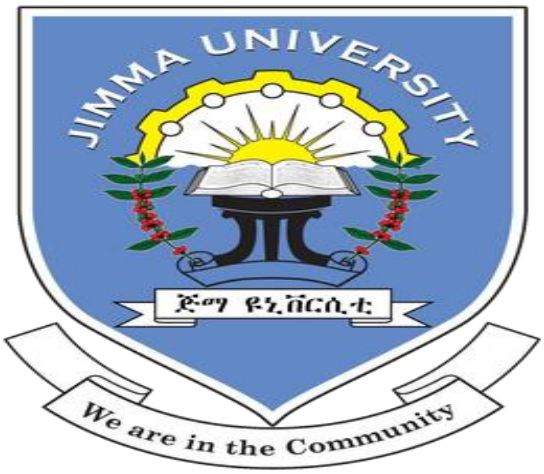

Covid-19 Prevention Practice and Associated Factors among Prisoners in Worabe Town Silte Zone, Southern Ethiopia 2022g.C

BY:

Mohammed Jamal

January 2022

Jimma Ethiopia

COVID-19 PREVENTION PRACTICE AND ASSOCIATED FACTORS AMONG PRISONERS IN WORABE TOWN SILTE ZONE, SOUTHERN ETHIOPIA 2022G.C

BY:

Mohammed Jamal

Advisors:-1.Mr. Desta Hiko (MPHE, Associate professor of Epidemiology)

2. Mr. Abeje Kebede (MSc MPH-E)

A THESIS TO BE SUBMITTED TO DEPARTMENT OF EPDEMIOLOGY, FACULTY OF PUBLIC HEALTH INSTITUE OF HEALTH JIMMA UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE MASTER IN PUBLIC HEALTH

Abstract

BACKGROUND: preventive actions for Coronavirus disease 2019 (COVID-19) were among the means to tackle the transmission of the virus. However, reluctance to implement the recommended preventive measures has been reported to be a major problem everywhere including Worabe prison Southern Regional State of Ethiopia

OBJECTIVE: To assess the practice of COVID-19 prevention and associated factors among prisoners in Worabe town, southern Ethiopia, in 2022.

METHODS: Institution-based cross-sectional study was conducted from Jun 1–30, 2022 among 444 prisoners in Worabe town prison. Simple random sampling techniques were used to select study participants. Data were collected by using pre-tested structured self-administered questionnaires and entered into Epi Data version (3.1) entry software and exported to SPSS version 26 software. A binary logistic regression analysis was used to identify factors related to COVID-19 prevention practice among prisoners. For statistical significance factors with p-value less than 0.05, an Adjusted Odds Ratio (AOR) with a 95% Confidence Interval (CI) was calculated and interpreted

Result: Two hundred thirty-five participants [53%, 95% CI: 27 - 39%] had good COVID-19 prevention practices. Being male [AOR=0.297, 95%CI (0.15-0.58)], being history of alcohol intake [AOR=3.79, 95%CI:(1.656- 8.675)], being Unfavorable attitude [AOR=0.429, 95%CI (0.27-0.68)], being knowledgeable about prevention[AOR=1.81, 95%CI (1.12- 2.92)], Information source [AOR=1.84, 95%CI (1.12-3.02)], and Stay at room [AOR=4.06, 95%CI (2.56-6.43)] were all factors associated with good COVID- 19 prevention practice

Conclusion: COVID-19 prevention practices were low among prisoners in the study settings. Prisoners' Sex, history of alcohol intake, being overall attitude, overall good knowledge of prevention, Information source and Stay at room were all associated with COVID-19 preventive measures practices among prisoners. Prisoners may need to improve the way and habit of practicing prevention methods towards COVID-19.

Key words: COVID-19, practice, prison, Worabe, Ethiopia.

Table of Contents

LIST OF TABLES AND FIGURES

Acronyms/Abbreviations

AOR	Adjusted odd ratio
COVID-19	Coronavirus disease 2019
ETB	Ethiopian birr
F-HCWs	Frontline health care workers
ICU	Intensive care unit
IPC	Infection prevention and control
KAP	Knowledge, attitude and practice
NGO	Non-governmental organization
PPE	Personal protective equipment
SARS-Cov-2	Sever acute respiratory syndrome-coronavirus
SD	Standard deviation
SNNPR	Southern nation nationalities and people's region
SPSS	Statistical package for the social sciences
TV	Television
VIF	Variance inflation factor
WHO	World health organization

ACKNOWLEDGMENTS

First and foremost, I thank Allah, the Almighty, for all of his protection. I would like to express my deepest gratitude to Jimma University, the institute of health, and the department of epidemiology for giving me this opportunity. I would like to extend my heartfelt thanks to my advisors, Mr. Desta Hiko and Mr. Abeje Kebede for their unreserved guidance and constructive comments in the development of my research work.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

On 31 December 2019 pneumonia of unknown cause was identified in the city of Wuhan, China, and reported to the WHO China Country Office. In January 2020 the microorganism responsible for the pneumonia was isolated and classified as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)(1).

COVID-19 infections may be introduced into prisons by anyone entering, including visitors and staff, and may be transmitted among people living in prisons, prison staff, and visitors. The transfer of people between prisons and staff rotation and cross-deployment between prisons may facilitate infection introduction into prisons (Kinner et al., 2020)(2).

In addition 23% of countries reported overcrowding in a recent WHO survey (WHO, 2019), which suggests that measures such as physical distancing are difficult or even, in some cases, impossible to implement, further contributing to the spread of infectious diseases(3).

People living in prisons may be more susceptible and vulnerable in the context of COVID-19 for several reasons. In prisons, there is an overrepresentation of the most marginalized communities and vulnerable populations, including those with poor living conditions and low health status in general(4).

The World Health Organization (WHO) has published guidelines on the prevention of infections within prisons, supporting the importance of the use of personal protective equipment (PPE), social distancing, and prisoners' mental health (5).

Touching the contaminated surface and body of an infected person, direct contact with the respiratory droplet of an infected person during and after coughing and sneezing is its means of transmission(6).

The best way to prevent and slow down transmission is to be well-informed about the COVID-19 virus, the disease it causes, and how it spreads COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, so it's important to practice respiratory etiquette (7).To reduce the disease's spread keeping a distance between prisoners bead using face masks inside the room, covering their nose and mouth when sneezing and coughing, or arm flexing, is necessary to minimize the spread of COVID-19, especially in prioritized high-risk groups like prisoners and the flow of

prisoners into and out of prisons and face-to-face contact between clinicians, prison staff, and patients are reduced. (8).

This aim of this study is to incorporate basic infection control interventions in a prison setting such as handwashing and respiratory etiquette and stressed the importance of environmental cleaning of cells or rooms, shared facilities and all surfaces across prisons. Information was shared on the unique nature of the prison setting and how it lends itself to the transmission of pathogens(9). Prison overcrowding persists in most countries and constitutes one of the most fundamental obstacles to providing safe and healthy custodial environments in line with fundamental human rights. Cramped accommodation areas, poor hygiene, ventilation and nutrition as well as insufficient health-care services in many prison systems will equally undermine infection control measures and thus significantly increase the risk for infection, amplification and spread of COVID-19(10).

1.2. Statement of the problem

COVID-19 is an emerging respiratory disease that was first reported in December 2019 in the Chinese city of Wuhan (WHO, 2020). The virus that causes COVID-19 is a severe acute respiratory syndrome coronavirus (SARS-CoV-2)-like the corona virus that was previously found in Chinese bats. The virus is a zoonotic pathogen that can spread from animal to human and human to human(4)

As of February 3, 2022, globally there were 391,393,876 COVID-19 confirmed cases, 310,264,020 recoveries, and 5,743,921deaths.In Africa in the same period, there were 11,164,044 COVID-19 confirmed cases, 10,017,825 recoveries, and 241,317 deaths. Similarly, as of February 3, 2022, Ethiopia had 466,289 confirmed cases, 400,374 recoveries, and 7355 deaths(11).

The WHO has declared a public health emergency as a result of international worries about COVID-19's highly contagious characteristics. On March 13, 2020, the first COVID-19 case was reported in Ethiopia, and measures to control the virus's spread were quickly put in place. COVID-19 has spread to almost all countries of the world. Among many factors, poor hand cleanliness, congestion in the same area, and bodily contact like handshaking contributed to the fast spread of the virus within a minimal period of time. The World Health Organization (WHO) recommends widely informing the public about the cause and, mode of transmission of the disease, and simple prevention methods such as hand washing with soap or use of hand sanitizers, maintaining social distancing, and reducing social contact to slow down the fast spread of the virus. Additionally, case detection, contact tracing, quarantines, and other community-level measures are recommended actions to reduce widespread COVID-19(12)

The global surveillance system established by (WHO) with partners in January 2020 contributed much in gathering standardized data at global, regional, and country levels it is also stated that the challenges to respond to COVID-19 in detentions like prisons require collaborative actions of government and the whole society. This is because people in prisons are already affected by their freedom and may respond differently to further restrictive measures imposed upon them. WHO in its interim guideline recommends that all staff and people in prisons and other places of detention should have a comprehensive awareness of COVID-19 prevention strategies, including adherence to hand hygiene measures, respiratory

etiquette (covering coughs and sneezes), physical distancing (maintaining a distance of at least one meter from others), being alert to signs and symptoms of COVID-19, and staying away from ill people. Furthermore, since all regions of the world are at risk of COVID-19, each country is encouraged to be ready to respond in line with the global Strategic Preparedness and Response Plan(13).

Ethiopia set up a Ministerial Committee led by the Prime Minister on March 16, 2020, to control COVID-19; the committee announced the postponement of large gatherings and meetings including sporting events, wedding and funeral ceremonies, limiting religious institutions and places of worship to limit gatherings and a total closure of all public and private schools including the higher learning. Moreover, the federal government adopted a COVID-19 control implementation regulation and declared a state of emergency (SoE) in April 2020 which was approved by the House of Peoples Representatives (HoPR). As a result, public and private institutions installed hand washing stations. At the work area, each individual is obligated to use a face mask using the slogan "NO MASK, NO SERVICE". More importantly, some individuals developed the behavior of sanitizer use before and after any procedure.(14).

Despite efforts made to improve awareness and practice towards COVID-19 prevention, several studies showed that there are gaps in the implementation of prevention measures. A study conducted in Cameroon demonstrated that 61% of participants reduced their practice of avoiding crowded areas, using facemasks, keeping hand hygiene, using hand sanitizers, and eating fruits(15). Similarly, a study conducted in Malaysia reported that study participants have been avoiding crowded areas (83%), practicing proper hand hygiene (88%), and wearing face masks (51%)(16). Another study conducted in Pakistan revealed that study respondents wash their hands frequently (85%), wash their hands before eating (60%), wash their hands after coming home (93%), cover their face when sneezing or coughing (50%), and practiced maintaining a safe physical distance (93%)(17). Practice-related evidence from Bangladesh also showed that 55% of participants increased hand hygiene, while 98% of them wore a face mask in crowded places, 99% of them agreed to inform a suspected case health authorities, and 94% of them implemented washing hands with soap and water(16). As to Ethiopia, evidence showed that COVID-19 prevention practice was 16% in Gondar, 62% in Amhara regional online study, 49% in Addis Ababa online study, 41% among Dire Dawa residents, 42% among residents in Dessie (18). 28.6%, among health professionals used facemask Dilla University(13).

In a study of Gedeo zone, Southern Ethiopia, the overall practice level of the community to the recommended safety measures ofCOVID-19 was 31.3%Thus, this study was conducted to assess the level of practice to COVID-19 preventive measures and associated factors among prisoners in Silte zone Worabe town South Regional State, Ethiopia(19).

1.3. Significance of the study

The finding of this study would provide information to the responsible body about the prevention practices of prisoners and helps in planning to modify or plan, the availability and accessibility of (IPC) materials and health education that can address preventive messages against the poor practice of the prisoners. This knowledge is used in strengthening preventive strategies against COVID-19. The data from this study is used as a baseline for the Silte zone health department so that they can strengthen or revise their plan for the specified problems regarding the prevention practice of COVID-19 Particularly among prisoners. The result of this study will benefit the Ministry of Health of Ethiopia away that they can understand whether preventive messages against COVID-19 reached the community to achieve the established goals and this study will also be a baseline for other researchers interested to work on the issue.

CHAPTER TWO

2. LITERATURE REVIEW

2.1 COVID-19 preventive practices

In case of the occurrence of emerging infectious diseases, it is common for individuals to take preventive actions. In particular, public takes the governments recommended actions as the standard. According to Jose et al 2020, when asked whether various activities imposed by the government could be considered signs for people to change their action, 80% sensed that the government had helped them implement behavioral changes. Public response and compliance with pandemic regulations existed even before COVID-19 worldwide(20).

Preventive Practice: after sum up of each score, those individual's prevention practiced the mean and above considered as had good preventive practice and scores the mean value below mean considered as had good=1 and poor =0 COVID-19 preventive practice(21).

A study conducted in Hubei, China, discovered that students washed their hands as frequently as possible during the COVID-19 episode, and they washed their hands after using the restroom or touching the question outside of the house. Be that as it may, as it were, 85.6% of them chose to wash their hands after hacking or sniffling. 4.7% of them did nothing amid the scourge, counting hand washing(22).

Knowing preventive practice and factors towards Covid-19 among prisoners can play a great role in the prevention of the disease prisons(23).

According to study done in Bangladeshi by R.Banik In terms of practices toward COVID-19 among participants, 75.2% always washed their hands with soap or hand-sanitizer thoroughly and up to 70.6% always wore a mask when going outside the home in recent days. However, 33.9% and 14.6 of participants reported "occasionally" and "never" maintained safe distance with people (3 feet) when going outside the home. Meanwhile, only 62.1% of participants avoided going to any crowded place, and the rate of reporting "occasionally" and "never" was 30.0% and 7.9%, respectively(16).

According to a study done in Mexico City by Irigoyen-Camacho International journal of environmental research and public health, 57.6% of the most common preventive measures were staying at home followed by hand washing (53.4%), use of alcohol-based hand sanitizer and cleaning and disinfection of household as preventive measures were adopted by 22.6%

and 21.8% respectively. About 16.6% did not adopt any preventive measures against infection which(24).

A cross-sectional study conducted to assess covid-19 prevention in students of Ghana due to the students becoming positive after reopening of schools only 31.5%, students wore a facemask and 50% of the students did not practice hand washing/hand sanitizing and social distancing. Also, other studies showed among students of Ghana 68% of students had good preventive practice(2).

According to Southwest Ethiopia: Community-Based Cross-Sectional Study approximately two-thirds (64.7%) of the respondents had a history of going to crowded places. However, only approximately one-third (30.3%) of the total study participants had a history of wearing a mask when leaving home. The majority (68.1%) of the study participants had a history of covering their mouth and nose when coughing and sneezing. Two-thirds of the respondents had a history of maintaining their distance at 2 meters (64.4%) and washing their hands with soap and water or using alcohol-based hand sanitizers (64.8%)(25).

A study conducted by Dilla University health care workers discovered that about (86.1%) were covering their mouths during sneezing and coughing and (79%) were using face masks. It also showed that (28.6%) of the respondents were using sanitizers. In addition, only (1.7%) of respondents were practicing physical distancing, and (37%) of healthcare professionals washed their hands after touching objects(26).

2.2 Modifying factors for covid-19 prevention

2.2.1 Socio-demographic factors

Many socio-demographic factors affect COVID-19 preventive practice, such as age, sex, marital status, residence, etc. in previous studies. The preventive practice of women against COVID19 was higher than men; probably men have other life concerns than spending time following the preventive measures. According to the study conducted on prevention practice on coronavirus disease in Egypt, women were more motivated for health than men whereas the performance of preventive behaviors against COVID-19 was higher in urban residents than rural(27).

Studies showed that COVID-19 preventive practice was different among the marital status of Japans in which married population had good preventive practice due to the concern of their families and to society(12).

A cross-sectional study conducted in Northern Iran on prevention from COVID-19 found that people living in urban areas showed better prevention against the disease than people living in rural areas(28).

According to a cross-sectional study done on College students in Amhara region by (Bitew, and Belsti,2021)adolescent age 16-20 years were twice more knowledgeable than ages greater than 20 years, single students had 2.3 times greater knowledge than married and students who had been living in urban had good COVID-19 preventive practice that was 3 times greater than rural residence(29)

. 2.2.2 Source of information

According to a survey done in Kenya, people reported obtaining information on COVID-19 from a broad number of sources via numerous channels; generally, government messages were the most frequently cited. The most frequently mentioned sources were government TV commercials, SMS, and radio ads. However, people with a greater degree of education had much more exposure to these sources. For example, 81% of those with a higher education received information via government SMS, compared to 66% of those without a high school diploma(30).

The Silte Zone HCWs study revealed that HCWs good preventative practice was significantly related to the source of information on COVID-19. HCWs who acquired their information from friends and colleagues were three times as likely as those who got it from electronics to provide good preventative care(31).

An institution-based cross-sectional study was conducted South Wollo. The majority of the participants (79%), reported that information about COVID-19 was received from social media, followed by radio and television (52%). Moreover, the other participants reported that they received information from other sources, such as seminars and workshops, and colleagues and senior staff (20.3% and 17.3%), respectively(32).

A study conducted in Central and South Gondar zones of the Amhara regional state among Healthcare Workers, indicated that 98.6% ever heard about the COVID-19 virus and as to information sources about two-thirds (67.3%) of the respondents reported that they use social media like Facebook, Twitter, WhatsApp, YouTube, and Instagram to obtain information about COVID-19 and almost 64.1% of the participants had good knowledge on the cause(26).

2.2.3 Knowledge on COVID-19 prevention

A study in South Korai showed that fever was identified by 57.9% and cough 47.1% while 12.1% did not know COVID -19 symptoms. In addition, 76.3% could describe three or more symptoms while 11.6% could describe only one or two symptoms and about 69.5% correctly identified older adults as the high-risk age group. The educated individual had better knowledge of(8). The overall knowledge point extended from 0 to 10 the study participants who had scored the mean and below were classified as having poor=0 knowledge, the mean and above as good knowledge=1 ofCOVID-19 prevention practice(21).

A study conducted on Bangladeshi students revealed that they were familiar with COVID-19 concepts, specifically that "wearing a mask is necessary for the public," as demonstrated by the maximum value of 89%. Similarly, students selected 'pregnant women, the elderly, and people with chronic conditions should take extra precautions against coronavirus' as their second-best awareness of COVID-19(33).

A cross-sectional study in China, regarding the overall knowledge and understanding of COVID -19, recognizes that the disease could be transmitted by droplets, direct or indirect hand contact, and contact with asymptomatic patients. About 24%, 16% and 10% of the respondents did not believe that asymptomatic patients, direct hand contact and indirect hand contact (via door handling) could transmit the disease, which could affect the use of appropriate practices. Individuals with higher levels of education were more likely to correctly identify whether asymptomatic patients could transmit the virus(34).

Study conducted in Sidama southern Ethiopia the disease is highly contagious, and its major clinical manifestations include fever, dry cough, runny or stuffy nose, sneezing, sore throat, headache, body aches, fatigue, chills, and shortness of breath. A study conducted on knowledge and attitude on COVID-19 among health providers in the Sidama region of southern Ethiopia, 2020 indicated that fever (94.6%), cough (85.3%), and shortness of breath (82.1%) were as commonest symptoms of COVID-19(32)(21).

A cross-sectional study of COVID -19 Prevention Practices in Addis Ababa, found that 60.5% were aware of how COVID -19 disease is transmitted from person to person, risk factors, and prevention and control mechanisms and another study showed that 55.9% had the knowledge and about 55.3% and 57.8% had good knowledge about symptoms and prevention methods of COVID -19 respectively. The three symptoms most commonly reported by the

respondents were fever 96.8%, shortness of breath 94.3% and cough 94.1%. In another study conducted on college students, 69.6% of them had good knowledge of COVID-19(35).

2.2.4 Attitude towards (COVID-19) prevention

Study conducted in South Gondar Zone Hospitals among adult visitors about two-thirds 62.6% of the hospital visitors had a positive attitude towards COVID-19 prevention, whereas 37.4% respondents had negative attitude towards COVID-19 prevention. About half (50.3%) of the participants agree that the black race is not protective against COVID-19. Similarly, less than half (44.6%) of the participants agreed that Ethiopia is in a good position to contain the spread of the COVID-19 and about two-thirds, (67.8%) of the participants believed COVID-19 does not cause stigma. More than half (54.7%) of the respondents agree that they can get infected with COVID-19 if they contacted infected patients despite their good immunity(26).

The attitude section consisted of10 items, and the response of each item was indicated on a 2 point Likert scale as follows 0 (“unfavorable”), 1 (“favorable attitude”) (e.g., It is crucial to report a suspected case to health authorities.). The total score was calculated by summating the raw scores of the ten questions ranging from 0 to 10, with an overall greater score indicating more positive attitudes towards COVID-19. After summing up the score and calculating the mean scored the mean and below the mean give zero or 0 for attitude and above the mean give as one or 1(36) .

A study conducted in Italy showed that "emotional expressions were more common than" perceptions in which excited expressions were more likely to be negative 69% than positive 31%. The most common negative passionate expressions were: missing, worry, mental torment, and fear, while the most common positive passionate expressions were hope and gratitude for the assistance received from jail specialists(37).

In a cross-sectional study conducted in Chad, (34.55%) members were exceptionally concerned about the plausibility of being infected, (81.27%) were unsatisfied or very unsatisfied with their social connections after the pandemics started, and 1553 (68.44%) thought that the widespread was a disturbing or very exasperating issue (38).

A health institution-based cross-sectional study was conducted in Dessie, Ethiopia. The majority of the study participants (71.9%) perceived that traditional medicines like eating garlic are not helpful to prevent infection with the new coronavirus. About 49.2% of study

participants believed that COVID-19 could not affect young people, and a large proportion of study participants said they would not go to a quarantine center if they contracted the disease(39).

In a study conducted in Sidama Regional State, shows that, in spite of participants positive association between higher attitudes and higher practice in the current study, only 81.0%, 80.9%, 67.1%, and 56.8% of the study respondents avoided shaking hands, stayed at home, used cloth face masks, and maintained social distance, respectively(21)

In a study conducted in the Silte zone, (84.2%) of HCWs demonstrated a positive attitude. In multivariate analysis, HCWs' age, COVID-19 training, work experience, and knowledge of COVID-19 all showed significant associations with HCWs' attitudes toward COVID-19.HCWs' positive attitude was significantly associated with age between 31 and 40 years, OR = 2.92, and age over 41 years, OR = 3.35. Similarly, HCWS who received training on COVID-19 had a 3.73 times more positive attitude towards COVID-19 than those who hadn't received the training(31).

2.3 Economic factors that influence COVID-19 Prevention

2.3.1 Living room of the prisoners

Prison housing conditions According to Clause 3 of Article 44/1994.Ec. of the Law on Prisons and Detention Centers, the Ministry of Justice, with the assistance of the Ministry of Health, should take the necessary measures to implement standards in prisons and detention centers concerning the floor space, residential quarters, amount of light in the rooms, ventilation, and heating, and other relevant issues for prisoners related to ventilation, heating, and other facilities in the prison. During the assessment, the team also considered the perceptions of the prisoners related to ventilation, heating and other facilities in the prison. Most of the prisoners have mentioned that the rooms have adequate ventilation and exposure to sun light (men have responded that only 73%)(40).

In Malawi, with support from UNODC, Ventilation of prison cells, sanitation facilities and access to water was improved in nine prisons, which is also contributing to preventing COVID-19 transmission among people living and working in prison(41).

African prison and COVID-19 in some states prisoners are provided with only one meal per day of the most basic nature, resulting in malnutrition; illness and infectious diseases are

common in the prison population; and prisoners are forced to sleep in cells filled to two or three times their capacity with the most rudimentary toilet facilities, and with limited capacity to maintain and keep ablution facilities sanitary. These conditions worsen health outcomes(42).

2.3.2Prisoners personal Hygiene

Prisons are to provide hygienic water and food for the prisoners and detainees with regards to their age and health condition (especially to women who are pregnant or giving birth).

Study conducted in Afghanistan Kunduz region regarding frequency of bathing, overall, 12% take bath twice a week, 20% take bath 4 times in a week and 68% take bath on daily basis the gender variation and frequency of bathing depends upon availability of space and facilities; which women prisoners have better facilities than men(40).

2.3.3 Turnover of prisoners

The high turnover of prisoners being admitted and released as well as the daily interaction of prisoners with prison officers, health-care professionals, visitors and service providers all provide for an intrinsic linkage between prisons and public health. On these grounds, any control strategy for COVID-19 in the community which does not encompass the prison context will not be sustainable(10).

2.3.4 Alcohol Intake of prisoners

According to WHO statement that Alcohol alters one's thoughts, judgment, decision-making and behavior. Study conducted in sidama regional state in this study the respondents who had history of alcohol intake 1.79 times less likely implement the COVID-19 prevention practice correctly and consistently affect(7). The majority of (80%) the residents had a current history of alcohol drinking without holiday, and (16%) were chewing khat. Only 48 (7.5%), and 80 (12.4%) of the participants were smoked cigarettes, and had a history of chronic disease, respectively(36).

The contribution this work

The contribution of my work is to fill the gap which is described in the above literature like social and economic factors which influences the prevention practice of COVID-19 and associated factors among the prisoners of Worabe town prison in 2022Gc.

2.6. Conceptual Framework of the Study

Factors associated with practice towards COVID-19 prevention in different studies used for the construction of the following conceptual framework, it is also based on an understanding of the factors that can affect knowledge, attitude, and practice of prevention regarding COVID-19 pandemic; adapted from articles.((43), 27, 31)

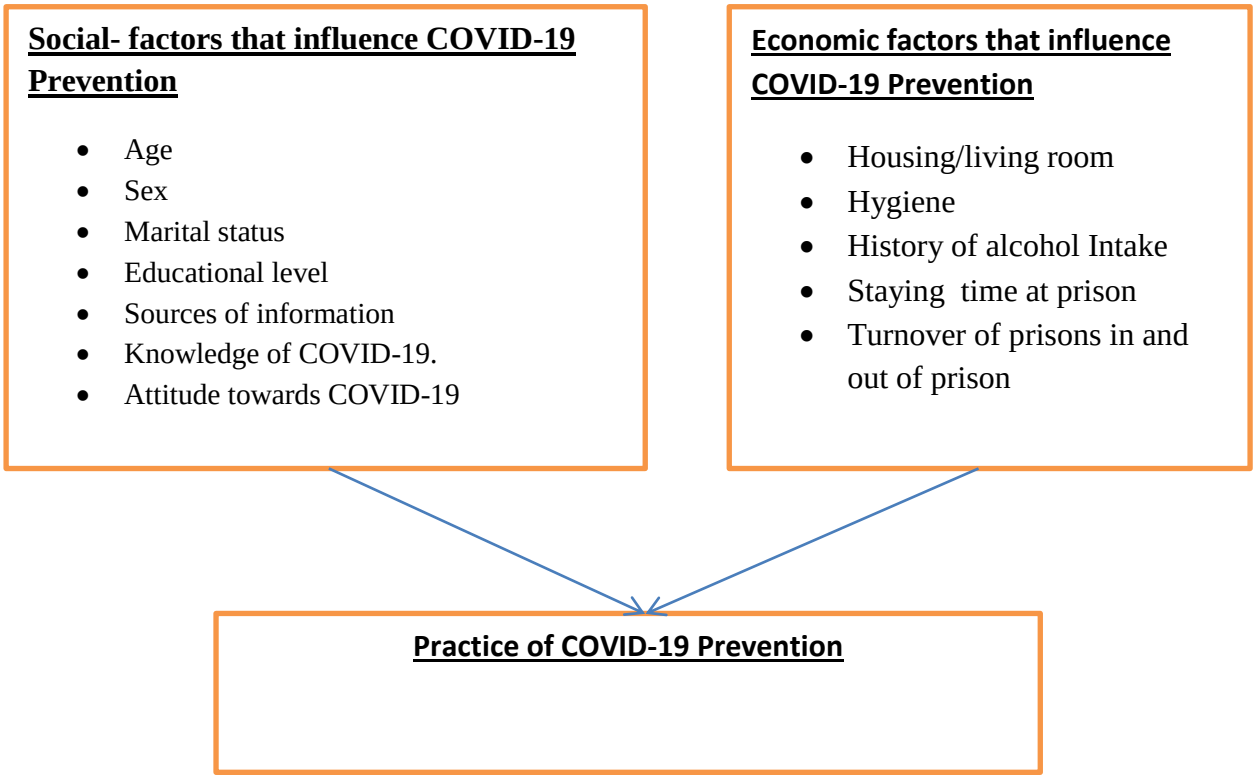

Figure1, Conceptual framework of social and economic factors to influence practice of COVID-19 prevention and associated factors at Worabe town Prisoner's southern Ethiopia: adapted from different literatures.

CHAPTER THREE

OBJECTIVE OF STUDY

3.1. General Objective

- To asses COVID-19 prevention practice and associated factors among prisoners of Worabe town, southern Ethiopia, 2022.

3.2. Specific objectives

- To determine COVID-19 prevention practice of prisoners in Worabe town southern Ethiopia, 2022.
- To identify social and economic factors to influence the practice of COVID-19prevention practice among prisoners in Worabe town southern Ethiopia, 2022.

CHAPTER FOUR

4. METHODS AND MATERIALS

4.1. Study Area and Period

The study was conducted at Worabe town prison in Silte Zone, southern Ethiopia. The Silte zone is located at a distance of 172 km from south to the capital of Ethiopia; Addis Ababa, and 167 km from north to the capital of the southern nation nationalities of people region, Hawassa City. The Silte zone was geographically separated from the north Gurage zone from the south Hadiya and Halaba zones, from the east Gurage zone, and the Oromia Regional State Adamitulu Jodo Kombolcha, from the west Gurage zone. The central statistical agency (census 1999), the total population in the zone was 1,017,557. The projected population of Worabe town for the year 2014/15 was about 15,920 and the estimated number of households was 3249. Silte zone has health coverage with 33 health centers, four hospitals (one tertiary hospital) around 212 health posts in the zone, and around 60 private health facilities. There was one prison and 13 police stations. Of these, 3 of them are in administrative towns (10 rural and urban). The study was conducted at Worabe town prison in Silte Zone SNNPR, southern Ethiopia(31).

4.2. Study design and period

Institution-based cross-sectional study was conducted from Jun 1–30, 2022 among 444 prisoners in Worabe town prison

4.3. Source population

All prisoners at Worabe town prison in Silte zone, southern Ethiopia.

4.4. Study population

Sampled prisoners who fulfilled inclusion criteria during the time of data collection were the study participants.

4.5. Inclusion and exclusion criteria

4.5.1. Inclusion criteria

Prisoners who were found at Worabe prison at the time of the data collection and willing to participate in the study.

4.5.2. Exclusion criteria

Prisoners who were critically sick had hearing difficulties and unable to communicate verbally during the data collection time were excluded from the study.

4.7. Sampling

4.7.1. Sample size determination

Sample size calculation for objective one: - The sample size for the first objective was calculated by using single population proportion formula. I used a prevalence of good hand washing practice of 68.9% to obtain the largest possible sample size (31).

By Considering the assumptions of: Zα/2 is the standard normal variable value at (1-α) % confidence level (α is 0.05 with 95%CI [confidence interval], Zα/2 = 1.96), p is an estimate of the proportion of good hand washing practice among health care workers in Silte Zone was 68.9%. A proportion of 68.9% was considered since there had been previous study conducted in the study area or other similar setting, and d margin of error (5.0%). Adjusting for an anticipated 10% non-response rate, the final sample size was determined to be 362.

$$n = \frac{(Z\ a/2)^2 * p\ (1-p)}{(d)^2} \quad \text{and}$$

Here,

n = number of samples

z = 1.96 (95% confidence level)

p = prevalence estimate (68.9%)

q = (1-p)

d = Precession of the prevalence estimate (0.05).

$$n = \frac{(1.96)^2\ 0.69(1-0.69)}{(0.5)^2}$$

n=3.842x0.8556=328.7

OR 329 and 10% Non-response rate =33

n=329+33=362

Correction formula: nf = n/ (1+n/N) since study population was less than 10,000 as indicated and summarized in table blow and there for the larger sample size was taken (257) to maximize the final sample size.

Variable Used	P(Proportion)	Cl = 95%	d= 0.05	n=initial sample size	nf=final sample size	After adding non-response rate=10%	Remark
Preventive practice Of COVID-19	69%	1.96	0.05	328.68	251	276	

Table.1 Correction formula

For the second objective: The sample size was calculated by double population proportion formula by using Epi.info version 7.2.5 computer program by considering the following assumption:-Sample size for double population proportion formula

$$n = \frac{(Z\alpha/2+Z\beta)^2 * (p_1(1-p1)+p_2(1-p_2))}{(P1-p2)^2}$$

Where;

n=desired sample size

Zα=1.96(95% confidence level)

Zβ=0.84(statistical power 80%)

p1=proportion of outcome in exposed group

p2=proportion of outcome in unexposed group

r =is the ratio of non-exposed to exposed 1:1

Table.2. Sample size calculations by using Epi-info computer program for preventive practice of COVID-19 among prisoners in Worabe Town, Southern Ethiopia, 2022.

No	Predictors	Percentage of outcome		Ratio	Sample	AOR	NRR10 %	Total	Reference
		Exposed	Unexposed						
1	History of alcohol intake	38.1%	39.5%	1:1	404	1.79	40	444	(7).
2	Implementing IPC guideline	78.8 %	89.6%	1:1	386	4.0	37	423	(44).
3	Source of information	73%	56%	1:1	134	3.13	13	147	(31).

Finally, after the obtained sample size for both objectives, the largest sample size for the study was **444**.

4.7.2. Sampling procedure and technique

The study subjects were chosen by using a simple random sampling technique. All prisoners were registered on the registration book and then each unit was numbered from 1 to 1051 were used as the entire population frame and the sample size of the prisoners of Worabe Town prison was selected by using lottery methods until the desired sample size that is 444 was reached and using these frame participants was included in the study according to the inclusion and exclusion criteria.

4.8. Data collection tool

An institution-based cross-sectional study was conducted from Jun 1–30, 2022 among 444 prisoners in Worabe town prison, and a structured interviewer-administered questionnaire was first prepared in English and then translated into Amharic and again re-translated into English to maintain consistency in translation by language expert. The tool was adapted and structured based on different literature((45)(7)(31)(46)). The validity and reliability of the questioner have checked the reliability of the questionnaire were checked using **Cronbach Alpha=0.729**, which is found in an acceptable range. The contents of the questionnaire address the socio-demographic characteristics of the respondents, their individual and institutional factors, and their practice towards COVID-19, prevention practices.

4.8. Variables of the study

4.8.1. **Dependent variables**: Practice towards COVID-19 prevention

4.8.2. Independent variables

Social factors that influence COVID-19 prevention: - Age, Sex, Marital status, Educational level, Sources of information, Knowledge of COVID-19, Attitude towards COVID-19

Social factors that influence COVID-19 prevention

- Housing/living room
- Hygienic condition of room
- History of alcohol Intake
- Staying at room in prison
- Turnover of prisons in and out of prison

4.9. Operational definitions

The reliability and validity: of the questionnaire was checked using Cronbach Alpha

Preventive Practice:-Practice toward COVID-19 was measured using ten items, and each item was responded to as Yes (1-point), No (0-point), and Sometimes (0-point). The total score ranged from 0 to 10, and the mean and above score were used as good practice toward COVID-19 prevention and control methods (47),(48).

Attitude of COVID-19 Prevention: the perception of respondents towards COVID-19 prevention activities. Respondents who answer mean and above were correctly considered as having a positive attitude (favorable attitude) gives one point(1) and below were negative attitude (unfavorable attitude) gives zero points (0) towards COVID-19 prevention(29) **Responses of Likert-scale:** for direct Likert-scale questions strongly agree, agree, and neutral were assigned as favorable attitudes, and disagree, and strongly disagree were assigned as unfavorable attitudes. For interrogative Likert-scale questions strongly disagree, disagree and neutral were favorable attitudes agree and strongly agree were unfavorable attitudes(48)(6).

Knowledge toward COVID-19 prevention and control: - was measured by 10 items, and each question was responded to as Yes and No. The correct answer was marked as 1, while the wrong answer was marked as 0. I used the mean score as a cut-off level and participants who get mean and above referred to good knowledge

Overall Knowledge towards COVID-19:- participants who have good knowledge of COVID-19 transmission, clinical signs, the symptom of COVID-19.

No formal education:-educational status of participants who cannot read and write.

Proper hand hygiene practice:- Proper hand hygiene practice was defined as a person who washes hands on the front, back, fingertips, rubs thumb, and palms with adequate water and detergent at least for 20 to 30 s or using sanitizer/hand rub to the level of compliance before getting in the facility or taking the services.

Proper physical distance: - Proper physical distance was defined as a person keeping 1 m away from another person during getting services, during greetings, during shopping, during the discussion, or during praying.

Proper mask wearing: - Mask-wearing practice while leaving home was defined as a person covering the mouth and nose with a mask or any type of cloth or handkerchief.

Sanitizer: applying a waterless antiseptic agent (i.e. Chemicals prepared with a mixture of alcohol, hydrogen peroxide and glycerin) to the hands to destroy or remove transient microorganisms.

4.10. Data quality control

The principal investigator was given 3 days of training for data collectors and supervisors. The training was focused on explaining the purposes of the study, how to interview questions and fill out the questionnaires, the neutrality of interviewers, the responsibilities of the data collector, and the rights of respondents. Before starting the actual survey, reliability and validity of questionnaire was checked using **Cronbach Alpha** the questionnaire was pre-tested on 5% of the sample in Butajira town prison to know the length, content, question-wording, and language understandability by similar characteristics to the study area. Based on the results of the pretest, the data collection instrument was modified accordingly. The entire questionnaire was checked daily to ensure whether they are appropriately filled out or not. In addition, the quality of data collection was ensured through close supervision of the data collectors by the principal investigator.

4.11. Plan for data processing and analysis

After data were entered into Epi Data version (3.1) entry software, cleaning and analysis were done using the statistical package for the social sciences (SPSS) version 26. The frequency, proportion, and standard deviations were computed to describe the socio-demographic and other characteristics of study participants. The Spearman's correlation analysis was used to measure the association among mean attitude, knowledge and practice scores. The variables under bi-variable analysis with a P-value < 0.25 were entered into a multivariable logistic regression to control confounders and to identify predictors of COVID-19 prevention practice. Fitness of binary logistic regression model was considered using the Hosmer-Lemeshow statistics in model and greater than 0.05 to assess whether they fulfilled the assumption and an Adjusted Odds Ratio (AOR) with a 95% confidence interval (CI) and P-value<0.05 was used to report the predictors of COVID-19 prevention practices(44).

4.12. Ethical consideration

Before the study begins, ethical clearance was obtained from the ethical review committee of Jimma University. Ethical clearance was taken from the SNNP region health bureau to the regional prison bureau, and finally, permission was taken from this bureau to the Worabe town prison manager. The study subjects were informed about the objective and purpose of the study and written consent was obtained from them. Confidentiality of the information was assured, and information was collected secretly.

CHAPTER FIVE

5.0. Result

5.1 Social-factors that influence the COVID-19 prevention practices of prisoners

A total of 444 study subjects, were included in the study the response rate of the participants was 100%. The mean age of the respondents was 32.3 with a standard deviation (SD) of 9.9. Of which 365 (82.2%) were male and 79(17.8%) were female. Regarding the ages of the participants, 325 (73.2%) were in the age group of less than or equal to36 years old. Three hundred sixty-four (81%) participants can read and write while 53 (11.9%) had attended College and above. Regarding the marital status of prisoners in the study participants, 220 (49.5%) was married.

Variable	Category	Practice	Percentage
Sex	Male	365	82.2%
	Female	79	17.8%
Age	≤36	325	73.2%
	≥37	119	26.8%
Educational status	No formal education	80	18%
	Primary school	166	37.4%
	Secondary school	145	32.7%
	College and above	53	11.9%
Marital status	Single	156	35.1%
	Married	220	49.5%
	Divorced	48	10.8%
	Widowed	20	4.5%

Table 3: Socio-Demographic Characteristics of Participants on COVID-19 Preventive Practice in Worabe town prison southern Ethiopia, 2022. (N=444)

5.3 social factors that influence practice of COVID-19

Almost all prisoners (100%) had heard about the COVID-19 pandemic. About 183(61.4%) participants who use social media which is allowed as special by the concerned body as information sources have good COVID-19 prevention practices and 115(38.6%) of them have poor COVID-19 prevention practices. Among the three dimensions ofCovid-19 knowledge assessed, 268 (60.4%), 277 (62.4%), and 321 (72.3%) of respondents provided the correct answers for signs and symptoms**,** mode of transmission, and prevention methods respectively. Regarding overall Covid-19 knowledge, 248 (56%) of the study subjects have good knowledge whereas 196 (44%) of them have poor knowledge about Covid-19 prevention practices.

About (56.5%) (95% CI: 48.10.–52.30) respondents had an overall favorable attitude toward the COVID-19 pandemic, and (43.5%) (95% CI: 44.00.–47.10) of them are unfavorable attitude towards COVID-19 pandemic prevention practice.

Prisoners Staying time in prison less than or equal to 12 months in prison from those (53.4%) of them have good preventive practices and (46.6%) of them have poor preventive practices also of those prisoners who stay at Worabe prison greater than 12 months from this (52%) of them have good preventive practice and (48%) of them have poor preventive practice.

Variable	Category	Total practice		Total	P-value	COR(95%CI)
		Good practice	Poor practice			
Information source	Yes	183(61.4%)	115(38.6%)	298	0.000	2.877(1.907-4.340)
	No	52(35.6%)	94(64.4%)	146		
Knowledge of transmission	Good knowledge	158(57%)	119(43%)	277	0.026	1.552(1.055-2.283)*
	Poor knowledge	77(46.1%)	90(53.9%)	167		
Overall knowledge	Good	154(62.1%)	94(37.9%)	248	≤0.000	2.326(1.586-3.411)*
	Poor	81(41.3%)	115(58.7%)	196		
Knowledge of Prevention	Good Prevention	177(55.1%)	144(44.9%)	321	0.132	1.378(0.908-2.090)
	Poor Prevention	58(47.2%)	65(52.8%)	123		
Overall attitude	Favorable	115(45.8%)	136(54.2%)	251	0.001	0.514(0.351-0.754)*
	Unfavorable	120(62.2%)	73(37.8%)	193		
Stay time at prison	≤12 months	149(53.4%)	130(46.6%)	279	0.867	0.979(0.760-1.259)
	>12 months	86(52%)	79(48%)	165		

Table.4.bi variate table Social and economic factors that influence the prevention practice of COVID-19 and associated factors of Prisoner's in Worabe town southern Ethiopia, 2022. (N=444)

5.2 Economic Factors that influence COVID-19 prevention

Among the Study Participants, 189(49%) respondents who had no history of alcohol consumption have good prevention practices and 200(51%) of the study respondents had poor COVID-19 prevention practices. Those prisoners who use hand washing facility as a means of prevention mechanism of the virus was 117(62%) had good prevention practice. Rooming conditions in a prison about (81%) of the respondents reported as the room has no window for entrance of light and fresh air had poor COVID-19 prevention practices and the room was not enough for living and sleeping. The position of sleeping 268(60.4%) of the prisoners sleeping position was head to head so it is not good for the prevention of airborne diseases like COVID-19, and also about 41(38%) of them who live in the unclean room have poor COVID-19 prevention practice.

Variable	Category	Total practice		Total	P-value	COR(95%CI)
		Good	Poor			
History of alcohol intake	Yes	46(83.6%)	9(16.4%)	55		
	No	189(48.6%)	200(51.4%)	389	0.000	5.4(2.57-11.35)
Hand washing facility near by toilet	Yes	117(62.2%)	71(37.8%)	188	0.001	1.927(1.313-2.829)
	No	118(46.1%)	138(53.9%)	256		
Visible dusts in the room	yes	67(62%)	41(38%)	108	0.030	1.634(1.049-2.546)
	no	168(50%)	168(50%)	336		
Windows for the room	yes	231(54.6%)	192(45.4%)	423	0.004	5.113(1.692-15.452)
	no	4(19%)	17(81%)	21		
The sleeping position	Head to head	124(46%)	144(54%)	268	0.001	1.983(1.344-2.926)
	Head to foot	111(63%)	65(37%)	176		

Table.5. Economic Factors of Participants on COVID-19 Preventive Practice in Worabe town prison southern Ethiopia, 2022. (N=444)

5.4 Prevention Practice towards COVID-19 among the prisoners.

Among the Study Participants, Approximately half (51.6%) of the respondents had a history of going to crowded places. However, only approximately two-thirds of (67.1%) of the total study participants had a history of wearing a mask when leaving home. (58.6%) of the study, participants had a history of covering their mouths and nose when coughing and sneezing. More than half of the respondents had a history of maintaining their distance at 2 meters (54.3%) and washing their hands with soap and water or using alcohol-based hand sanitizers (69.4%). However, a significant proportion (44.1%) of them had a history of eating raw/uncooked foods. The overall practice of respondents of the participants (n = 444), 235 (53%); 95% CI (50 - 63%) were having good prevention practice, and 209 (47%); 95% CI (37 - 50%) of participants were having poor practice towards COVID 19 prevention measures. The Spearman's analysis showed that a significant positive correlation among the mean knowledge and practice scores regarding COVID-19(r= -1.30, p<0.01).The higher the knowledge score were, the probability of good practices and positive correlation among the mean attitude and practice scores regarding COVID-19 (r = -1.62, P<0.001). Hence, good knowledge and a positive attitude toward COVID-19 was directly associated with a positive practice. The mean practice scores significantly varied across sex, information source, history of alcohol intake, stay at home until recovery.

Variable	Category	Frequency	Percentage
Stay at room until recovery	yes	229	51.6%
	No	214	48.2%
Keep social distancing	yes	241	54.2%
	No	203	45.8%
hand wash with soap and water	<20seconds	124	28%
	20sec-1minites	320	72%
Using hand sanitizer	yes	275	61.9%
	No	169	48.1%
Wearing of face mask	yes	298	67.1%
	No	146	32.9%
Cough with bent elbow	yes	260	58.6%
	No	184	41.4%

Avoid hand shaking	Yes	230	51.8%
	No	214	48.2%
Touch your eyes nose and mouth with dirty hands	yes	121	27.3%
	No	323	72.7%
sharing desks offices and other work tools	yes	254	56.9%
	no	190	42.8%
Enough room for physical distancing	Yes	114	26%
	No	330	74%
Overall prevention practice	Good	235	53%
	Poor	209	47%

Table.6. Table of Prevention Practice towards COVID 19 among the prisoners of Worabe town Southern, Ethiopia, 2022 (N=444)

5.5 Factors associated with the COVID-19 prevention practice.

The multi-variable logistic regression analysis result showed that; Sex, Length of stay in prison, Knowledge of transmission and Prevention of COVID-19, Stay at room until recovery, Overall Knowledge, overall attitude, History of consuming alcohol, Source of information and hand, washing facility near to toilet were statistically significant at p-values less than 0.25.

After controlling for confounders, In multivariable logistic regression analysis by backward stepwise method Prisoners:- Sex, information sources, knowledge, attitude, Alcohol consumption before prison, and Stay at room until recovery were significantly associated with the COVID-19 prevention practices of the participants at a p-value less than 0.05.

Male prisoners were 70% times less likely to practice COVID-19 prevention measures as compared to female prisoners in the Worabe prison, [AOR: 0.3, 95%CI: 0.15–0.58].

Prisoners who used social media as information sources which allowed as a especial situation(49). 1.84 times practiced COVID-19 prevention measures compared to Prisoners who did not access information using social media (AOR = 1.84, 95% CI = 1.12–3.02).

Those prisoners who had good knowledge about COVID-19 were 1.81 (AOR= 1.81, 95% CI = 1.12- 2.91) times more likely to have good practice about COVID-19 prevention as compared to the prisoners who had poor knowledge of COVID-19 prevention practice.

Prisoners who had no history of alcohol intake were 3.79 times higher COVID-19 preventive practices than those prisoners who had a history of alcohol consumption before being imprisoned by police (AOR = 3.79, 95% CI = 1.66–8.68).

Those prisoners who stay at home until the sign and symptoms resolved were 4.00 times higher COVID-19 prevention practice than who do not stay at home until the sign and symptoms resolved (AOR = 4.06; 95% CI: 2.56- 6.43).

Those prisoners who had unfavorable attitude towards COVID-19 were 57% times less likely to practice COVID-19 prevention measures as compared to favorable attitude prisoners in the Worabe prison (AOR= 0.43, 95% CI = 0.27-0.68).

Table.7. Bi- and multi-variable logistic regression analyses of practice toward COVID-19 prevention and control of prisoners at the Worabe town prison southern Ethiopia, 2022. (N=444)

Variables		**Covid-19 prevention practice**		**COR(95% CI)**	**AOR(95% CI)**	**P-value**
		Good practice 235 (53%)	**Poor practice 209(47%)**			
Sex	**Male**	**172(39%)**	**193(43%)**	**0.23(0.13-0.41)**	**0.3(0.15-0.58)**	**0.000****
	Female	63(14%)	16(4%)	**1**	**1**	**1**
Source of information	Yes	183(41%)	115(26%)	2.87(1.91-4.34)	1.8(1.12-3.02)	0.016*
	No	**52(12%)**	**94(21%)**	**1**	**1**	**1**
Knowledge of Transmission Mode	**Yes**	**158(35%)**	**119(27%)**	**1.6(1.05-2.28)**	**1.23(0.71-2.13)**	**0.459**
	No	**77(17%)**	**90(20%)**	**1**	**1**	**1**
Knowledge of Prevention mode	**Yes**	**177(39%)**	**144(32%)**	**1.4(0.91-2.09)**	**0.6(0.30-1.108)**	**0.098**
	No	**58(14%)**	**65(15%)**	**1**	**1**	**1**
Overall Knowledge	Good	154(35%)	94(21%)	2.33(1.6-3.41)	1.81(1.12-2.91)	0.015*
	Poor	**81(18%)**	**115(26%)**	**1**	**1**	**1**
Overall Attitude	Favorable	115(26%)	136(31%)	1	1	1
	Unfavorable	**120(27%)**	**73(16%)**	**0.52(0.35-0.75)**	**0.43(0.27-0.68)**	**0.000****
Consume alcohol before prison	**Yes**	**46(10%)**	**9(2%)**	**1**	**1**	**1**
	No	189(43%)	200(45%)	5.4(2.57-11.35)	3.8(1.66-8.67)	0.002**
Stay at Room until recover	Yes	161(36%)	68(15%)	4.51(3.03-6.73)	4.1(2.6-6.43)	0.00**
	No	**74(17%)**	**141(32%)**	**1**	**1**	**1**
Hand washing facilities nearby toilet	**Yes**	**117(26%)**	**71(16%)**	**1.93(1.31-2.83)**	**1.54(0.97-2.44)**	**0.66**
	No	**118(27%)**	**138(31%)**			

*COR: crude odds ratio; AOR: adjusted odds ratio. *p < 0.05, **p ⩽ 0.01*

6.0. Discussion

Due to rapid transmission, highly raised incidence and fatality rate worldwide, prevention of COVID-19 is an important way to combat this outbreak. COVID-19 preventive practices of prisoners had affected by different social factors like (socio-demographic, knowledge, attitude) and their Economic factors (alcoholic history before prison, stay at prison room until recovery) towards COVID-19. This study aimed to investigate the extent of COVID-19 preventive practice by prisoners in Silte zone Worabe prison district by using Institution-based cross-sectional method(50).

The findings of this study revealed that 53% (95% CI: 27-39) of prisoners had good COVID-19 prevention practices, which was lower than findings from Cameroon (60.8%)(18), Lebanese (75%)(51), China (96%)(22),India (81.67%)(20). However, it is greater than the study findings from SNNPR(48.9%)(52), Bangladesh(51.6%)(16),Venezuela (37.0%)(53).

The difference could be described by the study period difference, the current study's area, lack of infrastructure and materials such as hand washing facilities (lack of soap and water), disinfectants (alcohol and sanitizer), a scarcity of personal protective equipment (facemasks and gloves), work overload and incarceration room.

The level of poor practices for the prevention of COVID-19 in Worabe prisoners was 47% which was lower than the study conducted in Ethiopia,49%,and Aksum(48.8%)(43).which was higher than the study conducted in Thailand, 17%(54),Malaysia (26%)(55), Cameron (39%)(15). and Addis Ababa 41.79%(15).

The possible explanation for this could be study settings; the current study was conducted in a Prison where the full implementation of COVID-19 prevention measures was likely difficult due to the setting and the behavior of the prisoners in my study the response to COVID-19 in such places like prison is challenging and requires whole-government-societal approach. Furthermore, the healthcare service existing in prisons needs to be strengthened so that health education and counseling-focused service could change the knowledge, negative attitudes, and behavior of the prisoners.

This study found that 62% of participants used sanitizers (95% CI: 25.41- 36.41).

Which is higher than similar studies done in Dilla university Southern Ethiopia 28.6%(44),and lower than similar studies done in Northern Ethiopia Amhara Region 83.9%(47), (65.5%) Guji Oromia(56) Afghanistan (93%)(57), and Pakistan (96.1%) (11).

The difference can be explained in terms of population size variation, time of study carried out, and methodology followed may make a contribution to possible differences.

In this study, around 67% of the prisoners wore facemasks and 69.5% wash their hands with soap and water, which is not much different from that of studies from residents in Southern, Ethiopia 72.5 and 59.9% respectively(6) But it is higher than that of study from Ghana (31.7%)(58) Uganda (54%)(5), and which was lower than the finding from Addis Ababa (85%)(46)and Dessie (79.2%)(59), the observed difference indicated that additional work is needed to improve mask use and hand washing practice regarding the prevention practice of prisoners towards COVID-19.

The reason for the low use of hand washing and face mask is that Worabe prison does not provide facemasks and soap for the prisoners regularly the other reasons for inconsistency could be the differences in the level of respondents' awareness and belief toward the protectiveness of face mask and soap for Covid-19 preventive measures, time of studies, the number of Covid-19 cases reported, and also a shortage of infrastructure.

In this study, Male prisoners were 70% less likely to practice COVID-19 prevention measures compared to female prisoners (AOR = 0.294; 95%CI 0.153-.576).

The findings of this study were supported by previous studies conducted Dill university hospital(44),Southern Ethiopia(19). Dire-Dawa(36).

This could be because females spend more time at home and are naturally more likely to practice handwashing; also, most females are involved in childcare, food preparation, and other duties than males. This implies that females are more likely to practice preventative measures to protect themselves and others from infection, and this means that most males may have been forced to work and not adhere to social separation. So, preventive measures are more likely to be practiced better among females to protect themselves and others from infection.

In this study, all of the prisoners had heard about the Covid-19, with the majority (67%) gained information from social media which is allowed as especial situation (If visitors are restricted, alternative noncontact options for maintaining social connections between prisoners and their family or friends could be explored like technology solution)(2).

This result was higher than the study done in Mizan-Tepi University (57.2%)(60),Dessie(30%)(61), Ethiopian systematic study 61.78%(62), and lower than Iran (82.9%)(28) and Saudi Arabia 90%(63).

This could be because developing countries utilize social media less than industrialized countries, the sources of good knowledge of the participants where social media was the

primary source of COVID-19 prevention could be related to the convenience of use and access to the service via mobile internet and social media which have been used globally. As a result, everybody can update his knowledge and information demand using these media preferred by Prisoners and the community to offer information concerning the COVID- 19 and other health-related information effectively.

Those prisoners who had good knowledge about COVID-19 were 1.81 times more likely to practice COVID-19 prevention as compared to their counterparts of prisoners. This finding is consistent with a study in China(34) and Amhara region(47)

This might be because knowledge is the main modifier of positive attitudes toward COVID-19 preventive practices, and these activities are practiced after having awareness and knowledge of the activities to be performed. Knowledge of COVID-19 decreases the risk of infection by improving patient prevention practices. Knowledge about coronavirus disease (COVID-19) signs and symptoms, transmission, treatment, and how to prevent infection will increase the prevention practice of individuals and they might be implemented the key messages of the guideline include causes, how to choose and wear face masks, proper handwashing habits, preventive measures at different locations (e.g. at home, on public transportation, and in public space), disinfection methods, and medical observation at home

This study found that favorable attitude among overall respondents towards COVID-19 was found to be (56.5%),this finding was higher than the findings from Pakistan (53.5%)(11), Indonesia (50.8%)(64), Chad (34.55%)(38) and lower than findings from Cameroon (73.1%)(15) and South wollo (64%)(65) and Venezuela 78.4%(53) and 62.8% China(20).

The possible reason was Prisoners in developed countries may be more confident due to better-qualified health systems in prison. More importantly, this finding is in support of the statement of the WHO that inmates have poorer hygiene and weak immunity due to stress and poorer nutrition.

This study reveals that the participant's history of alcohol intake and their unfavorable attitude toward COVID-19 were significantly associated with the prevention practice of the respondents. Comparing the participants who have no history of taking, alcohol and the respondents who had a favorable attitude toward Covid-19 infection were 3.8, and 2.3 times more likely to have a favorable attitude about COVID-19 prevention practices respectively than the counterparts.

The finding was supported by the finding of a study conducted in north-east Ethiopia (among Dessie-residents)(66),and Similarly, study conducted in Egypt supports this finding as people

with a positive attitude toward COVID-19 prevention actions limit the spread of disease through good practice of its prevention measures(27).

This might be because alcohol drinkers are more likely to go out homes to buy alcohol, and group drinking leads to less likelihood of applying keeping their distance. Additionally, this finding is in line with the WHO statement that Alcohol alters one's thoughts, judgment, decision-making, and behavior.

6.1 Strength and Limitation of study

Strength of the study

First, I have tried to incorporate the observation part to measure practice besides participants' self-report. Second, this study has tried to avoid the possibility of social desirability bias by actively asking participants to mention the answer under each question rather than telling them the choices and recording their responses.

.Limitation of study

There might also be recall bias like some questions needs to recall past before imprisonment like income. This is the self-reported practice of COVID-19 prevention methods, and there may be a probability of social desirability bias. Since we have used a cross-sectional study design it may be difficult to establish the temporal relationship between the outcome variable and some of the independent variables.

7.0 Conclusion and recommendation

Conclusion

The proportion of individuals who had good COVID-19 prevention practices was inadequate in my study area. Moreover, the practice of wearing a protective mask and maintaining recommended physical distance is very low, and these all need immediate interventions. It was also demonstrated that female prisoners had good preventive practices compared to male prisoners. The respondents had moderate knowledge and attitudes about COVID-19, which had a positive influence on good practice. This can also enhance the prisoner's perceived mortality, which was recognized as a significant predictor of good practice. Overall, for such a highly infectious disease prevention should be a priority intervention, and the prevention practice of the prisoners in my study area needs further effort.

Recommendation

Based on the findings mentioned above the following recommendations are forwarded to the following concerned bodies. This gap should be addressed by educating male prisoners and availing important inputs for COVID-19 prevention methods. Thus, it is also important to center the interventions on updating the knowledge and attitude of respondents.

Zonal Health department

Zonal Health offices in particular need to communicate with responsible bodies on the number of prisoners per room to prevent crowdedness in the room and also, they should have to communicate with the responsible body to avail washing facility in the prison and other preventive materials in the prison-like cloth mask washing facility like soap water and others.

Worabe prison institute

Institute of Worabe prison, in particular, it better to make the sleeping room of the prisoners in the bedroom should be Head-foot according to WHO/CDC recommendation; to maintain physical distancing with the bedroom

Reference

1. Disease C. Coronavirus Disease COVID-19 GUIDELINES. 2022;

2. May B. IN MANAGING INFECTIOUS DISEASES IN PRISON SETTINGS A SNAPSHOT OF RESPONSES TO COVID-19. 2020;(September).

3. Preparedness, prevention and control of COVID-19 in prisons and other places of detention. 2021;(February).

4. Esposito M, Salerno M, Di Nunno N, Ministeri F, Liberto A, Sessa F. The Risk of COVID-19 Infection in Prisons and Prevention Strategies: A Systematic Review and a New Strategic Protocol of Prevention. Healthc. 2022;10(2).

5. Abeya SG, Barkesa SB, Sadi CG, Gemeda DD, Muleta FY, Tolera AF, et al. Adherence to COVID-19 preventive measures and associated factors in Oromia regional state of Ethiopia. PLoS One [Internet]. 2021;16(10 October 2021):1–26. Available from: http://dx.doi.org/10.1371/journal.pone.0257373

6. Okoro J, Ekeroku A, Nweze B, Odionye T, Nkire J, Onuoha M, et al. Attitude and preventive practices towards COVID-19 disease and the impact of awareness training on knowledge of the disease among correctional officers [version 2 ; peer review : 1 approved , 1 approved with reservations]. 2022;1–16.

7. Hankalo NC. COVID-19 Prevention Practices Among Prisoners , in Southern Ethiopia. 2022;(March):521–8.

8. Lee M, Kang B, You M. Knowledge , attitudes , and practices (KAP) toward COVID-19 : a cross-sectional study in South Korea. 2021;1–10.

9. Hewson T, Robinson L, Khalifa N, Hard J, Shaw J. Remote consultations in prison mental healthcare in England: impacts of COVID-19. BJPsych Open. 2021;7(2):1–3.

10. Nations U, Standards M, Office UN, Nations U. P O S I T I O N PA P E R COV I D - 19 preparedness and responses in prisons. :1–5.

11. Faisal S, Khotib J, Zairina E. Knowledge , attitudes , and practices (KAP) towards COVID-19 among university students in Pakistan : a cross-sectional study. 2021;32(4):681–6.

12. UN. One UN Assessment: Socio-Economic Impact of COVID-19 in Ethiopia. One Un Assess. 2020;(May).

13. Repository D. Covid-19 Preventive Practice and Associated Factors Among Secondary School Students in Enarj Enawuga District , Northwest Ethiopia : - Application of Health Belief Model. 2021;

14. Bursky M, Kosuri M, Walsh Carson K, Babad S, Iskhakova A, Nikulina V. The Utility of Meditation and Mindfulness-Based Interventions in the Time of COVID-19: A Theoretical Proposition and Systematic Review of the Relevant Prison, Quarantine and Lockdown Literature. Psychol Rep. 2021;0(0):1–44.

15. Ngwewondo A, Nkengazong L, Ambe LA, Ebogo JT, Mba FM, Goni HO, et al. Knowledge, attitudes, practices of/towards COVID 19 preventive measures and symptoms: A cross-sectional study during the exponential rise of the outbreak in Cameroon. PLoS Negl Trop Dis. 2020;14(9):1–15.

16. Banik R. Knowledge , attitudes , and practices related to the COVID-19 pandemic among Bangladeshi youth : a web-based cross-sectional analysis. 2021;(Sahin 2020).

17. Fatmi Z, Mahmood S, Hameed W, Qazi I, Siddiqui M, Dhanwani A, et al. Knowledge, attitudes and practices towards covid-19 among pakistani residents: Information access and low literacy vulnerabilities. East Mediterr Heal J. 2020;26(12):1446–55.

18. Bansal S, Sahni S. Bail, prisons and COVID-19: An Indian perspective. Altern Law J. 2021;46(4):326–31.

19. Weya A, Id K, Endashaw H, Id H, Agero G, Ashuro Z. Assessment of practice of Covid-19 preventive measures and associated factors among. 2021;19:1–12. Available from: http://dx.doi.org/10.1371/journal.pone.0261186

20. Xue Q, Xie X, Liu Q, Zhou Y, Zhu K, Wu H, et al. Knowledge , attitudes , and practices towards COVID-19 among primary school students in Hubei Province , China. 2022;2022.

21. Id AY, Tamiso A, Ejeso A. Knowledge , attitudes , and practices related to COVID-19 pandemic among adult population in Sidama Regional State , Southern Ethiopia : A community based cross-sectional study. 2021;(Ci):1–19. Available from:

http://dx.doi.org/10.1371/journal.pone.0246283

22. Xue Q, Xie X, Liu Q, Zhou Y, Zhu K, Wu H, et al. Children and Youth Services Review Knowledge , attitudes , and practices towards COVID-19 among primary school students in Hubei Province , China. Child Youth Serv Rev [Internet]. 2021;120(August 2020):105735. Available from: https://doi.org/10.1016/j.childyouth.2020.105735

23. Nweze VN, Anosike UG, Ogunwusi JF, Adebisi YA, Lucero-Prisno DE. Prison health during the COVID-19 era in Africa. Public Heal Pract [Internet]. 2021;2(January):100083. Available from: https://doi.org/10.1016/j.puhip.2021.100083

24. Hambili T, Sanjuluca P, Cruz-correia R. Impact of the COVID19 pandemic on the implementation of Health Information Technologies (HIT): a case study in Maternity Hospital of Lubango-Angola. 2021;1–13.

25. Wondimu W, Ejigu A, Ayenew M, Kidnau AW, Niguse W. Factors Associated with Coronavirus Disease 2019 Prevention Practices in Three Zones of Southwest Ethiopia : Community-Based Cross-Sectional Study. 2020;40617.

26. Belete ZW, Berihun G, Keleb A, Ademas A, Berhanui L, Abebe M, et al. Knowledge, attitude, and preventive practices towards COVID-19 and associated factors among adult hospital visitors in South Gondar Zone Hospitals, Northwest Ethiopia. Vol. 16, PLoS ONE. 2021.

27. Samir A, Zeinab A, Maha M, Ibrahim E, Ziady HH, Alorabi M. Knowledge , Perceptions , and Attitude of Egyptians Towards the Novel Coronavirus Disease (COVID - 19). J Community Health [Internet]. 2020;45(5):881–90. Available from: https://doi.org/10.1007/s10900-020-00827-7

28. Erfani A, Shahriarirad R, Ranjbar K. Title : Knowledge , Attitude and Practice toward the Novel Coronavirus (COVID-19) Outbreak : A Population-Based Survey in Iran. 2020;(March).

29. Bitew G, Sharew M, Belsti Y. Factors associated with knowledge, attitude, and practice of COVID-19 among health care professional's working in South Wollo Zone Hospitals, Northeast Ethiopia. SAGE Open Med. 2021;9:205031212110251.

30. Austrian K, Pinchoff J, Tidwell JB, White C, Abuya T, Kangwana B, et al. COVID-19 Related Knowledge, Attitudes, Practices and Needs of Households in Informal Settlements in Nairobi, Kenya. SSRN Electron J. 2020;(April):1–21.

31. Yesse M, Muze M, Kedir S, Argaw B, Dengo M, Nesre T, et al. Assessment of knowledge , attitude and practice toward COVID-19 and associated factors among health care workers in Silte. 2021;1–11. Available from: http://dx.doi.org/10.1371/journal.pone.0257058

32. Yesuf M, Abdu M. associated factors toward COVID-19 among preparatory school students in Southwest. 2022;1–12. Available from: http://dx.doi.org/10.1371/journal.pone.0262907

33. Rahman A, Sathi NJ. Knowledge , Attitude , and Preventive Practices toward COVID-19 among Bangladeshi Internet Users. 2020;17(5).

34. Cirrincione L, Plescia F, Ledda C, Rapisarda V, Martorana D, Moldovan RE, et al. COVID-19 Pandemic: Prevention and protection measures to be adopted at the workplace. Sustain. 2020;12(9):1–18.

35. Yazew BG, Abate HK, Mekonnen CK. Knowledge, attitude and practice towards covid-19 in ethiopia: A systematic review; 2020. Patient Prefer Adherence. 2021;15:337–48.

36. Sema A. Practice of COVID-19 Prevention Measures and Associated Factors Among Residents of Dire Dawa City , Eastern Ethiopia : Community-Based Study. 2021;219–28.

37. Sorge A, Bassanini F, Zucca J, Saita E. “Fear can hold you, hope can set you free”. Analysis of Italian prisoner narrative experience of the COVID-19 pandemic. Int J Prison Health. 2021;17(3):406–23.

38. Takoudjou Dzomo GR, Bernales M, López R, Djofang Kamga Y, Kila Roskem JP, Deassal Mondjimbaye F, et al. Knowledge, Attitudes and Practices Regarding COVID-19 in N’Djamena, Chad. J Community Health [Internet]. 2021;46(2):259–66. Available from: https://doi.org/10.1007/s10900-021-00963-8

39. Gebretsadik D, Gebremichael S, Belete MA. Knowledge, attitude and practice toward

covid-19 pandemic among population visiting dessie health center for covid-19 screening, northeast ethiopia. Infect Drug Resist. 2021;14:905–15.

40. Ahmad NA, Guillermo H. Perception Survey of Prisoners in Kunduz Provincial Prison on COVID 19. Johanniter Int Assist. 2020;(April):30.

41. Coordinating P, Issue B. UPDATE ON HIV IN PRISONS AND. 2021;(December):1–26.

42. Muntingh LM. Africa, Prisons and COVID-19. J Hum Rights Pract. 2020;12(2):284–92.

43. Akalu Y, Ayelign B, Molla MD. Knowledge, attitude and practice towards covid-19 among chronic disease patients at addis zemen hospital, Northwest Ethiopia. Infect Drug Resist. 2020;13:1949–60.

44. Tsehay A, Endashaw H, Molla W, Mengistu N. Factors associated with preventive practices of COVID-19 among health care workers in Dilla University Hospital , Southern Ethiopia Factors associated with preventive practices of COVID-19 among health care workers in Dilla University Hospital , Southern . Environ Challenges [Internet]. 2021;5(November):100368. Available from: https://doi.org/10.1016/j.envc.2021.100368

45. Obi CG, Fozeu LF, Ezaka EI, Kamwela R, Ochonma C. Knowledge , Attitudes , Practices , and Misconceptions towards COVID-19 among Sub-Sahara Africans Geographic Distribution of Study Population. 2022;6(January 2020):1–12.

46. Ababa A, Defar A, Molla G, Abdella S, Tessema M, Ahmed M, et al. Knowledge , practice and associated factors towards the prevention of COVID-19 among high-risk groups : A cross-sectional study in. 2021;1–14. Available from: http://dx.doi.org/10.1371/journal.pone.0248420

47. Asemahagn MA. Factors determining the knowledge and prevention practice of healthcare workers towards COVID-19 in Amhara region , Ethiopia : a cross-sectional survey. 2020;3.

48. Jemal B. Knowledge , attitude and practice of healthcare workers towards COVID-19 and its prevention in Ethiopia : a multicenter study. :1–19.

49. Report ET. Infection prevention and control and surveillance for coronavirus disease (COVID-19) in prisons in EU / EEA countries and the UK Target audience. 2020;2019(July).

50. Mekonnen B, Hailemariam S, Ejigu A, Shifera N, Simieneh A. Preparedness and readiness against covid-19 pandemic in prison institutions and detention centers in Southwest Ethiopia. Int J Gen Med. 2021;14:337–46.

51. Sakr S, Ghaddar A, Sheet I, Eid AH, Hamam B. Knowledge, attitude and practices related to COVID-19 among young Lebanese population. BMC Public Health. 2021;21(1):1–11.

52. Endriyas M, Kawza A, Alano A, Hussen M, Alano A. COVID-19 prevention practices in urban setting during early introduction of the disease : results from community survey in SNNP Region , Ethiopia. 2021;1–6.

53. Mendoza Millán DL, Carrión-Nessi FS, Mejía Bernard MD, Marcano-Rojas MV, Omaña Ávila ÓD, Doval Fernández JM, et al. Knowledge, Attitudes, and Practices Regarding COVID-19 Among Healthcare Workers in Venezuela: An Online Cross-Sectional Survey. Front Public Heal. 2021;9(May):1–12.

54. Novak A, Pascoe D. Executive Clemency During the Coronavirus Pandemic : A Global Analysis of Law and Practice. Int Criminol [Internet]. 2022;(Part V). Available from: https://doi.org/10.1007/s43576-022-00047-0

55. Azlan AA, Hamzah MR, Sern TJ, Ayub SH, Mohamad E. Public knowledge, attitudes and practices towards COVID-19: A cross-sectional study in Malaysia. PLoS One [Internet]. 2020;15(5):1–15. Available from: http://dx.doi.org/10.1371/journal.pone.0233668

56. Guji W. Assessment of factors affecting practice towards COVID-19 among health care workers in health care. 2020;

57. Prisons LAWOF, Affairs MOF. BASIC TRAINING MANUAL for PRISON and DETENTION CENTER WORKERS CENTERS , and PRISON AND DETENTION CENTER ’ S REGULATIONS FOR Instructor ’ s Version The Islamic Republic of Afghanistan.

58. Apanga PA, Lettor IBK, Akunvane R. Practice of COVID-19 preventive measures and its associated factors among students in Ghana. Am J Trop Med Hyg. 2021;104(2):526–31.

59. Natnael T, Alemnew Y, Berihun G, Abebe M, Andualem A, Ademe S, et al. Facemask wearing to prevent COVID-19 transmission and associated factors among taxi drivers in Dessie City and Kombolcha Town, Ethiopia. PLoS One [Internet]. 2021;16(3 March):1–15. Available from: http://dx.doi.org/10.1371/journal.pone.0247954

60. Reinhart E, Chen DL. Incarceration and its disseminations: COVID-19 pandemic lessons from Chicago's cook county jail. Health Aff. 2020;39(8):1412–8.

61. Prost SG, Novisky MA, Rorvig L, Zaller N, Williams B. Special Issue : Gerontology in a Time of Pandemic , Part I : Forum Prisons and COVID-19 : A Desperate Call for Gerontological Expertise in Correctional Health Care. 2021;61(1):3–7.

62. Alem E, Id L, Demissie BW, Gebeyehu NA. Knowledge , attitude and practice towards COVID-19 among health professionals in Ethiopia : A systematic review and meta- analysis. 2021;1–16. Available from: http://dx.doi.org/10.1371/journal.pone.0247204

63. Al-melhi A. Language and New Words and Phrases Related to Coronavirus Among Saudi Arabian Students : Awareness , Knowledge , and Use. 2022;12(2):221–9.

64. Saefi M, Fauzi A, Kristiana E, Adi WC, Muchson M, Setiawan ME, et al. Validating of Knowledge, Attitudes, and Practices Questionnaire for Prevention of COVID-19 infections among Undergraduate Students: A RASCH and Factor Analysis. Eurasia J Math Sci Technol Educ. 2020;16(12):1–14.

65. Ijeoma U, Id N, Osual EC, Chireshe R. preventative practices towards COVID-19 in sub-Saharan Africa : A scoping review. 2021;1–20. Available from: http://dx.doi.org/10.1371/journal.pone.0249853

66. Alemu T, Amare S, Legesse S, Abera A, Ayalew M, Bezabih B. Covid-19 knowledge, attitude, practices and their associated factors among dessie city residents, Northeast Ethiopia: A cross-sectional study. Risk Manag Healthc Policy. 2021;14:439–51.

ANNEXES-I

1. English Version questionnaire

My name is ----------. I am a data collector for a survey being conducted about COVID-19. The investigator is Mohammed Jemal, MPH candidate from Jimma University, Institute of Health, Faculty of Public Health, Department of Epidemiology (General MPH). The aim of this study is to assess practices towards COVID-19 prevention and identify associated factors with Practice on COVID-19 prevention. The socio-demographic variables will be used to determine the current level of Practice about COVID-19 prevention and to determine health behaviors related to the prevention of COVID-19 among the prisoners in Worabe, southern Ethiopia, in 2022. The purpose of this study is to generate information about COVID-19 prevention among the prisoners in Worabe. The study may help stakeholders, policymakers, responsible bodies and others to take actions based on the findings. The study comprises various socio-demographic and Preventive practice questions. You have been chosen to participate in this study. The interview will take no more than 25 minutes.

We assure you that there is no risk or harm in participating in this study. All information will be kept confidentially. The last name of a participant will not be written or specified. Your privacy will also be protected, and no one will know your response.

This study benefits you because you have the right to know about the prevention of the COVID-19 pandemic. If you are found to have a risk factor or if you are found to be suspected of having the COVID-19 pandemic, you will be referred for proper advice and further diagnosis and treatment. There is no incentive or payment for participating in this research. Likewise, findings of the study will show the magnitude of Practice and associated factors of COVID-19 prevention among prisoners. This in turn will help to design effective and appropriate measures for prevention and control of COVID-19.

You have the full right to decide whether or not to participate in this study. You may respond to all questions, or you may not answer the questions you don’t want to, or you may quit your participation totally at any time you want. You can ask any questions that are not clear to you.

Informed consent

As to the information given ahead, participating in this study has no risk. Your participation is vital in order to attain the objective of the study. For this reason, we are requesting your free will. You are enumerated in this study, and your name will not be written on this form, and the information you give will never be shared with others. Your genuine response to the interviews will be very important for the purpose of the study. You have the right to refuse to respond to any question or the entire question at any time you want. I have read this form or it has been read to me in the language. I comprehend and understand all the conditions stated above.

Are you interested and willing to participate in this study?

Yes □ No □

If "Yes" proceed with the interview.

If "No" thank you and end.

Name of the principal investigator: Mohammed Jemal (BSc)

English version questionnaire

Date of interview_____ Participant's Unique ID_____ Name of data collector_____

Questionnaire to assess practice towards COVID-19 and associated factors among Prisoner's in Worabe town Silte Zone, Southern Ethiopia, 2022

S. No.	Questions	Response Category	Skip
	Section I Socio demographic characteristics		
1.1	Age of respondents	----------years old	
1.2	Gender	1. Male 2. Female	
1.3	Marital status before imprisonment	1. Single 2. Married 3. Divorced 4. Widowed	
1.4	Educational status of respondents	1. Formal education 2. Primary school 3. Secondary school 4. College Diploma and above	
1.5	Income of the respondents	----------ETB	
1.6	Length of stay in prison	1. Less than 3month 2. 3-12 months 3. >=12months	
1.7	How many persons (prisoners) are living in one room? ----------		
1.8	Does the room has windows that can be opened	1. Yes. 2.No.	
1.9	Does the room have direct sun light?	1. Yes. 2.No.	

1.10	Is there high turnover of many Prisons?(IN and OUT) of prisons	1. Yes. 2.No.	
1.11	If you say Yes How many are they?	1. Male.---------- 2.Female----------	

Section II: knowledge of respondents towards COVID-19 prevention

No	Questions	Responses/Alternative choices	Remark
2.1	Have you heard of COVID-19?	1. Yes 2. No	
2.2	If yes in 1 above, from where did you hear of it? (Encircle multiple answer is possible)	1. Television 2. Radio 3. Health workers 4. Social media 5. Family visitors	
2.3	If no in 2 above ,question	Please Skip it	
2.4	Knowledge of transmission modes of COVID-19? (Encircle multiple answer is possible)	1. Contact withCOVID19 patient 2. Breathing 3. Coughing/sneezing 4. Eating and drinking 5. Others(specify)----------	
2.5	Knowledge on the prevention mechanisms of COVID19(Encircle multiple answer is possible)	1. Social distancing 2. Using face mask 3. Isolation/quarantine 4. Hand washing 5. Others	

2.6	Is hand-wash important?	1. Yes 2. No 3. Maybe	
2.7	If yes in 2.6 above, how long should you wash your hands to kill the virus?	1. Less than 20 s 2. 20 s to 1 min 3. I don't know	
2.8	The main clinical symptoms of COVID-19 are (Encircle multiple answer is possible)	1. Fever 2. Fatigue 3. Dry cough 4. Sneezing 5. Chest pain 6. I do not know any symptom	
2.9	Time imprisoned in police?	1. Less than five months 2. Five months to one year 3. One year and above	
2.10	You know Social media(Facebook Internet)	1. Yes 2. No	
Section III: Attitude of respondents towards COVID-19 prevention			
No	Questions	Responses/Alternative choices	Remark
3.1	Do you think that COVID-19 prevention measures should only be applied by older adults and age groups most risk?	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	
3.2	Do you think that limit of the Person to person movement decreases the transmission?	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	

3.3	Do you think that consumptions of raw vegetables and wild animal products have no role in transmissions of COVID-19?	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	
3.4	Garlic, lemon, ginger and cumin oil are medicines for COVID 19	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	
3.4	Do you agree that COVID-19 will finally be successfully controlled?	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	
3.5	Do you have confidence that Ethiopia can win the battle against the COVID-19 virus?	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	
3.6	Black race is protective toward COVID-19 disease.	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	
3.7	Wearing a well-fitting face mask is effective in preventing COVID-19	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	
3.8	Using a hand wash can prevent you from getting COVID-19.	1. Strongly agree 2. Agree 3. Neutral	

		4. Disagree 5. Strongly disagree	
3.9	Do you think social distancing can prevent you from getting COVID-19?	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	
Section IV: Practice of respondents towards COVID-19 prevention			
No	Questions	Responses/Alternative	Remark
4.1	Stay at home until the signs and symptoms will resolved	1. Yes 2. No opinion 3. No	
4.2	Had you kept social distancing	1. Yes 2. No opinion 3. No	
4.3	Hand washing with water and soap for 20 s	1. Yes 2. No opinion 3. No	
4.4	Using sanitizer	1. Yes 2. No opinion 3. No	
4.5	Wearing face mask	1. Yes 2. No opinion 3. No	
4.6	Had you practice bent elbow coughing and sneezing	1. Yes 2. No opinion 3. No	
4.7	Had you avoided hand shaking	1. Yes 2. No opinion 3. No	
4.8	Do you consume alcohol before	1.Yes 2.No opinion	

		3.No	
4.9	If you say yes for question 3.8 for how many years	----------years	
4.10	Do you touch your eyes, nose, and mouth frequently with unwashed hands?	1.Yes 2.No opinion 3.No	
4.11	Do you use other workers' phones, desks, offices, or other work tools and equipment?	1.Yes 2.No opinion 3.No	
	Section IV.II Observational checklist for housing condition of prisoners		
No	Area will be assessed by observers		Remark
4.2.1	Is enough room for physical distancing?	1. Yes 2. No	
4.2.2	Number of beds per room	----------	
4.2.3	Heading and footing of prisoners on the beds (observing pillows on the bed)	1. Head-to-foot 2. Head-to-head	
4.2.4	Number of prisoners stayed per room?	----------	
4.2.5	Is there window?	1. Yes 2. No	
4.2.6	If yes Q# 4.2.5 how many windows are there	----------	
4.2.7	Are windows opened for ventilation	1. Yes 2. No	
4.2.8	Is there hand washing facilities nearby room or toilet	1. Yes 2. No	
4.2.9	Are its visible dusts, soiled material in the room	1. Yes 2. No	

4.2.10	Is there any source of information (Tv/radio) in the prison	1. Yes 2. No	

የአማርኛ፡ቅጅ፡መጠይቆች

የመረጃ፡ቅጽ

ይህ፡ቅጽ፡በወራቤ፡ከተማ፡ማራሚያ፡ቤት፡ታራሚዎችን፡ስለ፡ኮሮና፡በሽታ፡መከለካያ፡በተመለከተ፡ያላቸዉን፡በመከለከል፡ራገድ፤እና፡ተያያዥነት፡ያላቸዉን፡ምክንያቶችን፡በተመለከተ፡ለሚደረገው፡ጥናት፡የጥናቱ፡ተሳታፊዎችን፡ስምምነት፡መጠየቂያ፡ነው፡፡

ስሜ_____ይባላል፡፡የዚህ፡ጥናት፡መረጃ፡ሰብሳቢ፡ስሆን፡ጥናቱም፡የሚካሄደው፡በወራቤ፡ማራሚያ፡ቤት፡ታራሚዎች፡ላይነው፡፡ጥናቱን፡የሚያጠናው፡መሀመድ፡ጀማል፡ይባላል፡፡በጅማ፡ዩኒቨርሲቲ፡ጤና፡ኢንስቲትዩት፡በማህበረሰብ፡ጤና፡ፋኩልቲ፡በኢፒዲሞሎጂ፡ትምህርት፡ክፍል፡በአጠቃለይ፡ማህበራሰብ፡ጤና፡ስፔሽልት፡የድህረ፡ምረቃ፡ተማሪ፡ነው፡፡የጥናቱ፡ዓላማም፡በወራቤ፡ከተማ፡ማራሚያ፡ቤት፡ታራሚዎችን፡ስለ፡ኮሮና፡በሽታ፡መከለካያ፡በተመለከተ፡ያላቸዉን፡በመከለከል፡ራገድ፡እና፡ተያያዥነት፡ያላቸዉን፡ምክንያቶችን፡ለማወቅ፡የታለመ፡ነው፡፡ስለዚህ፡ከዚህ፡ጥናት፡ጋር፡የተያያዘ፡ጥያቄዎችን፡እጠይቆታለሁ፡፡ለዚህ፡ጥናት፡የተዘጋጁ፡ጥቂት፡ቃለ፡መጠይቆች፡ይኖሩኛል፡ቃለ፡መጠይቁም፡እስከ 25፡ደቂቃ፡ሊፈጅ፡ይችላል፡፡

የእርሶን፡ስምም፡ሆነ፡እርሶን፡ማንናት፡የሚገልጽ፡ማንኛውም፡መረጃ፡ለማንኛውም፡አካል፡አይገለጽም፡፡የጥናቱ፡ተሳታፊ፡መሆን፡ምንም፡አይነት፡ጉዳት፡የለውም፡፡ለቃለ፡መጠይቁ፡ከሚፈጀው፡ጊዜ፡ውጪ፡እርሶ፡የሚሰጡን፡ማንኛውም፡መረጃ፡በጥብቅ፡ሚስጥር፡ይያዛል፡፡

የእርሶ፡በዚህ፡ጥናት፡መሳተፍ፡ሙሉ፡በሙሉ፡በእርሶ፡ፍቃደኝነት፡የተመሰረተ፡ነው፡፡በቃለ፡መጠይቆቹም፡ምቾት፡ካልተሰማዎት፡የማቋረጥ፡መብቶ፡የተጠበቀ፡ነው፡፡በጥናቱ፡ላይ፡ማንኛም፡ጥያቄ፡ካለዎት፡ወይም፡የጥናቱን፡የመጨረሻ፡ውጤት፡ማወቅ፡ከፈለጉ፡እባክዎን፡አጥኚውን፡ለማግኘት፡ወይም፡ማነጋገር፡ስለሚቻል፡ስሜቶን፡ያሳውቁን፡በሚከተሉት፡አድራሻዎች፡ማግኘት፡ይችላሉ፡፡

የአጥኚው፡ስም፡መሀመድ፡ጀማል::

ስልክ፡ቁጥር + 251 9-23-14-59-72

በጥናቱ፡ለመሳተፍ፡ፍቃደኛ፡ኖት

1. **አዎ _____ወደሚቀጥለውገጽይሂዱ**
2. **አይደለሁም _____ ወደሚቀጥለው ተሳታፊ ይሂዱ**

የስምምነት፡መጠየቂያ፡ (መቀበያ)፡ቅጽ

እኔ፡የዚህ፡ጥናት፡ተሳታፊ፡በዚህ፡ቅጽ፡ላይ፡የፈረምኩት፡በጥናቱ፡ለመሳተፍ፡ሙሉ፡በሙሉ፡ፍቃደኛ፡መሆኔን፡በማረጋገጥው፡፡

<u>የጥናቱ፡ርዕስ</u>

“በወራቤ፡ከተማ፡ማራሚያ፡ቤት፡ታራሚዎችን፡ስለ፡ኮሮና፡በሽታ፡መከለካያ፡በተመለከተ፡ያላቸዉን፡በመከለከል፡ራገድ፡እና፡ተያያዥነት፡ያላቸዉን፡ምክንያቶችን፡ለማወቅ”የሚል፡ሲሆን፡የጥናቱ፡ዓለማም ፤በወራቤ፡ከተማ፡ማራሚያ፡ቤት፡ታራሚዎችን፡ስለ፡ኮሮና፡በሽታ፡መከለካያ፡በተመለከተ፡ያላቸዉን፡በመከለከል፡ራገድ፡እና፡ተያያዥነት፡ያላቸዉን፡ምክንያቶችን፡ለማወቅ፡የታለመ፡ነው፡፡

በዚህ፡ጥናት፡መሳተፌ፡ሙሉ፡በሙሉ፡በፍቃደኝነት፡ላይ፡የተመሰረተ፡መሆኑን፡ተገንዝቤለሁ፡፡ለቃለ፡መጠይቁ፡የምሰጣቸው፡ምላሾችም፡ሆነ፡የኔ፡ማንነት፡በምንም፡መልኩ፡እንደማይታወቅና፡ለሌላ፡ሰው፡ወይም፡ለሦስተኛ፡ወገን፡ተላልፎ፡እንደማይሄድ፡ተነግሮኛል፡፡

የእኔ፡በጥናቱ፡መሳተፍም፡ሆነ፡አለመሳተፍ፡በእኔ፡ላይ፡ተጽእኖ፡ወይም፡ጉዳት፡እንደሌለውም፡ተነግሮኛል፡፡እንዲሁም፡በዚህ፡ጥናት፡መሳተፍ፡ምንም፡አይነት፡ጉዳት፡እንደማያመጣብኝ፡ተግንዘቤያለሁ፡፡በዚህ፡ጥናት፡ለሚኖሩኝ፡ጥያቄዎችም፡በጥናቱ፡ተሳታፊነቴ፡ላለኝ፡መብት፡ማነጋገርም፡ሆነ፡ኃላፊነት፡ያለበት፡ግለሰብ፡አቶ፡መሀመድ፡ጀማል፡መሆኑን፡በግልጽ፡አውቂለሁ፡፡

የጥናቱ፡ተሳታፊ፡ፊርማ፡_____

ቀለ፡መጠይቁ፡የተደረገበት፡ቀን _____ የተጀመረበት፡ሰዓት_____

የተጠናቀቀበት፡ሰዓት_____

ቃለመጠይቁን፡ያደረገው፡በለሙ፡ያስም ፡_____

ፊርማ _____

ቀን _____

የተቆጣጣሪው፡ስም _____ ፊርማ_____

.	ክፍል I: ሶሺዮ-ዴሞግራፍክ መረጃዎች		
ተ.ቁ	ጥያቄዎች	መልስ	አስተያየት
1.1	ዕድሜ	----------ዓመት	
1.2	ፆታ	3. ወንድ 4. ሴት	
1.3	ማረምያ ቤት ከመግባተዎ በፊት የነበረ የጋብቻ ሁነታ	5. የላገባ/ያላገባች 6. ያገባ/ያገባች 7. የተፋታ/የተፋታች 8. ባል/ምስት የሞተችበት/የሞተባት	
1.4	የትምህርት ደረጃ	5. መፃፍ እና ማንበብ የማይችል/የማትችል 6. የመጀመሪያ ደረጃ ትምህርት 7. 2ተኛ ደረጃ ትምህርት 8. ከሁለተኛ ደረጃ ትምህርት በላይ	
1.5	ወራሀዊ ገቢ	----------በብር	
1.6	የመኖሪያ አከባቢ	1. ከተማ 2. ገጠር	
1.7	ማረምያ ቤት ከመግባተዎ በፊት የነበሮት የመተዳደሪያ ሥራ	1. ግብርና 2. የመንግስት ሠራተኛ 3. የግል ሠራ 4. ተማሪ	
1.8	በማረሚያ ቤት የቆዩበት ግዜ	4. 3-12 ወራት 5. >=12 ወራት	

ክፍል II: ስለCOVID-19 መከላከል ዕዉቀት ለመለካት የምጠየቁ ጥየቄዎች፡፡			
ተ.ቁ.	ጥያቄዎች	መልሶቻቸው	አስተያየት
2.1	ስለ COVID-19 ሰምተው ያዉቃሉ?	1.አዎ 2.አይ	
2.2	አዎ ከሆነ መልሶ ከየት ነዉ የሰሙት? (ከአንድ በላይ መልስ ይቻላል)	1.ከተለቭዥን 2.ከሬዲዮ 3.ከጤና ባለሙያዎች 4.ከሶሻል ሚዲያ 5.ከቤተሰብ/ከጎረቤት/ከዎዳጅ	
2.3	መልሶ አይደለም ከሆነ ወደ ሚቀጥለው ጥያቄ ዝለል	እባክዎ ይዝለሉ	
2.4	ከሚከተሉት ዉስጥ የCOVID-19 መተላለፊያ መንገድ የሆናዉ የቱ ነዉ? (ከንድ በላይ መልስ የቻላል)	1.ከ COVID-19 ታማሚ ጋርየሚደረግ ቀጥታ ንክኪ	

		2.የአፍና አፍንጫ መሸፈኛ ጭምብልን በአግባቡ አለመጠቀም 3.እጅን በዉሃና በሳሙና በተደጋጋሚ አለመታጠብ 4.ባልታጠበ እጅ አፍና አፍንጫን መንካት	
2.5	ከሚከተሉት ዉስጥ የCOVID- 19 መከላከያ መንገድ የሆናዉ የቱ ነዉ? (ከአንድ በላይ መመለስ ይቻላል)	1.አካላዊ ሪቀትን መጠበቅ 2.የአፍና አፍንጫ መሸፈኛ ጭምብልን በአግባቡ መጠቀም 3.እጅን በዉሃና በሳሙና በተደጋጋሚ መታጠብ 4.ሳኒታይዘርን በአስፈላጊ ግዜ መጠቀም	
2.6	ጥያቄ ቁጥር 204 ላይ ሪቀትን መጠበቅ የCOVID-19መከላያከያ ዘዴ ነዉ ብሎ መልሶ ከሆኔ አካላወዊ ሪቀት ማለት በትንሹ ምን ያህል ብሆን ይመከራል?	1. በትንሹ ግማሽ ሜትር መሆን ይኖርበታል 2. በትንሹ 1 ሜትር መኖን ይኖርበታል 3. በትንሹ 2 ሜትር መሆን የኖርበታል 4. በትንሹ 5 ሜትር መሆን ይኖርበታል	
2.7	ጥያቄ ቁጥር 204 ላይ አፍና አፍንጫ መሸፈኛ በአግባቡ መጠቀም የCOVID-19 መከላከያ ዘዴ ነዉ ብሎ መልሶ ከሆነ አፍና አፍንጫ መሸፈኛ የት የት መጠቀም ይኖርብናል ብሎ ያስባሉ?	1. ብቻችንን እቤት ቁጭ ባልን ግዜ 2. ህዝብ የሚበዛበት አከባቢ ስንሆን 3. ወደተለያዩ አገልግሎት ሰጪ ተቋማት ስንሄድ	
2.8	ጥያቄ ቁጥር 204 ላይ እጅን በዉሃና በሳሙና በተደጋጋሚ መታጠብ የCOVID-19 መከላከያ ዘዴ ነዉ ብሎ መልሶ ከሆነ እጅን ለምን ያህል ግዜ መታጠብ ከ COVID-19 ልከላከል ይችላል?	1. ለ 5 ሰኮንዶች ያህል 2. በትንሹ ለ20 ሰኮንዶች ያህል 3. በደቂቃ የተወሰነ ነገር ያለ አይመስለኝም	
2.9	ጥያቄ ቁጥር 204 ላይ ሳኒታይዘርን በአስፈላጊ ግዜ መጠቀም ብሎ መልሶ ከሆነ ሳኒታይዘርን መቸ መቸ መጠቀም ያለብን ይመስላቸዋል?	1. እጃችን በጣም የጨቀየ መስሎ ስቆሸሸ 2. የተለያዩ ነገሮችን ክነካን 3. ሳዉ ከጨበጥን 4. ምግብ ለመመገብ	
2.10	ከሚከተሉት ዉስጥ ዋና ዋና የCOVID-19 ምልክቶች የትኞቹ ናቸዉ? (ከአንድ በላይ መመለስ ይቻላል)	1.ከፍተኛ ትኩሳት 2.ድካም 3.ደረቅ ሳል 4.በተደጋጋሚ ማስነጠስ 5.የጉሮሮ ህመም 6.የደረት ዉጋት 7.ለመተንፈስ መክበድ	
ክፍል III: ስለCOVID-19 መከላከል አመለካከት ለመለካት የወጡ ጥየቄዎች፡፡			
3.1	የCOVID-19 መከላከያ መንገዶችን ተግባራዊ	1.በደምብ እስማማለዉ	

	ማድረግ ያለባቸዉ ባለሣዉንቶች እና ተጋላጭ በሆኑ ሰዎች ብቻ ናቸዉ፡፡	2.እስማማለዉ 3.ሀሳብ የለኝም 4.እቃወማለዉ 5.በደምብ እቃወማለዉ	
3.2	የእንቅስቃሴ ገደብ መጣል የCOVID-19 ስርጭትን ልቀንስ ይችላል፡፡	1. በደምብ እስማማለዉ 2. እስማማለዉ 3. ሀሳብ የለኝም 4. እቃወማለዉ 5. በደምብ እቃወማለዉ	
3.3	ጥሬ አትክልቶችንና የዱር እንስሳቶችን ዉጤቶች መጠቀም በ COVID-19 ስርጭት ላይ ምንም ተፅዕኖ የለም፡፡	1. በደምብ እስማማለዉ 2. እስማማለዉ 3. ሀሳብ የለኝም 4. እቃወማለዉ 5. በደምብ እቃወማለዉ	
3.4	በስተመጨረሻ የCOVID-19 ስርጭት ይገታል፡፡	1. በደምብ እስማማለዉ 2. እስማማለዉ 3. ሀሳብ የለኝም 4. እቃወማለዉ 5. በደምብ እቃወማለዉ	
3.5	እትዮጵያ የCOVID-19 ስርጨትን ትቆጣጠራለች በምባለዉ ሃሳብ ይስማማሉ?	1. በደምብ እስማማለዉ 2. እስማማለዉ 3. ሀሳብ የለኝም 4. እቃወማለዉ 5. በደምብ እቃወማለዉ	
3.6	ጥቁር ህዝቦችን COVID-19 በሽታ አያጠቃም በምላዉ ሀሳብ ይስማማሉ?	1. በደምብ እስማማለዉ 2. እስማማለዉ 3. ሀሳብ የለኝም 4. እቃወማለዉ 5. በደምብ እቃወማለዉ	
3.7	የፊት መሸፈኛ ጭምብልን በአግባቡ መጠቀም የCOVID-19 ስርጭት ለመግታት ያገለግላል በምላዉ ሀሳብ ይስማማሉ?	1. በደምብ እስማማለዉ 2. እስማማለዉ 3. ሀሳብ የለኝም 4. እቃወማለዉ 5. በደምብ እቃወማለዉ	
3.8	በተደጋጋሚ እጅን በዉና በሳሙና መታጠብ በኮሮና ከመያዝ ይከላከላል በሚላዉ ሀሳብ ይስማማሉ?	1. በደምብ እስማማለዉ 2. እስማማለዉ 3. ሀሳብ የለኝም	

		4. እቃወማለዉ 5. በደምብ እቃወማለዉ	
3.9	አካላዊ ሪቀትን መጠበቅ በኮሮና ከመያዝ ይከላከላል በሚላዉ ሀሳብ ይስማማሉ?	1. በደምብ እስማማለዉ 2. እስማማለዉ 3. ሀሳብ የለኝም 4. እቃወማለዉ 5. በደምብ እቃወማለዉ	
ክፍል IV: ተሳታፍዎች የCOVID-19 መከላከያ መንገዶችን እንደምተገብሩ ለማየት የምጠየቁ ጥያቀዎች			
4.1	ከሚከተሉት ዉስጥ የትኛዉ/ዪትኛዎቹን የCOVID-19 መከላከያ መንገዶችን በትክክል ይተገብራሉ?	1. በቤት መቆየት 2. አካላዊ ሪቀትን መጠበቅ 3. በሳሙናና በወሃ እጀን በተደጋጋሚ ለ20 ስኮንዶች ያህል መታጠብ 4. ሳኒታይዘርን ባግባቡ መጠቀም 5. የፊት መሸፈኛ ጭምብል ባግባቡ መጠቀም 6. ሌሎችን ላለመበከል ስያስለኝ እና ስያስነጥሰኝ በክነዴ በመሸፈን 7. ባለመጨባበጥ	

Practice part 4. 2 የታራሚዎች፡የማኖርያ፡ቤት፡ሁኔታ፡ለመከታተል፡የምልከታ፡ዝርዝር			
ቁጥር	መራጀ፡ሰብሰብ፡የሚገመገም		ምርመረ
4.2.1	ለአካላዊ፡መለያየት፡በቂ፡ቦታ፡አለ	1. አዎን 2. አይደለም	
4.2.2	በአንድ፡ክፍል፡ዉስጥ፡የአልገዎች፡ብዛት	----------	
4.2.3	ታራሚዎች፡አተኛኛት(ጭንቅላት፡እና፡ፊለግ)፡አልገ፡ለይ፡ትረሶችን፡ማየት	1. ከራስ፡ወደ፡እግር 2. ራስ፡ወደ፡ራስ	
4.2.4	በአንድ፡ክፍል፡ስንት፡:ታራሚ፡የርፋል(ይቆያል)	----------	
4.2.5	ማራፍያ፡ክፍል፡መስታዎት፡አለ	1. አዎን 2. አይደለም	
4.2.6	አዎ፡ከሆነ፡ጥያቄ፡415፡ስንት፡መስኮቶች፡አሉ	----------	
4.2.7	ለአየር፡ማናፈሻ፡መስኮቶች፡ተከፍተዋል	1. አዎን 2. አይደለም	
4.2.8	በአቅራቢያ፡በሚገኛዉ፡በመጽደጀ፡ቤት፡የእጅ፡መታጠብያ፡ዉሃና፡ሰሙና፡አለ	1. አዎን 2. አይደለም	
4.2.9	በክፍሉ፡ዉስጥ፡በዓይን፡የሚታይ፡አቧራ፡የቆሸሹ፡ነገሮች፡ይታያሉ	1. አዎን 2. አይደለም	
4.2.10	በማራሚያ፡ለታራም፡ስለ፡ኮሮና፡በሽታ፡የመረጀ፡ምንጭ(ቲቪ/ራዲዮ)፡አለ	1. አዎን 2. አይደለም	