WOLKITEUNIVERSITY

COLLEGE OF MEDICENE AND HEALTH SCIENCE

DEPARTEMENT OF NURSING

ASSESEMENT OF KNOWLEDGE ,ATTITUDE AND PREVATION PRACTICE ON TUBERCUIOSIS AMONG ADULT PEOPLE LIVING IN WOLKITE TOWN, GURAGE ZONE, SNNPR ETHIOPIA ,2014

INVESTIGATORS

1. BILISE BAYISA 07/11
2. ELSABET MOGES 06/11
3. EMEBET BIRHANU 01/11

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NAME OF ADVISORS

SHEGAWU TASFA (BSC, MSC)

BITEWU TEFERA (BSC MSC)

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First of all ,we would like to thank almighty god for the reason that he gives us long life , strength and helped us to reach this precise time and, secondly who allowed us to do this proposal ,Wolkite University College Of Medicine and Health Science Department Of Nursing we are very gland to express out deep gratitude to our advisors Mr .Shegawu Tasfa and Mr. Bitawu Tafera Giving us their constructive comments and suggestion during the development of this thiasil, lastly, but not least we would like to acknowledge our family relatives and friends for their moral and material support and encouragement throughout the development of this thesis.

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ABREBVATION

BCG Bacilli-Calmette-Guerin

DR-TB Drug-Resistant Tuberculosis

EPTB Extra pulmonary

HIV Human Immunodeficiency Virus

MDR-TB Multidrug-Resistant Tuberculosis

NTP National Tuberculosis [Control] Programmed

PTB Pulmonary TB

TB Tuberculosis

WHO World Health Organization

HO health officer

OTD outpatient department

TSR Treatment success rate

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ABSTRACT

BACKGROUND:Tuberculosis (TB) is a treatable communicable disease that has two general states such as Latent infection and Active disease. Only from those who develop active tuberculosis is active states our country Ethiopia remain to be one of the 30 country with high burdenof tuberclosis Tuberculosis prevention practice is a combination of measures designed to minimize the risk of tuberculosis transmission within populations.

OBJECTIVE: To assess Knowledge, Attitude and prevention practice on tuberculosis among adult people living in Wolkite town, Gurage zone, SNNPR Ethiopia, 2014

METHODS: Community based cross-section study was conducted among Wolkite town adult resident by using interview based structured quaternary which contain Socio –demographic data prevention practice part questions . After data collection Data was analyzed by using epidata method and export to SPSS result was presented by text, figure, tables and graph. the study was conducted between Februarys - June to a prevention practice of TB among adult people living in Wolkite town Gurage zone SNNPR ETHIOPIA 2014 E.C

RESULT: There were total 409 study respondents they had good over all knowledge (48.7%)where as poor knowledge 51.3% and also they had 43.5%favorable attitude and 56.5% unfavorable attitude ,52.6%poor practice and 47.4%good practice

CONCLUSION: overall prevention practice (47.4%) attitude (47.4%) and knowledge(48.7%) on TB of Wolkite adult resident needs awareness creation program with planned health education using diffrent mechanism at community level

RECOMMENDATION :We recommends community to put mask when travel from place to place by bus and other public bulding and we recommends health worker giving health education to community as they visit heath care facility

KEY WOEDS: PREVENTION PRACTICE

1. 1INTRODUCTION

1.1 Background

TB is an infectious disease caused by mycobacterium tuberculosis. (1) TB is typically affect the lungs (pulmonary TB account for 80%) but can affect other organ (extra pulmonary TB 20%) most infection do not have symptom that known as latent TB About 10% of latent infection progress to active disease. (2)

The classic symptom of active TB are chronic cough with blood containing sputum, Fever, night sweet and weight loss. The disease is spread in the air when people who are sick with pulmonary TB expel bacteria, by coughing, sneezing, talking etc. Coughing produces tiny infectious droplet nuclei (infectious particles of respiratory secretions), The main source of infection is untreated smear-positive PTB patients. A single cough can produce 3000 droplet nuclei. Droplet nuclei are so small that they avoid the defenses of the bronchi and penetrate into the terminal alveoli of the lungs, where multiplication and infection occur. Overall, a relatively small proportion of people infected with M. tuberculosis will develop TB disease. However, the probability of developing TB is much higher among people infected with HIV and smoking cigarette. People with latent TB do not spread the disease. (3)

Primary pulmonary TB is usually asymptomatic; however, patients may complain of nonspecific constitutional symptoms such as fever, lassitude, regional lymphadenitis, and rarely erythematic nudism. If the primary infection Progresses, it may produce a cavity lesion or disseminated infection begin. Prevention of TB involves screening those at high risk , early detection and treatment of cases and vaccination with bacillus calmaette-guerin vaccine (BCG). (4) (5) Those at risk include house hold work place and social contact of people with active TB. Treatment requires the use of multiple antibiotics over a long period of time. Antibiotic resistance is a growing problem is with increase rates of multi drug resistant tuberculosis (MDR –TB). Active pulmonary TB is usually treated with simonized (INH), rifampin, pyrazinamide, and ethambutol for 2 months followed by INH and rifampin for an additional 4 months. Vitamin B6 should be added to prevent peripheral neuropathy associated with INH (6) .The goals of TB control are to reduce mortality, morbidity and disease transmission (while preventing drug resistance) until TB no longer poses threat to public health. The aim is of prevention to reduce human suffering and the social and

economic burden on families and communities as a consequence of TB. In order to achieve this, it is necessary to ensure access to diagnosis, treatment and cure for each patient (7)

Different activity have been performed around the world to overcoming the problem of strategies to end TB followed the intention of sustainable development goals, with the targets of a 95% reduction in the number of TB death and 90% reduction in TB incidence rates by 2035 (8) However TB remains a global public health threat affecting millions of people every year, and increase incidence of drug resistance and the human immune deficiency (HIV) pandemic mean that TB control effort have now become more challenging, and this risk of transmission of TB in health care setting (9) . Prevention practices of TB are necessary to reduce the spread of TB. There is verity of prevention mechanism used by public health organizations to reduce the transmission of TB. For example, the bacillus calmette-Guerin (BCG) vaccine, which is approved for the prevention of TB, May be administered at birth in countries with high incidence of TB. While educating the community about TB and screening the person affected by TB. (10)

1.2 STATEMENT OF THE PROBLEM

According to world health organization (WHO) TB reported 2020; globally it causes an estimate of 10.0 million people and 1.3 million deaths among HIV negative and 208,000 deaths among HIV positive patient. (11)In Africa, approximately 2.48 million cases were reported. Ethiopia is one of the 30 highly burden country in the world in Ethiopia, as WHO 2019 report, an estimate of 157,000 cases was 164 cases per 1000 population and the mortality rate is 125 per 100,000 population per year from 2000-2017. And the estimated incidence rate for TB was 140 per 100,000 populations. it also estimate that 0.7% of new cases and 12% of previous cases treated were MDR/RR-TB treatment was initiated in 708 patient of which 75% were successfully treated (12) Ethiopia is one of the countries among the 22 high burdened countries and the 27 high MDRTB burden countries in the world. Compounded with become a formidable threat to the country the emerging epidemic of M/XDR TB further endangers patients and public health . It remain a very important occupational risk for health care workers in low and middle income countries and for worker in some institutions in high income country .risk appears particularly high when there is increased exposure combine with inadequate prevention practice measurement (13) (14) Tuberculosis prevention practice is the best well is to avoid getting sick in the first place. It may sound like a disease of past, but TB it still a real concern today. And as the old saying goes, an ounce of prevention is worth a pound of cure (15).

In prevention practice of TB the communities are very important involvement for decrease the incidence of TB. It include first infants are often given the BCG vaccine. then community is to know how TB spread method then open window in home and at large community gatherings; cough etiquette in the community (16) and met always cover your mouth with a tissue when cough or sneeze, keep all your doctor appointment; wash your hand after coughing or sneezing; use properly public transport. (17) Then training of community member should include how to include TB messages in health promotion activities, way to increase cases detection, emphasis on improved quality of care through patient-centered support (18)

Before COVID-19 came along, TB was a primary focus of health authorities in sub-Saharan Africa. In 2019, approximately 1.4 million people were diagnosed with TB in the region, but epidemiologists estimated that 1 million more had TB but were neither diagnosed nor treated.

The scope and intensity of the global TB epidemic is fueled by antiquated and inadequate TB drugs, most of which were developed more than 50 years ago. But, given how contagious TB is, we need to find and treat many more people. It is a disease that strikes impoverished communities the hardest, and those same communities can be hard to reach with healthcare services. And then came COVID-19 the only infectious disease that killed more people than TB in 2020. The regional numbers have held steady this past year, according to the WHO, but a deeper dive shows that more attention is needed. Nigeria, in Africa's largest country by population, nearly three out of every four cases of TB was missed. Ethiopia, Africa's second largest country, fared better, missing less than one out of every three cases. Kenya, a hub for international development in East Africa, missed almost half its TB cases. South Africa is burdens in the world of drug-resistant TB infections, TB/HIV co-infections, and all TB infections in total—missed 40% of its cases in 2020. (19). The environmental domain relates to the sense of safety, security, home environment, transport and financial TB is a disease with social implications due to the stigma attached to it which is evident from the lower scores of cases in psychological and social domains. This is in coherence with the other studies (20) (21) which point out that TB affects all the predicted domains of Psychological, general health perception and social role functioning security which was negatively affected in TB patients (22)

At present, 8-10 million new case of TB and 3 million TB related deaths occur worldwide. Approximately 90% of patients and deaths occur in the developing countries. In 2020 the largest number of new TB cases occurred in the south- east Asian region with 43% of new cases followed by the WHO African region, with 25% of new cases and WHO western pacific with 18%. ( ) Africa has 28% of the world's TB cases and highest sever burden relative to population, according to annual (WHO) global report released last October that means 281 cases for every 100.000 people. (28) About one-third of the population of sub Saharan Africa is infected with M.TB in year 2000; an estimated 17 million people in sub-Saharan Africa were infected with both M.TB and HIV. (30)

The economic impact of TB has been widely studies over the past 20 years. (23) TB adversely affects the labor force (24) exhausts government health budget (25) depressed household savings and distrust local economies (26) . TB/HIV co- infection and its impact on stigma and mental health problem could also be a big hurdle for HIV/AIDS control program (20)

From 2020 to 2050, based on the current annual decrease in TB deaths of 2%, 31.8 million TB deaths are estimated economic loss of US$17.5 trillion to (14.9 trillion -20.4 trillion). SDG TB mortality targets is met in 2030.23.8 million TB deaths 18.9 (million -29.5 million) and $13.1 trillion (11.2 trillion-15.3 trillion) in economic losses can be avoided. If the targets met in 2045, 18.1 million TB deaths (14.3 million-22.4 million) and $10.2 trillion (8.7trillion-11.8trillion) can be avoided. The cost of inaction of not meeting the SDG TB mortality target until 2045(vs2030) is. Therefore, 5.7 million TB deaths (5.1million-8.1 million) and $3.0 trillion (2.5 trillion-3.5 trillion) in economic losses.COVID-19 related disruption adds $290.3 billion-570.1 billion to this cost. (27)

1.3 SIGNIFICANCE OF THE STUDY

In developing and poor country it is important to develop TB prevention Practice to decrease the risk of disease exposure complication and economic burden related to this disease, so That in this town prevention practice have significant role as individual, community and as well as country development. Since no study is conducted in this town this study will help community to their gap regarding to prevention practice. When health worker like Nurse, health officer (HO), health extension and other gives attention to teaching the necessary about prevention practice on TB it will improve quality and safety of health care service, community and government policy by decreasing risk of this TB exposure. This study will also help community to improve increase TB prevention practice among adult people live in Wolkite town. This research will gives wide information about TB problem in community health and on their economy. This research will help health care system, community, government and researcher by providing good information related to this TB disease.

2. LITERATURE REVIEW

2.1 TUBERCULOSIS PREVENTION PRACTICE

In worldwide there are various variable are reported about TB prevention practice, A cross-section study in northeast Tanzania shows 785 (89.0%) had good practices in controlling TB. 692 (96.5%) from urban areas as compared to 93 (56.4%) of the rural adult population had good practices about TB infection control. (28)

On other cross section study conducted in Addis Ababa anebessa bus users. Half of participant (50.5%) had good practice on TB prevention practice among bus users in the study area. (50.5%) had good practice on TB prevention practice among bus users in the study area. (29)

A study conducted in South African metropolitan shows (68.4%) of patient reported good TB prevention practice. The overall prediction success was 71.1% with specificity (poor practice) of 37.5% and sensitivity (good practice). (30)

On other study 72.9% had good prevention practice if TB. (31)A study conducted in Bahir Dar city 41.4% participant had good practice level. (32) On other study conducted in woliyta zone 55.22% had improper and 44.78% had proper prevention practice. (33)

Addis Ababa 48.0%(34), Gonder university referral hospital 19.6%(35), northern Ethiopia 38.0% (36)ondo state, Nigeria 68.0% (37),free state province, south Africa 72.9%(38), north western Nigeria 85.3%(39).India 53 %(40) Had proper TB prevention practice.

A cross sectional study conducted in mecha distinct (48%) study participants had good prevention practice. (41)

2.2.1Socio demographic factor

A Cross section study is conducted in Addis Ababa from study participant 60.5%were female and 39.5% male (42)

In other rcross sectional study in Shenzhen was reported, (45.3%) were male and 54.3% and also(52.5%) were aged 65-70 years. More than half (55.4%) had an educational level of primary school . (43)

Study conducted in Bahir Dar city was shows 51.5%were male and 48.5%femele (32) And on other study conducted in Brazil was a show 70.12% was male and 29.9% female , On other study conducted in Brazilian the mean monthly income was R$1.244.00 (44) .on other study done in woliyta zone 55.5% were female and 44.5% and 54.4% were married. (33)

A population based study conducted in Lesotho (44.4%), had secondary level education and Nearly half of the respondents were female (49.8%) approximately 96% were Christian. Most respondents were female (71.6%) and more than half of the female respondents (58.5%) had a secondary level of education or higher. (45)

On other cross- sectional study 408 Addis Ababa city Anebessa bus users were The median ages of the participants were 25 years with interquartile range of 12.25 Nearly, two-thirds of the participants were males and unmarried. About 44.6% were resided in Addis Ababa and 70.1% of bus users were Orthodox Christian. More than one-third of respondents reported that they always had used Anibessa bus. More than half of the participant's monthly household incomes were less than ETB 500.(29)

2.2 KNOWLEDE TOWARDS TUBERCULOSIS PREVENTION PRACTICE

Study conducted in northeast Tanzania shows 952 (70.1%) had good knowledge about TB. While 678 (94 (32) .7%) of the study participants residing in urban areas had good knowledge about TB, only 274 (42.7%) from rural areas had such knowledge. (28)

On similar study 601 (44.2%) had good overall knowledge. While 460 (64.2%) study participants from urban areas had good overall knowledge, less than a quarter, 141 (22.0%) from rural settings had good overall knowledge about TB. (28)

Study conducted In South Africa shows 42.8% of good level knowledge. (31) And on other study conducted in Bahir Dar 57.2% of the respondents knew about TB. (32)Study conducted in woliyta zone good level of knowledge 86.4% and poor level of knowledge 13.6%. (33)

Study conducted in Ameristar shows 137(60.0%) of the study participants had absolutely no knowledge regarding the TB. (46)

Another study conducted in Addis Ababa More than half (52.7%) of the respondents were knowledgeable about the causes, risk factors, means of transmission, signs. (29)

Study conducted in Gilgele gibe shows that most of the respondents (83%) had ever heard of PTB, (50.4%) mentioned 'evil eye' as a causes of PTB. (47)

Community based cross sectional study conducted in India shows that most of the people (93.2) had heard of TB, 96% did not know the causative agent of TB as bacteria or germ, 52% had

significant knowledge about the predisposing factors, only (21%) know haw TB spreading and (68.4%) consider TB as a big problem; however the preventable measure was low. (48)

A cross section study conducted in north mecha distinct (74%) participant had information about TB mentioned that droplet inhalation as the main mode of transmission of the disease whereas 2% replied that hereditary as the mode of transmission disease. (49)

A community based cross sectional study conducted in Arbaminche shows that most of the respondents (87.8%) had heard of PTB, only cough well known by (95%) respondents, (86.4%) did not know the cause of PTB as bacteria. (50)

2.3 ATTITUDE TOWARDS TUBERCULOSIS PREVENTION PRACTICE

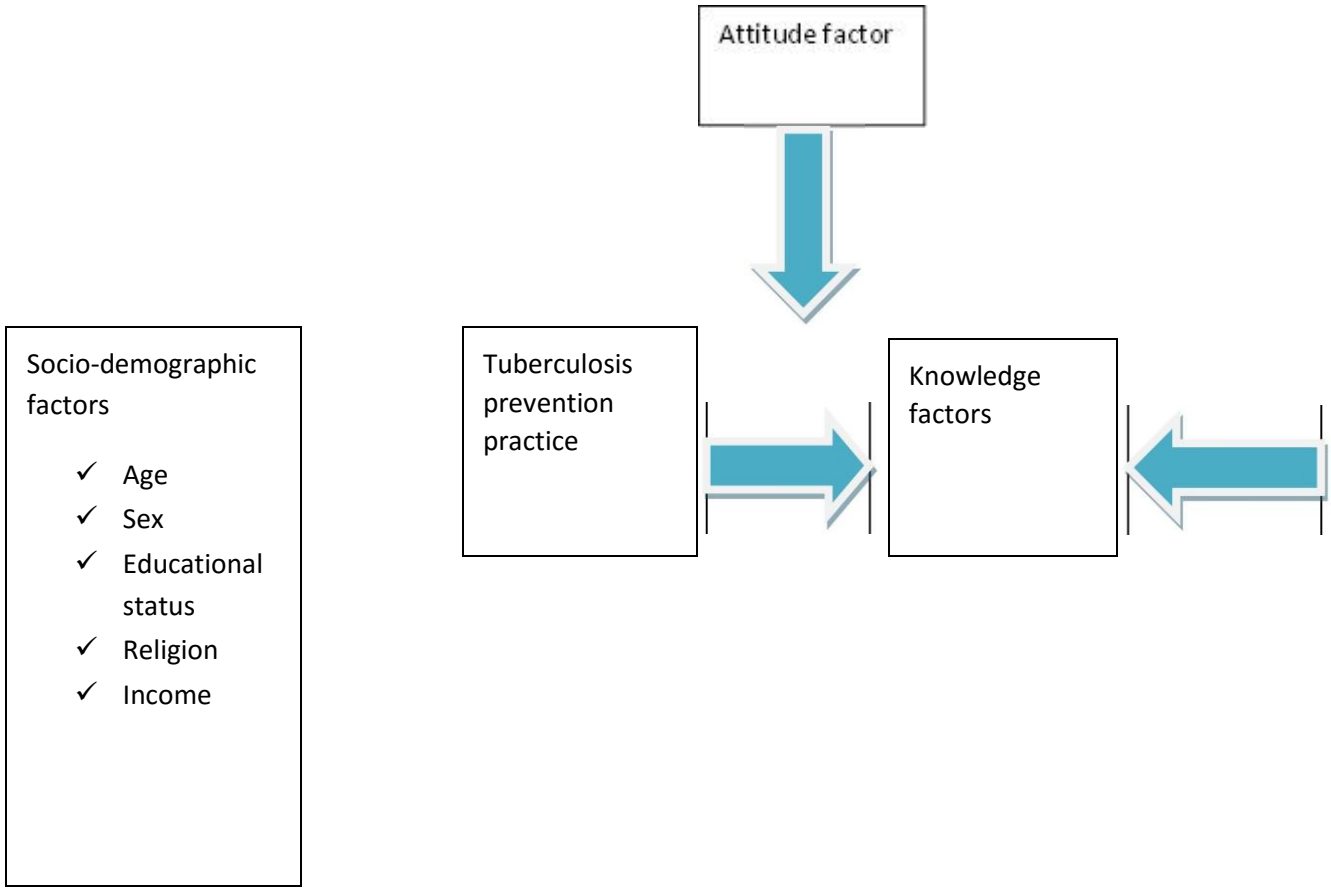
Study conducted in Lesotho shows a higher proportion of respondents (72.8%) had a positive attitude towards TB. (45). On cross sectional study was conducted in northeast Tanzania 158 (10.9%) had positive attitudes towards TB. There were significantly more study participants from urban areas, 113(15.8%) with positive attitudes towards TB infection as compared to adults welling in the rural settings, 45 (6.2%). (28)

Study on Gamo Gofa shows two hundred seventy-six (67.2%) HCWs had a good attitude towards TB prevention practice and only 34.9% of HCWs ever had TB-related training. (46). On other study conducted in South Africa shows that more than half (52.8%) of the participants strongly agreed that TB is severe disease. (30). Another study conducted in Shenzhen was shows the percentages of respondents who had positive attitudes or practices were 48.0% and 42.2%, respectively. (43). Study conducted in South Africa shows 80.4% had positive attitude towards TB. (31) On other study conducted in woliyta were positive attitude 66.9% and negative attitude 33.1 %.(33)

Across sectional study conducted in mech distinct (40.7%) study participant stated about that TB is dangers and serious for the community majority of the study participants 46.2%stated that TB is cannot transmitted from human to human .(49)

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.(51)

2.1 .CONCEPTUAL FREAMWORK



3 OBJECTIVE

3.1 GENERAL OBJECTIVE

To assess Knowledge, Attitude and prevention practice on tuberculosis among adult people living in Wolkite town, Gurage zone, SNNPR Ethiopia, 2014

-3.2 SPECIFIC OBJECTIVE

-To determine prevention practice strategies of TB among Wolkite town adult resident Gurage zone SNNPR Ethiopia 2014 E.C

_To assess level of knowledge on TB prevention practice among Wolkite town adult resident Gurage zone SNNPR Ethiopia 2014 E.C

_To assess attitude on TB prevention practice among Wolkite town adult resident Gurage zone SNNPR Ethiopia 2014 E.C

4. METHODS

4.1 STUDY AREA AND PERIOD

-The study was carried in Wolkite towns. Wolkite is a town and separate Woreda in south western Ethiopia the administrative center of the Gurage zone of southern nations nationalities and peoples region this town has an attitude and longitude of 8^0 17^0 N 37^0 47^0 E and an elevation

between 1910 and 1935 meters above the sea level the city is located 153 km or 95.1 miles or 82 .6 nautical miles from Addis Ababa the capital of Ethiopia 280 km from Hawassa the capital city of SNNPR and 202 km from Jimma the city has estimated total population residing in town is 28.866(2007) Study period the study will be conducted February-Jul (33)

4.2 STUDY DESIGN

Community based cross-sectional study was employed among Wolkite town adult >18 resident

4.3 POPULATION

4.3.1 SOURCE POPULATION

All adult residents in Wolkite town.

4.3.2 STUDY POPULATION

Adult residents in the selected house hold.

4.4 ELIGIBILITY

House hold member age >18 years old will be including in the study

4.4.1 Inclusion criteria

All adult residents >18. Years old available during collection.

4.4.2 Exclusion criteria

-People who severely ill and not able to respond

-children who <18 year

4.5 SAMPLE SIZE DETERMINATION AND SAMPLING TECHNIQUE

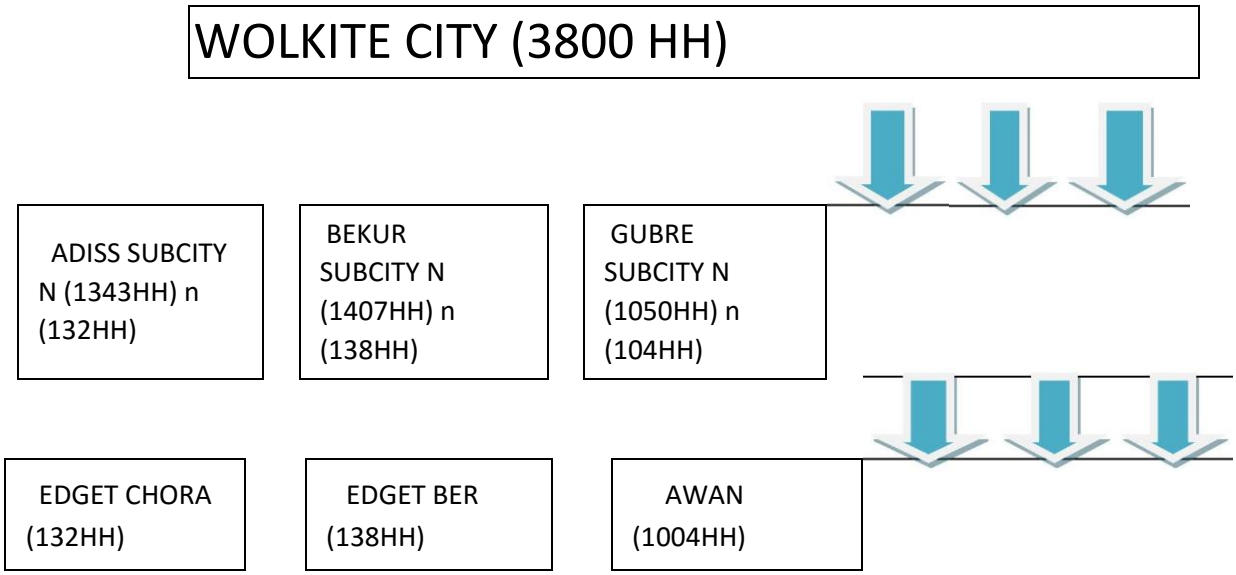
Sample size determinate by single population proportion formula was used to calculate size calculation. Following statistical assumption: 95% confidence interval, 5% margin of error, and prevalence of respondent good prevention practice of TB from previous study at western Ethiopia in chiro town was 0.58%.and to select the population by schematic presentation process.

k $N = \frac{z^2 x P(1-P)}{d^2}$

$\frac{1.96^2 x\ 0\ .58(1-0.58)}{(0.58)} = 374$

W= 5%=0.05

374 =37(Non respondents rate) 411



4.6 DATA COLLECTION PROCURES

The study was employed with interview based structural quaternaries adapted from different literatures and making necessary modification according the quaternaries have been developed in Amharic language since respondent are Wolkite town adult resident and they can easily understand Amharic language pretested self-administrating structure quaternaries which contain socio demographic data prevention practice was used as data collection tools the data was collected for 1 week. In Wolkite town for three sub city we choose three kebele, Edget ber, Edget chora and Awan kebele thier huuse hold number are 1407,1343 and 1050 respectivily

Were N is equal to 411

Edget chora (1343 鼠 ˛

Edget ber (1407 鼠 ˛

Awan (1050 鼠 ˛

4.7 STUDY VARIABLE

4.7.1 Dependent Variable

- ✓ Knowledge of TB

- ✓ Attitude of TB
- ✓ Prevention practice of TB

4.7.2 Independent Variable

- ✓ Age
- ✓ Sex
- ✓ Marital status
- ✓ Ethnicity
- ✓ Religion
- ✓ Occupation
- ✓ Family income
- ✓ Educational status
- ✓ Family size

4.8 OPERATIONAL DEFINITION

 Practice - In this study it refers to the communities' actions done them on the subject regarding prevention practice of TB.

- ✓ Good Practice: Refers to those study participants who correctly respond to practice questions and score greater than equal mean of prevention practice of TB.
- ✓ Poor Practice: Refers to those study participants who score less than mean of practice questions.

Knoweledge:is fact of community related toTBprevention practice

Good knoweledgerefer :refers to those study participant who correctly respond to knoweledges qusastion and score above or equal to the mean of knoweledge qustion

Poor knoweledge :reters to those study participant score less than mean of knoweledge quastion

Attitude: in this study attitude is communities feeling about TB

Favorable: when respondent scored above or equal mean of attitude quastion

Un favorable : when respondent scored less than mean of attitude quastion

Prevention practice of TB; prevention of TB involves screening those at high risk early detection and treatment cases and vaccination with the BCG vaccine. Those at high risk include house hold, work place and social contact of people with active TB.

4.9 Data Quality Assurance

The questionnaires were first prepared in English translated to Amharic during data collection 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

4.10 DATA ANALYSIS AND MANAGEMENT

After the completion of data collection process, all the questionnaires was checked for completeness, clarity and consistency and the data was analyzed by using epi data method and export to SPSS result was presented by text, figure and tables and graph .

4.11 ETHICAL CONSIDERATION

Ethical clearance was obtained from Wolkite University, College of health sciences in order to obtain permission to proceed with data collection. Informed consent will obtain from each participant prior to enrollment the participants was check a box indicating willingness to participate in the study. Verbal consent from the respondents was asked before intervening.

4.12 DISSEMINATION OF THE RESULT

The final report was presented and discussed at Wolkite University College of health science and department of nursing as partial fulfillment of the Bachelor of Science degree of nursing. Copies of this study were sent to Wolkite health center Bureau. It wills also being disseminated through publication on local or international journals and presentation on scientific conferences.

5. RESULT

5.1 Socio demographic background

From a total of 411 sample population, 409 study subjects gave their informed consent making the respondents rate 99.5%. Participant were include all Wolkite town adult resident among the study participant 170 (41 .6%) were male and 239(58.4%) female, out of the 409 study subject the mean age is 31.17. the religious participant 171(41.8%), 117(28.6) ,49(12.0%) , 31(7.6) ,41(10%) were Muslim, orthodox protestant , and other respectively, majority of respondent , around 152(37.4%) participant was merchant ,and also 123(30.1%) governmental employment. 6(1.5) farmer ,75(18.3 %) daily labor and 53 (13%) were other . Among the study participant 173(42.3%) Gurage, 61(14.9%) Amhara, 36(8.8%), Tigre,54(13)Oromo and85(20.8) other. From study participant 263(64%) married, 97(23%) single, 34(8.3%) widowed, 15(3.7%) divorced. From

Table 1: socio demographic characteristics of respondents

1	Age in year	18-25	111	27.1
		26-35	236	57.7
		>=35	62	15.2
		Total	409	100.0
2	Sex	Male	170	41.6
		Female	239	58.4
		Total	409	100.0
3	Religion	Muslim	171	41.8
		Orthodox	117	28.6
		Protestant	49	12.0
		Catholic	31	7.6

		Other	41	10.0
		Total	409	100.0
4	Ethnicity	Gurage	173	42.3
		Amhara	61	14.9
		Oromo	54	13.2
		Tigray	36	8.8
		Other	85	20.8
		Total	409	100.0
5	Educational status	Un able to read and write	16	3.9
		Read and write	74	18.1
		Primary level	34	8.3
		High school	83	20.3
		Diploma and above	202	49.4
		Total	409	100.0
6	Occupation	Government employment	123	30.1
		Farmer	6	1.5
		Merchant	152	37.2
		Daily labor	75	18.3
		Other	53	13.0
		Total	409	100
7	Your income	<500	3	7
		500-1000	20	4.9

		>=1000	386	89.1
		Total	409	100.0
8	Family size	<=4	272	66.5
		>=5	137	33.5
		Total	409	100.0
9	Marital status	Single	97	23.7
		Married	265	64.8
		Widowed	33	8.1
		Divorced	14	3.4
		Total	409	100.0

5.2 knowledge related characteristic

From this result more than half of study participant 210(51.3) were good knowledge about TB where as199(48.7) study participant were poor knowledge about TB .all study participant 409(100 %) were heard about TB majority of those study participant were gain information from TV 176 (44%) the left was gain from health provider ,poster ,radio , news paper community leader , friends ,health care provider 79(19.3),18(4.4),17(4.2)and 11(2.7) 2(0.5) ,106(25.9) and 79(19.3) respectively

Table 2: knowledge related characteristics of respondents living in Wolkite town adult resident Gurage zone, Ethiopia 2022 .

No	Character	Value	Frequency	Percentage
1	Cause of TB	Virus	40	9.8
		Bacteria	86	21.0
		Other	8	2.0
		Don’t know	275	67.2
		Total	409	100.0
2	Can TB transmitted	Yes	409	100.0
		No	0	0
3	How can an individual contract TB	Hand shake	3	7
		Smoking	27	6.6
		Sharing utilities	0	0
		Drink fresh milk without boiling	21	5.1
		From mother to unborn child	0	0
		Through air transmission from infected person (cough or sneezing)	289	70.7
		Total	409	100.0

4	What TB symptom do you know	Loss of appetite	14	3.4
		Chest pain	6	1.5
		Prolonged cough of more than two weeks	79	19.3
		Difficulty in breathing	81	19.8
		Weight loss	4	1.0
		Cough	225	55.0
		Total	409	100.0
5	Can TB be cured	Yes	407	99.5
		No	2	0.5
6	How can TB protect yourself against TB	Boil fresh milk	41	10.0
		Avoid hand shaking	3	7
		Avoid sharing utensils	5	1.2
		Sanitize when in contact with public handles	130	31.8
		Close door and windows	17	4.2
		Good diet	15	3.7
		Prayers	144	35.2
		Avoid crowding	54	13.2
		Total	409	100.0
7	How expensive is the cost of TB	Free\no cost	110	26.9
		Normal, acceptable	37	9.0
		Somehow expensive	26	6.4
		Very expensive	168	41.1
		Don't know	68	16.6
		Total	409	100,0
8	Heard about TB	Yes	409	100
		No	0	0
		Total	409	100.0
9	Source of information	News paper	11	2.7
		Radio	17	4.2.
		TV	176	43.0
		Posters	18	4.4
		Health care provider	79	19.3
		Neighbors	106	25.9
		Community leader	2	0.5

		Total	409	

TB knowledge

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	poor knowledge	199	48.7	46.7	46.7
	good knowledge	210	51.3	53.3	100.0
	Total	409	100.0	100.0	

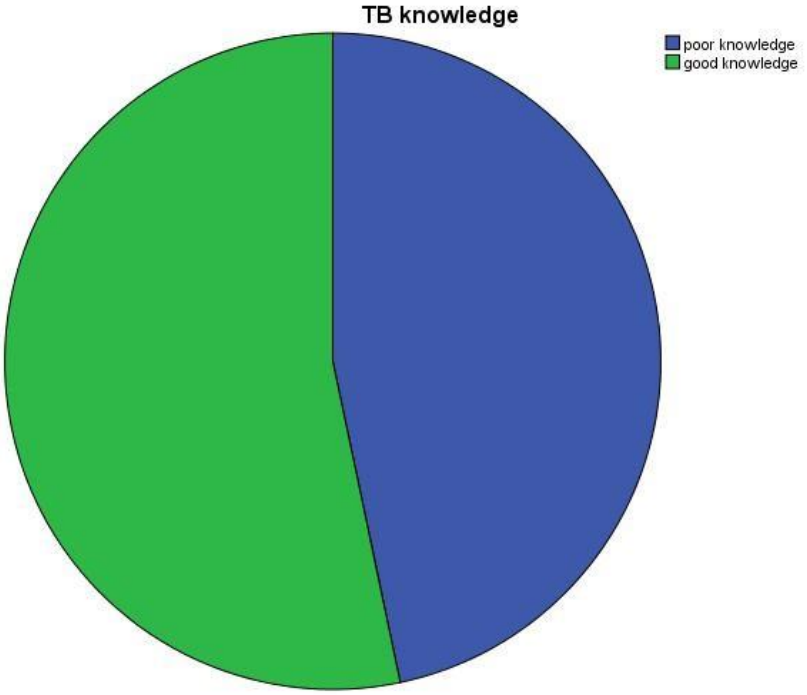


Figure 2: knnowledge result figure

5.3 Attitude

From study participant 178 (43.5) had favorable attitude about TB where as 231(56.5)study participant were unfavorable 231(56%) from our study finding 68.7% of respndent stating stronglly disagree as TB is not punishiment from god and 3.4%belive that TBis punishiment from god .

Table 3: attitude related charateristic of respondent live in wolkite twon adult resident gurage zone 2022

Variable	Strongly disagree	disagree	neutral	agree	Strongly agree
TB is a punishment from god	281 (68.7%)	70 (17.1%)	17 (4.2%)	27 (6.6%)	14 (3.4%)
TB is due to witchcraft	206 (50.5%)	123 (30.1%)	57 (14.0%)	15 (3.7%)	7 (1.7%)
TB is due to dry period with strong sun	136 (33.3%)	74 (18.1%)	160 (39.1%)	26 (6.4%)	13 (3.2%)
TB is curable	31 (7.6%)	37 (9.0%)	96 (23.5%)	93 (22.7%)	152 (37.2%)
TB has been imposed by whites to kill Africans	84 (20.5%)	72 (17.6%)	179 (43.8%)	39 (9.5%)	35 (8.6%)
HIV\AIDS is due to TB	133 (32.5%)	82 (20.0%)	167 (40.8%)	15 (3.7%)	12 (2.9%)
TB is due to HIV\AIDS	130 (31.8%)	65 (15.9%)	144 (35.2%)	37 (9.0%)	33 (8.1%)
People with TB should be feared	250 (61.1%)	54 (13.2%)	31 (7.6%)	33 (8.1%)	41 (10.0%)
People with TB should be avoided	307 (75.1%)	71 (17.4%)	13 (3.2%)	10 (2.4%)	8 (2.0%)

TB attitude

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unfavorable	231	56.5	56.5	56.5
	Favorable	178	43.5	43.5	100.0
	Total	409	100.0	100.0	

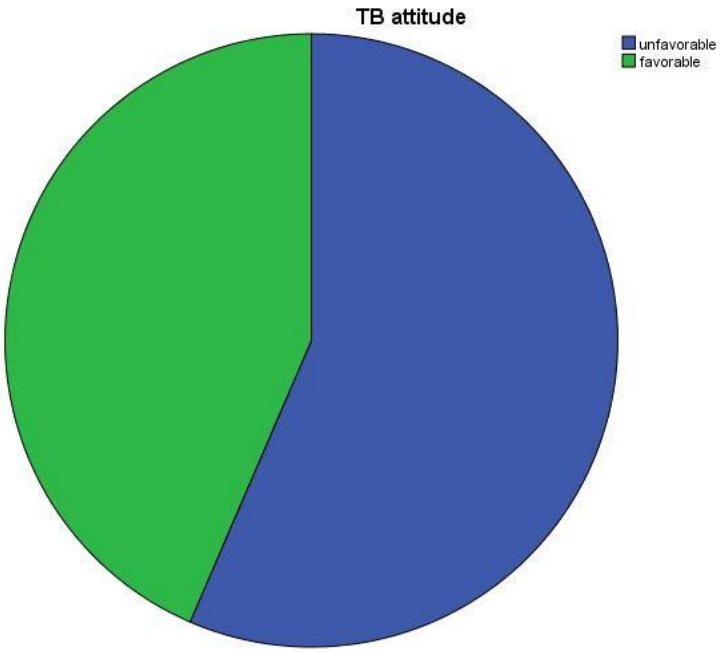


Figure 3: Attitude related result figure

5.4 prevention practice

In this study 194(47.4) of study participant had good privention prictice whereas 215(52.6) study participant had poor prevention practice ,from our finding 43.3%of study participant regularly boil milk before use where as 5.4% use raw milk with out boiling always.

Table 4: practice related charateristic of respondent live in wolkite two adult resident gurage zone 2022

Variable	Always	Most of the time	sometimes	Not at all
Boiling milk before use	176 (43.3%)	155 (37.7%)	56 (13.7%)	22 (5.4%)
Hand –shaking with anybody suspecting a TB case	76 (18.6%)	182 (44.6%)	79 (19.4%)	71 (17%)
Put on mask when suspecting TB	126 (30.6%)	151 (37.0%)	107 (26.2%)	25 (6.1%)
Sharing of utensils	62 (15.2%)	116 (28.4%)	138 (33.7%)	93 (22.7%)
Avoid contacts in public building	126 (30.8%)	82 (20.0%)	160 (160%)	41 (10.0%)
Opening windows in your bed\ living room	277 (67.7%)	61 (14.7%)	110 (27.0%)	9 (2.2%)
Have a good diet especially when suspecting TB symptom	277 (67.7%)	69 (16.9%)	47 (11.5%)	16 (3.9%)

Visit health facility when having TB symptom	299 (73.1%)	59 (14.4%)	38 (9.3%)	13 (3.2%)

Prevention practice category table

Variables	Frequency	Percent
Poor (mean,<15.8)	215	52.6
Good (mean,>15.8)	194	47.4
Total	**409**	**100.0**

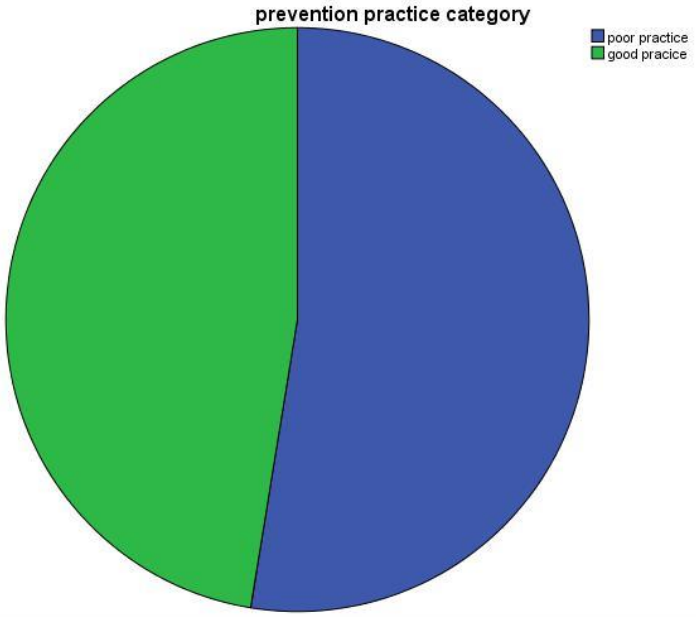


Figure 4: prevention practice result figure

6 Discussion

The present study TB prevention practice in this study over all study participant heard about Tuberculosis majority of those study participant were gain information from TV 176(44%) which is greater than study conducted in Gelgel Gibe from these study participant 83%of respondent had herd about TB(47) and also study conducted in india show that 93.2 % of respondents heard about TB which is similar to this study(48) ,this study is also better than study conducted in Arbaminchi

it shows that 87%of respondents heard about TB .In this study 210 (51%)of respondents had good overall knowledge about TB which is better than study conducted in shouth africa which shows that 42.8% of respondents had good overall knowledge about TB (30) .This study is similar to study conducted in Addis Ababa which shows 52.7% of study participant had good overall knowledge about TB (29) study conducted in North Tanzania 70.1% of respondent had good knowledge about TB it is better than our finding because their sample size is two times our sample size (28) in our finding shows 225(55%) respondents know cough is symptom of TB it is less than study conducted in Arbaminch which shows 95%of respondents state that cough is symptom of TB .our study revealed that 21%of study participant knew the ethology of disease as bacteria which is better than study conducted in Tepi general hospital 9.9%(25m)and also better than study conducted in Itang spetial distinict (51). inthis study finding also with the majority 67.2% stating don't knew the cause of TB and also the Ethiopian national survey showed that 47% participant don't know cause of TB (51) wich is better than this study ,and also study conducted in diga twon is only 4.6 % of participant didn't know cause of TB(53)

In this study 176(43.5) of study respondents had favorable attitude which is is similar to study done in Thailand in which 47.9 %had a high attitude level (54) and it is lower than study conducted in tepi general hospital 53.3% (24m) and below than study conducted in mech distinict where 68%had high levels of attitude, 66% in this finding respondents stating that TB is curable by agree 93(22.7)and 152 (37.2)strongly agree ,it is lower than study conducted in tepi general hospital which is 79.5%(50) and also it is lower than study done in Ethiopia national survey(88.9%)(52)

Regarding to the practice from our finding 67% of respondents open their window regularly which is better than study conducted in tepi general hospital (32.55)(50) .from our finding 299(73.1)respondents visit health care when suspected TB symptom it is similar study conducted indiga town which is 65.7%..

In our finding 47.4%of study participant had good overall practice which is comparable to study conducted in mecha distinict where 48%had good prevention practice (41)and Tepi hospital in which 44.4 had good prevention practice (50).In North Tanzania 89% of study participant had good over all prevention practice because of their sample study were greater than our study sample size (28) study conducted in Bahar dar city 41.4%of study respondent had good over all prevention practice it is similar to our study (32) study conducted in Abasa bus user 50.5 %and in south African shows 68.4% these study are better than our finding (46)

In our finding majority of respondent were 58.4% were female which is similar to study conducted in addis ababa 60.5% were famale , in this finding majority of respondent 89.1% had greater than 1000 which is better than study conducted in Addis ababa which (29)

7. Limitation of the study of the study

The study has lacks in regulating the deep insight of participant especially in attitude and practice ,the descriptive nature of the study could not explain determinant which are affecting TB prevention practice deeply ,inseficient time and the present of non respondant

8. CONCLUSION AND RECOMMENDATION

8.1 conclusion

Studies revealed that Tuberculosis prevention practice not satisfactory the finding from this research showed the majority of study participant 52.6%had poor TB prevention practice and fron our finding 41(10%)of respondent not avoid public building and 38(9.3%) visit health facility some times when suspected TB and 13(3.2%) not visit completely .62(15.2)respondents sharing utility and 22(5.4)not boil milk before use and 56% boil some times before use. From our study participant 27(6.6%) by agree and 14(3.4%) by strongly agree believe that TB is punitioment from god and15(3.7%) and 7(1.7) stating that TB is due to witchcraft by agree and strongly respectively .and also 130(31.8%)of our respondent stating TB is not due to HIV by strongly disagree and 65 (15.9%) of study respondent by dis agree. From our finding 41%of study respondent stating that the cost for TB treatment is very expensive and only 6.6% of respondents smoking as risk factor of TB .From our study 144(35%)of respondent mentioned that way of TB prevention by praying

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 worker 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 , Ensure access to community centered TB care services and screen community
- ✓ Empower and involve people affect 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

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ANNEX

Questionnaires

Wolkite University College of medicine and health science department of nursing Instruction

Dear data collector, the respondent name will not be written on this form and no individual response will be reported to anybody. If there is any problem in the understanding of the question any respondent can ask

data collectors to clarify for them. Write the correct answers of respondents by mark “X” inside the box found in front of the alternative of the question. And write the respondents answer in the given space after the respondents willing to answer by consent form.

Consent Form

Introduction

Hello! My name is.....I come from Wolkite university 4th year nursing students of this research team member. Today I am here to collect data about the knowledge, attitude and prevention practice of TB. The collected information will be destroyed after the study completed and it is confidential during the study period.

Your correct answer to the question will make the study to achieve its goal. There for you are kindly requested to respond genuinely and voluntarily with patience, the interview will take about 30 minute.

Are you willing to fill the questioner? Yes ____ No_____

TB prevention practice measuring questionnaire

Part I. Socio demographic characteristics

No	Question	Option	Skip
1	Sex	A. Male B. Female	
2	Age	----------years	

3	Religion	A. Muslim B. Orthodox C. Protestant D. Catholic E. Others specify…….	
4	Ethnicity	A. Amhara B. Tigray C. Oromo D. Garage E. Others specify……	
5	educational level	A. Un able to read and write B. Read& write C. Primary level D. high school E. diploma and above	
6	Occupation	A. Government employment B. Farmer C. Merchant D. Daily labor E. Others specify……	
7	Your monthly income	_____ birr	

8	How many people normally live in this	_____	
	household?		
8	Marital status	A. Single B. Married C. Widowed D. Divorced E. Others specify…….	
9	Do you heard about TB	A. Yes B. No	
10	Source of information	A. Newspapers/Magazines B. Radio C. TV D. Posters E. Health care providers F. Relatives/Friends/Neighbors G. Religious/Community leaders	

Part II: knowledge related questions

No	Question	Responses
1	What organisms that cause pulmonary TB?	A. Virus B. Bacteria C. Other D. Don't know
2	Can TB transmittable	A. Yes B. No

3	How can an individual contract TB? (Circle all that apply)	A. Hand shake B. Smoking C. Sharing utensils D. Drink fresh milk without boiling E. Contact handles in public places (door handles, hand hangers in the buses, etc. F. Sexual intercourse G. From mother to unborn child H. Through air transmission from an infected person (cough or sneezing
4	What TB symptoms do you know? (Circle all that apply)	A. Loss of appetite B. Unexplained fevers of more than seven days C. Chest pains D. Prolonged cough of more than two weeks E. Difficulty in breathing F. Night sweats G. Weight loss H. Coughing some blood I. Constant fatigue
5	Can TB be cured	A. Yes B. No

6	How can you protect ırself against TB?(Circle all that apply)	A. Boil fresh milk B. Avoid hand shaking C. Avoid sharing utensils D. Sanitize when in contact with public handles E. Close doors and windows F. Good diet G. Prayers H. Avoid crowding
7	How expensive is the cost of TB examination and treatment	A. Free/No cost B. Normal, acceptable C. Somehow expensive D. Very expensive E. Don't know

Part III: Attitude toward TB and its prevention practice in Wolkite town.

No	Variables	1	2	3	4	5
1	TB is a punishment from God					
2	TB is due to witchcraft					
3	TB is due to dry period with strong sun					
4	TB is curable					
5	TB has been imposed by Whites to kill Africans					
6	HIV/AIDS is due to TB					

7	TB is due to HIV/AIDS					
8	People with TB should be feared					
9	People with TB should be avoided					

Key 1: strongly disagree, 2: disagree, 3: neutral, 4: agree, 5: strongly disagree

Part Four: Prevention practices towards TB transmission

No	Variables	1	2	3	4
1	Boiling milk before use				
2	Hand-shaking with anybody suspecting a TB case				
3	Put on a mask when suspecting TB				
4	Sharing of utensils				
5	Avoid contacts in public buildings				
6	Opening widows in your bed/living room				
7	Have a good diet especially when suspecting TB symptoms				
8	Visit health facility when having TB symptoms				

Key: 1: Always, 2. Most of the time, 3. Sometimes, 4. Not at all