



Preventive Practices of Nosocomial Infections among Health Workers in Two Selected Tertiary Hospitals in Ogun State, Nigeria

Maitanmi J.O¹., Anise I²., Maitanmi O. T³., Okwuikpo, M. I⁴., Leslie T.A¹.

¹Department of Community/Public Health Nursing, School of Nursing, Babcock University, Ilishan-Remo, Ogun State, Nigeria maitanmij@babcock.edu.ng

²School of Nursing, Babcock University, Ilishan-Remo, Ogun State, Nigeria, aniseife@yahoo.com

³Department of Psychiatric/Mental Health Nursing, School of Nursing, Babcock University, Ilishan-Remo, Ogun State, Nigeria, maitanmib@babcock.edu.ng,

⁴Department of Maternal and Child Health, School of Nursing, Babcock University, Ilishan-Remo, Ogun State, Nigeria, okwuikpom@babcock.edu.ng,

**Corresponding Author:* Maitanmi Julius Olatade

Corresponding Email: maitanmij@babcock.edu.ng

Abstract: Hospital-acquired infection (HAI) is one of the common challenges faced by hospitals in all countries globally. In Nigeria, many lives are lost because of the spread of nosocomial infections in hospitals. Health workers are not only expected to be knowledgeable about HAI but are also to practice prevention against the spread of HAI. **Aim:** This study assessed the level of knowledge, preventive practices against nosocomial infection and the factors affecting the practices against nosocomial infection among health workers in two selected tertiary hospitals in Ogun State. **Method:** A descriptive survey was done using proportionate and convenient sampling techniques to recruit respondents for this study. A self-structured validated questionnaire with a reliability coefficient of 0.86 was used for the data collection. Data retrieved were analyzed using descriptive and inferential statistics with the use of Statistical Package for the Social Scientist (SPSS) version 21. **Results:** Findings revealed that 94.1% of the respondents had high knowledge about nosocomial infection, 95.9% had high knowledge of preventive practices against nosocomial infection. Factors that affect preventive practices were workload, lack of equipment and distance to preventive equipment. **Conclusion:** The study concluded that the health workers in the selected tertiary hospitals had a high level of knowledge about HAI and practice though the practices were affected by some factors.

Keywords: *Health Workers, Knowledge, Nosocomial Infections*

Introduction

Hospital-acquired infection (HAI) is one of the common problems and difficulties faced by hospitals in all countries around the world. The fact that health is wealth does not exclude health workers even though they are professionally shouldered with the responsibilities of providing health care to the people. Adequate knowledge of health-care-associated infections and some measures to

curb the festering of such ailments among health workers will surely bring to the fore the professional acumen and improve the efficacy of health administration and better the lots of the society (Reinhart, Daniels, Kissoon, Machado, Schachter, & Finfer, (2017).

Nosocomial infections are a major public health problem globally and are on the increase despite efforts in hospital infection

control measures and contribute significantly to morbidity and mortality (Mbim *et al.*, 2016). Hospital-acquired infections are also known as nosocomial infections (Khan, Ahmad, & Mehboob, 2015). According to World Health Organization (2010), Hospital-acquired infection is defined as an infection occurring in a patient during the process of care within a health care facility that was not present or incubating at the time of admission. These infections are those acquired after 48 hours of patient's admission (Alrubaiee *et al.*, 2017). Invasive devices such as catheters and ventilators employed in modern health care are associated with these infections (Centers for Disease Control and Prevention, 2016). Risk factors include lack of proper health care facilities such as isolation units, sinks and bed space; inappropriate waste management, contaminated equipment, inappropriate use of antibiotics and transmission of infection from the hands of healthcare workers and family caretakers due to inadequate hand hygiene practice (Shahida *et al.*, 2016).

According to Khan *et al.* (2015), organisms that are frequently involved in hospital-acquired infections include *Streptococcus* spp., *Acinetobacter* spp., enterococci, *Pseudomonas Aeruginosa*, Coagulase-negative staphylococci, *Staphylococcus aureus*, *Bacillus cereus*, *Legionella* and *Enterobacteria* family members. These micro-organisms can be transferred from person to person, environment and contaminated water and food, infected individuals, contaminated health care personnel's skin or contact via shared items and surfaces.

In hospitals, health workers are responsible for and perform procedures like medication administration, wound dressing, sterilization and disinfection. They are more involved in more contact with patients than other health care workers. Therefore, they are more exposed to various nosocomial infections (Shinde & Mohite, 2014). Hence, nurses play a vital role in transmitting nosocomial infections, and their compliance with infection control measures seems to be necessary for

preventing and controlling nosocomial infections (Sarani *et al.*, 2015). Accordingly, the nurses and other health care workers should be aware of how to prevent transmission of nosocomial infections and be knowledgeable of its potential risk to patients, family members and the community at large (Chan-Yeung, 2004).

Inadequate knowledge and poor infection prevention and control practices among health workers increase the rates of hospital-acquired infections (Shahida, Islam, Dey, Islam, Venkatesh, & Goodman (2016). In clinical practice, the researchers observed cases where health workers handle contaminated linen with bare hands, put needles in the patient's mattress after giving injections, do not clean the stethoscope after each patient contact and do not wash hands regularly in the clinical environment.

Hand hygiene is the single most important intervention to prevent transmission of infection and should be a quality standard in all health institutions. In a study that was conducted in India where Nair *et al.* (2014) assessed knowledge, attitude and practices of hand hygiene among medical and nursing students at a tertiary health care centre, the majority of the respondents had a poor knowledge with regard to hand hygiene. This means that the students were not well informed about the importance of hand hygiene and this negatively affected their attitude and practices of hand hygiene. Poor hand hygiene practices among health workers have been found to increase the risk of spreading nosocomial infections (Beggs, Noakes, Shepherd, Kerr, Sleight, & Banfield, 2006).

Health care-associated infections have long been recognized as crucial factors bedevilling the quality and outcomes of health care delivery. Developing countries have reported to have up to 20 times the risk of contracting a nosocomial infection compared with developed countries (World Health Organization [WHO], 2012). Thus, the spread

of infection serves as a major source of worry for health care practice, particularly in developing countries where the health care system is already overstretched. Therefore, this study assessed the knowledge and preventive practices of nosocomial infection among health workers in two selected tertiary hospitals in Ogun State.

Research Questions

1. What is the level of knowledge of health workers about nosocomial infection in two selected tertiary hospitals in Ogun state?
2. What is the level of preventive practices against nosocomial infection among health workers in two selected tertiary hospitals in Ogun state?
3. What are the factors affecting the preventive practices of nosocomial infections in two selected tertiary hospitals in Ogun State?

Hypothesis

H₀₁: There is no significant relationship between the knowledge of health workers and their preventive practices against nosocomial infection.

Methods and Materials

Research Design

A descriptive survey design was used in determining the knowledge, preventive practices and factors affecting the preventive practices of nosocomial infections among health workers in two selected tertiary hospitals in Ogun state.

The population of the Study

The population of the study comprised of health workers working at Babcock University Teaching Hospital, Ilishan-Remo and Olabisi Onabanjo University Teaching Hospital, Sagamu. Babcock University Teaching hospital comprises 360 health workers (208 Nurses, 87 Midwives, 136 Doctors and 16 Medical Laboratory Scientists). Olabisi Onabanjo University Teaching Hospital comprises 477 health

workers (255 Nurses or Midwives, 203 Medical doctors and 19 Medical Laboratory Scientists). The total population as at the time of conducting this study was 837 health workers.

Sample Size

The sample size was calculated using the Taro-Yamane formula:

$$n = \frac{N}{[1+N(e)^2]}$$

Where, n= sample size

N= estimated target population (N= 837)

e= sampling error (0.05 acceptable error) at 95% confidence level

$$\begin{aligned} \text{Therefore, } n &= \frac{837}{[1+837(0.05)^2]} \\ n &= \frac{837}{1+837(0.0025)} \\ n &= \frac{837}{1+2.0925} \\ n &= \frac{837}{3.0925} \\ n &= 271 \end{aligned}$$

Therefore, 271 health workers were recruited for the study.

Sampling Technique

Proportionate and convenient sampling techniques were adopted in the recruitment of the respondents.

• **Proportionate Sampling Technique**

- a) Number of health workers in BUTH

$$\begin{aligned} & \frac{\text{Number of health workers in BUTH}}{\text{Total number in the two settings}} \times \text{Sample size} \\ & = \frac{360}{837} \times 271 \\ & = 0.43 \times 271 \\ & = 117 \end{aligned}$$

Therefore, 117 health workers were recruited from BUTH.

- b) Number of health workers in OOUTH

$$\begin{aligned} & \frac{\text{Number of health workers in OOUTH}}{\text{Total number in the two settings}} \times \text{Sample size} \\ & = \frac{477}{837} \times 271 \end{aligned}$$

$$= 0.57 \times 271$$

$$= 154$$

Therefore, 154 health workers were recruited from OOUTH

- A convenient sampling technique was then used in recruiting the respondents from each of the settings.

The instrument for Data Collection

The researcher utilized a self-structured questionnaire with closed-ended questions to collect data on the knowledge and preventive practices of nosocomial infection among health workers in the study centres.

The scoring of the items on the questionnaire was done as follows:

For the level of knowledge (measured on a 20-point reference scale)

- Low level of knowledge: 0-6 (0-30%)
- Moderate level of knowledge: $6 \leq 14$ (>30-70%)
- High level of knowledge: $14 < 20$ (>70%-100%)

For the preventive practices which were measured on a 50-point reference scale:

- Low level of practice: 0-15 (0-30%)
- Moderate level of practice: $15 \leq 35$ (>30-70%)
- High level of practice: $35 < 50$ (>70%-100%)

Results

Table 1: Socio-demographic Characteristics

Items	Frequency (n)	Percentage (%)	
Age	20 -29 years	45	16.6
	30 – 39 years	106	39.1
	40 -49 years	85	31.4
	50 years and above	35	12.9
	Total	271	100.0
Gender	Male	84	31.0
	Female	187	69.0
	Total	271	100.0
Professional Area	Registered Nurse/Midwife	193	71.2
	Medical Doctor	50	18.5
	Medical Lab. Scientist	28	10.3
	Total	271	100.0
Years of Practice	Less than 5 years	105	38.7
	5 – 10 years	104	38.4
	11 – 15 years	28	10.4
	16 – 20 years	18	6.6

Face and content validity of the instrument was ensured by the researchers, experts in the field of health, and other experts in tests and measurement.

The internal consistency method was used in ascertaining the reliability of the instrument. Cronbach’s alpha coefficient of 0.86 was achieved, hence the instrument was considered reliable.

Ethical Consideration

Ethical approvals were sought from the Ethical Committees of the two study centres. The purpose and contents of the questionnaire were explained to the participants. This was done in order to gain maximum cooperation in obtaining correct and unbiased information. The researchers waited for the participants to fill the questionnaire and then it was retrieved immediately. Respondents were told that the responses would only be used for research purposes and that they were free to pull out at any phase of the research.

Method of Data Analysis

The copies of the questionnaire were sorted, arranged and coded for analysis. All statistical analyses were done with Statistical Package for the Social Sciences (SPSS) software version 21. Descriptive and inferential statistics were used for the data presented.

	Above 20 years	16	5.9
	Total	271	100.0
Employment Status	Full time	229	84.5
	Contract	42	15.5
	Total	271	100.0

Table 1 shows the demographic features of the respondents in the study. The analysis revealed that 106 (39.1%) which is the majority of the respondents were between 30 – 39 years. The majority 187(69.0%) of the respondents were female. The profile of the professional area or disciplines of the

respondents were 193 (71.2%) registered nurse/midwives, 50(18.5%) medical doctors and 28(10.3%) medical laboratory scientists. On the length of years of practice, 105(38.7%) indicated that they have been practising for less than 5 years while 229(84.5%) of the respondents worked full time.

Table 2: Knowledge about Nosocomial Infections (N=271)

Items	True	False	I don't know	Mean	STD	Remark
Nosocomial infection is an infection gotten from the hospital during admission of the patient.	257 (94.8%)	11 (4.1%)	3 (1.1%)	1.95	0.222	Low knowledge: Nil
Nosocomial infection is also known as hospital acquired infection.	264 (97.4%)	4 (1.5%)	3 (1.1%)	1.97	0.159	
Organisms that causes nosocomial infection include Streptococcus spp., Staphylococci and Acinetobacter spp.	249 (91.9%)	10 (3.7%)	12 (4.4%)	1.92	0.274	Moderate knowledge = 16(5.9%)
Prolonged hospital stay increases the risk of nosocomial infection.	254 (93.7%)	9 (3.3%)	8 (3.0%)	1.94	0.243	High knowledge = 255 (94.1%)
Nosocomial infection can be transmitted by medical equipment such as syringes, needles, catheters, stethoscopes, thermometers etc.	255 (94.1%)	4 (1.5%)	12 (4.4%)	1.94	0.236	
Standard Precautions are taken to prevent Nosocomial infections.	256 (94.5%)	10 (3.7%)	5 (1.8%)	1.94	0.229	
Standard precautions apply to all patients regardless of their diagnosis.	257 (94.8%)	8 (3.0%)	6 (2.2%)	1.95	0.222	Knowledge mean Score = 19.833
All health workers and patients are considered potentially infectious.	238 (87.8%)	24 (8.9%)	9 (3.3%)	1.88	0.328	
Micro-organisms are destroyed by using only clean water.	62 (22.9%)	196 (72.3%)	13 (4.8%)	1.72	0.448	Standard deviation = 1.157
Nosocomial infections are curable.	244 (90.0%)	13 (4.8%)	14 (5.2%)	1.90	0.300	

Table 2 shows the knowledge of respondents about Nosocomial Infection. From the table, when asked whether Nosocomial infection is an infection gotten from the hospital during admission of the patient, 257(94.8%) indicated true. On average, the respondents indicated true that Nosocomial infection is an infection gotten from the hospital during admission of the patient (Mean = 1.95, STD =

0.222). Furthermore, 264(97.4%) indicated true to the statement that Nosocomial infection is also known as hospital-acquired infection. On average, the respondents indicated true that Nosocomial infection is also known as hospital-acquired infection (Mean = 1.97, STD = 0.159).

For the summary of the analysis on knowledge of respondents about nosocomial infection, the majority, (94.1%) had high knowledge about nosocomial infection. The

overall level of knowledge about nosocomial infection was high with a mean score of 19.83 out of a 20-point reference scale.

Table 3: Preventive Practices against Nosocomial Infection (N=271)

Items	Always	Often	Some Times	Rarely	Never	Mean (STD)	Remark
I do not wash hands if I used gloves.	33 12.2%	19 7.0%	49 18.1%	55 20.3%	115 42.4%	3.74 (1.386)	<i>Low preventive practice: Nil</i>
I wash hands before and after direct contact with the patients.	270 99.6%	1 0.4%	0 0.0%	0 0.0%	0 0.0%	5.00 (0.061)	
I put on a mask and glasses when performing invasive and body fluid procedures.	179 66.1%	43 15.9%	35 12.9%	11 4.1%	3 1.1%	4.42 (0.939)	<i>Moderate preventive practice = 20(7.4%)</i>
I wear personal protective equipment when handling linen.	164 60.5%	53 19.6%	28 10.3%	22 8.1%	4 1.5%	4.30 (1.041)	<i>High preventive practice =251 (92.6%)</i>
I shake linen out to release dust from the linen.	52 19.2%	19 7.0%	29 10.7%	31 11.4%	140 51.7%	3.69 (1.596)	<i>Preventive Practice Mean Score = 44.21</i>
I recap needles after use and before disposal.	47 17.3%	12 4.4%	24 8.9%	30 11.1%	158 58.3%	3.89 (1.551)	
I follow aseptic techniques strictly.	192 70.8%	49 18.1%	23 8.5%	5 1.8%	2 0.7%	4.56 (0.786)	<i>Standard deviation = 4.69</i>
I isolate patients with communicable diseases in separate rooms to prevent cross contamination	270 99.6%	1 0.4%	0 0.0%	0 0.0%	0 0.0%	5.00 (0.061)	
I use the same needle and syringe for at least two patients before disposing.	0 0.0%	0 0.0%	0 0.0%	0 0.0%	271 100.0	5.00 (0.000)	
I follow the World’s Health Organization’s ‘5’ moments of hand hygiene.	205 75.6%	37 13.7%	22 8.1%	7 2.6%	0 0.0%	4.62 (0.744)	

Table 3 shows the preventive practices against nosocomial infections among the respondent. It was observed that when the respondents were asked how often they wash hands if they used gloves, 33(12.2%) indicated that they always do not wash hands if they used gloves, 19(7.0%) indicated often, 49(18.1%) sometimes, 55(20.3%) rarely and 115(42.4%)

indicated that they never wash hands if they used gloves.

The majority (92.6%) had high preventive practices against nosocomial infection. The mean score of preventive practices against nosocomial infection was 44.21 out of a 50-point reference scale.

Table 4: Factors Affecting the Preventive Practices against Nosocomial Infection

Items	True N (%)	False N (%)	I Don't know N (%)	Mean	STD
The workload affects my ability to apply infection prevention guidelines.	107 (39.5%)	158 (58.3%)	6 (2.2%)	1.63	0.528
Lack of supervision from the infection control department makes it difficult to follow the procedure guidelines of infection prevention and control in the hospital.	43 (15.9%)	225 (83.0%)	3 (1.1%)	1.85	0.385
My cultural belief makes it difficult for me to follow some infection control procedures.	19 (7.0%)	248 (91.5%)	4 (1.5%)	1.94	0.287
Lack of in-service training or workshop by the hospital makes me ignore the standard precautions in the hospital.	57 (21.1%)	209 (77.1%)	5 (1.8%)	1.81	0.439
Hospital equipment are not readily available to practice infection prevention and control.	126 (46.4%)	137 (50.6%)	8 (3.0%)	1.56	0.553
Language serves as a barrier for effective prevention of nosocomial infection in the hospital.	61 (22.5%)	200 (73.8%)	10 (3.7%)	1.81	0.477
The part-time health workers in the hospital serves as a barrier to infection prevention.	33 (12.2%)	224 (82.7%)	14 (5.1%)	1.93	0.411
The distance from the necessary facilities influences infection prevention practices in the hospital.	100 (36.9%)	168 (62.0%)	3 (1.1%)	1.64	0.503
Insufficient support from the management in creating a facilitating work environment is a barrier to infection prevention.	101 (37.3%)	165 (60.9%)	5 (1.8%)	1.65	0.516
Adequate knowledge of nosocomial infection and chain of infection promotes my infection preventive practices.	259 (95.6%)	8 (3.0%)	4 (1.5%)	1.06	0.292

Table 4 shows the factors affecting the preventive practices against nosocomial infection. From the table when asked whether workload affects their ability to apply infection prevention guidelines, 107(39.5%) indicated true. The majority, 259(95.6%) of the respondents indicated true to the statement that adequate knowledge of nosocomial infection and chain of infection promotes infection preventive practices. Insufficient support from the management in creating a facilitating work environment is a barrier to infection prevention as indicated by 37.3% of

the respondents. Almost half (46.4%) of the respondents claimed that hospital equipment is not readily available to practice infection prevention and control.

Hypotheses Testing

Hypothesis One

H₀₁: *There is no significant relationship between the knowledge of health workers and their preventive practices against nosocomial infection.*

Table 5: Relationship between knowledge of Health Workers and their Preventive Practices against Nosocomial Infection

Knowledge of Health Workers	Preventive Practices against Nosocomial Infection				Test Result
	Low	Moderate	High	Total	
Low	0	0	0	0	<i>P = 0.000</i>
Moderate	0	11	0	11	
High	0	9	251	260	
Total	0	20	251	271	

The result showed a value of $p = 0.000$ based on the value of $p < 0.05$ that showed that the estimate between the two variables is

statistically significant, we reject the null hypothesis. We then declare that there is a significant relationship between the

knowledge of health workers and their preventive practices against nosocomial infection. That is, knowledge of health workers on preventive practices against nosocomial infection played a role in the preventive practices against nosocomial infection.

Discussion of the Findings

The majority of the respondents were between 30-39 years and are mostly female Nurses. This might be because Nurses make up the highest percentage of the health care workforce. Most of the respondents were full-time workers with 1-10 years experience.

Research Question 1: *What is the level of knowledge of health workers about nosocomial infection in two selected tertiary hospitals in Ogun state?*

The result of this study on the level of knowledge about nosocomial infection was high. The result agrees with earlier studies on nosocomial infection among health workers. Specifically, the findings correlate with the findings of Arinze-Onyia, Ndu, Aguwa, Modebe and Nwamoh (2018), who researched knowledge and practice of standard precautions by healthcare workers in tertiary health institution in Enugu, Nigeria. The findings of Arinze-Onyia, Ndu, Aguwa, Modebe and Nwamoh (2018), showed that the health care workers had high knowledge of the concept. Similarly, the result from this study correlates with the findings of Melaku, Temesgen, Nega, Nibretie, Muluken and Muluaem (2018), conducted among healthcare workers in Debre Markos referral hospital, Northwest Ethiopia. The findings from their study showed that more than two-thirds of healthcare workers were found to be knowledgeable. The finding of this study revealed a good knowledge of infection prevention in the majority of participants. Furthermore, the research conducted by Samaila, Istifanus, Danjuma, Mohammed, Omoniyi and Yusuf (2015) on the knowledge of healthcare workers on nosocomial infection in selected secondary health institutions in Zaria, Nigeria showed a somewhat diverse

outcome from our findings. In their study of 160 respondents, the result showed that only a moderate number of the respondents were aware of nosocomial infection, compared to this study. The findings (high level of knowledge) from this study may be connected with the location of the hospitals and complexity of the hospital (Teaching hospitals located in Ogun state which shares a border with Lagos state).

Research question 2: *What is the level of preventive practices against nosocomial infection among health workers in two selected tertiary hospitals in Ogun state?*

The level of practice of preventive practices against nosocomial infection among health workers in two selected tertiary hospitals in Ogun state was high. The findings from this study is not in tandem with the result from Alrubaiee, Baharom, Shahar, Daud and Basaleem (2017) who found out that majority of the nurses had fair practices about nosocomial infections. Furthermore, the study by Adjugah and Ordinioha (2018) showed that the practice of the infection control measures was poor among 92.5% of the respondents. The high level of practice in these settings could be linked to the high knowledge level though there is still room for improvement in both the knowledge and practice levels. This implies that efforts are still needed to sustain the knowledge level and the practice to help reduce the incidence of hospital-acquired infections since there are still cases of infections in the settings. More so, Sahiledengle, Gebresilassie, Getahun and Hiko (2018) and Iliyasu, Dayyab, Zaiyad, Tiamiyu, Abubakar, Mijinyawa and Habib (2016), carried out research on infection prevention practices and associated factors among healthcare workers in Governmental healthcare facilities in Addis Ababa, the results showed that a two-third of the healthcare workers had good infection prevention practices. Their findings is in tandem with the findings from this study. Both studies suggest that having good knowledge of infection prevention measures

is a predictor of good infection prevention practices.

Research question 3: *What are the factors affecting the preventive practices of nosocomial infections in two selected tertiary hospitals in Ogun State?*

On the factors affecting the preventive practices, workload (39.5%), insufficient support from the management in creating a facilitating work environment (37.3%), unavailability of hospital equipment to practice infection prevention and control, knowledge about nosocomial infection (95.6%) were the factors found out to be majorly affecting the preventive practices in the study centre. This finding is somewhat related to the findings of Haile, Engeda and Abdo (2017) and Travers *et al.* (2015) who found out that perceived barriers to effective infection control, language or culture, lack of knowledge, understanding or training among healthcare workers on standard precautions, part-time staff, shortage of time to implement the precautions and work overload were key themes that affect the preventive practices of nosocomial infections. Haile, Engeda and Abdo (2017) also reported factors that affect compliance with standard precautions to infection prevention to include limited resources, uncomfortable equipment, skin irritation, forgetfulness, distance from the necessary facilities and insufficient support from management in creating a facilitating work environment. One other study that supports this finding is the work of Tariku, Eshetu and Abdella (2017), carried out in Gondar University Comprehensive Specialized Hospital, Northwest Ethiopia. Their result showed that the associated factors influencing compliance with standard precautions include training on standard precautions, accessibility of personal protective equipment, and management support. This shows that there are always factors militating against the preventive practices in the different settings.

Hypothesis 1: *There is no significant relationship between the knowledge of health*

workers and their preventive practices against nosocomial infection.

Findings from this study show that there was a significant relationship between knowledge of health workers and their preventive practices against nosocomial infection. The level of knowledge was high and also the preventive practices. In terms of comparisons on specifics, the findings from this study partially agree with the findings of Oli, Okoli, Ujam, Adje and Ezeobi (2016) in Delta state Nigeria among medical doctors, nurses, pharmacists and medical laboratory scientists. Their result showed that healthcare professionals have good knowledge of hospital-acquired infections but the active effort was not always made to the practice. Findings from Sahiledengle, Gebresilassie, Getahun and Hiko (2018) carried out among healthcare workers in government healthcare facilities in Addis Ababa also showed that 95% of healthcare workers had good infection prevention practices and also, 95% have good knowledge of infection prevention measures. Their finding is in close correlation with the finding from this study. That is, both studies agreed that having good knowledge of infection prevention measures is a predictor of good infection prevention practices.

Conclusion: Health workers in the two tertiary hospitals had high knowledge about nosocomial infections though the practice is often affected by some factors which may include knowledge about nosocomial infections and chain of infection, unavailability of some hospital equipment to practice infection prevention and control, workload, and insufficient support from the management.

Recommendation: Education, in-service training and reinforcement should not be relented on so that the level of knowledge about nosocomial infection can be sustained. The factors affecting the preventive practices should be worked on so that the practice can be better. Government and hospital administrations should ensure that PPE and other needed equipment are available for the

preventive practices and the monitoring and evaluation team should monitor compliance in each facility. More health care workers could be employed to reduce the workload on the health workers so that the preventive practices can be better.

Conflict of interest: There is no conflict of interest declared by the Authors.

Acknowledgements: The authors acknowledge all the respondents (health workers) from the two selected Institutions and the Managements of the two Institutions for granting the request to conduct this study in their establishment.

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