

**ADDIS ABABA UNIVERSITY**  
**COLLEGE OF HEALTH SCIENCE**  
**SCHOOL OF ALLIED HEALTH SCIENCES**  
**DEPARTEMET OF NURSNG AND MIDWIFERY**

ASSESSEMENT OF KNOWLEDGE, ATTITUDE, PRACTICE AND ASSOCIATED FACTORS TOWARDS HEPATITIS B PREVENTION AMONG PATIENTS COMING TO PUBLIC HOSPITALS IN ADDIS ABABA, ETHIOPIA.

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A RESEARCH THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY SCHOOL OF ALLIED HEALTH SCIENCES, DEPARTEMENT OF NURSING AND MIDWIFERY FOR PARTIAL FULFILLMENT OF REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN ADULT HEALTH NURSING.

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Addis Ababa, Ethiopia

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## **Abstract:**

**Background:** Hepatitis B is the most common serious liver infection in the world. Hepatitis B infection is caused by the hepatitis B virus which attacks the liver and can cause both acute and chronic disease and puts people at high risk of death from cirrhosis and liver cancer. Hepatitis B infection is one of the major public health problems and is the tenth leading cause of death.

**Objectives:** The aim of this study was to assess knowledge, attitude, practice and associated factors towards hepatitis B prevention among patients coming to public hospitals in Addis Ababa, Ethiopia, 2017.

**Method:** Health Institution based, cross-sectional study design was conducted from March to April 2017. A total of 422 patients were selected by random sampling method from public hospitals in Addis Ababa, Ethiopia. Data was collected based on interview administered pre tested structured questionner. Descriptive analysis was done and level of knowledge, attitude and practice was determined based on the mean value of questions asked and bivariate and multivariate regression for analysis of relation between dependent and independent variables. The data was checked for its completeness manually and then entered in EPI DATA version 3.1.1 and analyzed using SPSS version 22 statistical software package. Confidence interval 95% and P-Value < 0.05

**Result:** From the total of 422 study participant the response rate was 396 (94%). Almost half of the respondents had a poor knowledge 197(49.7), negative attitude of 190(48%) and poor practice 266(67.2%). unemployment [AOR=0.236, [0.075,0.756] and housewife [AOR=0.284, [0.102,0.794] less likely associated with good knowledge, Monthly income [AOR=2.123, [1.022, 4.409] more likely and educational level less likely [AOR=0.235, [0.068, 0.812] with positive attitude and marital status more likely (AOR= 3.409, 95% CI [1.380,8.422] with good practice.

**Conclusion:** Results from this study showed that poor knowlegdge, Negative attitude and poor practice of patients towards HB. nearly half of the respondents had poor knowledge and more than half are with poor practice. Therefore, extensive health educational campaign should be provided to general population and especially to patients coming to public hospitals.

**Key Words:** *Knowledge, Attitude, Practice, Hepatitis B, Patients, Prevention, Addis Ababa*

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## **Lists Acronyms and Abbreviations**

AAU	Addis Ababa University
AIDS	Acquired Immune Deficiency Syndrome
CHB	Chronic Hepatitis B
HB	Hepatitis B
HBV	Hepatitis B virus
HbsAg	Hepatitis B surface antigen
HCV	Hepatitis C virus
HCC	Hepatocellular carcinoma
HCW	Health Care Workers
HIV	Human Immune Virus
IRB	Institution Review Board
KAP	Knowledge, Attitude and practice
OPD	Outpatient department
SPSS	Statistics Package for Social Science

# 1. Introduction

## 1.1. Background

Hepatitis B infection is a viral infection which is caused by the hepatitis B virus (HBV) that attacks the liver and can cause both acute and chronic disease. It is one of the main global health problems which can cause chronic infection and leaves people at high risk of death from cirrhosis and liver cancer (1). HBV is the number one worldwide cause of chronic hepatitis, cirrhosis and hepatocellular cancer (2). The hepatitis B virus can live outside the body for at least 7 days. During this time, the virus can still cause infection if it gets in to the body of a person who is not vaccinated (1). Genotypes of HBV (A–H) have been identified with different geographic distributions (3).

It is most usually spread from mother to child at birth, percutaneous or mucosal exposure to infected blood and various body fluids, such as saliva, menstrual, vaginal, and seminal fluids (4) and by reuse of needles and syringes either in health care institution or through tattooing. It's also transmitted sexually in unvaccinated homosexual and persons with multiple sex partners. Infection in adulthood leads to chronic hepatitis in less than 5% of cases (1, 5).

Primary testing should include serologic testing for surface antigen (HBsAg), hepatitis B core antibody (anti-HBc total), and hepatitis B surface antibody (anti-HBs) (3). Acute hepatitis B has symptoms like fever, fatigue, loss of appetite, nausea and/or vomiting, jaundice, pain in muscles, joints, and stomach. Chronic hepatitis B virus infection is a long-term illness that most people do not have symptoms, but it is still very severe and can lead to liver damage (cirrhosis), liver cancer and even death (5).

People can protect themselves from hepatitis B by being vaccinated. However, for those already infected treatment is the only choice for survival. Antiviral agents active against HBV are available and shown to suppress HBV replication, prevent progression to cirrhosis, and reduce the risk of HCC and liver-related deaths. Currently available treatments fail to eradicate the virus. In addition, these drugs are not widely available to be used in low and middle income countries, (6).

Knowledge, attitude, and practice (KAP) surveys are representative of a detailed population to collect information on what is known, believed and done in relation to a particular topic and are the most recurrently used study tool in health seeking behavior researches. These studies are the reflection of the important health related issues by the society and help to design prevention strategies (7).

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

Hepatitis B infection is one of the major public health problems and is the tenth leading cause of death (8). It is categorized as 'disease of priority,' there is a continuous increase in discovery of new cases worldwide (9). Worldwide, there are an estimated 240 million chronically infected persons, mainly in low- and middle-income countries. Between 20% and 30% of those who become chronically infected will acquire these complications, cirrhosis and hepatocellular carcinoma and an estimated above 6 hundred thousand people will die annually due to chronic HB(CHB) (6). High rates of chronic infections are also found in the Amazon and the southern parts of eastern and central Europe. In the Middle East and the Indian subcontinent, an estimated 2–5% of the general population is chronically infected. Less than 1% of the population of Western Europe and North America is chronically infected(1).

On average, Asian Americans are three times more likely to die from liver cancer than other racial/ethnic communities, with Chinese Americans at six times, Koreans eight times and Vietnamese 13 times higher than their white counterparts (10). Vietnamese American males have the highest incidence rate of liver cancer in the U.S. (41.8 per 100,000) followed by Hmong American males (25.7 per 100,000). Hmong women, Korean Americans have the highest incidence rate of liver cancer (10.0 per 100,000) followed by Hmong Americans (8.8 per 100,000) (11).

HBV is a serious health problem in Turkish-Dutch population shows that the level of awareness regarding HBV is low (12). Study done in Pakistan found hepatitis B and C are more prevalent amongst older compared to younger patients, which can be explained due to increased probability of exposure to the virus with increasing age. The older population poses a higher risk of transmission of the virus as compared to the younger population. Similarly a higher incidence of both Hepatitis B and C were found in the male population as compared to female population which could arise due to high risk behaviour found in males in contrast to female (13).

Nigeria is among the group of countries endemic for HBV infection (14). Hepatitis B surface antigen (HBsAg) prevalence in healthy Nigerians is the same in any part of the country though higher among patients having AIDS in the northern states, especially the North eastern states where the prevalence is up to 70% (15). The prevalence of HBV is high in rural communities in the central African Republic and comparable to that observed in urban areas.

This high prevalence confirms that HBV is responsible for high rates of morbidity and mortality in Central Africa Republic (16).

In Ethiopia, study done in Southwest Ethiopia on hepatitis B and C viruses infections and their association with human immunodeficiency virus show prevalence rate of Hepatitis B Virus were 2.1% (17). In another study done in HIV positive individuals the overall prevalence of viral hepatitis (HBV and HCV) was (11.7%). The seroprevalence of HBV were (5.6%) (18). Data regarding knowledge, as well as practice towards hepatitis B among the general population is scarce, however study done in Haramaya University shows poor knowledge among the medical and health science students entering into the profession practice about the hazards of Hepatitis B, its mode of transmission and prevention (19).

Presently, in Ethiopia pregnant women are routinely screened for hepatitis B when they seek antenatal follow up, However scarce base line data on knowledge, attitude and practice on prevention of hepatitis B among patients, this patients are at risk since, the epidemiology and methods of transmission have similarities, and many of the risk groups for HBV are the same as those for HIV(20). Since there is no study done among patients coming to public hospital in our country, in view of these considerations, this study showed patients knowledge, attitude and their preventable practice towards hepatitis B in the study area.

### **1.3. Significance of the study**

Prevention is the only safe method against high prevalence of HBV, having enough knowledge and proper preventive practice towards this infection are the corner-stones of preventing the spread of the virus.

The objective of this study is to identify the gap in Knowledge, attitude and practice of the study population in order to reduce all the effects of the disease on these patients. The result of this study assist Hospital medical directors, governmental and non-governmental organizations in collaboration with Ministry of Health to be aware of the existing knowlege, attitude and practice of patients and help to develop strategies for promoting awareness creation in the community and improving HBV vaccine coverage, also end results of this study will be used as a base line for further study.

## **2. Literature review**

The beginning of Modern research on viral hepatitis began in the year 1963, when Nobel Prize winner Baruch S. Blumberg (1925– 2011) reported for the first time publicly on the discovery of a new antigen named Australia antigen (20). In the years following , AuAg(Australia antigen) would become the first specific marker of viral hepatitis. Thereafter, viral hepatitis type B became a driving force for the development of modern virus diagnostics and vaccines (21).

Hepatitis B is the most common serious liver infection in the world. Two billion people or 1 in 3 have been infected and more than 240 million people are living with a chronic hepatitis B infection. Each year up to 1 million people die from hepatitis B despite the fact that it is preventable and treatable (22).

### **2.1. Socio-demographic characteristics**

A study done in France shows that a good level of knowledge of HBV transmission modes was found more often in women than in men, in the 18–30 year-old population than in the 45–54 and 55–69 year-old populations, in people who had educational qualifications compared with those without qualifications, in those whose net monthly household income was high (23). Similar study done in Pakistan (Nawabshah) shows knowledge and awareness about most aspects of the disease was more amongst individuals who are educated (increasing level of education) but uneducated people were either unaware or had only little information in most parameters except in prevalence of disease, organ involvement and clinical presentation. This study revealed decreased knowledge of even educated persons concerning route of transmission, transmission by unsafe sex, or complication of the disease like malignancy. Both educated and uneducated persons were mostly relying on homeopathic medicine, thinking them to be more accurate and reliable in treating the hepatitis (24).

Study done in Hong Kong found that There were significant differences in HBV screening depending on education level, occupation, received a university education, and were working as professionals or executives (25).

A study done in turkey found age group 26-30 years had slightly more knowledge with 55% scoring compared to 42% in the total of all age groups (12). In the contrary study done in California among Asian American found that there were no significant differences in hepatitis B knowledge and practice by age group, sex, or level of education (26).

Study done on Cambodians immigrants in Seattle found that Hepatitis B awareness and higher knowledge scores were significantly associated with younger age and a greater proportion of life in the US, but not gender. A minority of survey respondents knew that Cambodians are more likely to be infected with hepatitis B than whites in 43% of respondents (27).

Study done in Pakistan among healthy population the demographic variables, education level, occupation and area of residence (locality) were significantly associated with mean knowledge, attitude and practice scores (28).

In African country Ghana's study age, occupation and working experience were significantly associated with mean knowledge scores (29) .

## **2.2. Review of different literature on knowledge, attitude and practice of hepatitis B**

### **2.2.1. Knowledge on hepatitis B**

Study conducted in Turkey shows low levels of hepatitis B awareness and knowledge in the Turkish community in Rotterdam in 2010. This overall level of awareness differed between tested and non- tested individuals, 42% of tested had some awareness in contrast with 24% in non-tested group (12). Another survey done in France which was carried out in 2010 among a random sample of 9,014 individuals aged between 18–69 and living in metropolitan France among general population from the people interviewed, 96.1% declared having already heard of hepatitis B (23).

Study done on Hepatitis B and Liver Cancer knowledge and preventive Practices among Asian Americans in the San Francisco Bay Area, California in 2007 among 200 adults knowledge level, although 90% of adults had heard of hepatitis B and 24% reported that they or a family member had a history of hepatitis B or liver cancer, knowledge regarding hepatitis B transmission, prevention, symptoms, risks, and patterns of occurrence was poor (26).

Another study done in healthy population of Quetta, Pakistan among One thousand healthy individuals (aged 18 years and above) were approached for the study, out of the 780 participants, the major source of information regarding HB was from family/friends and neighbors 284(36.4%), 588 (75.4%) were within the poor knowledge range whereas (24.6%) showed adequate knowledge about HB. Poor knowledge was apparent in responses to questions relating to symptoms and transmission of HBV (28). Similar study done in Quetta, Pakistan among Hepatitis-B patients was undertaken with 390 Hepatitis-B patients attending two public

hospitals Out of the 390 HB patients, (76.4%) were within the poor knowledge range whereas (23.6%) showed adequate knowledge about HB. Poor knowledge was apparent in responses to questions relating to symptoms and the transmission of HB (30).

Study done in Malaysia on Knowledge, attitudes and practices among people with chronic hepatitis B attending a hepatology clinic among outpatient adult hepatology clinic found almost half of the participants could not differentiate whether HBV is a viral or bacterial infection. Knowledge on modes of transmission was reasonably good and the majority achieved correct response and mean knowledge score was 12.57 ( $\pm 4.4$ ) (31).

Another similar design study on the Prevalence of Hepatitis B and knowledge about Hepatitis B among migrant workers in Shandong Province, China: The majority of survey respondents had heard of a disease called hepatitis B (89.8%), but only. Correct response rates for questions on the transmission of hepatitis B were low, especially the question of whether hepatitis B can be transferred by unsafe sexual contact (36.8%) and whether it can be transferred from mother to infant (33.9%). A total of 80.9 percent of migrant workers knew that vaccination is effective for hepatitis B (32).

Another population-based telephone survey in public awareness of hepatitis B infection in Hong Kong among 506 respondents Regarding knowledge about the mode of transmission, mother-to-infant transmission and blood contact were recognised by 67% and 65% of respondents, respectively. Sexual contact was realised by 44% of respondents, while sharing a razor or tooth brush was identified by 41%. Only about one third of respondents (37%) indicated that tattooing or body piercing could spread the virus (25).

Hepatitis B knowledge and practices among Chinese Immigrants to the United States found that HBV cannot be spread by eating food that was prepared by an infected person (23%), and cannot be spread by sharing eating utensils with an infected person 16%. In addition, only 37% knew that people can be infected with HBV for life. The proportions who knew HBV can be spread during childbirth, during sexual intercourse, and by sharing razors were 70%, 54%, and 55%, respectively (33). Similar Study done in Cambodian immigrants on hepatitis B knowledge and practices in a community-based telephone survey was conducted in Seattle. study sample size of 111 individuals. About two-thirds 64% of the study group had heard of hepatitis B. The mean knowledge score was only 4. Hepatitis B cannot be spread by eating food that has been prepared by an infected person 28% and can be spread by sexual intercourse 46% and can be spread by someone who looks and feels healthy 43% (27).

Egypt study on Hepatitis B and C viral infection, prevalence, knowledge, attitude and practice among barbers and clients in Gharbia governorate shows that level of knowledge about modes of transmission was high among the majority of the study participants. Knowledge about the existence of protective drugs and vaccines was to low. Friends and relatives were the main source of information for both barbers 46.1% and clients 49.7% (34).

A cross sectional study on Knowledge, attitude and practices concerning Hepatitis B infection, among healthcare workers in Bantama, Ghana shows that out of the 175 participants showed Mean knowledge of  $13.691 \pm 2.81$  which is adequate knowledge but poor knowledge was apparent in responses to questions relating to types and transmission of HBV (29). Similarly, study done in Ibadan, Nigeria on knowledge and utilization of Hepatitis B infection preventive measures and influencing factors among health care workers in almost all the health care workers had heard about hepatitis B preventive measures at one time or the other 65.2% of the HCWs had good knowledge of hepatitis B infection. The most common source of health care workers' information on hepatitis B was seminar/ workshop 51.7% (35).

Study done in Haramaya University, Ethiopia on the assessment of knowledge and practice towards Hepatitis B among Medical and Health Science students, out of the 322 participants, 43.8% were within the poor knowledge range whereas 56.2% showed adequate knowledge about HB. Poor knowledge was apparent in responses to questions relating to transmission. And the mean knowledge score for the entire study was 11.52 62.37 (19). Similar study done on the assessment of knowledge, attitudes and practice toward prevention of hepatitis B virus infection among students of medicine and health sciences in Northwest Ethiopia found most of the study participants had adequate knowledge on HBV infection and its mode of transmission. Of the students surveyed, 81.3 % knew that HBV infection associate with liver cancer. Regarding the mode of transmission 97.2 % reported contact with blood or body fluid of HBV carriers (36).

Another cross sectional study done in Northwest Ethiopia, Bahir Dar City Administration on Hepatitis B vaccine knowledge and vaccination status among health care workers on Knowledge of HCWs about hepatitis B infection. The mean knowledge score of the respondents about hepatitis B infection was 7.6. About 52% of the respondents scored above the mean knowledge score about hepatitis B infection. Similarly about 82% agreed that hepatitis B infection is more common in Sub Saharan Africa (37).

### **2.2.2. Attitude towards hepatitis B**

Study done in Pakistan among healthy population the over all respondents had a negative attitude towards Hepatitis B with mean score of  $3.72 \pm 1.2$  Majority of the respondent (79.7%) believed that they cannot get infected with HB. (39.5 %) respondents stated that they will be a shamed to get infected with HB (26.0%) agreed to consult a physician as their first choice of treatment (28). Also in another study done in Pakistan among hepatitis b patients, out of the 390 HB patients, 79.2% were within the negative attitude range whereas 20.8 % showed a positive attitude towards HB (32). Similar study done in Ghana on knowledge, attitude and practices concerning Hepatitis B infection, among healthcare workers shows that out of the 175 study participants, 2.28-25.13% were within the negative attitude range whereas 69.14- 91.9% showed a positive attitude towards HBV whereas 4.57-5.7% were unaware of the issues (29).

### **2.2.3. Hepatitis B preventive practices**

Hepatitis B and Liver Cancer knowledge and preventive Practices among Asian Americans in the San Francisco Bay Area, California in 2007 found that sixty percent of adults reported having been tested for hepatitis B, 31% reported having been vaccinated against hepatitis B, had never been vaccinated against hepatitis B, had never been screened for liver cancer, or had not had their children vaccinated against hepatitis B were significantly less likely to have been tested for hepatitis (26).

Study in Quetta, Pakistan found 66.9% of patients were within the bad practice range whereas 33.1% showed good preventive practice towards HB. The majority of the patients (98.2%) had never had HB screening before they became infected. The mean score for related practices was  $2.37 \pm 1.0$  revealing poor practices among study participants (30).

In another similar study among healthy population of Quetta, Pakistan Majority of the respondents 96.9% never went for HB screening and 86.8% stated a negative immunized status against HB. The mean score for HB related practices was  $2.76 \pm 1.1$  revealing poor practices among the study participants (28).

Knowledge, attitudes and practices among people with chronic hepatitis B attending a hepatology clinic in Malaysians study for prevention of transmission, almost all the participants avoided sharing personal items such as razors and toothbrushes 98.3% (31).

Study among Chinese Immigrant to the United States found less than one-half (48%) of their study group showed they had received a hepatitis B blood test, and about one third (31%)

indicated they had been vaccinated against hepatitis B. The proportions of survey participants reporting they had been tested and vaccinated, tested but not vaccinated, vaccinated but not tested, and neither tested nor vaccinated were 20%, 28%, 11%, and 41%, respectively (33). In similar Study done on hepatitis b knowledge and practices among cambodian immigrants less than one-half (46%) of the survey participants reported previous hepatitis B testing, and only about one-third (35%) reported previous hepatitis B vaccination (27).

Egypt study on Hepatitis B and C viral infection, prevalence, knowledge, attitude and practice among barbers and clients in Gharbia governorate found that practice of barbers during shaving showed that changing the blade for each client was the practice of (94.5%); 93.2% of urban and 95.9% of rural ones. Disinfection of used instruments was practised by 76.9% and washing hands by 63.0% of them. The difference between rural and urban barbers regarding these practices was not statistically significant (34).

Another African cross sectional study done on knowledge, attitude and practices concerning Hepatitis B infection, among healthcare workers in Bantama, Ghana found Over all of the respondents reported to have poor practice towards HBV with mean score of  $2.23 \pm 1.19$ . 43.1% participants had tested themselves after needle stick injury. 37.5% of the respondents had themselves tested for HBV within 21 days of needle stick injury. About 74.4% had taken HBV vaccine while about 41.8% had their immunity checked (29). Nigeria study on knowledge and utilization of Hepatitis B infection preventive measures and influencing factors among health care workers show that on Self reported practice of Hepatitis B preventive measures was poor among the majority (62.4%) of the respondents (35).

Study done in haramaya Ethiopia reveal that the majority of the respondents, (85.7%) never screened for HB and 86.6% stated a negative immunized status against HB. The mean score for HB related practices was  $2.04 \pm 1.15$  revealing poor practices among the study participants 13.4% were vaccinated against HBV (19).

Similar study done in north west Ethiopia found practical measures for HBV prevention and Health seeking behavior of the 246 participants, only 9.3 % had screened for HBV, 4.9 % students had vaccinated against HBV. Overall there were poor practical measures on prevention of HBV infection among the study subjects (36).

### 2.3. Conceptual frame work

This is a set of interactions between knowledge, attitude and practice with socio-demographic factors. This conceptual frame work was adopted from different literature and modified accordingly.

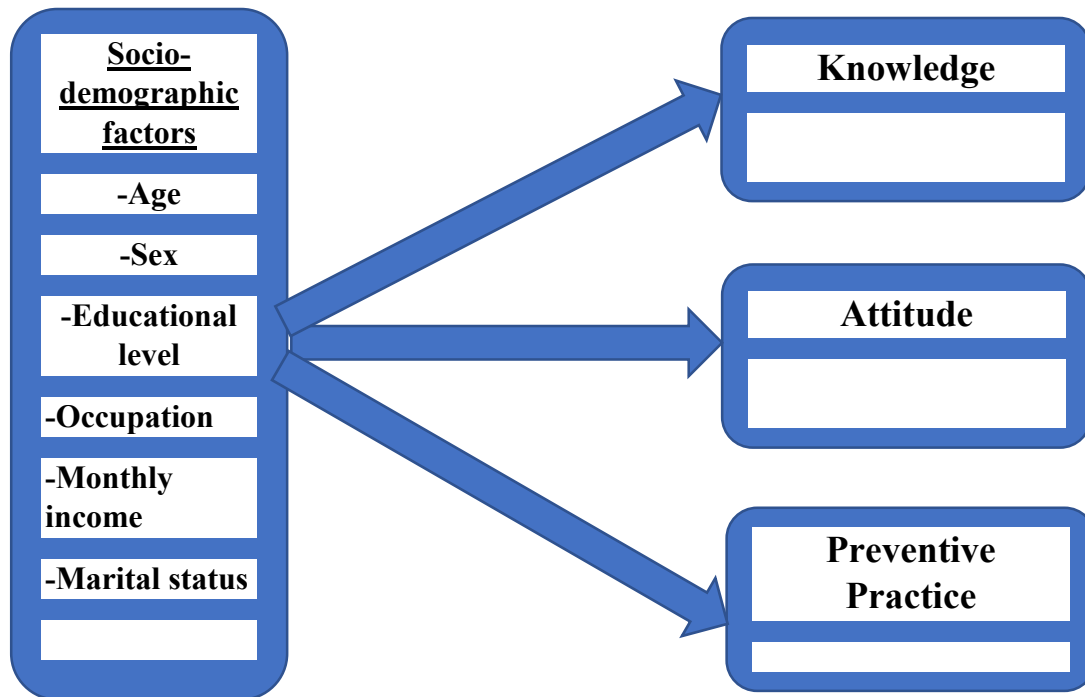


Figure 1 Conceptual frame work was developed from different literature (24, 28)

### **3. Objectives**

#### **3.1. General objectives**

- To assess knowledge, attitude, practice and associated factors towards hepatitis B prevention among patients coming to public hospital in Addis Ababa, Ethiopia, 2017.

#### **3.2. Specific objectives**

- To determine the knowledge of patients towards the disease hepatitis B.
- To assess the attitude of patients toward hepatitis B.
- To assess the practice of patients towards the prevention of hepatitis B.
- To identify association between dependent and socio demographic factors towards prevention of hepatitis B.

## **4. Methods and materials**

### **4.1. Study area and period**

Addis Ababa is the capital and largest city of Ethiopia. It has a population of 3,384,569 according to the 2007 population census, with annual growth rate of 3.8%. This number has been increased from the originally published 2,738,248 figure and appears to be still largely underestimated Addis Ababa has the status of both a city and a state. The City has classified in two administrative layers such as the sub-city top layers, followed by Woreda, based on current classification Addis Ababa has ten sub cities and 116 Woreda (38). It has 13 publics and 35 Private Hospitals, from public 6 hospitals are under Addis Ababa Regional Health Bureau and 5 are specialized referral (central) Hospitals which are under Federal Ministry of Health, two of them are defense forces (military) referral hospitals and other hospital under army force. The city has 98 health centers ruled by the Addis Ababa health bureau and more than 760 Clinics. Study area for this study will be five hospitals under Addis Ababa health bureau found in Addis Ababa. These are Zewditu Metasebiya, Yekatitis 12, Rasdesta dametew Metasebiya, Tirunesh Beijing and Minilik. Gandhi Hospital will be left out because it has no medical outpatient department.

### **4.2. Study Period**

- The study was conducted from March 7 to April 1 2017

### **4.3. Study design**

- Health Institutional based cross sectional study design was used.

### **4.4. Population**

#### **4.4.1. Source population**

- All patients coming to the public hospitals in Addis Ababa

#### **4.4.2. Study population**

- All patients coming to outpatient department in public hospitals at the time of data collection.

#### **4.4.3. Study subjects**

- Patients coming to public hospital at time of data collection and patients who fulfill inclusion criteria.

#### 4.4.4. Inclusion criteria

- All patients coming to public hospital to medical outpatient department at the time of data collection, 18 years of age and above.

#### 4.4.5. Exclusion criteria

- Patients who are acutely sick and unable to respond.

#### 4.5. Sample size determination

Sample size was calculated using single proportion formula with the assumptions of Confidence interval = 95%, Critical value  $Z_{\alpha/2} = 1.96$ , Degree of precision  $d = 0.05$ . The proportion ( $p$ ) = 50% since there was no research done in the same setting as this study concerning knowledge, attitude and practice of patients towards hepatitis B prevention. Non-response rate of 10% was considered.

$$\text{Using } n = \frac{(Z_{\alpha/2})^2 p(1-p)}{d^2}$$

Where,  $n$ = the required sample size  $Z_{\alpha/2}$ = the standardized normal distribution curve value for the 95% confidence interval (1.96)

$P$ = Proportion of patients coming to medical opd is unknown so we take as 50%

$d$ = degree of precision (the margin of error between the sample and population, 5%) = 0.05

$$n = \frac{(1.96)^2 (0.5(1-0.5))}{(0.05)^2}$$
$$n = 384$$

By taking additional 10% contingency for non-response rate, the sample size was = 422

Since we have source population greater than 10,000, sample size was  $n = 422$

#### 4.6. Sampling procedures

The study participants was selected from each institution by proportion to population size allocation based on the total number of patients coming to medical opd in a month duration and random sampling method was used to select specific patients who full fill eligibility criteria from the institution by using patients registration book as a sampling fame and first patient was selected by lottery method and the next respondent was selected in every other interval according to their order in the registration .

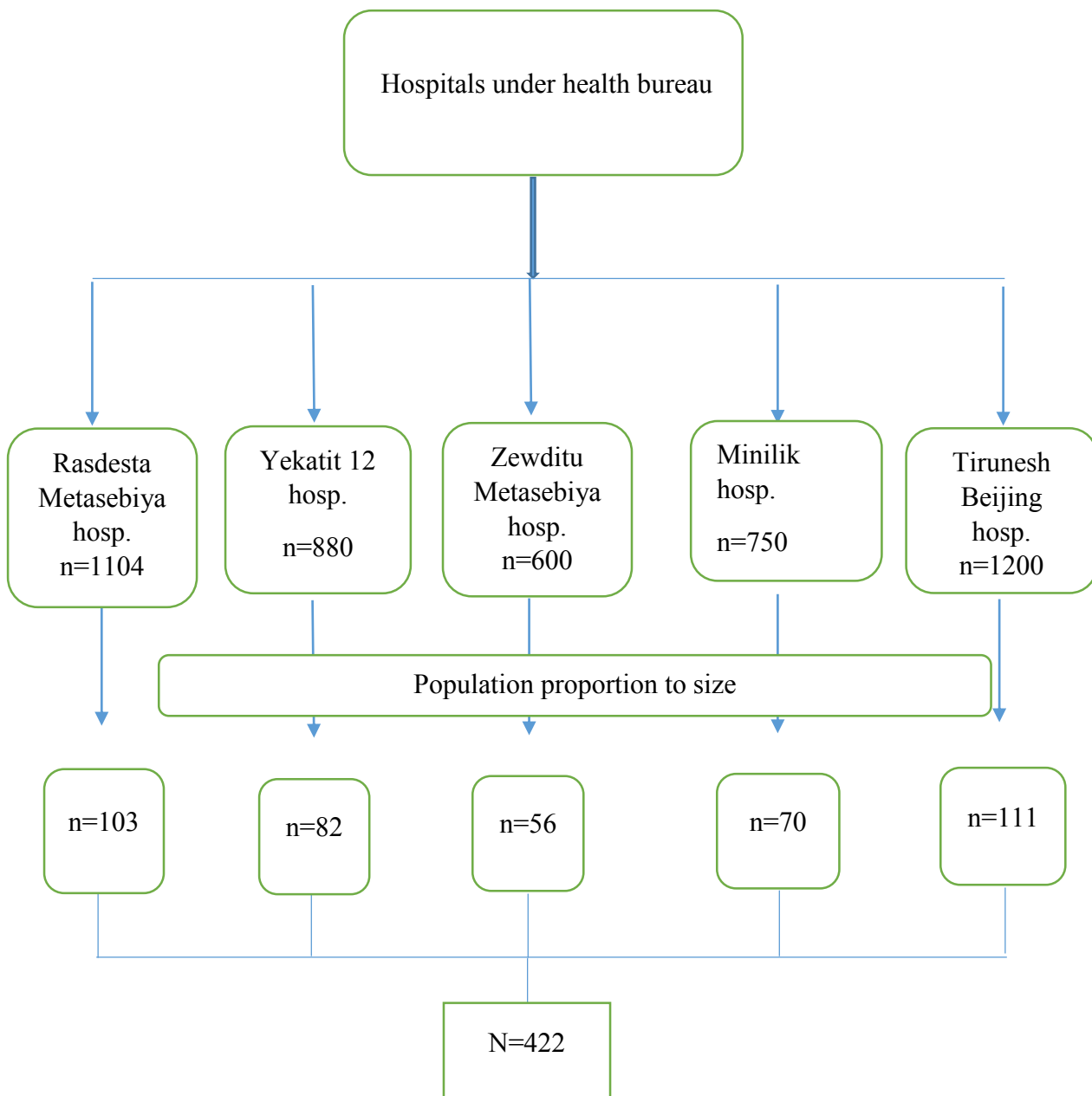


Figure 2. Schematic presentation of sampling procedure for patients coming to public hospitals Addis Ababa, Ethiopia 2017.

#### **4.7. Data Collection Tool and Procedure**

Data was collected using a structured interviewer administered questionnaire which has 4 sub parts namely socio demographic, knowledge, attitude and practice parts also has 6,21,7,8 questions respectively which are adopted and modified from published literature, consistency was assessed by using Cronbach's alpha ( $\alpha = 0.7$ ) and was found to be in acceptable ranges (28). The questionnaire was initially prepared in English then translated in to local language (Amharic ) by experts who has good ability of the two languages then translated back to English by different person to ensure consistency. A week prior to the actual data collection, the questionnaire was pre-tested on 5% patients identified from Keraniyo health center. Findings of the pretest was incorporated to modify and clarify the collection tool before the actual data collection

#### **4.8. Study variables**

##### **4.8.1. Dependent variable**

- knowledge,
- Attitude
- Practice

##### **4.8.2. Independent variables**

- Age
- Sex
- Income
- Educational level
- Occupation
- Marital status

#### **4.9. Operational definition**

**Knowledge**-Awareness about the disease, ways of transmission, and prevention

- **Good knowledge**: refers for those study participants who answer more than the mean knowledge questions correctly.
- **Poor knowledge**: refers for those study participants who answer less than or equal to mean of knowledge questions correctly (28).

**Attitude**: is the perception patients having about a learned predisposition to think, feel and act in a particular way towards a given situation (39).

- **Positive attitude**: Refers to those study participants who scored point greater than the mean of attitude questions

- **Negative attitude:** refers for those study participants who scored point equal to and less than the mean of attitude questions.(28)

**Practice:** is the application of preventable practices

- **Good practice:** refers to those study participants who correctly respond to practice questions and score above the mean value.
- **Poor Practice:** Refers to those study participants who correctly respond to practice questions and score mean value and below mean value.(28)

#### **4.10. Data Quality Control**

Data quality was assured by designing data collection instrument and training of data collectors and supervisors was done. The data collector and the supervisor were given training for two days on procedures, techniques and ways of collecting the data. 5% pretest was done at Keraniyo health center to check consistency of the questionnaires. The collected data was reviewed and checked for completeness by principal investigator each day.

#### **4.11. Data Processing and Analysis**

The collected data was checked for its completeness manually and then entered in EPI data version 3.1.1 and analyzed using SPSS version 22 statistical software package. Descriptive statistic including proportion, percentage, frequency distribution, mean and standard deviation was used to describe the data on knowledge, attitude and practice and bivariate and multivariate logistic regressions was used to study association between dependent and independent variables. CI 95% and p value < 0.05 being statistically significant.

#### **4.12. Ethical Consideration**

Ethical clearance was obtained from the Addis Ababa University, College of Health Science Department of Nursing and Midwifery IRB (institutional review board) of research committee. Respondents was informed about the purpose of the study then information was collected after obtaining verbal consent from each participant. Verbal consent was obtained from all the informed respondents before the start of each interview. Respondents was allowed to refuse or discontinue answering questions at any time they want. Information was recorded anonymously and confidentiality and beneficence was guaranteed throughout the study.

#### **4.13. Dissemination of the Results**

The final report of this study was submitted to Addis Ababa University College of Health Sciences, Department of Nursing and Midwifery. It will also be sent to Addis Ababa health bureau and the health facilities where study was done. Effort will be made to disseminate through publication and presentation in scientific conferences.

## 5. Result

### 5.1 sociodemographic characteristics

A total of 396 patients coming to public hospitals were enrolled in the study giving a respondent rate of 94%. More than half 283(71.5%) of the study subjects were females, large number of the study participants 108 (27%) were belongs to the age group 18 to 27 and 28 to 37 years old with mean age of the respondents were 38.6 with a minimum and maximum age of 18 and 73 respectively. 225(57%) of the respondents were married and 117(29.5%) were unmarried. Of the study subjects 135 (34%) were in higher educational level which is college and above and 32(8%) cannot read and write. 149(38%) of the respondents had low monthly income with 67(17%) high income and 149(38%) were employed in government and private institutions.

Table.1 Distribution of socio-demographic characteristics of patients coming to public hospitals, Addis Ababa, Ethiopia, (N=396)

<b>Variables (categories)</b>	<b>Frequency(n=396)</b>	<b>Percent %</b>
<b>Sex</b>		
Male	113	28.5
Female	283	71.5
<b>Age</b>		
18-27	108	27.3
28-37	108	27.3
38-47	69	17.4
48-57	54	13.4
>=58	57	14.4
<b>Marital status</b>		
Married	225	56.8
Unmarried	117	29.5
Widowed	31	7.8
Divorced	23	5.8

<b>Educational level</b>	31	7.8
Cannot read and write	45	11.4
Can read and write	53	13.4
Primary school	68	17.2
Secondary school	23	5.8
Preparatory school	41	10.4
Technical school	135	34.1
College graduate and		

above

### Occupation

Student	24	6.1
Self employed	113	28.5
Employed	149	37.6
Unemployed	30	7.6
Housewife	49	12.4
Others	31	7.8

### Monthly income

0-1000	149	37.6
1001-2000	80	20.2
2001-3000	56	14.1
3001-4000	44	11.1
>=4001	67	16.9

## 5.2 Knowledge, Attitude and Practice towards HBV prevention

knowledge about hepatitis B was assessed using 21 questions with mean of 10.9. the study subjects reports poor knowledge 197(49.7%) about hepatitis B prevention. Attitude about hepatitis B was assessed by 7 questions with mean attitude value of 6.76 which reports that almost half of the respondents 190(48.0) had negative attitude towards hepatitis B prevention and Practice towards hepatitis B prevention was assessed by 8 questions with 3.0 mean value. majority of the respondents had poor practice 266(67.2%) towards hepatitis B prevention.

Table.2 Distribution of knowledge, Attitude and Practice towards HBV prevention among patients coming to public hospitals Addis Ababa, Ethiopia 2017 G.C (N=396)

Variables	Mean	Frequency	Percent (%)
<b>Knowledge</b>	10.9		
Poor knowledge		197	49.7
Good knowledge		199	50.3
<b>Attitude</b>	6.76		
Negative attitude		190	48
Positive attitude		206	52
<b>Practice</b>	3.0		
Poor practice		266	67.2
Good practice		130	32.8

## **5.3 Factors associated with knowledge, attitude and practice of hepatitis B prevention**

### **5.3.1 Sociodemographic Factors associated with knowledge of hepatitis B prevention**

As can be seen from the result of bivariate analysis, 3 of the 6 variables did not show significant association with good knowledge at 5% level of significance. From the factors sex, age and marital status was not significant at 0.2 level of significance and was excluded from further analysis. Educational level, occupation and monthly income was significant at 0.2 level of significance and entered to multivariate logistic regression.

Two of variable which showed significant association with good knowledge in bivariate analysis could not continue as significant in the multivariable analysis. These variables are educational level and monthly income.

In the multivariable binary logistic regression analysis, one variable had shown overall significant effect on good knowledge at 5% level of significance. Those who are unemployed and house wife are 23.9% [AOR=0.239, 95% CI[0.075,0.756]] and 28.4% [AOR=0.284, 95% CI[0.102,0.794]] less likely associated to good knowledge than those that are students respectively.

Table 3 Sociodemographic factors associated with knowledge among patients coming to public hospitals Addis Ababa, Ethiopia 2017

Variables(categories)	Poor knowledge N(%)	Good knowledge N(%)	COR(95%CI)	AOR(95%CI)
<b>Educational level</b>				
cannot read and write	20(10.20)	11(5.5)	1	1
can read and write	31(15.7)	14(7.0)	0.82(0.311,2.165)	0.69(0.256,1.893)
primary school	31(15.7)	22(11.1)	1.29(0.516,3.226)	0.98(0.381,2.558)
secondary school	38(19.3)	30(15.1)	1.43(0.597,3.453)	0.95(0.375,2.425)
preparatory school	9(4.9)	14(7.0)	2.82(0.928,8.622)	1.86(0.566,6.169)
technical school	20(10.2)	21(10.6)	1.90(0.733,4.972)	0.99(0.345,2.855)
college graduate and above	48(24.4)	87(43.7)	3.29(1.458,7.451)	1.74(0.668,4.548)
<b>Occupation</b>				
Student	9(4.6)	15(7.5)	1	1
Self employed	56(28.4)	57(28.6)	0.61(0.247,1.510)	0.82(0.126,5.439)
Employed	58(29.4)	91(45.7)	0.94(0.387,2.291)	1.24(0.190,8.110)
Unemployed	21(10.7)	9(4.5)	0.25(0.082,0.802)	<b>0.239(0.075,0.756)**</b>
Housewife	33(16.8)	16(8.0)	0.29(0.105,0.806)	<b>0.284(0.102,0.794)**</b>
Others	20(10.2)	11(5.5)	0.33(0.109,0.998)	0.57(0.079,4.225)
<b>Monthly in come</b>				
No income	58(29.4)	38(19.1)	1	1
<=1000	35(17.8)	18(9.0)	0.78(0.390,1.581)	0.34(0.056,2.136)
1001-2000	37(18.8)	43(21.6)	1.77(0.973,3.233)	0.71(0.112,4.575)
2001-3000	28(14.2)	28(14.1)	1.52(0.785,2.967)	0.52(0.082,3.415)
3001-4000	20(10.2)	24(12.1)	1.83(0.891,3.766)	0.64(0.096,4.404)
>= 4001	10(9.6)	48(24.1)	3.85(1.972,7.539)	1.38(0.213,8.955)

\*\* significant at p value 0.05

### 5.3.2 Sociodemographic Factors associated with attitude of hepatitis B prevention

A significant association was found between monthly income and educational level of the study participants with positive attitude towards hepatitis B in a bivariate analysis at 0.2 significance level. The significant variables monthly income and educational level entered to multivariate logistic regression for further analysis. both variables had shown overall significant effect on positive attitude at 5% level of significance. Those who had high monthly income were 2.123 times more likely associated to positive attitude than those who had low monthly income [AOR=2.123, 95% CI[1.022, 4.409] . In educational level preparatory level 23.5% less likely associated than those who cannot read and write [AOR=0.235, 95% CI [0.068, 0.812]

Table 4 Sociodemographic factors associated with attitude among patients coming to public hospitals Addis Ababa, Ethiopia 2017 (N=396)

<b>Variables(categories)</b>	<b>Positive attitude n(%)</b>	<b>Negative attitude n(%)</b>	<b>COR(95%CI)</b>	<b>AOR(95%CI)</b>
<b>Educational level</b>				
cannot read and write	14(7.4)	17(8.3)	1	1
can read and write	15(7.9)	30(14.6)	1.67(0.643,4.218)	1.75(0.670,4.572)
primary school	25(13.2)	28(13.6)	0.92(0.379,2.245)	1.01(0.409,2.528)
secondary school	33(17.4)	35(17)	0.87(0.372,2.048)	0.82(0.344,1.980)
preparatory school	18(9.5)	5(2.4)	0.22(0.068,0.773)	<b>0.235(0.068,0.812)**</b>
technical school	22(11.6)	19(9.2)	0.71(0.279,1.814)	0.65(0.238,1.802)
college graduate and above	63(33.2)	72(35)	0.94(0.430,2.061)	0.65(0.275,1.577)
<b>Monthly in come</b>				
No income	52(25.2)	44(23.2)	1	1
<=1000	26(12.6)	27(14.2)	0.81(0.416,1.595)	0.72(0.362,1.459)
1001-2000	34(16.5)	46(24.2)	0.62(0.344,1.137)	0.63(0.337,1.179)
2001-3000	23(11.2)	33(17.4)	0.59(0.303,1.149)	0.72(0.355,1.472)
3001-4000	26(12.6)	18(9.5)	1.22(0.593,2.518)	1.51(0.697,3.297)
>= 4001	45(21.8)	22(11.6)	1.73(0.904,3.312)	<b>2.123(1.022,4.409)**</b>

*\*\*Significant at p value 0.05*

### 5.3.3 Sociodemographic Factors associated with practice of hepatitis B prevention

From the analyzed variables educational level, monthly income and marital status become significantly associated with good practice in bivariate analysis in 0.2. only marital status showed over all significance at CI 5%. Those participants who were divorced is 3.4 times more likely had good practice towards HB prevention than those who were married. [AOR= 3.409, 95% CI (1.380,8.422)]

Table 5 Sociodemographic factors associated with practice towards HB prevention among patients coming to public hospitals Addis Ababa, Ethiopia 2017

<b>Variables(categories</b>	<b>poor practice n(%)</b>	<b>Good practice n(%)</b>	<b>COR(95%CI)</b>	<b>AOR(95%)</b>
<b>Marital status</b>				
Married	158(59.4)	67(51.5)	1	1
Unmarried	74(27.8)	43(33.1)	1.37(0.855,2.197)	1.36(0.833,2.225)
Widowed	24(9)	7(5.4)	0.68(0.283,1.673)	0.73(0.292,1.831)
Divorced	10(3.8)	13(10)	3.06(1.281,7.336)	<b>3.409(1.380,8.422)*</b>
<b>Educational level</b>				
Cannot read and write	23(8.6)	8(6.2)	1	1
Can read and write	34(12.8)	11(8.5)	0.93(0.324,2.667)	0.94(0.320,2.772)
Primary school	34(12.8)	19(14.6)	1.60(0.602,4.285)	1.69(0.617,4.670)
Secondary school	43(16.2)	25(19.2)	1.67(0.651,4.294)	1.54(0.578,4.143)
Preparatory school	20(7.5)	3(2.3)	0.43(0.101,1.849)	0.40(0.091,1.811)
Technical school	31(11.7)	10(7.7)	0.92(0.317,2.717)	0.75(0.247,2.321)
College graduate and above	81(30.5)	54(41.5)	1.91(0.799,4.598)	1.76(0.700,4.442)
<b>Monthly in come</b>				
No income	67(25.2)	29(22.3)	1	1
<=1000	36(13.5)	17(13.1)	1.09(0.530,2.248)	1.02(0.476,2.205)
1001-2000	57(21.4)	23(17.7)	0.93(0.486,1.788)	0.88(0.445,1.778)
2001-3000	38(14.3)	18(13.8)	1.09(0.538,2.226)	1.09(0.509,2.360)
3001-4000	29(10.9)	15(11.5)	1.19(0.559,2.557)	0.99(0.435,2.275)
>= 4001	39(14.7)	28(21.5)	1.65(0.864,3.185)	1.29(0.610,2.767)

\* Statistically significant at p value 0.05

## **6. Discussion**

This study aims at assessing KAP towards hepatitis B prevention among patients coming to public hospitals in Addis Ababa. There is a limited literature about assessing KAP among patients since there is no study done in patients coming to public hospitals.

### **6.1 Knowledge towards hepatitis B prevention**

This study revealed that about 197(49.7%) of the participants had poor knowledge towards hepatitis B prevention which is in line with study done in Haramaya, Ethiopia (19) among health science students which shows 43.8% and 48% in Bahir Dar (37) study done among health care workers and in contrary higher in Pakistan study done among healthy populations 75.4% (28) this is may be as a result of difference in study population and cultural difference between the countries. according to multivariate analysis, those who had unemployed shows significant association to good knowledge as study done in Ghana (29) that found significant association of occupation. This study found 335(84.6%) of the respondents heard about hepatitis B which similar with study done in China (32) 89.8%, in California study 90%(26) and France (23)study 96.1% but it is more than 64% found in Seattle study done among Cambodian immigrants (27).

### **6.2 Attitude towards hepatitis B prevention**

The overall negative attitude in this study is 190(48%) with mean of 6.76 which is similar to study done in Pakistan (28) found mean of negative attitude 7.72 and another Pakistan (30) study done among Hepatitis B patients found higher 79.2% negative attitude. This difference may be due to social interaction between the society. High monthly income were 2.3 times more associated to positive attitude which differs from study done in Pakistan which showed area of residence significantly associated with attitude. This may be as result of increase income will increase access to ways of getting information about hepatitis B. Slightly more than half 210(53%) didn't think they can get HB which is consistent with study done in Pakistan (28) that showed 79.7%. 166(41.9%) will feel fear if they have HB virus but they will feel shame in Pakistan study and Most respondents 168(42.4%) will talk to physician which is more than the study 26% in Pakistan (28)

### **6.3 Practice towards hepatitis B prevention**

This study found an overall poor practice of 266(67.2%) which is similar to 66.9% found in Pakistan study on HB patients (30). Only marital status showed significant association to good practice. A lot of study subjects 306(77.3%) didn't screen for HB as a study done in Haramaya (19) 86.6%, Pakistan (28) 96.9% and on contrary 60% were screened in California study (26). 372(93.9%) of the respondents didn't get vaccinated which is similar to 95.1% in study done North West (18), in Haramaya study 86.6% (19), Pakistan 86.8% (28), California 69% (26). this may be result of lack of health education about HB. 358(90.4%) of the study subjects didn't participate in any health education program as 76.1% in Haramaya (19) study done among medical and health science students showed more 98.2% respondents didn't participate in health education program.

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

### **7.1 Strength of the study**

- Since there were no studies conducted in this study population it can contribute as baseline data for further study.

### **7.2 Limitations of the Study**

- Shortage of domestic literatures done in similar study subjects

- This study didn't address more associated factors because of lack of literatures done in specific study population

## **8. Conclusion and recommendation**

### **8.1 Conclusion:**

This study showed there is a poor knowledge of 197(49.7%) and good knowledge 199(50.2%) about hepatitis B prevention. this reveals that almost half of the respondents has poor knowledge. This shows that there is lack of awareness about HBV and needs a lot of work to teach the patients about mode of transmission and availability of vaccine for prevention. Being unemployed and housewife were less associated to good knowledge than students. This is may be due to not participating in educational programs.

High monthly income and educational level are significantly associated with positive attitude and the overall negative attitude of 190(48%) and 206(52%) positive attitude.

Only marital status showed over all significance for good practice and majority of the respondents had poor practice 266(67.2%) towards hepatitis B prevention with 130(32%) poor practice. Since there is poor practice the prevention from Hepatitis B will not be achieved.

At last this much poor knowledge, negative attitude and poor practice will lead to high prevalence of HB which in turn affects individual health as well as the community's wellbeing.

## **8.2 Recommendation**

### **For health bureau**

- To increase hepatitis B awareness creation by training of health extension workers so that they can teach the community about the disease transmission and prevention.
- To inforce medias like television, newspaper and radio to educate the community about the disease ways of transmission and availability of vaccine for prevention

### **For Health facility**

- Health facility medical directors should plan to increase knowledge of the patients visiting the facility by making schedule for hepatitis B health education and training health professionals to clearly identify the symptoms to recommend the patients for screening and vaccination.

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## **Annexes**

### **Annex I. Personal Information Sheet**

Title of Research: Assessment of knowledge, attitude and practice towards hepatitis B prevention among patients coming to public hospitals in Addis Ababa, Ethiopia

Institution: Addis Ababa University Department Nursing and Midwifery

Name of sponsor: Addis Ababa Regional Health Bureau

Principal Investigator: Selamawit Seifu (BSc.)

Mobile: +251 913326154

E-mail: selamsei85@gmail.com

Advisor: Husen Mekonen (BSC, MPH, PHD)

Co- Advisor: Tadesse Bedada (MSC)

Purpose: The aim of the study is to asses' knowledge, attitude and practice towards hepatitis B prevention among patients coming to public Hospitals in Addis Ababa, Ethiopia

Duration: The question that is going to be asked usually takes about 20 minutes.

Benefit of the study: - There is no direct benefit to you now. However, the result of the study will be helpful for all population in the future by assessing KAP of patients towards hepatitis B virus prevention

Risk of the study: - Participating in this study will not have any risk or harm associated with data collection.

Rights of Participants: - You have full right to participate or to refuse and you can ask question if it is not clear for you.

Confidentiality: - confidentially will be maintained, no identification will be recorded.

Email: selamsei85@gmail.com

Questionnaires ID \_\_\_\_\_

## **Annex II: Informed Consent Form**

Title of the project: *“Assessment of knowledge, attitude and practice towards hepatitis b prevention among patients coming to public hospital in Addis Ababa, Ethiopia.”*

I am well aware of that this research undertaking for a partial fulfilment of MSc degree which is fully supported and coordinated by Addis Ababa University College of Health Science Department of Nursing and Midwifery, and the designate principal investigator. I have been fully informed in the language I understand about the research project objectives that is to assess the knowledge, attitude and practice towards hepatitis B among patients. I have been informed that all the information I shall provide to the interviewer will be kept confidential. I understood that the research has no any risk and no composition. I also knew that I have the right to withhold information, skip questions to answer or to withdraw from the study any time I have acquainted nobody will impose me to explain the reason of withdrawal. It is also enlightening that there would have no effect at all in my health benefit or other administrative effect that I get from the refuse.

I have assured that the right to ask information that is not clear about the research before and or during the research work and to contact Addis Ababa University, College of Health Science IRB Office

**Principal Investigator’s Name:** Selamawit Seifu (BSC) Tel: +251913326154

**Advisor’s Name and Address:** Husen Mekonon (MSC, MPH, PHD) Tel: +251911631634

**Co advisor:** Taddesse Bedada (MSC)

I understand this form, or it has been read to me in the language I comprehend and understood the condition stated above, therefore, I am willing and confirm my participation by signing the consent.

Agreed to participate in the study: Yes /No (mark one of them for verbal consent)

Yes \_\_\_\_\_

No \_\_\_\_\_

Signature \_\_\_\_\_

Name of witness signature \_\_\_\_\_ (Data collector, supervisor, any third person)

### Annex III English version questionnaire

#### Part one: - Socio-demographic

Q No.	Questions	Responses
101	Age	_____
102	Sex	1. Male 2. Female
103	Marital Status	1. Married 2. Single 3. Widowed 4. Divorced
104	Educational Level	1. cannot read and write 2. Can read and write 3. Primary school 4. Secondary school 5. preparatory school 6. Technical school 7. College graduate or above
105	Occupation	1. Student 2. Self employed 3. Employed 4. Unemployed 5. House wife 6. Other(Specify) .....
106	Monthly Income	..... Birr

Part Two: - Assessing Knowledge on Hepatitis B virus of patients

Q No.	Questions	Responses
201	Have you ever heard of a disease termed as Hepatitis?	A. yes B. no
202	Have you ever heard of a disease termed as Hepatitis B?	A. yes B. no
203	If you heard what is your Source of Information	1.New papers and magazines 2.Health workers 3.Family/friends/neighbors 4.TV, Radio and Internet 5.Religious leaders/teachers 6.HB information Leaflets, Brochures, Posters etc.
204	Is Hepatitis B a viral disease?	A. yes B. no
205	Can Hepatitis B affect liver function?	A. yes B. no
206	Can Hepatitis B cause liver Cancer?	A. yes B. no
207	Can Hepatitis B affect any age group?	A. yes B. no
208	Are Fever, Running Nose, Cough and Jaundice the early symptoms of Hepatitis B?	A. yes B. no
209	Jaundice is one of the common symptoms of Hepatitis B?	A. yes B. no
210	Are Nausea, Vomiting and Loss of appetite common symptom of Hepatitis B?	A. yes B. no
211	Are there no symptoms of the Hepatitis B in some of the patients?	A. yes B. no
212	Can Hepatitis B be transmitted by un-sterilized syringes, needles and surgical instruments?	A. yes B. no
213	Can Hepatitis B be transmitted by contaminated blood and blood products?	A. yes B. no

214	Can hepatitis B be transmitted by using blades of the barber/ear and nose piercing?	A. yes B. no
215	Can Hepatitis B be transmitted from mother to child?	A. yes B. no
216	Can Hepatitis B be transmitted by un safe sex?	A. yes B. no
217	Can Hepatitis B be transmitted by contaminated water/food prepared by person suffering with these infections?	A. yes B. no
218	Is Hepatitis B curable/treatable?	A. yes B. no
219	Can Hepatitis B be self-cured by body?	A. yes B. no
220	Is vaccination available for Hepatitis B?	A. yes B. no
221	Is specific diet is required for the treatment of Hepatitis B?	A. yes B. no

Part Three: - Attitude toward Hepatitis B

Q No.	Questions	Responses
301	Do you think you can get Hepatitis B?	A. yes B. no
302	What would be your reaction if you found that you have Hepatitis B?	A. Fear B. Shame C. Surprise D. Sadness
303	Who would you talk to about your illness?	A. Physician B. Spouse C. Parents D. Child E. Other Relatives F. Friends G. No one
304	What will you do if you think that you have symptoms of Hepatitis B?	A. Go to Health facility B. Go to Hakeem C. Go to Traditional healer
305	If you had symptoms of Hepatitis B, at what stage you will go to the health facility?	A. Own treatment fails B. After 3-4 weeks of the appearance of symptoms C. Soon as I realize the symptoms are of Hepatitis B D. Will not go to physician
306	How expensive do you think is the diagnosis and treatment of Hepatitis B?	A. Free B. Reasonable C. Somewhat expensive D. Expensive E. Don't know
307	What worries you most if you will be diagnosed with Hepatitis B?	A. Fear of death B. Fear of disease spread to family C. Cost of treatment D. Isolation from the society

Part Four: - Hepatitis B Practice Items

Q No.	Questions	Responses
401	Have you done screening for Hepatitis B?	A. Yes B. No
402	Have you got yourself vaccinated against Hepatitis B?	A. Yes B. No
403	Do you ask for a new syringe before use?	A. Yes B. No
404	Do you ask for screening of blood before transfusion?	A. Yes B. No
405	Do you ask your barber to change blade/Or for safe Equipment's for ear and nose piercing?	A. Yes B. No
406	In case you are diagnosed with Hepatitis B, would you go for further investigation and treatment?	A. Yes B. No
407	Do you avoid meeting with Hepatitis B patients?	A. Yes B. No
408	Have you ever participated in health education program related to Hepatitis B?	A. Yes B. No

**Annex IV Amharic version**

አባሪ 1 የግል መረጃ ገጽ

የጥናቱ ርዕስ:- በአዲስ አበባ ውስጥ በህዝብ ሆስፒታል ከሚመጡ ህመማን መካከል ስለጉበት በሽታ (Hepatitis B) በተመለከተ የእውቀት፣የአመለካከት እና ልማድ ዳሰሳ።

ተቋም: አዲስ አበባ ዩኒቨርሲቲ የነርቪንግ እና ሚድዋይፍ ክፍል

ስፖንሰር: የአዲስ አበባ ጤና ቢሮ

የዋና መርማሪ ስም: ሰላማዊት ሰይፉ ስልክ: +251913326154

Email: selamsei85@gmail.com

የአማካሪ ስም እና አድራሻ:- ዶ/ር ሁሴን መኮንን ስልክ: +251911631634

ተባባሪ አማካሪ: ታደሰ በዳዳ (MSC)

አላማ: የ ዚ ጥናት አላማ በህዝብ ሆስፒታል ከሚመጡ ህመማን መካከል ስለጉበት በሽታ(Hepatitis B) በተመለከተ ያላቸውን የእውቀት፣የአመለካከት እና ልማድ ዳሰሳ ማድለግ።

ጥያቄው የሚወስደው ጊዜ: 20 ደቂቃ

የ ዚ ጥናት ጥቅም:ለተጠያቂው ቀጥታ የሆነ ጥቅም የለውም ነገር ግን ከ ጥናቱ በሚገኘው ውጤት መሰረት በማድለግ ህብረተሰቡን ለውደፊት ተጠቃሚ ያደርጋል።

የ ጥናቱ ጉዳት:በ ዚ ጥናት በመሳተፋችሁ የሚደርስባቸው ምንም አይነት ጉዳት የለም።

የ ጥናቱ ተሳታፊ መብት:በ ጥናቱ ላይ የመሳተፍ ወይም ያለመሳተፍ እንዲሁም ያልገባችሁን የመጠየቅ መብት መብት አላችሁ።

ሚስጥር ጠባቂነት: መለያ ባለመመዝገብ ተጠያቂው የሚሰጠውን መረጃ ሚስጥር ይጠበቃል።

የጥያቄ መለያ \_\_\_\_\_

አባሪ 2: የፍቃደኝነት መግለጫ ቅጽ

የጥናቱ ርዕስ:- “በአዲስ አበባ ውስጥ በህዝብ ሆስፒታል ከሚመጡ ህሙማን መካከል ስለጉበት በሽታ (Hepatitis B) በተመለከተ የእውቀት፣የአመለካከት እና ልማድ ዳሰሳ።”

ይህ ጥናት እና ምርምር ለኤምኤስሲ ዲግሪ በከፊል ማሟያ በአዲስ አበባ ዩኒቨርሲቲ ኮሌጅ የጤና ሳይንስ የነርቪንግ እና ሚድዊይፍ ክፍል ደጋፊነት እና መርማሪ አስተባባሪነት በመከናወን ላይ እንዳለ አውቂያለሁ። የጥናትና ምርምር ፕሮጀክት አላማዎችን በሚገባን ቋንቋ ሙሉ በሙሉ እንዳውቅ ተደርጌአለሁ። ይህም በህሙማን መካከል ያለውን የጉበት በሽታ (hepatitis b) እውቀት፣ አመለካከትና ልማድን በተመለከተ ነው። በቃለመጠይቁ ተጠያቂው የሚሰጠው መረጃ ሁሉ ሚስጥራዊ መሆኑ ተነግሮኛል። ጥናትና ምርምሩ አደጋ እና ሌላ ተጨማሪ አላማ የሌለው መሆኑን ተረድቻለሁ። እንዲሁም መረጃውን የመያዝ፣ ጥያቄዎችን ሳልመልስ የማለፍ ወይም በማንኛውም ጊዜ ከጥናቱ የመውጣት መብት እንዳለኝ የወጣሁበትን ምክንያት እንድንገልጽ ማንም ሰው ሊጫነኝ እንደማይችል አውቄአለሁ። በእኔ የጤና ጥቅም ላይ ሙሉ በሙሉ ተጽኖ የማይኖረው መሆኑ ወይም ባለመቀበሌ የሚደርስብኝ አስተዳደራዊ ተጽእኖ አለመኖሩን አውቂያለሁ።

ጥናትና ምርምሩን በተመለከተ ቀደም ብዬ ወይም የጥናት ስራው በሚከናወንበት ጊዜ ግልጽ ያልሆነውን መረጃ ከአዲስ አበባ ዩኒቨርሲቲ የጤና ሳይንስ ኮሌጅ አይአርቢ ጽ/ቤት የመጠየቅ መብት እንዳለኝ አረጋግጫለሁ።

የዋና መርማሪ ስም: ሰላማዊት ሰይፉ ስልክ: +251913326154  
የአማካሪ ስም እና አድራሻ:- ዶ/ር ሁሴን መኮንን ስልክ: +251911631634

ተባባሪ አማካሪ: ታደሰ በዳዳ (MSC)

ይህንን ቅጽ ተረድቼዋለሁ ወይም ከላይ በተጠቀሰው ሁኔታ በሚገባኝ እና በምግባባበት ቋንቋ ተነቦልኛል ስለዚህ ለመሳተፍ ፍቃደኛ መሆኔን በፊርማዬ አረጋግጣለሁ።

በጥናቱ ላይ ለመሳተፍ ተስማምቻለሁ። አዎ/ አይደለም (ፍቃደኛ ለመሆንዎ አንዱ ላይ ምልክት ያድርጉ)

ፊርማ -----

የምስክር ስምና ፊርማ -----

- (መረጃ ሰብሳቢ፣ ሱፐር ቫይዘር፣ ማንኛውም 3ኛ ወገን)

**Annex V Amharic version questioners**

አንደኛ : ስለ ተጠያቂዎቹ ያለ መረጃ

ተ. ቁ	ጥያቄዎች	መልሶች
101	እድሜ	_____
102	ጾታ	1. ወንድ 2. ሴት
103	የጋብቻ ሁኔታ	1. ያገባ 2. ያላገባ 3. የትዳር አጋር የሞተበት 4. የተፋታ
104	የትምህርት ደረጃ	1. ማንበብና መጻፍ የማይችል 2. ማንበብና መጻፍ የሚችል 3. የአንደኛ ደረጃ ትምህርት 4. የሁለተኛ ደረጃ ትምህርት 5. የመሰናዶ ደረጃ ትምህርት 6. የሙያ ትምህርት 7. የኮሌጅ ትምህርት ወይም ከዚያ በላይ
105	ስራ	1. ተማሪ 2. የግል ስራ 3. ተቀጣሪ 4. ስራ የሌለው 5. የቤት እመቤት 6. ሌላ (ይገለጽ) . . . .
106	ወርሃዊ ገቢ	. . . . . ብር
107	የወፍ በሽታ መረጃ ምንጮች	1. ጋዜጣና መጽሔት 2. የጤና ባለሙያዎች 3. ቤተሰብ/ጌደኛ/ጎረቤት 4. ቲቪ/ራዲዮ/ኢንተርኔት 5. የእምነት አባቶች/አስተማሪዎች 6. የወፍ በሽታ መረጃ ሰጪ ወረቀቶችና ፖስተሮች

ሁለተኛ : የወፍ በሽታ ላይ ስላላቸው ግንዛቤ

ተ. ቁ	ጥያቄዎች	መልሶች
201	ስለ ጉበት በሽታ ሰምታችሁ ታቃላችሁ	1 አዎ 2 አይ
202	የወፍ በሽታ ሲባል ሰምታችሁ ታቃላችሁ ?	1. አዎ 2. አይ
203	የወፍ በሽታ መረጃ ምንጮች	1. ጋዜጣና መጽሔት 2. የጤና ባለሙያዎች 3. ቤተሰብ/ጌደኛ/ጎረቤት 4. ቲቪ/ራዲዮ/ኢንተርኔት 5. የእምነት አባቶች/አስተማሪዎች 6. የወፍ በሽታ መረጃ ሰጪ ወረቀቶችና ፖስተሮች
204	ይህ የወፍ በሽታ በቫይረስ የሚመጣ ነው ?	1. አዎ 2. አይ
205	ይህ የወፍ በሽታ የጉበትን ስራ ያስተጓጉላል ?	1. አዎ 2. አይ
206	ይህ የወፍ በሽታ የጉበት ነቀርሳ ሊያመጣ ይችላል ?	1. አዎ 2. አይ
207	ይህ የወፍ በሽታ ማንኛውንም የእድሜ ክልል ሊያጠቃ ይችላል ?	1. አዎ 2. አይ
208	ትኩሳት፣ የአፍንጫ መዘረክረክ፣ ማሳልና የቆዳ ቢጫ መሆን የወፍ በሽታ ምልክት ናቸው ?	1. አዎ 2. አይ
209	የቆዳ ቢጫ መሆን የተለመደ የወፍ በሽታ ምልክት ነው ?	1. አዎ 2. አይ
210	ማጥወልወል፣ ማስመለስና የምግብ ፍላጎት ማጣት የተለመዱ የወፍ በሽታ ምልክት ናቸው ?	1. አዎ 2. አይ
211	አንዳንድ በወፍ በሽታ የተጠቁ ሰዎች የበሽታ ምልክት ላያሳዩ ይችላሉ ?	1. አዎ 2. አይ
212	የወፍ በሽታ ከጀርም ነጻ ባልተደረጉ መርፌዎችና የቀዶ ጥገና መሳሪያዎች ሊተላለፍ ይችላል ?	1. አዎ 2. አይ
213	የወፍ በሽታ በተበከለ ደምና የደም ውጤቶች ሊተላለፍ ይችላል ?	1. አዎ 2. አይ
214	የወፍ በሽታ በጸጉር መቁረጫ መሳሪያዎችና በጀሮና አፍንጫ መብሻ መሳሪያዎች ሊተላለፍ ይችላል ?	1. አዎ 2. አይ
215	የወፍ በሽታ ከእናት ወደ ልጅ ሊተላለፍ ይችላል ?	1. አዎ 2. አይ

216	የወፍ በሽታ በልቅ የግብር-ስጋ ግንኙነት ሊተላለፍ ይችላል ?	1. አዎ 2. አይ
217	የወፍ በሽታ በተበከለ ውሃና በበሽታው በተጠቃ ሰው በተሰራ ምግብ ሊተላለፍ ይችላል ?	1. አዎ 2. አይ
218	የወፍ በሽታን በህክምና ሊድን ይችላል ?	1. አዎ 2. አይ
219	የወፍ በሽታን ሰውነታችን በራሱ ሊያድን ይችላል ?	1. አዎ 2. አይ
220	የወፍ በሽታ ክትባት አለ ?	1. አዎ 2. አይ
221	የወፍ በሽታን ለማከም የተለየ የአመጋገብ ዘዴ ያስፈልጋል ?	1. አዎ 2. አይ

ሶስተኛ : የወፍ በሽታ ላይ ስላላቸው አስተሳሰብ

ተ. ቁ	ጥያቄዎች	መልሶች
301	የወፍ በሽታ የሚይዘት ይመስሎታል ?	1. አዎ 2. አይ
302	የወፍ በሽታ እንደያዘት ቢነገሮት ምን ይሰማዎታል ?	1. ፍርሃት 2. እፍረት 3. አግራሞት 4. ሃዘን
303	ስለ ህመም ማንን ያናግራሉ ?	1. ሀኪምን 2. ባለቤቶን 3. ቤተሰቦቻን 4. ልጆቻን 5. ሌሎች ዘመዶችን 6. ጓደኞቻን 7. ማንንም
304	የወፍ በሽታ ምልክት ቢያዩ ምን ያደርጋሉ ?	1. ወደ ህክምና ቦታ ይሄዳሉ 2. ወደ ሃኪም ይሄዳሉ 3. ወደ ባህላዊ ሃኪም ይሄዳሉ
305	የወፍ በሽታ ምልክት ቢያዩ መቼ ነው ወደ ህክምና ቦታ የሚሄዱት ?	1. በራሴ ለማከም ሞክሬ ሳይሻለኝ ሲቀር 2. ምልክቶቼ ከታዩ 3-4 ሳምንት በኋላ 3. ምልክቶቼ የወፍ በሽታ መሆናቸውን እንዳወቅሁ ወዲያውኑ 4. ወደ ሀኪም አልሄድም

306	የወፍ በሽታ ምርመራና ህክምና ምን ያህል ውድ እንደሆነ ያስባሉ ?	1. ነጻ ነው 2. ምክኒያታዊ ነው 3. ትንሽ ውድ ነው 4. በጣም ውድ ነው 5. አላውቅም
307	የወፍ በሽታ እንደያዙት ቢነገሩት በጣም የሚያስጨንቁዎት ምንድን ነው ?	1. የመሞት ፍርሃት 2. በሽታው ወደ ቤተሰብ መዛመድ 3. የህክምና ወጪ 4. ከህብረተሰቡ መገለል

አራት : የወፍ በሽታ ላይ ስላለው የመከላከላከያ ልምድ

ጥ. ቁ	ጥያቄዎች	መልሶች
401	ለወፍ በሽታ ምርመራ አድርጋችኋል ?	1. አዎ 2. አይ
402	የወፍ በሽታ ክትባት ተከትባችኋል ?	1. አዎ 2. አይ
403	ከመወጋቶ በፊት መርፌው አዲስ ምሆኑን አረጋግጠዋል ?	1. አዎ 2. አይ
404	ከደም ዝውውር በፊት የደሙን ጥራት አረጋግጠዋል ?	1. አዎ 2. አይ
405	ጸጉር ቤት ወይም የጀሮና ይአፍንጫ መብሻ ቤት አዲስ ምላጭና መርፌ መጠቀማቸውንና የመሳሪያዎቻቸውን ንጽህና አረጋግጠዋል ?	1. አዎ 2. አይ
406	የወፍ በሽታ ቢይዙት ለተጨማሪ ምርመራና ህክምና ይሄዳሉ ?	1. አዎ 2. አይ
407	የወፍ በሽታ ከተያዙ ሰዎች ጋር ላለመገናኘት ይጥራሉ ?	1. አዎ 2. አይ
408	የወፍ በሽታ ጋር የተገናኘ የጤና ማስተማሪያ ፕሮግራም ላይ ተሳትፈው ያቃሉ ?	1. አዎ 2. አይ

## **Annex VI: Assurance of principal investigator**

### **Declaration:**

I, the undersigned, declare that this is my original work and has not been presented in this or any other University and all sources of materials used for this proposal have been fully acknowledged.

Name: **Selamawit Seifu**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Place: Addis Ababa University, College of Health Sciences, Department of Nursing and midwifery

This proposal has been submitted for examination with my approval as University advisor

**Hussen Mekonnen (BSc, MPH, PHD)**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Taddese Bedada (BSc, MSc,)**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### **Examiner**

**Debela Gela (BSC, MSC)**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Place: Addis Ababa University, College of Health Sciences, Department of Nursing and midwifery