

ADDIS ABABA UNIVERSITY
FACULTY OF MEDICINE
CETRALIZED SCHOOL OF NURSING

ASSESSMENT OF OCCUPATIONAL HAZARDS AMONG
STUDENTS OF NURSING AND MIDWIFERY IN CLINICAL
PRACTICE, IN ADDIS ABABA, ETHIOPIA, 2009

A Thesis Submitted to the School of Graduate Studies of Addis
Ababa University in Partial fulfillment of the requirement for the
Degree of Master of Science in Adult Health Nursing

By:

Teferi Fite Chewaka (RN, BSC.N.)

July, 2009

Addis Ababa, Ethiopia

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Advisor:

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Declaration

I THE UNDERSIGNED, DECLARE THAT THIS THESIS IS MY ORIGINAL WORK IN PARTIAL FULFILLMENT FOR THE REQUIREMENTS OF MASTER OF SCIENCE DEGREE IN ADULT HEALTH NURSING.

ALL THE SOURCES OF THE MATERIALS USED FOR THIS THESIS AND ALL PEOPLE AND INSTITUTIONS WHO GAVE SUPPORT FOR THIS ARE FULLY ACKNOWLEDGED.

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DATE OF SUBMISSION -----

THIS THESIS WORK HAS BEEN SUBMITTED FOR EXAMINATION WITH MY APPROVAL AS UNIVERSITY ADVISOR.

ADVISOR: S/R TEKEBASH ARAYA SIGNATURE ----- Date-----

-

Approval by the board of examiners

This thesis by _____ is accepted by the Board of Examiners as satisfying thesis requirement for the Degree of Master of Science in Adult Health Nursing.

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Research Advisor/ supervisor:

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ASSURANCE OF PRINCIPAL INVESTIGATOR

The under signed agree to accept responsibility for the scientific, ethical and technical conduct of the research and for provision of required progress reports as per terms and conditions of the Institutional Review Board (IRB), FOM, AAU in effect at the time of Grant is forwarded as the result of this application.

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2. KEA-MED Medical College
3. Africa Health College
4. Hayat Health Science College
5. Central Health College
6. Universal Medical College
7. Alkan Health College

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List of acronyms

AAU – Addis Ababa University

AIDS – Acquired Immunodeficiency Syndrome

ARV – Antiretroviral Drug

CDC – Communicable Disease Control

FOM – Faculty of Medicine

HBV – Hepatitis B Virus

HCV – Hepatitis C Virus

HIV - Human Immunodeficiency Virus

IRB – Institutional Review Board

MOH – Ministry of Health

NIOSH - National Institute for Occupational Safety and Health

OHS – Occupational Health Safety

PEP - Post Exposure Prevention

SPSS – Statistical Package for Social Science

TB - Tuberculosis

Abstract

Background: In their every day clinical practice, Nurses and Midwife students are at risk of occupational hazards especially risk of exposure to blood born pathogens potentially resulting to infections. The Nurse and Midwife students are prone to occupational health hazards and they are unrecognized group of health care providers. High levels of occupational hazards are believed to affect students' health and academic functions. If the occupational hazards are not dealt with effectively, feeling of loneliness, sleeplessness and worrying may result. Effective coping strategies facilitate the return to a balanced state, reducing the negative effects of occupational hazards.

Therefore, it is better to identify the occupational hazards that the Nurses and Midwife students face during their clinical practice and mechanisms of coping or preventing the occupational hazards. In order to have healthy and productive Nurses and Midwife graduates for the country, assessing the occupational hazards they face in their clinical practice and prompt intervention is very necessary.

Objective: The objective of this study is to assess the occupational hazards faced by the Nurses and Midwife students during their clinical practice in all Degree program Nursing and Midwifery Schools in Addis Ababa.

Methods: Cross-sectional descriptive survey was conducted from November 2008 to June 2009. 422 self administered questionnaire was distributed to 6 Health College Nurse and Midwife students who were systematically sampled and all have been filled and returned with much effort. The study populations were all of the systematically sampled of the regular Nurses and Midwifery day Degree program students of the six Nursing and Midwifery Schools excluding evening and 1st year students. Data was coded and analyzed using SPSS version 11 for computing frequency distributions. Greater number of responses and percentages were calculated.

Result: The majority of the respondents (51.1%) knowledge of occupational hazards was gained from Nursing and Midwifery Schools, followed by books (16.6%) and Journals, (9.2%). Majority of the study population (93.1%) indicated that they have got needle prick, blood splash and skin cuts during their clinical practice. The result confirms that all the factors mentioned in the work plan such as physical, biological, psychosocial and mechanical factors cause occupational hazards in the clinical practice.

Conclusion and recommendation

The study showed high rate of occupational hazards and the strongest predictor of needle prick injury, blood splash, and skin cuts, Nurse and Midwife students at risk for blood born pathogens. A safe and healthy practical area for Nurse and Midwife students is necessary for safe patient care and implementing control measures as well as preventive measures such as using universal precautions and managing shortage of preventive materials in clinical practical areas are recommended.

Chapter I. Introduction

1.1. Background

The Nurses and Midwife students are prone to occupational health hazards and they are unrecognized group of health care providers. High levels of occupational hazards are believed to affect students' health and academic functions (1).

It was not until the early 1900s that the Public Health Service conducted one of the first scientific studies on occupational hazards by investigating dust conditions in mines, cement manufactories, and stone cutting (2).

In 1914 a study of garment workers in United States showed a high incidence of tuberculosis related to poor ventilation, overcrowding, and unsanitary work conditions. Workers compensation laws provided for occupational injury and disease coverage, and other efforts were made to protect workers against the hazards of the work place (2).

In Africa, especially in Tanzania the main general methods of preventive measures of occupational hazards in the work place were indicated as:

1. Getting rid of the hazard or toxic substance.
2. Reducing exposure.
3. General ventilation, and
4. Protective and safety equipment (3).

In Ethiopia, the Health Policy of the Transitional Government of Ethiopia supports the promotion of the occupational health and safety, developing facilities for workers' health and safety in production centers, and discouraging the acquisition of harmful habits such as cigarette smoking, alcohol consumption and drug abuse (4).

The Nursing Education program provides both classrooms and clinical experiences. The greater part of the clinical experiences of the student Nurses and Midwives is obtained in the hospitals. They are in part of the health team and are equally prone to

risk occupational hazards encountered in the hospital setting than other health workers. The relevant hazards in health care include biological hazards, HIV, blood born infections and tuberculosis infections of multi drug resistant. Chemical hazards involving exposures to antineoplastic and antiviral agents, sterilants, like ethylene oxide and formaldehyde and the possible risk of drug dependency and abuse. Chemotherapeutic and cytotoxic agents were been suggested to be carcinogenic, and teratogenic (5).

1.2. Statement of the problem

Globally occupational hazards are increasing as technology increases. Student Nurses and Midwives whether in urban or rural clinical practice have some occupational hazards. It is estimated that 17, million work- related illness and 99,000 work-related deaths occur in the United States each year. The incidence of some of these diseases will diminish through preventive efforts (2).

Health care facility have developed standards, policies and procedures as a standard in case of sharp injury or other exposure, but many health workers neglect to report such injuries. This can lead to inaccurate data on health care worker exposure following sharps injury “immediate” first aid should be given, such as flashing the site with running water and washing with soap and water where there bleeding allowing the site to bleed briefly

Nurses and midwife students do have fear of occupational hazards and life-threatening effects may compromise their clinical practice to provide adequate care to patients. Also there is a limited amount of information on this area. Therefore; this study will help to explore the factors that cause occupational hazards among Nurses and Midwife students in their clinical practice.

The success of any nation depends to a considerable degree whether the country has adequate opportunities to develop or not. Among the population students must have the opportunities to develop all characteristics of development, which will enable them to be

effective in earning, a living, making a home, and assuming responsibilities of citizenship.

However, there are forces, which would hinder them to take over effectively these responsibilities. These are forces that hamper the nursing school not to bring up students in the desired fashion. Among these forces, occupational hazard and its fear is one that is obstacle to accomplish the nursing school objectives.

Hence, nursing schools need healthy Nurses and Midwife students to accomplish their objectives, control of occupational hazards are necessary if any thing is to be accomplished.

It is only when the nursing schools secure and maintain healthy Nurse and Midwife students that it will be able to produce well-qualified Nurses and Midwives for the benefit of the country.

A study done on occupational hazards among student nurses at the University of Benin Teaching Hospital, has reported that nurses are chemically dependent, and for many substance abuses begin while attending nursing school (5).

Securing and maintaining healthy Nurses and Midwife students in nursing schools is one of the most important aspects of teaching. However, one of the valid reasons for the lowering of the quality of the nursing practice is the problem of fear of occupational hazards. This problem is hopefully to be controlled with the joint effort of the nursing schools and the practical area health organizations.

Therefore, this research study focuses on factors that cause occupational hazards and on possible solutions to the problems.

1.3 Significance of the study

In Addis Ababa needs of the occupational health hazards study among Nurses and Midwife students is not well addressed. This is practically true because no such assessment is yet done in Addis Ababa Nursing and Midwifery Schools. Therefore, the factors that cause occupational hazards among Nurses and Midwife students in the clinical area should be thoroughly studied in relation to the role of the Nurse and Midwife students have to apply in their clinical practice and it would provide base line data for prospective study.

Chapter II.

Literature Review

Occupational hazards are defined as a danger or illness that is a risk for people doing a particular job (6). Occupational hazards poses many challenges for care providers while accompanying the patient through the course of his/her illness may hold many rewards. There is no denying the significant stresses that are inherent in caring for those affected by diseases. These stresses may result from the emotional impact of caring for a person with a life threatening illness or be secondary to the perceived risk of occupational exposure to communicable diseases such as HIV/AIDS, Hepatitis B, (HBV), Hepatitis C (HCV), and Tuberculosis (7).

This section of literature review will provide an overview of the occupational risks facing Nurses and Midwife students and potential strategies for preventing or treating occupational hazards, of communicable diseases within the context of clinical practice. An over expanding body of the literature identifies the occupational hazards that care givers experience in caring for those with terminal illness. More recent research focuses on factors that caregiver's experience, which are physical, mechanical and psychosocial. Health care workers are continually at risk for exposure to infectious microorganisms. The occupational safety and health act of 1991 established rules and regulations to protect employees from infectious hazards in the work place (8).

Research suggests that despite the high-risk perception of the health care workers toward occupationally acquiring infection, there is quiet low level of practice of health care workers towards prevention of occupationally acquired infection. In response to the demand on health institution a substantial research and literature has been developed looking at the impact of AIDS on health care to identify particularly stressful factors (9).

Based on Ofili and Sogbesan description in their study, back-pain ranked highest among the list of work related hazards. One hundred and fifteen (88.5%) student nurses have had

back pain. The causes attributed to back pain were lifting patients. Among the mechanical hazards that expose students to blood borne infection, blood splashes were the commonest. This is in keeping with the study carried out by Ofili and her colleagues (2000), where cutaneous exposure to blood was found to be commoner than percutaneous exposure. Fifty percent of the students had needle pricks injury as well as drug ampoules cut, and 10% of the participants have got scalpel cuts. Olifi and her colleagues (2000) found cuts from drug ampoules as the commonest percutaneous injury among nurses. While other studies found needle pricks as the commonest percutaneous injury. Among the psychosocial factors 81 (62.3%) of the respondents were stressed during ward positioning, and 3 (2.3%) were stressed during practical session (5).

According to standards of health care facility any exposed mucous membranes to microorganisms should be flushed with large amount of water; antiseptic solution can have a caustic effect and have not been proven effective. However, in the absence of water, antiseptic solution should be used as post exposure prophylaxis (PEP) with antiretroviral treatment (9). (ARV) can reduce the risk of becoming infected (PEP) should be guided by local policies and is dependent upon the availability of the drugs (10).

Appropriate barriers (gloves, face shields, goggles, gowns, masks are used to prevent exposure of the skin and mucous membrane when coming in contact with blood or body fluids. Hands and other areas of the body are immediately washed if they become contaminated with blood or body fluid. Sharp items should be handled with extreme care. Disposable needles, scalpel blades, and other sharp items are placed in special, marked, puncture proof containers. (11).

In Ethiopia, efforts to improve the healthcare provided to its citizens are increasing in all aspects of health. Foremost among the initiatives currently underway, the protection of patients and healthcare workers from infections inside the hospital has been given particular attention by the Federal Ministry of Health. Indeed; the Ministry is scaling-up its activities related infection prevention and will use all opportunities to strengthen

ongoing activities. In addition, without adequate infection prevention practices, healthcare workers are at increased risk of acquiring infection, most commonly HIV/AIDS Hepatitis A and C, as well as other common Bacterial and viral infections (12). In Addis Ababa there are Hospitals and Health Centers owned by MOH, NGO, and private, where students are assigned for clinical practice (13).

The Occupational Health and Safety Section in the Ministry of Health in Kenya ensure that those psychosocial issues are made a priority in the provision of good quality health care services. The Ministry of Health is on a course aiming to insure that all places of work are free from illness and diseases. Steps undertaken to boost the effort include proper networking with Kenya Medical Training College, Department of Environmental Health in the Faculty of Public Health Sciences, which is offering the Higher National Diploma with Specialization on Occupational Health and Safety (14).

Chapter III. Objectives of the study

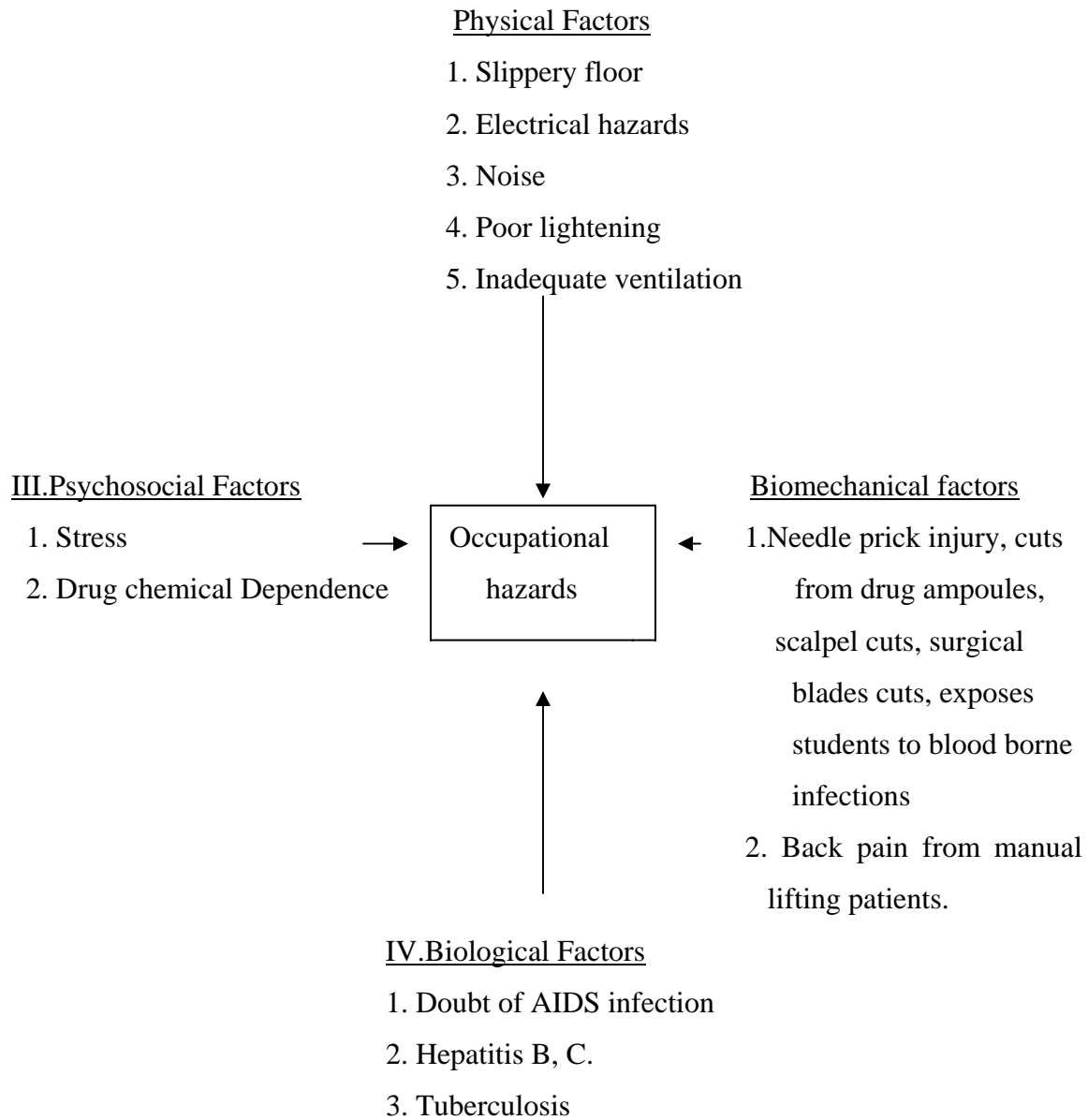
3.1. General objective

To assess the risk of the occupational hazards and its determinants among Nurses and Midwife students in their clinical practice in nursing and Midwifery schools in Addis Ababa.

3.2. Specific objectives

1. To identify the factors that causes occupational hazards among Nurses and Midwifery students at their clinical practice.
2. To explore the students' physical and occupational hazards that contributes to students illness.
3. To assess the psychosocial factors of the occupational hazards among nurses and midwife students.
4. To identify the mechanical factors which contribute to the occupational hazards.
5. To collect recent information about occupational hazards and come with recommendations how to improve the condition.

3.3 Conceptual Framework



3.4 Operational definitions

- **Assessment:** Finding or examining the causes of occupational hazards in relation to patient care.
- **Occupational hazards:** any physical, mechanical and psychosocial harm, at the area of Nurse and Midwife students' clinical practice.
- **Students:** Nurses and Midwife students who are studying in Degree program Nursing and Midwifery Health Colleges/ University, second year and above.
- **Clinical practice:** the area where Nurse and midwife students work with patients. Performance activity of the students in relation to the patient care.
- **Stress:** is the physical, emotional and excitability that occurs in nurses and midwife students in response to occupational hazards.
- **Physical hazards:** defined as falling due to slippery floors, harm due to electrical accidents, illness due to inadequate ventilation, loud noise such as when patient dies and relatives start to cry and bump of doors. Can be measured by the Questionnaire.

Chapter IV. Methodology

4.1. The study area and period

The study was conducted in Addis Ababa; the capital of Ethiopia from November 2008 to June 2009. It is located in central high land of Ethiopia and has an elevation of 2326 meters above sea level. According to the 2007 census, Addis Ababa has a total population of 2,738,248. Among these, 1,304,518 (47.6%) were males and 1,433,730 (52.4%) were females (15). The city is administratively divided into 10 sub-cities and 99 kebeles now (16). In Addis Ababa there are a total of 45 Hospitals, 29 Health Centers, and 43 Health Posts owned by MOH, other governmental organizations (OGO), NGO and private. Total medical personnel in Addis Ababa excluding private and NGO, OGO are 1208 among these 610 are nurses (12).

The settings of the study were all Nursing and Midwifery Schools with Degree day programs. The study was conducted in one governmental and five private Nurses and Midwives Schools in Addis Ababa, namely:

1. Centralized School of Nursing, Faculty of Medicine, Addis Ababa University (Governmental)
2. KEAMED Medical College (Private)
3. Africa Health College (Private)
4. Alkan Health College (Private) was used for pre-test
5. Hayat Health Science College (private)
6. Central Health College (private)
7. Universal Medical College (private).

4.2. Description of study sites

The study sites were six Degree program running of Nursing and one Midwifery School, which is under the Centralized School of Nursing, Faculty of Medicine, Addis Ababa University, the only governmental School of Nursing running Degree Midwifery program in Addis Ababa.

Centralized School of Nursing, Faculty of Medicine, Addis Ababa University is now training three batches, first, second and third year Degree program Nursing and Midwife students. The greatest number of the study population was in this school. The School contains three branches namely; Black Lion, St.Paul's and Zewditu School of Nursing. The school provides Dormitory for those students who are coming from the region and also provides food for those who need to be served by the School.

There is separate residence for male and female nurses in the St.Paul's campus, is the largest campus. The St.Paul's School of Nursing was established in 1973 during Haile Sellassie regime with the aid of German government. The school assigns the students to different governmental Hospitals and Health Centers for their clinical practice.

There are demonstration rooms that allow students to demonstrate nursing skills during their training. These are in Black Lion, Zewditu and St.Paul's Schools of Nursing. Centralized School of Nursing, Faculty of Medicine, Addis Ababa University started to train Nurses in Master's Degree program for the duration of two years since 2006. The first batch is already graduated. The School is tremendously progressing and there is hope that PHD program in nursing may start in the near future.

KEAMED Medical College was started to function legally in the year 2003 G.C.

It functions at three campuses. The degree program functions in two places at Arada and Hyahulet. The school doesn't have its own building but has all necessary training and demonstration rooms as well as class rooms in all three campuses according to the information gained from the school Dean. The School sends the students to different health institutions for clinical practice during their training. There is no dormitory or residence for students in the school campus either for male or female students. There are 97 second year nurse students in both areas where degree program is running and third year students were already graduated according to the information gained from the school Dean. There are also diploma program training for nurses in the school.

Alkan Health College was established in the year 2002 renting the building to train nurses in degree and diploma status. The school is not training Midwife students by now but trains Laboratory Technicians with Diploma, Health officers in Degree according to the information gained from the school. The School has other branches in other cites such as Wello, Dessie, Bale Goba, and Bahirdar. The students are assigned to different health institutions for clinical practice during their training. The school has its own transportation for students to transport them during their clinical practice.

Africa Health College was established in the year 2004 to train health professionals including Nurses in its own building in Lagahar, and in Hayahulet by renting the building according to the information gained from the school. The school did not start training Midwives and the degree program is running in Lagahar while the Diploma program is running in Hayahulet. The school has demonstration room in both areas to demonstrate the students during their training. The students are assigned to different health institutions for their clinical practice. The school has no dormitory.

All of the private health collages in degree program are accredited and are functioning legally.

4.3. Study design

Cross sectional descriptive survey was conducted

4.4. Source and Study Population

The source of population constituted the day Degree program Nurse and Midwifery students of the six schools stated above. Both male and female Nurse and Midwifery students, who were trainees at the six degree program training Nursing and Midwifery Schools' students were proportionally included in this study. One of the schools with the small number namely Alkan Health College was used for the pre-test from among the seven Medical Colleges.

Under Ministry of Health (MOH), Ethiopia, Addis Ababa City Administration Health Bureau and Addis Ababa University, of the Nursing and Midwifery Schools with day degree program were proportionally included: Centralized School of Nursing, Faculty of Medicine, Addis Ababa University, KEAMED Medical College, Africa Health College, Alkan Health College, Hayat Health Science College, Central Health College, and Universal Medical College who were attending Nursing and Midwifery were included in the study. Among the above mentioned schools, the Centralized School of Nursing Faculty of Medicine, Addis Ababa University is the only one that is training Midwife students.

4.5. Sampling method

Systematic sampling was used to include day degree program Nurses and Midwife students proportionally of all the degree program running schools excluding the evening and first year students.

4.6. Sampling size determination.

There are two governmental and 23 private Schools of Nursing in Addis Ababa. Among these eight of them are running Degree programme and one of them train only upgrade evening students. Therefore, all day Degree programme Nursing and Midwifery Schools in Addis Ababa were included in the study. The sample size was determined by assuming 50% of the Nursing and Midwife degree students with 5% marginal error and 95% confidence interval since the study is not yet done here in Addis Ababa. Therefore the minimum number of sample for the study was calculated, using the formula for single population proportion. The sample was taken proportionally from all Degree program training health colleges which were six in number.

4.7. Proportion of Nurses and Midwife students by schools were as follows.

$$n = \frac{z^2 \times p(1-p)}{d^2}$$

Where n = Minimum sample size required
z = Standard score corresponding to 95% confidence interval
P = Assumed proportion of students
d = Margin of error (precision) 5%

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

$$= \frac{3.84 \times 0.5 \times 0.5}{0.0025}$$

$$= 3.84 \times 0.5 \times 0.5 = 0.96$$

$$\frac{0.96}{0.0025} = 384 \quad \text{contingency} = 10\% = \frac{384 \times 10}{100} = 38 + 384 = 422$$

S.No	Name of the schools	No.of students	calculation	proportion
1	Centralized School of Nursing, FOM, A A U.	265	265 x 422 ----- 597	187
2	KEAMED Medical college	95	95 x 422 ----- 597	67
3	Africa Health college	50	50 x 422 ----- 597	35
4	Hayat Health Science College	55	55 x 422 ----- 597	39
5	Central Health College	62	62 x 422 ----- 597	44
6	Universal Medical college	70	70 x 422 ----- 597	50
	Total			422

4.8. Study variables

The independent variables such as socio-demographic variables, age, religion, educational status, ethnicity, and marital status will be included.

The dependent variables of the study

Physical hazards such as pain, mechanical hazards such as needle pricks, and psychosocial hazards such as stress were the main variables.

4.9. Data collection technique

The data was collected using self-administered closed ended questionnaire prepared in English and Amharic. The researcher and his supervisors distributed the questionnaires after giving a brief description of the importance of the study.

4.10. Pre - test

In order to evaluate the clarity of the questions in the questionnaire and to ensure that the validity and reliability of the instrument and the reactions of the respondents to the questions, pre-test was done on Alkan Health College of day Degree program Nursing School students prior to the actual data collection and care was taken not to include in the main data.

4.11. Quality assurance of the study

- Frequent supervision and monitoring over all activities of the study was done during data collection.
- Pre-test was utilized and there were no serious unclear statements in the questionnaire, but minor correction was done to unclear wards.
- During data collection period the filled questionnaires were checked every night after data collection.
- The Collection of data was done by self-administered questionnaires carefully.

4.12. Data management and analysis

Data was entered coded and analyzed using SPSS version 11 for computing frequency distributions. Greater numbers of responses and percentages were calculated.

Descriptive statistics was computed to examine the effect of selected variables on occupational hazards among Nurses and Midwife students in the clinical practice in Addis Ababa.

4.13. Ethical consideration

Ethical clearance was obtained from the ethical committee of the Centralized School of Nursing and the Institutional Review Board (IRB) of the FOM, A.A.U.

4.14. Inclusion and exclusion criteria

- ✓ Degree program Nurses and Midwife students in all day program of the Nursing and Midwifery schools and 2nd year and above students were proportionally included.
- ✓ All evening and 1st year students of the same categories and uncooperative students were excluded.

4.15. Limitation of the study

- Difficulty of retrieving literatures.
- Transportation problem to go to each school every day during data collection.
- Shortage of time during data collection because of several appointments given by each school to arrange time for the data collection.
- Scarcity of electric power for data entry and analysis.

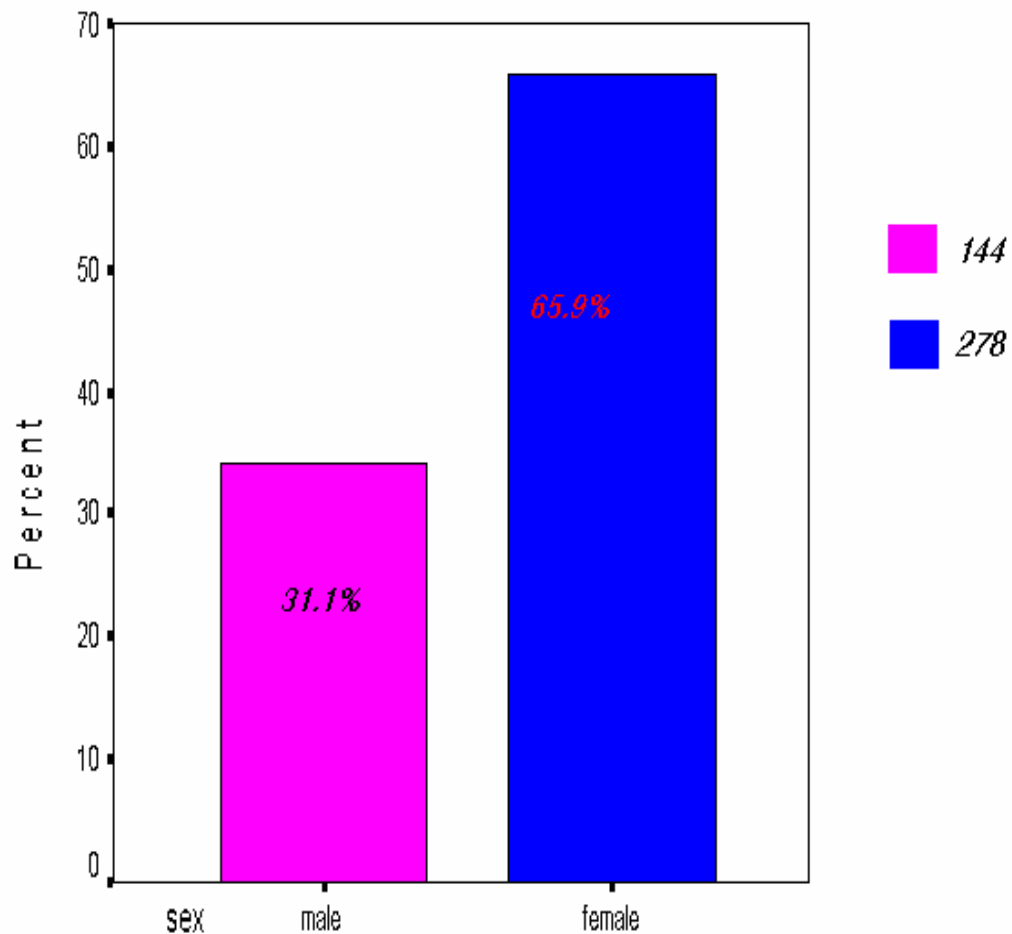
4.16. Dissemination of result

The final result of this study will be submitted to the Centralized School of Nursing, Faculty of Medicine, Addis Ababa University, the other private study Schools and other concerned bodies will be given after approval.

Chapter V. Results

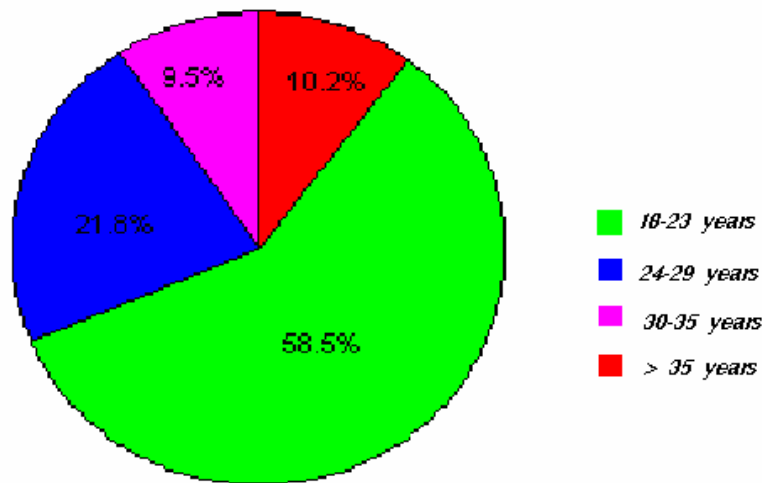
A total of 422 Nurses and midwifery regular day degree program training students in Addis Ababa from one governmental and five private health science colleges were included in the study 422 self administered questionnaire were distributed and all have been filled and returned with much effort. From 422 successfully completed responses 144 (31.1%) were males and 278 (65.9%) were females. (Fig. 1 and Table 1)

Fig. 1.Percentage distribution of respondents by sex Addis Ababa, Ethiopia, 2009.



Majority of the respondents' age 247 (58.5%) were between 18-23 years, 92 (21.8%) were between 24-29 years, 43 (10.2%) were greater than 35 years and minority of the respondents 40 (9.5%) were between 30-35 years.

Fig. 2. Shows percentage distribution of the respondents by age, Addis Ababa, Ethiopia, 2009.



While 234 (55.5%) were 2nd year Nurse and Midwifery students 183 were 3rd years students and 5 (1.2%) of the participants didn't respond. Among the respondents 105 (24.9%) were married, 302 (71.6%) were single, 8 (1.6%) were widowed, 3 (0.7%) were divorced and 4 (0.9%) didn't respond. Majority of the respondents 174 (41.2%) were Amhara, 74 (17.5%) were Oromo, 48 (11.4%) were Tire, 120 (28.4%) were from other ethnic group and 6 (1.4%) didn't respond.

As the religion back ground concerned the majority 266 (63%) were orthodox, 100 (23.7%) were protestant, 44 (10.4%) were Muslim, 6 (1.4%) belongs to other religion and 1 (0.2%) didn't respond.

Missing	5	1.2
Clinical practice: Medical ward	89	21.1
Surgical ward	102	24.2
Ob-Gy	133	26.8
Pediatrics	111	26.3
Others	7	1.6

Table-2 shows the source of knowledge of respondents on occupational hazards. According to the participants response, most common source of information were Nursing and Midwifery schools 220 (51.1%), books 70 (16.6%), Journals 39 (9.2%), no information 19 (4.5%) and 5 (1.2%) didn't respond.

Table 2. Knowledge about occupational hazards among Nurses and Midwives students in Addis Ababa, Ethiopia. 2009.

Category	No	%
Total participants	422	100
Source of information about occupational hazards:		
Nursing and Midwifery school	220	51.1
Journals	39	9.2
Books	70	16.6
No information	19	4.5
Missing	5	1.2
Knowledge about occupational hazards in clinical practice		
Needle prick, blood splash, skin cuts, chemical biological factors:		
Yes	393	93.1
No	17	4.0
Fairly	11	2.6
Missing	1	0.2
Knowledge of the students about occupational hazards as whole:		
Poor	65	15.4
Fair	149	35.3
Good	191	45.3
No knowledge	6	1.4
Missing	11	2.6
Have you learned about occupational hazards in Nursing or		

Midwifery Schools: Yes	311	73.7
No	106	25.1
Missing	5	1.2

Concerning knowledge of students related to needle prick, blood splash, skin cuts, chemicals and biological factors hazards 393 (93.1%) were responded yes and 17 (4.0%) responded no 11 (2.6%) responded fairly and 1 (0.2%) were not respond.

Regarding the knowledge of occupational hazards in clinical area as whole: 191 (45.3%) has had good knowledge, 149 (35.3%) have got fair knowledge, 65 (15.4%) has had poor knowledge, 6 (1.4%) didn't have any knowledge and 11 (2.6%) didn't responded.

Three hundred eleven (73.7%) of the respondents have learned about occupational Hazards in Nursing and Midwifery Schools while 106 (25.1%) didn't learn in their school, 5 (1.2%) did not respond.

3. Table 3 below indicates the psychosocial factors or stress among Nurse and Midwifery students in Addis Ababa at their clinical practice. Of the 422 Nurses and Midwife student respondents 124 (29.4%) marked that they have fear of occupational hazards while 274 (69.9%) of the respondents did not have fear 24 (5.7%) didn't respond.

Table 3. Psychosocial factor or stress among Nurse and Midwife students in Addis Ababa, Ethiopia. 2009

Category	Number	Percent
Total Participants	422	100
Fear of occupational hazards: Yes	124	29.4
No	274	64.9
No response	24	5.7
Worry due to death of patient: Yes	386	91.5
No	19	4.5
No response	17	4.0
Intention to leave Nursing or Midwifery School due to fear of catching disease: Yes	91	21.6
No	293	69.4
No response	32	7.6
Missing	6	1.4
Affection of life style due to giving care to patients with communicable and life threatening disease: Yes	139	32.9

	No	238	56.4
	No response	38	9.0
	Missing	7	1.7
Taking drugs without prescription:	Yes	90	21.3
	No	278	65.9
	Sometimes	53	12.6
	Missing	1	0.2

On the other hand majority of the participants 386 (91.5%) responded that they did have worry due to death of patients while 19 of them (4.5%) didn't have worry. 17 of them (4%) didn't respond. This is slightly different from the study done in Nigeria where 63.3% were stressed during ward positioning. Among the participants of the Addis Ababa study group 91 (21.6%) intended to leave the Nursing and Midwifery school due to fear of catching diseases during clinical practice, 293 (69.4%) of the participants responded that they were not intended to leave the school due to fear of catching diseases 45 (9%) didn't respond.

Of all the Nurse and Midwife student respondents 139(32.9%) marked that giving care to patients with communicable and life threatening diseases affect their life style while 238 (56.4%) of the participants life style were not affected 45 (10.7%) didn't respond.

Regarding taking drugs without prescription 90 (21.3%) of the participants took drugs without prescription 278 of them (65.9%) didn't take drugs without prescription. 53 (12.6%) of the respondents took drugs sometimes without prescription and 1 (0.7 %) didn't respond.

Table 4 bellow shows the physical factors of occupational hazards such as shortage of materials, fall in clinical area due to slippery floors, electrical accidents, problem of loud noise and poor lighting. Regarding to the physical factors of occupational hazards among Nurse and Midwifery students in Addis Ababa, 358 (84.4%) of the study population stated that there was shortage of materials during clinical practice, 34 (8.1%) of the respondents stated that there was shortage of material sometimes, 28 (6.6%) mentioned there was no shortage of materials during clinical practice, 2 (0.5%)of the participants didn't respond.

No problem of loud noise as 381 (90.3%) of the respondents responded.

Sixty two (14.7%) stated that poor lighting can cause occupational hazard during clinical practice while 357 (84.6%) of the study population stated there is no problem of occupational hazards due to poor lighting. 3 (0.7%) didn't respond.

As shown in table 5 there is needle prick risk during clinical area practice. Five (1.2%) participants have got needle prick always, 18 (4.3%) of the study population faced needle prick often, 60 (14.2%), have got needle prick sometimes and 70 (16.6%) of them occasionally got needle prick, and the majority of the respondents 261 (61.8%) never got needle prick, while 3 (0.7%) did not respond. 162 (38.4%) took measure for the needle prick by reporting to the counselor while 141 (33.4%) washed their hands with soap and water, 107 (25.4%) have used antiseptic solution and 12 of the respondents (2.9%) did not take any measure.

Table 5. Mechanical factors of occupational hazards among Nurses and Midwife students in Addis Ababa, Ethiopia 2009.

Category	Number	Percent
Total Participants	422	100
Needle prick in clinical area: Always	5	1.2
Often	18	4.3
Sometimes	60	14.2
Occasionally	70	16.6
Never	261	61.8
Didn't respond	8	1.9
Measures taken for the needle prick:		
Report to the counselor	162	38.3
Wash hands with soap & water	141	33.4
Use antiseptic solution	107	25.4
No any measure taken	2	0.5
Not responded	10	2.4
Scalpel cut in clinical area practice: Yes	39	9.2
No	373	88.4
Not responded	10	2.4
Drug ampoules cut in clinical area: Yes	122	28.9
No	291	69.0
Did not responded	9	2.1
Surgical blades cut in clinical area: Yes	112	26.5
No	300	71.1
Not responded	10	2.4
Back pain in clinical area: Yes	257	60.9

No	146	34.6
All the time	15	1.2
Didn't responded	4	3.3
The cause of back pain: Lifting patient	66	15.6
Prolonged standing	185	43.9
Lifting machine	16	3.8
Lifting bed	25	5.9
Wound dressing	22	5.2
Too much work	66	15.6
Didn't feel back pain	26	6.2
Others	16	3.8

Concerning the scalpel cut in clinical area, 39 of the study population (9.2%) stated that they have got scalpel cut, while 373 (88.4%) of the respondents didn't have scalpel cut 10 (2.4%) of study population didn't respond. 122 (28.9%) have got cut from drug ampoules during their clinical practice while 291 (69.0%) of them didn't have cut from drug ampoules 9 (2.1%) of the participants didn't respond. The same response was true for surgical blade cut. Regarding to back pain majority of the study population 257 (60.9%) have got back pain, 146 (34.6%) didn't get back pain 5 (1.2%) of the respondents have got back pain all the time, 14 (3.3%) of the participants didn't resound.

Concerning the cause of back pain of the participants the majority of the study population 185 (43.8%) stated that lifting patient was the cause of their back pain, 66 (15.6%) of the respondent felt back pain due to too much work, while 22 (5.2%) stated that the cause of their back pain was wound dressing, 25 (5.9%) of the respondents felt back pain due to lifting bed, 16 (3.8%) of the participant's cause of back pain was lifting machine while 11 (2.6%) were felt back pain due to observing patient and 5 (0.6%) were felt back pain because of tepid sponging while 26 (6.2%) were not felt back pain at all.

Table 6 shows the biological factors of occupational hazards among Nurses and Midwife students according to their responded results. Majority of the study population 293 (93.1%) indicated that they have got needle prick blood splash, and skin cuts during their

Table 6. Biological factors of occupational hazards among Nurses and Midwife students in Addis Ababa, Ethiopia.2009.

Category	Number	Percent
Total Participants	422	100
Blood splash in clinical area: Many times	22	5.20
Sometimes	81	19.20
Occasionally	99	23.50
Not at all	214	50.70
Didn't responded	6	1.40
Sickness during clinical practice: Yes	159	37.70
No	257	60.90
Didn't responded	6	1.40
Diagnosis of sickness during clinical practice: TB	8	1.90
Typhoid	13	3.10
HIV/AIDS	1	0.20
Hepatitis	63	14.90

Other diagnosis	66	15.70
Didn't become sick	271	64.20

clinical practice, 17 (4.0) didn't have needle prick, blood splash and skin cuts at all, 11 (2.6%) fairly got needle prick, blood splash and skin cuts, 1 (0.2%) of the participant didn't responded. Regarding to blood splash alone 22 (5.2%) have got blood splash many times, 81 (19.2%) indicated that they have got blood splash sometimes, 99 (23.5%) of the participants have got blood splash occasionally, majority of the respondents 214 (50.7) didn't get blood splash at all and 6 (1.4) of the study population didn't responded.

Concerning the sickness of the study population 159 (37.7%) stated that they became sick during their clinical practice, 257 (60.9%) of the participants responded that they were not became sick during their clinical practice, 6(1.4%) of the study population didn't respond.

Regarding to their diagnosis of their sickness 8 (1.9%) of the respondents were diagnosed as TB, 13 (3.1%) of the study population were diagnosed as typhoid, 1 (0.2%) of the participant was diagnosed as HIV/AIDS, 63 (14.9) of the respondents were diagnosed as Hepatitis, 66 (15.6%) were diagnosed as other diseases not mentioned in the questionnaire paper and majority of the study population 271 (64.20%) were not responded because the study result shows they didn't become sick during their clinical practice.

Chapter VI. Discussion

Regarding knowledge about occupational hazards among Nurses and Midwife students the major source of information acquired from the Schools of Nursing and Midwifery confirmed by the majority of the study population 51.1%, followed by books 16.6% and journals 9.2%. Concerning the knowledge of students related to occupational hazards about needle prick, blood splash skin cuts, chemicals and biological factors the majority of respondents 93.1% were knowledgeable while 4% did not know about occupational hazards and 2.6% fairly know about the occupational hazards.

According to this study the over all knowledge of the students about occupational hazards at the clinical practice as whole, 45.3% has good knowledge, 35.3% have got fair knowledge 15.4% has got poor knowledge and 1.4% did not have any knowledge about occupational hazards . Therefore the study confirms that the majority of the Nurses and Midwives students have knowledge concerning the risk of occupational hazards at the clinical practice.

Regarding to the psychosocial or stress factor of occupational hazards according to the result of this study 29.4% of the students have fear of the occupational hazards while 56.7% of them have no fear and 5.7% of the study participants where not responded to this specific question. Even though majority of students have no fear of occupational hazards in this study it indicates that the students have stress during their clinical practice, this is slightly different in percentage from the result of the research done at the University of Benin Teaching Hospital in Nigeria, where students were highly stressed 81 (62.3%) of the study population were stressed. On the other hand majority of the study

population in Addis Ababa, 91.5% have worry due to death of patients in the health institutions while 4.5% of them didn't have worry. Among the participants of the study population, 21.6% intended to leave the Nursing and Midwifery Schools due to fear of catching diseases during clinical practice whereas 64.4% of the study population were not intended to leave the Nursing and Midwifery school due to fear of catching diseases during clinical practice and 9% of the participants were not identified their opinion.

Of all the Nurse and Midwife students 32.9% of them, have fear in giving care to patients with communicable and life threatening diseases affect their life style while 56.4% of the participants life style were not affected and 10.7% of the study population did not identified their opinion. Regarding to taking drugs without prescription this study indicated that 21.3% of the study population took drugs without prescription while 65.9% of the participants didn't take drugs without prescription and 12.6% of the participants took drugs sometimes without prescription 0.7% of the participant were not respond.

Regarding to the physical factors of occupational hazards among Nurse and Midwife students in Addis Ababa majority of the study population 84.4% confirmed that there was shortage of materials in health institutions during clinical practice while 8.1% of the participants indicated that there was shortage of materials sometimes, 6.6% of the participants indicated that there was no shortage of materials at the clinical practical area. Zero point five percent (0.5%) of them did not respond, 9.7% of the study population did face accidental fall due to slippery floor, while 90.0% didn't have accidental fall due to slippery floor. Three point one (3.1%) of the participants have got electrical accident and 96.2% of the study population didn't have electrical accident during their clinical practice. Nine percent (9%) of the study population has got problem of loud noise while 90.3% of the participants didn't have problem due to loud noise at their clinical practice. Fourteen point seven (14.7%) of the participants stated that there were occupational hazards due to poor light while the majority 84.6% of the participants stated that there was no occupational hazards due to poor light, 0.7% of them did not want to respond to this specific question. The study done in Nigeria didn't assess the above mentioned variables.

The study done on occupational hazards among student Nurses at the University of Benin Teaching Hospital in Nigeria by Olifi and S. Sogbesan revealed that 50% of the participants had needle prick injury, and the percentage is about the same with this study.

Regarding to needle prick during clinical practice, in Addis Ababa, the result indicated that 1.2% of the participants got needle prick always, 4.3% of the study population has had needle prick often, 14.2% of the study participants have got

needle prick sometimes 16.6% of the study population has had needle prick occasionally and the majority of the respondents 61.8% of the study population never got needle prick while 0.7% of the study participants hesitated to explain their opinion. The measure they took for the needle prick was 38.4% of them have been reported to the concerned counselor while 33.4% of the study participants washed their hands with soap and water and 25.4% of the participants have used antiseptic solution while 2.9% of the study population didn't take any measure.

Concerning the scalpel cut in clinical area, 9.2% of the respondents have got scalpel cut and this result was almost the same as the research done in Nigeria where 10 % has got scalpel cut. In Addis Ababa 88.4% of the respondents didn't have scalpel cut, 2.4% of the study population were not eager to respond. Regarding cut from drug ampoules during the clinical practice 28.9% of the participants have had cuts from drug ampoules during their clinical practice while 69.0% of the study population didn't have cut from drug ampoules, 2.1% of the study participants didn't want to describe their idea of cuts about drug ampoules. The same description was true about surgical blade cuts. This result is deferent from the research done in Nigeria which revealed 50% of the participants have got drug ampoules cut.

Regarding to back pain majority of the study population 60.9% have got back pain and this is similar to the study done in Nigeria which was 88.5%.According to the study done in Addis Ababa 34.6% of the participants didn't feel back pain during their clinical practice while 1.2% of the study participants have got back pain all the time, 3.3% of the study population didn't respond to this specific question. Concerning the cause of back pain the majority of the study population 43.8% stated that lifting patient was the cause of their back pain, 15.6% of the study participants cause of back pain was too much work, while 5.2% of the study participants cause of back pain was lifting bed, 3.8% of the study participants cause of back pain was lifting machine, while 2.6% of the participants were felt back pain due to observing patients and 0.6% of them felt back pain because of tepid sponging of patients while 23.2% of study population were not felt back pain at all.

Regarding to the biological factors of occupational hazards in this study, the majority of the study Participants 93.1% of them stated that they have got needle prick, blood splash, and skin cuts during their clinical practice, 4% of the study participants didn't have

needle prick, blood splash and skin cuts and 2.6% of study participants fairly got needle prick, blood splash and skin cuts, 0.2% of the participants didn't explain their opinion of needle prick, blood splash and skin cuts.

The participants were asked if they have got sick during their clinical practice and 37.7% of the study population became sick during their clinical practice, 60.9% of the study participants did not become sick during their clinical practice and 1.4% of the study

This study confirms that the population did not eager to respond. diagnosis of the study population, 1.9% of them diagnosed as TB, 3.1% of the study participants diagnosed as Typhoid, 0.2% of them diagnosed as HIV/AIDS, 14.9% of study population were diagnosed as Hepatitis and 15.6% were diagnosed as other diseases not mentioned in the questionnaire while majority of the study population 271(64.20%) were not diagnosed because they didn't become sick during their clinical practice. This is different from research done in Nigeria because students were admitted there to hospital due to back pain according to Ofili's and S. Soybean's findings.

Chapter VII: Conclusion and Recommendation.

As stated previously in the introduction of this study the development of any nation depends on how the students (young) people are educated, trained and act in the desired mode of discipline is necessary every where if planned objectives are to be achieved

This study indicates that the mechanical factors of occupational hazards stood first among the four factors. The study confirms that the Nurse and Midwifery students are at risk of occupational hazards due to needle pricks, scalpel cut injury, drug ampoule cuts, surgical blade cuts, which expose students to blood born infections. Back pain was also another mechanical factor which causes occupational hazards due to lifting of patients and other hospital materials such as bed and machine and the like.

According to this study's result the psychosocial factor or stress was pointed out as the second occupational hazards. Fear of occupational hazards, worrying due to death of patients in clinical practice area Health Institutions, thinking to leave the Nursing and Midwifery Schools due to fear of catching communicable diseases during clinical practice, fear of giving nursing care to patients with communicable or life threatening diseases and taking drugs with out prescription were the causes of the students stress.

The study confirms that the physical factor was the third cause of occupational hazards. Shortage of materials, fall in clinical area due to slippery floors, electrical accidents; loud noise and poor lighting were identified as the third factor of occupational hazards.

According to this study's result biological factors such as blood splash, communicable disease such as TB, Hepatitis and HIV/AIDS infections were pointed out as the fourth factors of occupational hazards.

Recommendations

After assessing the factors, which cause the occupational hazards, the researcher believes that most of the occupational hazard problems are manageable with the co-operative effort of the Nursing and Midwifery Schools as well as clinical area health institutions and students. Thus, it is suggested that the following recommendations are to be considered as a prevention and treatment of the occupational hazards problem in clinical practice.

1. The study confirms that there are occupational hazards risk among Nurses and Midwifery students because the study confirms that there is fear of giving nursing care so that nursing care was not given as it would have been given.

Shortage of materials in health institutions where students will be assigned for the clinical area practice should be fulfilled. The Nursing and Midwifery School students should strictly follow the universal precautions.

2. To prevent the occupational hazard risks problem and increase the quality of nursing education and nursing service and to graduate healthy and responsible Nurses and Midwives as well as to improve poor health condition of the students it is better to maintain counseling office in each nursing and Midwifery Schools.

3. In order to overcome the mechanical factors of occupational hazards students should be educated about the whole health related occupational hazards and its prevention.

4. To overcome the clinical practice occupational hazards as whole, The Nursing and Midwifery Schools as well as the clinical area practice Health Institutions should work hand in hand co-operatively.

5. This research can be base line for further study. Therefore, further and detail research is recommended.

If the above suggestions are practiced and fulfilled, the occupational hazard problems confirmed by this study, which now exist, will be easily solved. Each student may not be suffer from occupational hazards as it is today and a wonderful, acceptable and appreciated and very good clinical practicing situations will be maintained in the near future.

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Addis Ababa University, Faculty of Medicine, Centralized School Of Nursing

Annex-I. Information sheet.

Survey questionnaire prepared to collect data on the occupational hazards among Nurses and Midwife students in Addis Ababa Nursing and Midwife Schools, student's self-reporting questionnaire.

Dear Students:

Greetings; Good morning? / Good afternoon?

My Name is S/R/ Ato _____ I am here today to collect data on the assessment of the occupational hazards among nurses and midwife students in clinical practice in this School of Nursing.

The objectives of this questionnaire are to assess the occupational hazards among Nurses and Midwife students in clinical practice in Addis Ababa. The study is believed to be very helpful for nurse students, nursing schools, all health workers and as a whole for the Country and I hope you will answer the questions voluntarily. I would like to ask you few questions. Your correctly respond to the questions can make the study achieve its goals. The information I will collect will be recorded anonymously and your name will not be written on this questionnaire and will never be used in connection with any of the information you gave me. I assure you that this information is confidential and feel free.

Therefore, would you please take a few minutes to answer the questions; you are kindly requested to respond voluntarily with patience? Your participation in this study is Voluntarily-basis.

If you have question you are free to ask. Teferi Fite can be reached through a call at 0912074379.

Addis Ababa University Medical Faculty Institutional Review Board Can be addressed through a call 0115538734

E-maill aaumfirb @ yahoo.com

Are you willing to respond to the questionnaire? Put a tick (√) in the preference

Yes! Go to the next page

No, thank them and interrupt.

Supervisor's Name _____ Signature _____ Date _____

Annex II

Consent form

In signing this document, I am giving my consent to Participate in the study titled as:-
Assessment of occupational hazards among students of Nursing and midwifery in
clinical practice in Addis Ababa.

I have been informed that the purpose of this particular research is to assess the occupational hazards among students of Nursing and Midwifery in clinical practice in Addis Ababa. I understood that I am selected randomly to participate in this study from this Nursing & Midwifery School.

I have been informed that the participation in this study is entirely voluntarily, I have been told that my answers to questions will not be given to any one else and no reports of this study ever identify me in any way. I have also been informed that my participation or non-participation or my refusal to answer questions will have no effect on my grades and me. I understood that participation in this study does not involve risks.

I understood that the study is helpful for student Nurses, Midwives, all Health workers, the Nursing and Midwifery Schools and as a whole for the country.

I understood that Teferi Fite is the contact person if I have questions about the study or about my rights as a study participant. Teferi Fite can be reached through a call at 0912074379.

Addis Ababa University Medical Faculty Institutional Review Board Can be addressed through a call 011 5 538734

E-mail aaumfirb@yahoo.com

Respondent's Signature_____

Date_____

Annex III

3. Questionnaires

3.1 Questions on Sociodemographic Data of Nurses and Midwife Students in Addis Ababa, Ethiopia.2009.

1. Name of the School/ College /University _____ Code No _____
2. Date _____
3. Time _____
4. Department /unit _____

No.	Questions	Coding criteria/or choice	Selected code
5.1	Age in years	18-23 years (1) _____ 24-29 years (2) _____ 30-35 years (3) _____ > 35 years (4) _____	
5.2	Sex	1. Male _____ 2. Female _____	
5.3	Area of clinical practice covered	1. Medical _____ 2. Surgical _____ 3. Ob-gyn _____ 4. Pediatrics _____ 5. All _____ 6. Others _____	
5.4	Students' academic year in the school	1. 2 nd year _____ 2. 3 rd year _____	
5.5	Marital status	1. Married _____ 2. Single _____ 3. Widowed _____ 4. Divorced _____ 5. Others _____	
5.6	Ethnicity	1. Amhara _____ 2. Tigre _____ 3. Oromo _____ 4. Others _____	
5.7	Religion	1. Orthodox _____ 2. Protestant _____ 3. Catholic _____ 4. Muslim _____ 5. Others _____	

3.2 Questions on knowledge about occupational hazards among Nurses and Midwife Students in Addis Ababa, Ethiopia.2009.

No	Questions	Coding criteria/ or choice	Selected code
6.1	What is your source of information about occupational hazards	1.Mass media_____ 2.Nursing School____ 3. Journal ____ 4. Books ____ 5.Others_____ 6. No information ____	
6.2.	Have you learned about occupational hazards in Nursing or Midwifery school?	1. Yes_____ 2. No ____	
6.3	Do you know needle prick blood flush, skin cuts can cause occupational hazards	1. Yes_____ 2. No_____ 3. Fairly ____	
6.4	Do you know mechanical injuries, chemicals; biological factors can cause occupational hazards?	1. Yes_____ 2. No_____ 3. Fairly____	
6.5	Knowledge of occupational hazards as a whole as measured by the score of the students.	1. Poor_____ 2.Fair ____ 3.Good ____ 4.No knowledge ____	

3.3 Questions on stress among Nurses and Midwife Students in Addis Ababa, Ethiopia.2009.

No.	Question	Coding criteria/ or choice	Selected code
7.1	Are you fearful in giving care to any patient due to occupational hazards?	1. Yes _____ 2. No _____ 3. No response _____	
7.2	Is death of patients worrying you?	1. Yes _____ 2. No _____ 3. No response _____	
7.3	Have you ever intended to leave Nursing Midwifery school due to fear of catching disease during clinical practice?	1. Yes _____ 2. No _____ 3..No response _____	
7.4	Is giving care to patients with communicable and life threatening disease affect your life style?	1. Yes _____ 2. No _____ 3. No response _____	
7.5	Do you worry more in your clinical practice than when you are in class room for lecture?	1. Yes _____ 2. No _____ 3. No difference _____ 4.The opposite is true _____	
7.6	Do you take drugs regularly without prescription	1. Yes _____ 2. No _____ 3. Sometimes _____	
7.7	If your answer to question No, 7.6 is yes, what drug did you take for what purpose?	1.Paracetamolforheadache ____ 2.Diazepam for sedation ____ 3. Antacid for gastritis ____ 4. Antibiotics for infection ____ 5. Sleeping pills for insomnia__ 6. Others specify _____	
7.8	Do you have fear to give care for HIV/AIDS, T.B, and Hepatitis patients?	1. Yes _____ 2. No _____ 3. Sometimes _____	

3.4 Questions on Physical factor of occupational hazards among Nurses and Midwives Students in Addis Ababa, Ethiopia.2009.

No	Category	Choice	Selected code
8.1	Is there shortage of material when giving care in health in-situation, you have been assigned for clinical practice?	1.Yes _____ 2.No _____ 3.Sometimes _____	
8.2	Did you face any fall/problem in your clinical practice due to slippery floors?	1.Yes _____ 2.No _____	
8.3	Did you come across electrical accident in clinical practice?	1.Yes _____ 2.No _____	
8.4	Have you faced any problem due to loud noise in clinical practice?	1.Yes _____ 2.No _____	
8.5	Can poor lightening cause any hazard during clinical practice?	1.Yes _____ 2.No _____	

3.5. Questions on mechanical factors of occupation hazards among Nurses and Midwives Students, in Addis Ababa, Ethiopia.2009.

No	Question	Choice	Selected code
9.1	How often did you have needle prick during your clinical practice?	1. Always _____ 2. Often _____ 3. Sometimes _____ 4. Occasionally _____ 5. Never _____	
9.2	What measure do you take if you accidentally have got a needle prick?	1. Report to the counselor _____ 2. Wash hand with soap & water____ 3. Use antiseptic solution ____ 4. No any measure taken _____	
9.3	Did you have scalpel cut during performing procedure in your clinical practice?	1. Yes _____ 2. No _____	
9.4	Did you have cut from drug ampoules during clinical practice?	1. Yes _____ 2. No _____	
9.5	Have you got back pain during your clinical practice?	1. Yes _____ 2. No _____ 3. All the time _____	
9.6	If your answer to question No9.6 is yes, what was the cause of your back pain?	1. Lifting patient _____ 2. Prolonged standing _____ 3. Lifting machine _____ 4. Lifting bed _____ 5. Wound dressing _____ 6. Too much work _____ 7. Observing patient _____ 8. Others _____	

3.6 Questions on Biological factors of occupational hazards among Nurse and Midwife students in Addis Ababa, Ethiopia.2009.

<u>No</u>	Questionnaire	Choice	Selected code
10.1	How many times did you have blood splashes during clinical practice?	1. Many times _____ 2. Sometimes _____ 3. Occasionally _____ 4. Not at all _____	
10.2	Did you become sick during your clinical practice?	1. Yes _____ 2. No _____	
10.3	If your answer to question No, 10.2, is yes, what was your diagnosis?	1. T.B. _____ 2. Typhoid _____ 3. AIDS _____ 4. Hepatitis _____ 5. Others, specify _____	

ቅጥያ 1:

አዲስ አበባ ዩኒቨርሲቲ [ሜዲካል](#) ፋኩልቲ አጠቃላይ ነርስ ት/ቤት

የመረጃ ወረቀት ፎርም

ውድ ተማሪዎች እንደምንደራችሁ እንደምንዋላችሁ

በአዲስ አበባ ዩኒቨርሲቲ [ሜዲካል](#) ፋኩልቲ አጠቃላይ ነርስ ት/ቤት በነርስ የማስተርስ ዲግሪ ተማሪ በጥናትና ምርምር እንድትሳተፉ ተጋብዛችኋል። እባክችሁ የሚከተሉትን እረፍት ነገሮች አንብባችሁ ያልገባችሁን ትጠይቁ ዘንድ እጠይቃችኋለሁ።

1. የጥናቱ ርዕስ በነርስና አዋላጅ ተማሪዎች ላይ የሚደርስ በሽታ/ አደጋ በሥራ ሙከራ ቦታዎች በአዲስ አበባ።
2. የጥናቱ ዓላማ በሥራ ሙከራ ወቅት በነርስና አዋላጅ ተማሪዎች ላይ በሥራ ሙከራ ምክንያት የሚደርስባቸውን በሽታ/ አደጋ መንስኤ ለመመርመር ወይም ለማጥናት ነው።
3. ጥናቱ ለነርስና አዋላጅ ተማሪዎች ለነርስና አዋላጅ ት/ቤቶች ለጠቅላላ ጤና ባለሙያዎች በሙሉ እና በአጠቃላይ ለሀገሪቱ እጅግ ጠቃሚ እንደሆነ ታምኖበታል። ስለዚህ ጥያቄውን በፈቃደኝነት እንደምትመልሱ ተስፋ አደርጋለሁ።ጥቂት ጥያቄዎችን ልጠይቃችሁ እወዳለሁ። የእናንተ ጥያቄውን በትክክል መመለስ ጥናቱ ግቡን እንዲመታ ያደርጋል። እኔ የምስበሰበው መረጃ ስም አይጻፍበትም። ስለዚህ በጥያቄ ወረቀቱ ላይ ስም አይጻፍም።

የሚሰበሰበው መረጃም በሚስጥር የሚጠበቅ መሆኑን አረጋግጥላችኋለሁ ።

ስለዚህ ነጻነት ይሰማችሁ።

እባክችሁ ጥቂት ጊዜ ወስዳችሁ ጥያቄውን ትመልሳላችሁ

በፈቃደኝነት ጥያቄውን ትመልሱ ዘንድ በትህትና እጠይቃለሁ። የእናንተ ተሳትፎ በፈቃደኝነት ላይ የተመሰረተ ነው ። ጥያቄ ከላችሁ መጠየቅ ትችላላችሁ።ተፈሪ ፊጤ 0912074379 በመደወል ይገኛል።አድስ አበባ ዩኒቨርሲቲ መድከል ፋኩልቲ እንስቲቱሽናል ሪቪው ቦርድ 0115538734 በመደወል ይገናል።በተጨማሪም E-mail aaumfirb @ yahoo.com ይገኛል።

ጥያቄውን ለመመለስ ፈቃደኛ ነህ/ ነሽ

1 አዎን:- ወደሚቀጥለው ገጽ ገልብጠህ/ሽ በትክክለኛው ምርጫሽ አቅጣጫ የራይት ምልክት ☉ ☒ ○ አድርግ/አድርገ።

2. አይደለም:- ወረቀቱን ገልብጠህ/ሽ ጠረጴዛ ላይ አድርገህ/ሽ ሌሎቹ ሞልተው እስኪጨርሱ ድረስ በትእግስት ቆይ/ ቆዩ

የተቆጣጣሪ ስም----- ፊርማ----- ቀን -----

ቅጥያ 2 የስምምነት ውል ቅጽ

ነርስና አዋላጅተማሪዎች ለተግባር ሥራ ሙከራ በየጤና ድርጅቶች በሚመደቡበት ወቅት በሥራ ምክንያት ስለሚደርስባቸው በሽታ / አደጋ ጥናት በአዲስ አበባ በሚል ርዕስ በሚደረገው ጥናት ለመሳተፍ ይህንን ፎርም በመፈረም መስማማትን አረጋግጣለሁ።

የዚህ ጥናት አላማ በነርስና በአዋላጅ ተማሪዎች በሥራ ሙከራ ጊዜ የሚደርስባቸውን በሽታ/ አደጋ ለማጥናት መሆኑ ተገልጿል። በዚህ ጥናት እንድሳተፍ ከዚህ ነርስ/ አዋላጅ ት/ቤት ለአጥኚው እንደመጣለት መመረጤን ተረድቼአለሁ ። ጥናቱ ፍጹም በፈቃደኝነት ላይ የተመሰረተ መሆኑ ተገልጿል ። ለጥናቱ የምስጢር መልሶቹ ለሌሎች ወይም ለማንም እንደማይሰጡ ተነግሮኛል የጥናቱም ውጤት እኔን እንደማያጋልጠኝ ተረድቼአለሁ። እንዲሁም የእኔ በጥናቱ መሳተፍ ወይም አለመሳተፍ ወይም መለስ ለመስጠት እምቢ ማለቴ በእኔ ወይም በውጤቶቹ ላይ ጎዳት እንደማያደርስ ተረድቼአለሁ።

በዚህ ጥናት መሳተፊ ጎዳት እንደማያስከትል ተረድቼአለሁ። ጥናቱም ለነርስና ለአዋላጅ ተማሪዎች ለጠቅላላ ባለሙያዎች በሙሉ ለነርስና አዋላጅ ት/ቤቶች በአጠቃላይ ለሀገሪቱ እንደሚጠቅም ተረድቼአለሁ ። እንደ ጥናቱ ተሳታፊ ስለጥናቱ ወይም ስለመብቴ ጥያቄ ቢኖረኝ ማግኘት ያለብኝ ተፈሪ ፊጤ መሆኑን አውቄአለሁ። ተፈሪ ፊጤ የሚገኘው በ0912074379 በመደወል መሆኑ ገብቶኛል።

የአድስ አበባ ዩኒቨርሲቲ መድከል ራኩልቲ እንስቲትዩሽናል ቦርድ በ01155734 ይገኛል።

E-mail aaumfirb@yahoo.com.

የተሳታፊው ፊርማ -----

ቀን -----

አመሰግናለሁ

ቅጥያ 2:1 የማሕበራዊና ሥነሕዝባዊ ጥያቄዎች ለነርስና አዋላጅ ተማሪዎች አዳስ አበባ : ኢትዮጵያ 2001 ዓ/ም

1. የኮሌጅ/ የዩኒቨርሲቲው ስም-----
2. ቀን----- 3. ጊዜ -----

ተ.ቁ	ጥያቄዎች	የመልስ መስፈርት/ምርጫ	የተመረጠው ኮድ
5 - 1	ዕድሜ	<ol style="list-style-type: none"> 1. ከ18-23----- 2. ከ24-29 ----- 3. ከ30-35 ----- 4. > -35 ----- 	
5 - 2	ጾታ	<ol style="list-style-type: none"> 1. ወንድ ----- 2. ሴት ----- 	
5 - 3	በተግባራዊ የሥራ መከራ ጊዜ የተሸፈነ/ የተደረሱ ቦታዎች	<ol style="list-style-type: none"> 1. የመደሃኒት ሕክምና ክፍል----- 2. የቀዶ ጥገና ሕክምና ክፍል---- 3. የማዋለጃ ክፍል----- 4. የሕጻናት ሕክምና ክፍል----- 5. ሌሎች ቦታዎች ይገለጹ----- 	
5 - 4	የተማሪዎች የት/ ደረጃ በት/ቤት	<ol style="list-style-type: none"> 1. ሁለተኛ ዓመት----- 2. ሶስተኛ ዓመት----- 	
5 - 5	የጋብቻ ሁኔታ	<ol style="list-style-type: none"> 1. አግብቻ አለሁ ----- 2. አላገባሁም----- 3. ባሌ/ሚስቴ ሞቶብኛል----- 4. ፈትቼአለሁ ----- 	
5 - 6	የዘር / የኅሣ ሁኔታ	<ol style="list-style-type: none"> 1. አማራ----- 2. ትግሬ ----- 3. ኦሮሞ----- 4. ሌሎች----- 	
5- 7	ሃይማኖት	<ol style="list-style-type: none"> 1. ኦርቶዶክስ----- 2. ኻሮቴስታንት ----- 3. ከቶሊክ----- 4. እስላም----- 5. ሌሎች----- 	

ቅጥያ 3: የነርስና የአዋላጅ ተማሪዎች በሥራ ምክንያት ስለሚያጠቁ በሽታዎች/ አደጋዎች ስለአላቸው እውቀት መጠይቅ አዲስ አበባ ኢትዮጵያ 2001ዓ/ም

ተ.ቁ	ጥያቄዎች	የመልስ መስፈርት /ምርጫ	የተመረጠው ኮድ
6-1	በሥራ ምክንያት ስለሚያጋጥሙ በሽታዎች/ አደጋዎች የሰማኸው/ የሰማሽው ከየት ነው?	1. ከነርስ/ ከአዋላጅ ት/ቤት----- 2. ከጆርናል----- 3. ከመጽሐፍት ----- 4. ከሌሎች----- 5. የሰማሁት ነገር የለም-----	
6-2	በሥራ ምክንያት ስለሚያጋጥሙ በሽታዎች /አደጋዎች በነርስ/ አዋላጅ ት/ቤት ተምረሃል?	1. አዎን----- 2. አልተማርኩም-----	
6-3	በሽተኞች: በተወጉበት መርፌ ጭረት: የደም መረጨት : በሽታ እንደሚያስከትሉ ታውቃለህ?/ ታውቁያለሽ?	1. አዎን----- 2. አላውቅም----- 3. በመጠኑ-----	
6-4	በመሣሪያ የመቆረጥ: የተቀመመ ፈላሽ: ተሕዋሳት በሥራ ላይ በሽታ/አደጋ ያስከትላሉ?	1. አዎን----- 2. አያስከትሉም----- 3. በመጠኑ-----	
6-5	በአጠቃላይ ተማሪዎች በሰጡት ውጤት አኳያ ሲመዘን :ስለ ሥራ ላይ ጎዳት: በሽታ /አደጋ መድረስ ያላቸው እውቀት	1. አነስተኛ ነው----- 2. መጠነኛ ነው ----- 3. ጥሩ ነው ----- 4. እውቀቱ የለም -----	

ቅጥያ 4: ለነርስ / ለአዋላጅ ተማሪዎች ስለጭንቀት የቀረበ ጥያቄ

አዲስ አበባ ኢትዮጵያ 2001 ዓ/ም

ተ.ቁ	ጥያቄዎች	የመልስ መስፈርት/ ምርጫ	የተመረጠ ኩድ
7-1	በሽታ ይይዘኛል ብለህ / ብለሽ በማሰብ ለበሽተኞች ክብካቤ ለመስጠት ትፈራለህ?	1. አዎን----- 2. አልፈራም----- 3. መልስ አልሰጥም-----	
7-2	የበሽተኞች ሞት ያስጨንቅሃል/ ያስጨነቅሻል?	1. አዎን----- 2. አያስጨንቅኝም----- 3. መልስ አልሰጥም-----	
7-3	በሥራ ሙከራ ጊዜ በሽታ ይይዘኛል ብለህ/ብለሽ የነርስ /የአዋላጅ ት/ቤት ለመልቀቅ አስቦህ/ አሰበሽ ታውቃለህ/ ታውቁያለሽ ?	1. አዎን----- 2. አይደለም----- 3. መልስ አልሰጥም-----	
7-4	ተላላፊ ወይም የዕድሜ ሙሉ በሽታ ላላቸው ሕመማን ክብካቤ መስጠት ሁኔታህን/ ሁኔታሽን ይጎዳል?	1. አዎን----- 2. አይደለም----- 3. መልስ አልሰጥም-----	
7-5	ከክፍል ትምህርት ክፍለ ጊዜ ይልቅ በሥራ /ተግባር ሙከራ ጊዜ ይበልጥ ይጨንቅሃል/ይጨነቅሻል?	1. አዎን----- 2. አይደለም----- 3. መልስ አልሰጥም-----	
7-6	ሳይታዘዝልህ/ሳይታዘዝልሽ በተከታታይ መድሐኒት ትወስዳለህ/ ትወስዳለሽ?	1. አዎን----- 2. አልወስድም----- 3. አንዳንድ ጊዜ-----	
7-7	መልስህ/መልስሽ ለጥያቄ ቁጥር 7.6 አዎን ከሆነ ምን መድሐኒት ለምን ጎዳይ ወሰድክ/ወሰድሽ?	1. ፖራሲታሞል ለራስ ምታት---- 2 .ዲያዘፖም ለመተኛት----- 3. አንቲ አሲድ ለጨንቆ----- 4. አንቲባዮትኪስ ለምራዜ----- 5.የእንቅልፍ መድሐኒት ለእንቅልፍ እጦት----- 6. ሌሎች ካለ ግለጽ-----	
7-8	ለኤድስ: ለሳምባና ለጎበት በሽተኞች ክካቤ መስጠት ተፈራለህ /ትፈራያለሽ?	1. አዎን----- 2. አልፈራም----- 3. አንዳንድ ጊዜ-----	

ቅጥያ 5: በሰውነት ላይ በሥራ ሙከራ ስለሚደረሱ በሽታዎች / አደጋዎች ለነርስ/ለአዋላጅ ተማሪዎች የቀረበ ጥያቄ አዲስ አበባ ኢትዮጵያ 2001 ዓ/ም

ተ.ቁ	ጥያቄዎች	የመልስ መሰፈርት/ምርጫ	የተመረጠው ኮድ
8-1	ለሙያው መከራ በተመደብክበት /በተመደብሽበት የጤና ድርጅት ለበሽተኛ ክብካቤ ለበስጠት የዕቃዎች እጥረት አለ?	1. አዎን----- 2. የለም----- 3. አንዳንድ ጊዜ-----	
8-2	በተግባር ሙከራ ጊዜ ወለሉ ከማዳለጡ የተነሳ ወድቀህ /ወድቀሽ ታውቃለህ/ ታውቁያለሽ?	1. አዎን----- 2. አይደለም-----	
8-3	በተግባር ሙከራ ጊዜ የኤሌክትሪክ አደጋ ደርሶብህ/ ደርሶብሽ ያውቃል?	1. አዎን----- 2. አይደለም-----	
8-4	በተግባር ሙከራ ጊዜ በጤና ድርጅቱ ውስጥ በከፍተኛ ድምጽ ምክንያት ጎዳት ደርሶብህ/ደርሶብሽ ያውቃል?	1. አዎን----- 2. አይደለም-----	
8-5	በመብራት ችግር ምክንያት በተግባር ሙከራ ጊዜ ጎዳት ደርሶብህ/ደርሶብሽ ያውቃል ::	1. አዎን----- 2. አይደለም-----	

ቅጥያ 6: በመሳሪያ በመቆረጥ ምክንያት በነርስ/ በአዋጅ ተማሪዎች ላይ በተግባር የሥራ ሙከራ ጊዜ የሚደርሱ ጎዳቶች ጥያቄ አዲስ አበባ ኢትዮጵያ 2001 ዓ/ም

ተ.ቁ	ጥያቄዎች	የመልስ መስፈርት /ምርጫ	የተመረጠ ኩድ
9.1	በተግባር የሥራ ሙከራ ጊዜ ምን ያህል በመርፊ ተጭረሃል/ተጭረሻል?	1. ሁልጊዜ----- 2. እምብዛም----- 3. አንዳንድ ጊዜ----- 4. አልፎ አልፎ----- 5. ጨርሶ አልተጫርኩም-----	
9-2	ድንገት በመርፊ ብትጫሪ/ ብትጫር ምን እርምጃ ትወስዳለህ? /ትወስጃለሽ?	1. ለአማካሪ እናገራለሁ ----- 2. እጄን በውሃና በሳሙና እታጠባለሁ ----- 3. ፀረ ተሕዋስ እጠቀማለሁ -- 4. ምንም እርምጃ አልወስድም-	
9-3	የተግባር የሥራ ሙከራ ሥራ ስትሰራ /ስትሰራ በቀዶ ጥገና ምላጭ ተቆርጠህ/ ተቆርጠሽ ታውቃለህ? ታውቂያለሽ ?	1. አዎን----- 2. አይደለም-----	
9.4	በተግባር የሥራ ሙከራ ጊዜ በመድሐኒት ብልቃጥ ሰባሪ ተቆርጠህ/ ተቆርጠሽ ታውቃለህ/ታውቂያለሽ	1. አዎን----- 2. አይደለም-----	
9-5	በተግባር የሥራ ሙከራ ጊዜ የጀርባ ሕመምተስምቶህ/ተስምቶሽ ያውቃል?	1. አዎን----- 2. አይደለም----- 3. ሁልጊዜ-----	
9-6	ጥያቄ ቁጥር 9-5 ፣መልስሽ / መልስህ አዎን ከሆነ የጀርባ ሕመሙ መንስኤ ምንድነው?	1. በሽተኛ ማንሳት----- 2. ብዙ ጊዜ መቆም----- 3. መሣሪያዎችን ማንሳት----- 4. አልጋ ማንሳት----- 5. ቁስል ማከም----- 6. የሥራ ብዛት----- 7. በሽተኞችን ማየት----- 8. በሽተኞችን ማጠብ-----	

ቅጥያ 7 : በተሕዋስ ምክንያት በሥራ ሙከራ ቦታ በነርስና አዋላጅ ተማሪዎች ላይ ስለሚከሰቱ በሽታዎች/ አደጋዎች መጠየቅ : አዲስ አበባ ኢትዮጵያ 2001

ተ.ቁ	ጥያቄዎች	የመልስ መስፈርት/ምርጫ	የተመረጠው ኩድ
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10-1	በተግባር የሥራ ሙከራ ወቅት ስንት ጊዜ በደም ተረጨህ/ ተረጨሽ	1. ብዙ ጊዜ----- 2. ጥቂት ጊዜ----- 3. አልፎ አልፎ ----- 4. ምንም አልተረጨሁም-----	
10-2	በሥራ ሙከራ ወቅት ታመህ/ ታመሽ ታውቂያለሽ?	1.አዎን----- 2.አልታመምኩም -----	
10-3	የጥያቄ ቁጥር 10.2: መልስህ/ መልስሽ አዎን ከሆነ በሽታህ/ በሽታሽ ምን ነበር?	1. የሳምባ ነቀርሳ----- 2. ተስቦ----- 3. ኤይድስ----- 4. ሌሎች ግልጽ/ ግለጫ-- -----	

