in which 44.4% had good preventive practices(24)

Chapter Seven

7. Limitation of the study

The study is also conducted on clients who are visiting the health facility and it is not at the community level. The study also lacks in triangulating the deep insight of participants, especially in attitude and practices as the study is an only a quantitative part. The descriptive nature of the study could not explain the determinants which are affecting the knowledge, attitude, and practices towards TB prevention in study participants

Chapter Eight

8 Conclusion and Recommendation

8.1 Conclusion

The studies revealed that knowledge, attitude and preventive practices towards TB was not satisfactory. The finding from this research showed that majority of participant received information about the disease but from total of 172 respondents, 40.1% did not the cause of tuberculosis and 16.3% respondents didn't know the symptom of TB. 22.1% did not know the prevention methods in addition to this only 48.8% participant would cope with it if they had tuberculosis. Majority of the respondent didn't open the window regularly at home and during traveling so their practical knowledge, attitude and practice were not as such comparative with the information they received. This urges concerned bodies to design strategies to provide a better awareness creation towards the disease.

8.2 Recommendation

Based on the findings of this study, the following recommendations were given to the responsible bodies:

Government level and nongovernmental organization

- ✓ The government must ensure the commitment to mobilize resources for TB prevention and control
- ✓ Governmental and nongovernmental organization should promote specialized education programs for community members to reduce the knowledge gap ,attitude and practice
- ✓ Training given to participant should focus to change knowledge, attitude and practice and set measures.

Facility level (to health service providers): -

- ✓ Hospital administrates and the health office of the town should strengthen the awareness creation and the routine health education programs for clients visiting the hospital.
- ✓ Improve TB case notification through early identification presumptive TB cases and Ensure access to patient-centered TB care services
- ✓ Empower and involve people affected by the diseases in the prevention and control activities

Community level;

- ✓ Increase community awareness on TB cause, transmission, prevention and treatment
- ✓ Educate different segments of the population to take action through mass media, school health programs, community groups, religious leaders, health extension workers and health education programs
- ✓ Behavior-change campaigns for family members and infectious TB patients should aim at minimizing stigma.
- ✓ Carryout communication interventions for different segments and high risk population groups,
- ✓ Organize community events (festivals, testimonials, community drama, etc…) in the town

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Annex I. Consent format

Information sheet

Hello; my name is ____________ I am a final year health officer students in Wolikite University College of health sciences and medicine. Currently I and my colleagues are conducting a study onknowledge, attitude and practice towards TB among clients visiting worabe comprehensive specialized hospital medical outpatient department.Iwould like to ask you some questions and it might take 10 -15 minutes. You are requested to answer these confidentially. Your participation is totally voluntarily. If there is any question you do not want to answer just tell me and Iwill go on to the next question or you can stop the interview at any time. You and the community will be indirectly benefited from the study.

Consent form

All the information has been explained to me and I understand it well. I understand that the research imposes no risk on me and I agree to participate in the study.

Interviewer signature __________________________ date _______________

Respondent agree _____________________________ disagree_____________

Name of investigator __________________________

Annex II. Questionnaire English version

Part I Socio demographic characteristic of the study participants

1. Sex a) male b) female
2. Age __________
3. Marital status a) Married b) Single c) Divorced d other (specify)
4. Educational status
    a) Illiterate
    b) Able to read and write
    c) Attend grade 1-4

d) Attend grade 5-8

e) Attend grade 9-12

f) College

5. Occupation a) farmer b) laborer c) housewife d) merchant

   e) Employee f) other (specify)

6. Family size in number __________
7. Family income _______________
8. Ethnicity a) silte b) hadiya c) gurage d) other (specify)
9. Religion a) Orthodox b) Muslim c) Catholic d) protestant e) other (specify)

Part II Questions to assess knowledge of study participants on PTB.

1. Have you ever heard of TB? A) yes b) No
2. If Yes, from where do you heard?A. Radio B.TV C. both D. From health extension works E .other
3. What do you think is the cause of PTB?
   a) Bacteria (germs)
   b) Cold air
   c) Punishment from God
   d) Starvation
   e) I do not know
   f) Other(specify)
4. Who can be infected with TB?
   a) Anyone
   b) HIV infected people only
   c) Poor people only
   d) Poor behavior
5. Body parts affected by TB?
   a) Lung

b) Intestine

c) Bone

d) Lymph node

e) Other

f) Don't know

6. Do you know any predisposing factor of TB? A) yes b) No
7. If yes what factor do you know

a) Over crowding

b) Malnutrition (poverty)

c) Immune compromised

d) Other (specify)

8. Do you think TB iscommunicable? a) yes b) No c) I do not know
9. If yes what do you think is the mode of transmission?

a) Coughing (breathing)

b) Sharing cups

c) Drinking raw milk(un boiled)

d) Hereditary

e) Other (specify)

10. Do you know any symptom of TB? A) yes b) No
11. If your answer is yes, which one of the following do you know?

a) Cough more than 2 weeks

b) Fever

c) Night sweating

d) Weight loss

e) Loss of appetite

f) Other (specify)

12. Do you think TB is preventable disease? a) yes b) no c) I do not know
13. If yes what methods of prevention do you know?

a) Covering mouth while coughing
b) Avoid sharing cups
c) Ventilation living rooms and car's window
d) Using separate room
e) Vaccination
f) Other (specify)

14. Do you think TB is curable disease? a) yes b) No c) I do not know
15. If yes, what are the methods to cure?

a) Modern drug therapy
b) Holly water
c) Traditional method
d) Other (specify)___________

Part III Questions to assess attitude of participants on TB and TB patients

1. Do you think you could get TB? a) yes b) no
2. What would be your reaction if you acquired TB?
    a) Cope with it
    b) Fear
    c) Shame
    d) Sadness/hopelessness
3. Would you tell to others if you had TB? a) yes b) no
4. If you say yes for who?
    a) Doctor/health worker
    b) Spouse
    c) Parent
    d) Children
    e) Other family member
    f) Close friend

5. If no why?
    a) Shamefull
    b) Fear of stigmatization
    c) Others (specify)--------------
6. Are you afraid of TB patients? A) yes b) No
7. Would you continue friendship with TB patients? A) yes b) No c) I do not know
8. Would you provide care to TB patients? a) yes b) No
9. Do you allow your daughter (son) to marry cured TB patients? a) yes b) No

Part IV. Questions to assess practice of participants on TB and TB patients

1. What do you do, if you get TB patients?
    a) Help him to get to clinic(hospital)
    b) Help him to get to holy water
    c) Advice him to take home made medication
    d) Keep myself away from him
    e) Do nothing
    f) Other (specify)_________
2. What do you if you develop TB?
    a) Go to hospital
    b) Go to traditional healer
    c) Go to holy water
    d) I keep it secret
    e) Other(specify)__________
3. Do you open the window during traveling? a)yes b) no
4. Do you have window at your home? a) yes b) no
5. If you say yes do you open window regularly? a)yes b)no

Annex III. Questionnaire Amharic version

ቀን ---------------------

በወልቂጤ ዩኒቨርሲቲ የህብረተሰብ ጤና አጠባበቅና ህክምና ትምህርት ክፍል

በ ወራቤ ኮምፕርሄንሲቭ እስፔሻላይዝድ ሆስፒታል የውሶጥ ደዌ ተመላላሽ ታካሚዎች ስለ "TB" በሽታ ያለውን ዕውቀት፤ አመለካከትና ተግባር ለማወቅ የተዘጋጀ መጠየቅ፤ 2013ዓ.ም

ጤና ይስጥልኝ ደህና አደራችሁ/ ዋላችሁ ስሜ ----------------- ይባላል:: የወልቂጤ ዩንቨርሲቲ የህብረተሰብ ጤና አጠባበቅ ተመራቅ ተማሪ ነኝ:: እነና ጉደኞቼ የውስጥ ደዌ ታካሚዎች ስለ ‘’TB’’ በሽታ ያላቸው ዕውቀት፤ አመለካከትና ተግባሪን በተመለከተ ጥናት ለማድረግ ነው: መጠይቁ የጥናቱ አንድ አካል ነው:: የሚሞላው በቃለ ምልልስ ስሆን ከ10 እስከ 15 ደቂቃ ይወስዳ:: የሚሰጡት ምላሽ ለማንም ግለሰብ ወይም ድርጅት ተላልፎ የማይሰጥና ምስጥራዊነቱ የተጠበቀ ይሆናል:: ለመመለስ የማይፈልጉት ጥያቄ ካለ ወደ ሚቀጥለው አልፉለው ወይም መጠይቁን በማንኛውም ሰዓት ማስቆም ይችላሉ:: እርሰዎም ሆነ ማህበረሰቡ በተዘዋዋሪ የጥናቱ ተጠቃሚ ይሆናል፤ ጥናቱ ውጤታማ ሊሆን የሚችለው እርሰዎ በሚሰጡት ትክክለኛ መልስ በመሆኑም ጥያቄዎችን በጥንቃቄ እንዲመልሱልን ፋቃድኝነተዎትን በትህትና እንጠይቃለን::

ቃለ ምልልሱን ለማድረግ ተስማምተዋል?

አው ተስማምችያለሁ ----------------------

አልተስማማውም ------------------------

ስለተብብረው እናመሰግናለን!

<u>ክፍል -አንድ፡ -</u>የጥናቱ ተሳታፊዎችን ማህበራዊና ኢኮኖሚያዊ ሁኔታ በተመለከተ

1. ፃታ ሀ/ ወንድ ለ/ ሴት
2. ዕድሜ ---------------
3. የጋብቻ ሁኔታ ሀ/የገባ/ች ለ/ ያላገባ/ች ሐ/ የተፋታ/ች መ/ የሞተበት/ባት ሰ/ ሌላ ---------
4. የትምህርት ደረጃ ሀ/ ያልተማረ/ች ለ / መፃፍና ማንበብ የምችል /የምትችል ሐ/ 1- 4 ኛ ክፍል መ/ 5–8ኛ ክፍል ሰ/ 9–12 ኛ ክፍል ረ/ ከ 12 በላይ
5. ሥራ ሀ/ገበሬ ለ/ነጋዴ ሐ/ የቤት እመቤት መ/የቀን ሰራተኛ ሰ/ የመንግስት ሰራተኛ ረ/ ሌላ ካለ ይጥቀሱ -----
6. የቤተሰብ ብዛት በቁጥር -----------------------
7. የቤተሰብ ወራዊ ገቢ መጠን በአማካይ ------------------
8. ብሔረሰብ ሀ/ስልጠ ለ/ ሀዲያ ሐ/አማራ መ/ ሌላ ካለ ይጥቀሱ --------------
9. ሃይማኖት ሀ/ ኦርቶዶክስ ለ/ ሙስልም ሐ/ ካቶልክ መ/ ፕሮቴስታንት ሰ/ ሌላ ካለ ይጥቀሱ

<u>ክፍል - ሁለት</u>፡ - የጥናቱ ተሳታፊዎች ለ "TB" በሽታ ያላቸውን ዕውቀት የሚገመግሙ ጥያቄዎች

1. ስለ "TB" በሽታ ሰምተው ያውቃሉ? ሀ/ አው ለ/ አይደለም
2. ሰምተው ሚያውቁ ከሆነ የመረጃ ምንጫችሁ ምንድ ነው? ሀ/ሬድዮ ለ/ቴሌቭዥን ሐ/ ሬድዮና ቴሌቨዥን መ/ ጋዜጣና መፅሔት ሠ/ ሌላ ካለ ይጥቀሱ

3. የ "TB" በሽታ መንሴኤ ምንድ ነው? ሀ/ በዓይን ማይታዩ ረቂቅ ህዋሳት /ጀርም/ ለ/ ቀዝቃዛ አየር ሐ/ ከፈጣሪ የመጣ ቅጣት መ/ ረሃብ ሠ/ አላውቅም ረ/ ሌለ ካለ ይጥቀሱ
4. ማን በTB ሊያዝ ይችላል? ሀ/ማንኛዉም ሰው. ለ/ ኤች አይ ቪ ያለበት ሰው ብቻ. ሐ/በኢኮኖሚዉ ዝቅ ያለ ሰው ብቻ. መ/ ሌላ ካለ ይጥቀሱ
5. TB የትኛውን የሰውነት ክፍል ያጠቃል. ሀ/ሳንባን. ለ/አንጀትን. ሐ/አጥንትን. መ/ሊንፍ እጢን ሠ/ ሌላ ካለ ይጥቀሱ ረ/ አላውቅም
6. ለ "TB" በሽታ የሚያጋልጡ ነገሮችን ያውቃሉ? ሀ/ አዎ ለ/ አላውቅም
7. ሚያውቁ ከሆነ የትኛውን ያውቃሉ? ሀ/ የቤት ጥበት ለ/ የምግብ ዕጥረት ሐ/ በሽታን የመከላከል አቅም ማነስ መ/ ሌል (ይጥቀሱ) -------------
8. የ -"TB" በሽታ ከሰው ወደ ሰው ይተላለፋል ብለው ያሰድባሉ? ሀ/ አዎ ለ/ አይደለም ሐ/ አላውቅም
9. ይተላለፋል ብለው የሚስቡ ከሆነ እንዴት ሊተላለፍ ይችላል? ሀ/ ሲያስለው (ሲተነፍስ) ለ/ ኩባያ /ሲኒ/ በጋራ በመጠቀም ሐ/ ያልተፈላ ወተት በመጠጣት መ/ በዘር የሚተላለፍ ሠ/ሌላ (ይጥቀሱ) -------
10. የ "TB" ምልክቶችን ያውቃሉ? ሀ/አዎ ለ አላውቅም
11. የሚያውቁ ከሆነ የትኞችን ያውቃሉ ከአንድ በላይ መመለስ ይቻላል ሀ/ ከ2 ሣምንት በላይ ሳል ለ/ ትኩሳት ሐ/ የመኝታ ጊዜ ላብ መ/ የክብደት መቀነስ ሠ/ የምግብ ፍላጎት መቀነስ ረ/ ሌላ ካለ ይጥቀሱ

12. የ “TB” በ ሽ ታ ን መ ከ ላ ከ ል ይ ቻ ላ ል ? ሀ / አ ዎ ለ / አ ይ ደ ለ ም

13. የ ሚ ቻ ል ከ ሆ ነ በ የ ት ኛ ው መ ን ገ ድ መ ከ ላ ከ ል ይ ቻ ላ ል ? ከ አ ን ድ በ ላ ይ መ ጥ ቀ ስ ይ ቻ ላ ል ሀ / በ ሚ ያ ስ ል በ ት ጊ ዜ አ ፍ ን በ ማ ህ ረ ብ በ መ ሸ ፈ ን ለ / ኩ ባ ያ (ሲ ኒ / በ ጋ ራ ባ ለ መ ጠ ቀ ም ሐ / የ መ ኖ ሪ ያ ክ ፍ ል አ የ ር እ ን ዲ ገ ባ በ ማ ድ ረ ግ ና የ መ ኪ ና መ ስ ኮ ቶ ች ን በ መ ክ ፈ ት መ / የ ተ ለ የ ክ ፍ ል በ መ ጠ ቀ ም ሠ / በ ክ ት ባ ት ረ / ሌ ላ ካ ለ ይ ጥ ቀ ሱ

14. የ “TB” በ ሽ ታ ይ ድ ና ል ብ ለ ው ያ ስ ባ ሉ ? ሀ /አ ዎ ለ / አ ይ ደ ለ ም ሐ አ ላ ው ቅ ም

15. የ ሚ ስ ቡ ከ ሆ ነ በ የ ት ኛ ው መ ን ገ ድ ? ሀ / በ ዘ መ ና ዊ መ ድ ሃ ኒ ት ህ ክ ም ና ለ / በ ጠ በ ል ሐ / በ ባ ህ ላ ዊ ህ ክ ም ና መ / ሌ ላ -----

<u>ክ ፍ ል -ሦ ስ ት</u>፡ - የ ጥ ና ቱ ተ ሳ ታ ፊ ዎ ች ስ ለ “TB” እ ና በ ሽ ተ ኞ ች ላ ይ ያ ላ ቸ ው አ መ ለ ካ ከ ት የ ሚ ገ መ ግ ሙ ጥ ያ ቄ ዎ ች

1. “TB” ሊ ይ ዘ ኝ ይ ች ላ ል ብ ለ ው ያ ስ ባ ሉ ሀ / አ ዎ . ለ /አ ይ ደ ለ ም
2. TB ቢ ይ ዘ ት ም ን አ ይ ነ ት ም ላ ሽ ይ ኖ ሮ ታ ል ሀ / ለ መ ዳ ን ጥ ረ ት አ ደ ር ጋ ለ ሁ . ለ /እ ፈ ራ ለ ሁ . ሐ /አ ፍ ራ ለ ሁ . መ /አ ዝ ና ለ ሁ /ተ ስ ፋ እ ቆ ር ጣ ለ ው
3. የ “TB” በ ሽ ተ ኛ ከ ሆ ኑ ለ ሌ ላ ሰ ው ይ ነ ግ ራ ሉ ?ሀ /አ ዎ ለ /አ ይ ደ ለ ም
4. አ ዎ ከ ሆ ነ መ ል ሶ ለ ማ ን ይ ና ገ ራ ሉ ? ሀ /ለ ጤ ና ባ ለ ሙ ያ . ለ / ለ ባ ለ ቤ ቱ . ሐ /ለ ል ጆ ቹ . መ /ለ ቤ ተ ሰ ቦ ቹ . ሠ /ለ ጓ ደ ኞ ቹ
5. የ ማ ይ ነ ግ ሩ ከ ሆ ነ ም ክ ን ያ ቱ ም ን ድ ነ ው?ሀ /ነ ው ር ስ ለ ሆ ነ ለ /መ ገ ለ ል ን ስ ለ ም ፈ ራ ሐ /ሌ ላ ----------
6. የ “TB” በ ሽ ተ ኞ ች ን ይ ፈ ራ ሉ ? ሀ /አ ዎ ለ /አ ይ ደ ለ ም
7. ከ “TB” በ ሽ ተ ኞ ች ጋ ር ያ ለ ዎ ት ን ጉ ደ ኝ ነ ት ይ ቀ ጥ ላ ሉ ? ሀ /አ ዎ ለ /አ ይ ደ ለ ም

8. ለ "TB" በሽተኞች እንክብካቤ ያደርጋሉ? ሀ/አዎ ለ/አይደለም
9. ወንድ ልጅዎን ወይም ሴት ልጅዎን ለ "TB" በሽተኛ ያጋባሉ? ሀ/አዎ ለ/አይደለም

ክፍል -አራት፡ -የጥናቱ ተሳታፊዎች ስለ "TB" በሽታ እና በሽተኞች ያላቸውን ተግባር የሚገመግሙ ጥያቄዎች

1. የ "TB" በሽተኛ ብታገኝ/ኚ ምን ታደርጋለህ/ታደርግያለሽ? ሀ/ ጤና ተቋም እንዲሄድ እመክራለሁ ለ/ ወደ ጠበል እንዲሄድ እመክራለሁ ሐ/ ባህላዊ ህክምና እንዲወስድ እመክራለሁ መ/ ከእስ እሸሻለው ሠ/ ምንም አላደርግም ረ/ ሌላ ------------
2. የ "TB" በሽታ ቢይዞት ምን ያደርጋሉ? ሀ/ ጤናተቋም እሄዳለው ለ/ ባህላዊ ህክምና እሄዳለው ሐ/ ጠበል እሄዳለው መ/ ለሰው አልነግርም ሠ/ ሌላ ካለ -----------
3. በጉዞ ወቅት መስኮት ይከፍታሉ ወይ. ሀ/አዎ. ለ/አይደለም
4. በቤቷ መስኮት አለ ወይ. ሀ/ አዎ. ለ/አይደለም
5. አዎ ከሆነ መልሶ መስኮቷን ሁልጊዜ ይከፍታሉ ወይ ሀ/አዎ. ለ/አይደለም

መጠይቁን የሞላው ተማሪ ስም ---------------------- ፊርማ---------------------------