Knowledge, Attitude and Practices towards Infection Prevention among Health Workers in Bugiri Hospital, Bugiri District. A Cross-sectional Study.

Manjeri Kwagala[a,1], Amiri Were[a]

[a] Kampala School of Health Sciences, P. O. Box 14263, Kampala-Uganda.

Abstract

Background:
Globally, the incidence of nosocomial infections varies from 3.5% to 12% in developed countries and from 7.5% to 19.1% in low-income and middle-income countries.
The purpose of the study was to assess the knowledge, attitude, and practices toward infection prevention among health workers in Bugiri hospital, Bugiri district.

Methodology:
The study used a cross-sectional study design with a simple random technique as a sampling technique on a sample of 50 respondents. Data was collected using questionnaires with semi-structured and open-ended questions written in the English language; data was later analyzed manually and systematically by compiling it informs of percentages, bar graphs, tables, and piecharts.

Results:
All (100%) had ever heard about infection prevention, (60%) knew patients as the common sources of infections in health facilities, (68%) knew 20 seconds as the correct minimal time required for hand washing and (58%) knew hand washing with soap and water as the effective standard precaution for infection prevention. (90%) of respondents strongly agreed that they were at risk of acquiring infections, (50%) would feel guilty when they omit hand hygiene precautions, (52%) would not feel free to report safety violation done by their fellow workmates regarding infection preventions, (70%) agreed that they would change working environment due to increased exposure of infections. (64%) regularly use PPE, (and 54%) always wash their hands with soap and water before and after patients care, (76%) had pictorial/ pinned adverts regarding acquired infection prevention measures either to patients or health workers in their departments

Conclusion:
Knowledge, attitude, and practices of health workers towards infection prevention were equitably delightful despite few noted and observed issues which need to be worked upon by the facility administration to enhance fully infection standard preventive measures.

Recommendation:
Bugiri hospital administration should provide enough infection prevention facilities and supplies.

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1 Background of the study

Globally, the incidence of nosocomial infections varies from 3.5% to 12% in developed countries and from 7.5% to 19.1% in low-income and middle-income countries. Healthcare-associated with HAI occurs worldwide and mainly affects low- and

middle-income countries, which are believed to be 5.7–19.1 times greater than that of the developed world (Bayleyegn, 2021).

Preventing healthcare workers (HCW) from acquiring infections is critical to maintaining a functioning healthcare system, and they have been a priority group for testing throughout the pandemic. However, China observed a cumulative incidence of COVID-19 in 1.1% (110 of 9685) of HCWs. However, the rates were 0.5% among HCWs with direct contact to suspect or confirmed COVID-19 patients, 1.6% in HCWs with patient contact in non-COVID departments, and 1.0% among HCWs with no patient contact (Hunter *et al.*, 2020).

In developing countries, the pooled prevalence of HCAI was 15.5 per 100 patients (95% confidence interval; 12.6–18.9), with surgical site infections being the leading HCAI, caused mainly by Gram-negative organisms and multidrug-resistant organisms (Orek, 2018).

Overall, the estimated pooled lifetime prevalence of all types of occupational exposure to blood and body fluids, including percutaneous injury and mucous membrane exposure among healthcare workers in Africa was 65.7%. The regional prevalence estimate was highest for northern Africa: 82.9%. For percutaneous injury only, the lifetime prevalence was 82.0% in Uganda.

Overall, the estimated pooled lifetime prevalence of percutaneous injury was 54.4% and the estimated pooled lifetime prevalence of all types of exposure to blood and body fluids and percutaneous injury was 53.6% in Uganda (Auta *et al,* 2017). The specific objectives of the study were to assess the; knowledge of infection prevention among health workers, attitude toward infection prevention among health workers, and practices towards infection prevention among health workers.

2 Methodology

Study design

A descriptive cross-sectional study design was employed to yield results from the study in a relatively short period. This design was preferred because it involved the use of varied methodologies and data sources that helped to ensure more accuracy and stronger research outcomes by triangulating data from different methods.

Study area

The study was carried out in Bugiri hospital, Bugiri district. The hospital was located in the Eastern region of Uganda on the Jinja-Tororo highway in the town of Bugiri district, about 153.4km Kilometers from Kampala city. the facility received an average of 200 patients per day with several departments namely; the Outpatients department (OPD), Inpatients, ART clinic, dental clinic, ANC, Lab, pharmacy, maternity, Eye clinic, mental health clinic, pediatrics ward, male ward, female ward, orthopedic department, Sickle cell clinic, and others.

Study population

This was comprised of health workers in Bugiri Hospital who were present in person and voluntarily provided information during the period of data collection. The target population was selected because they were the providers of health care to patients and this put them at risk of infections from patients, sharps equipment, biological wastes, and other equipment.

Sample size determination

The sample was determined using the formula below;

N=a2bc/x2 (Kish and Lisle, 1967)

Where; N=desired sample a=standard normal deviation usually set at 1.96 which corresponds to a 95% confidence level.

b= proportion of survey population with particulars under investigation and where it is unknown, 50% is used.

c=probability that the researcher got a certain amount of error. 50% is considered to cater for that.

x=degree of accuracy which ranges from 0.01-0.1

Therefore it is; (1.96)^2 x 0.5 x0.5/(0.09)^2

=118.57

~119 respondents

The target population would therefore be 119 respondents but due to financial and time constraints, the researcher opted for 50 respondents.

Sampling technique

The study employed a simple random sampling technique to select the sample from the study population. This study technique was preferred over other techniques because it helped the researcher to get the statistical analysis related to sample distributions, hypothesis testing, and sample size.

Definition of variables

Dependent variable

Infection prevention was the dependent variable.

Independent variables

Knowledge, attitude, and practices towards infection prevention were the independent variables.

Data collection methods

Questionnaire

This is defined as a pre-determined, written list of questions, which may be answered by a respondent without supervision or explanation by the interviewer. A self-administered structured questionnaire with open and closed questions written in the English language was designed based on the study-specific objectives and used to collect data. Therefore, this type of questionnaire was preferred because it helped the researcher to reduce the possibility of getting bias from the respondents. It also further enabled the researcher to collect data from a large population in a short period.

Observation

This is a technique that involves directly viewing the respondent's behavior to describe it. To observe means to examine an object or an individual or group of people or an event with all of the senses. Therefore, the researcher observed the behaviors of health workers towards standard precaution procedures as a key guide to infection prevention. This enabled the researcher to write notes on everything that was observed relating them to the topic under study.

Data collection procedure

An introduction letter was obtained from Kampala School of Health Sciences seeking permission to carry out the study in Bugiri Hospital when permission was granted; research assistants were chosen and trained based on having training in any medical-related course. Before conducting the interview, the researcher with her assistants introduced themselves and explained the purpose of the study to the respondents. Respondents who met the inclusion criteria were sampled either to self-administer the questionnaire or interviewed preferably in their departments. Each respondent was interviewed for periods of about 10-15 minutes or given some extra time to self-administer the questionnaire depending on the work schedule. Each respondent was thanked for participating in the study.

Pre-testing of questionnaire

To ensure validity and reliability of the tool, the researcher undertook certain measures; whereby the researcher was regularly present to draft research tools to the research assistants for advice and assistance. The researcher prior pre-tested the first draft of the questionnaire among ten respondents in Kawolo hospital among 10 health workers to make necessary corrections to produce the final copy.

Quality control

For a data collection instrument that was considered valid, the content selected and included were relevant to the need or gap established. The validity of the instrument was checked in terms of how the questionnaire was constructed and the content it contained. This was done to ensure that the questions were structured understandably to enable all respondents to interpret the questions without any bias; the responses finally helped to answer the research questions.

For safety purposes, standard operating procedures for COVID 19 were strictly followed and maintained during the data collection period.

Data were checked for completeness and accuracy. Questionnaires inaccurately or incompletely filled were removed and disposed of. Accurate and filled ones were locked in a cupboard to provide no access to other people. This was done to maximize confidentiality.

3 Data analysis and presentations

The researcher analyzed data manually and systematically by compiling it inform of percentage bar graphs, tables, and pie charts by relating the information that was collected from the study population and literature search for easy presentation of the findings.

Ethical considerations

Ethical considerations in the conduct of this study were followed to prevent ethical dilemmas. To ensure this, the researcher obtained permission for the study from the medical superintendent of Bugiri hospital. Once permission was granted, respondents received an explanation of the study before enrolment and only those willing to participate were involved. The research processes and procedures were used based on voluntary informed consent and the researcher further ensured that any information obtained from the respondents was kept confidential and that no name or identification number of the respondents appeared on the questionnaire or study results.

4 Findings

From the study findings, the majority of the respondents (70%) were females by gender whereas the minority (30%) were males.

To study findings, half of the respondents (50%) were within the age bracket of 3339 years whereas the least (6%) were within the age bracket of 18-24 years.

Findings in regards to tribes, almost half of the respondents (44%) were Basoga whereas the least (10%) were Basamya.

The study further revealed that most of the respondents (32%) were nursing assistants whereas the least (6%) were doctors.

In addition to that, almost half of the respondents (52%) had worked for 5 years and above at this facility whereas the least (2%) had worked for less than a year at this facility.

Knowledge of Infection Prevention among Health Workers

Narratively, findings obtained from a study revealed that all the respondents (100%) had ever heard about infection prevention.

From the table 2, the majority of the respondents (60%) obtained information about infection prevention from tutors whereas the least (6%) noted it from textbooks and friends.

From the table 3, half of the respondents (50%) reported respiratory tract infections as the healthcare-acquired infection whereas the least (10%) reported surgical wound infections as the healthcare-acquired infection.

Shows the distribution of respondents according to their knowledge about the most recognized sources of infections in health facilities

From the table 5, more than half of the respondents (58%) knew hand washing with soap and water as the effective standard precaution for infection prevention whereas the least (6%) reported antiseptic.

Attitude Towards Infection Prevention Among Health Workers

From the figure above, almost all the respondents (90%) strongly agreed that they were at risk of acquiring infections whereas the least (10%) disagreed.

From the table 6, half of the respondents (50%) reported that they feel guilty when they omit hand hygiene precautions whereas the least (12%) noted that they feel normal when they omit hand hygiene precautions.

From the figure 2, most of the respondents (60%) agreed that standard precautions for infection prevention should be followed all the time, for all patients whereas the least (40%) disagreed.

From the figure 3, most of the respondents (52%) would not feel free to report safety violations done by their fellow workmates regarding infection prevention whereas the least (48%) would feel free to report safety violations done by their fellow workmates regarding infection preventions.

Noted that infection prevention equipment in this facility is effective whereas the minority (2%) were not sure about the effectiveness of infection prevention equipment in this facility.

Noted that infection prevention equipment in this facility is effective whereas the minority (2%) were not sure about the effectiveness of infection prevention equipment in this facility.

From the figure above, majority of the respondents (80%) were fully vaccinated for common pathogens whereas the minority (10%) were not fully vaccinated.

From the table above, more than half of the respondents (64%) reported that they regularly use personal protective equipment whereas the least (36%) reported that they irregularly use personal protective equipment.

From the table 8, almost half of the respondents (44%) reported inadequate access to PPE as a reason for irregular use of PPE whereas the least (6%) reported that PPE is not always necessary.

From the figure 8, most of the respondents (54%) reported that they always wash their hands with soap and water before and after patients' care whereas the least (4%) reported that not often they do wash their hands with soap and water.

From the figure 8, the majority of the respondents (76%) had pictorial/ pinned adverts regarding acquired infection prevention measures either to patients or health workers in their departments whereas the minority (24%) never had pictorial/ pinned adverts regarding acquired infection prevention measures either to patients or health workers in their departments.

From the figure above, most of the respondents (40%) reported that UTIs as the infection they had ever been exposed to whereas the least (6%) noted HIV.

Table 1. Shows the distribution of respondents according to their demographic data (N=50)

Gender	**Frequency(f)**	**Percentage (%)**
Male	15	30
Female	35	70
Total	**50**	**100**
Age (years)		
18-24	3	6
25-32	9	18
33-39	25	50
40-45	13	26
Total	**50**	**100**
Tribe		
Musoga	22	44
Musamya	5	10
Munyole	8	16
Others	15	30
Total	**50**	**100**
Qualification		
Nursing Assistant	16	32
Enrolled nurse	7	14
Enrolled Midwife	6	12
Registered Midwife	5	10
Doctor	3	6
Laboratory Technician	4	8
Others	9	18
Total	**50**	**100**
Working experience		
Less than a year	1	2
1-2 years	6	12
3-4 years	17	34
5 years and above	26	52
Total	**50**	**100**

Table 2. Shows the distribution of respondents according to where they obtained information about infection prevention **(**N=50)

Response	**Frequency (f)**	**Percentage (%)**
Tutor	30	60
Textbook	3	6
Friends	3	6
Others	14	24
Total	**50**	**100**

Table 3. Shows the distribution of respondents according to their knowledge about health care-acquired infections (N=50)

Response	Frequency (f)	Percentage (%)
Respiratory tract infections	25	50
UTI	7	14
Surgical wound infections	5	10
Blood borne infections	13	26
Total	**50**	**100**

Table 4. Shows the distribution of respondents according to their knowledge about the most recognized sources of infections in health facilities

Response	Frequency (f)	Percentage (%)
Patients	30	60
Bed side curtains	2	4
6Medical wastes	11	22
Stethoscope	3	6
Others	4	8
Total	**50**	**100**

Table 5. Shows the distributionof respondents according to their knowledge about the effective standardprecautions for infection prevention

Response	Frequency (f)	Percentage (%)
Hand washing with soap and water	28	58
Antiseptic	3	6
Sterilization	13	26
Others	6	12
Total	**50**	**100**

Table 6. Shows the distribution of respondents according to how they feel when they omit hand hygiene precautions (N=50)

Response	Frequency (f)	Percentage (%)
Normal	6	12
Guilty	25	50
Frustrated	19	38
Total	**50**	**100**

Table 7. Shows the distribution of respondents according to how often do they use the personal protective equipment (N=50)

Response	Frequency (f)	Percentage (%)
Regular	32	64
Irregularly	18	36
Total	**50**	**100**

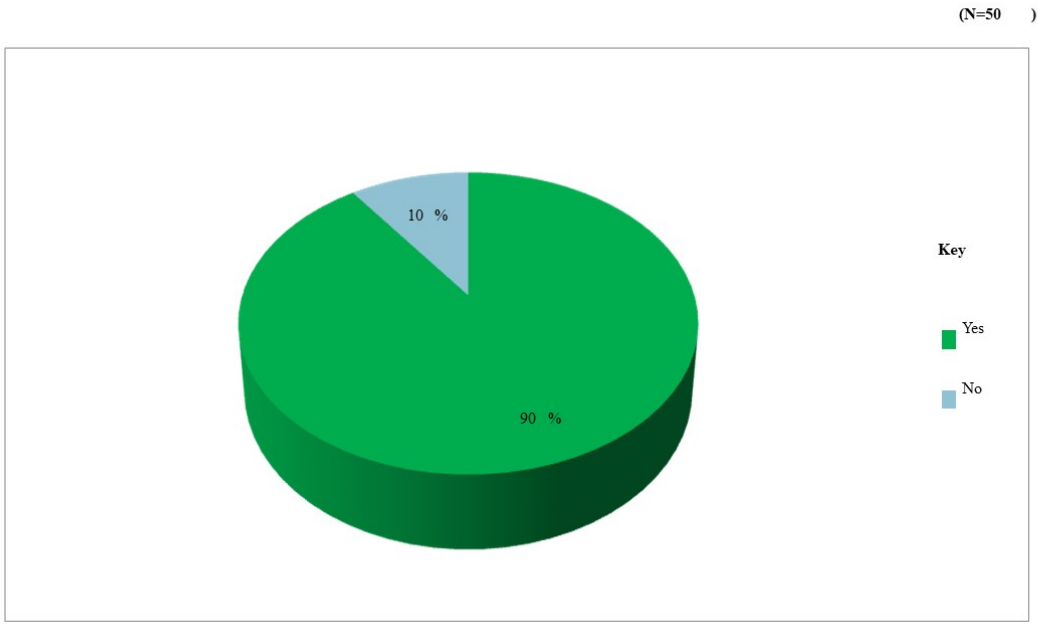

Figure 1. Shows the distribution of respondents according to whether they think they are at risk of acquiring occupation infections.

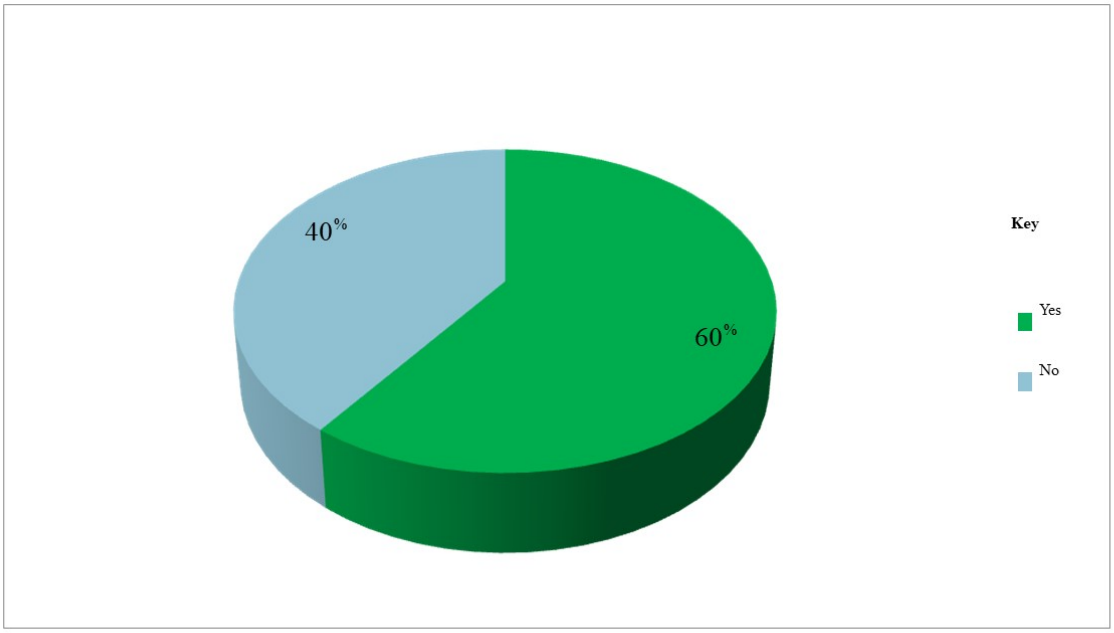

Figure 2. Shows the distribution of respondents according to whether they think standard precautions for infection prevention should be followed all the time, for all patients (N=50)

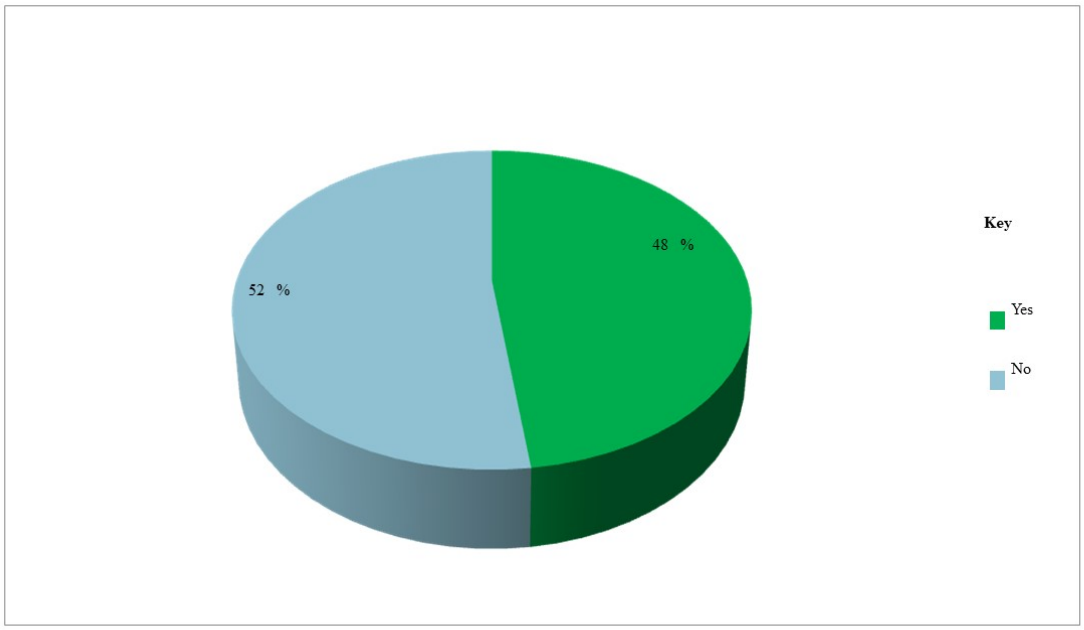

Figure 3. Shows the distribution of respondents according to whether they would feel free to report safety violations done by their fellow workmates regarding infection prevention (N=50)

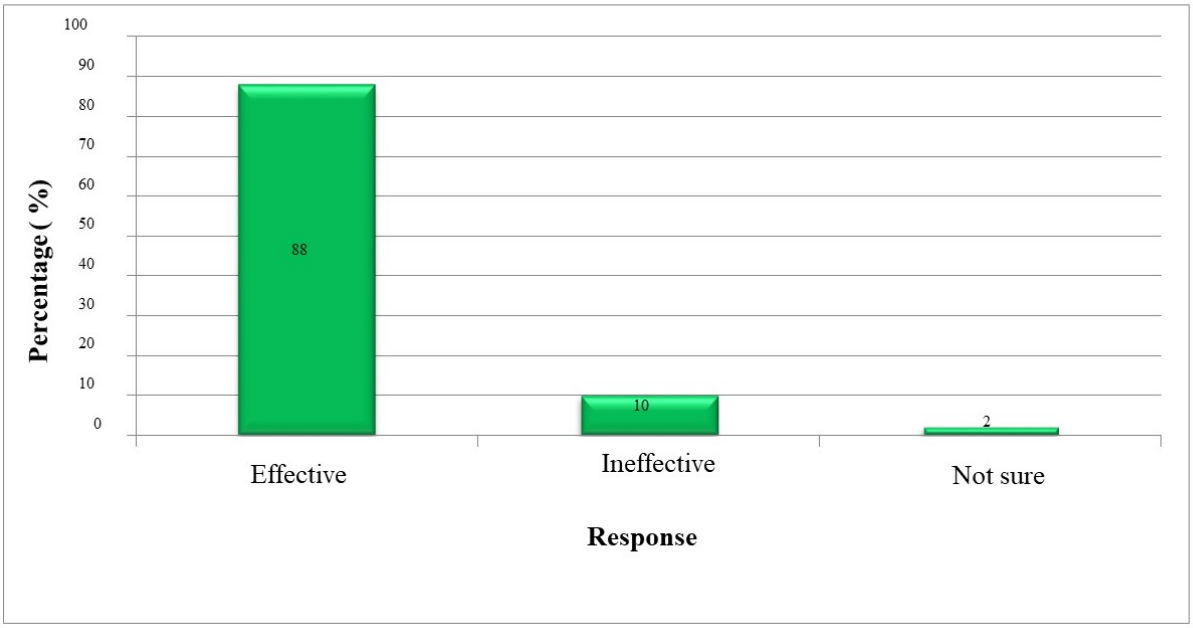

Figure 4. Effectiveness of infection prevention equipment in this facility (N=50)

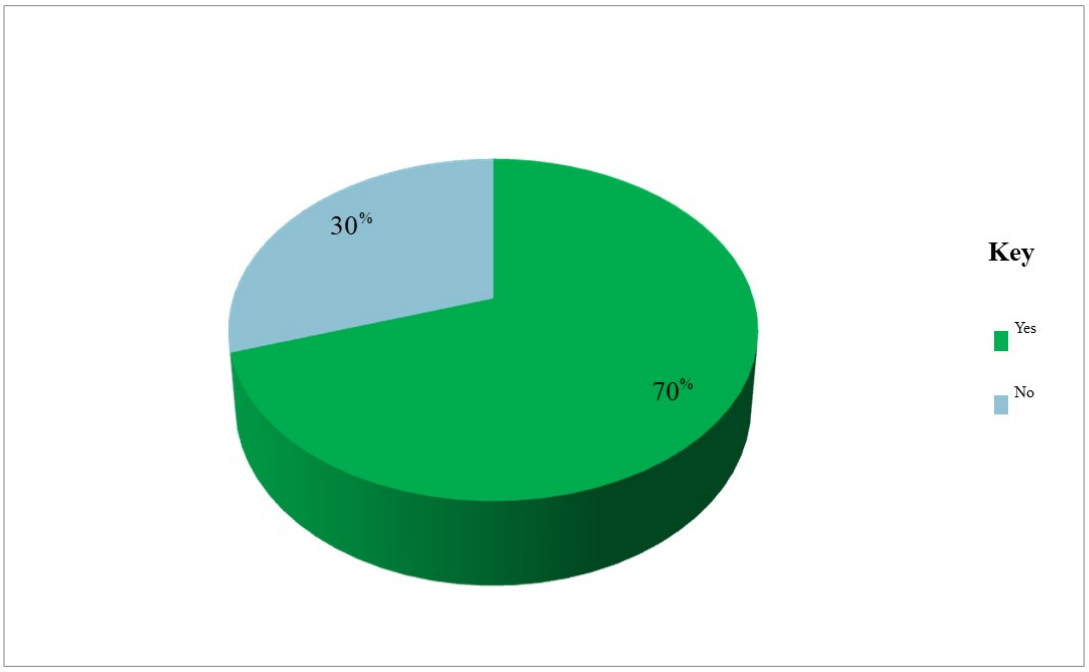

Figure 5. Shows the distribution of respondents according to whether they would change the working environment due to increased exposure to infections (N=50)

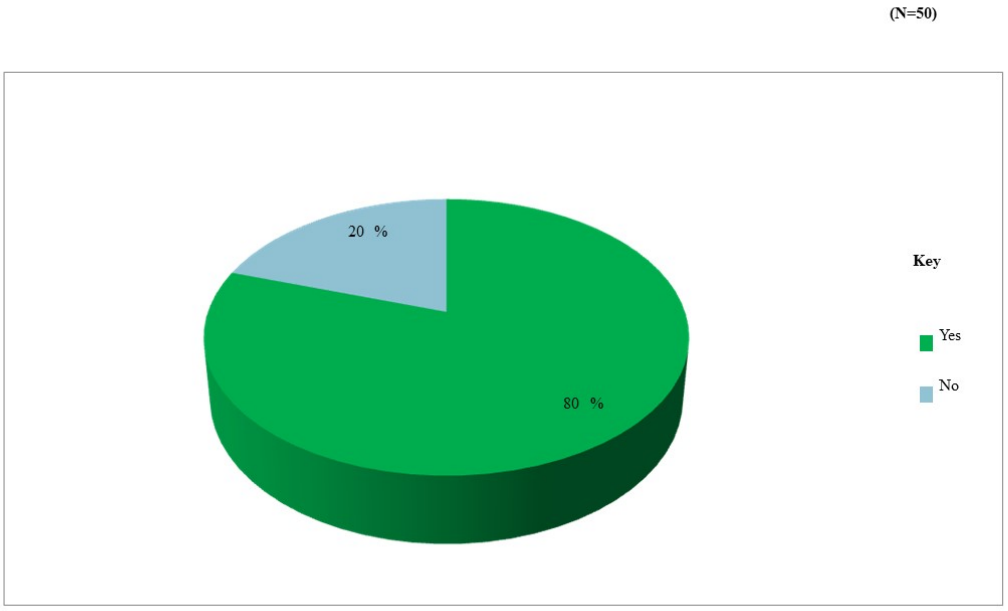

Figure 6. Shows the distribution of respondents according to whether they would change the working environment due to increased exposure to infections

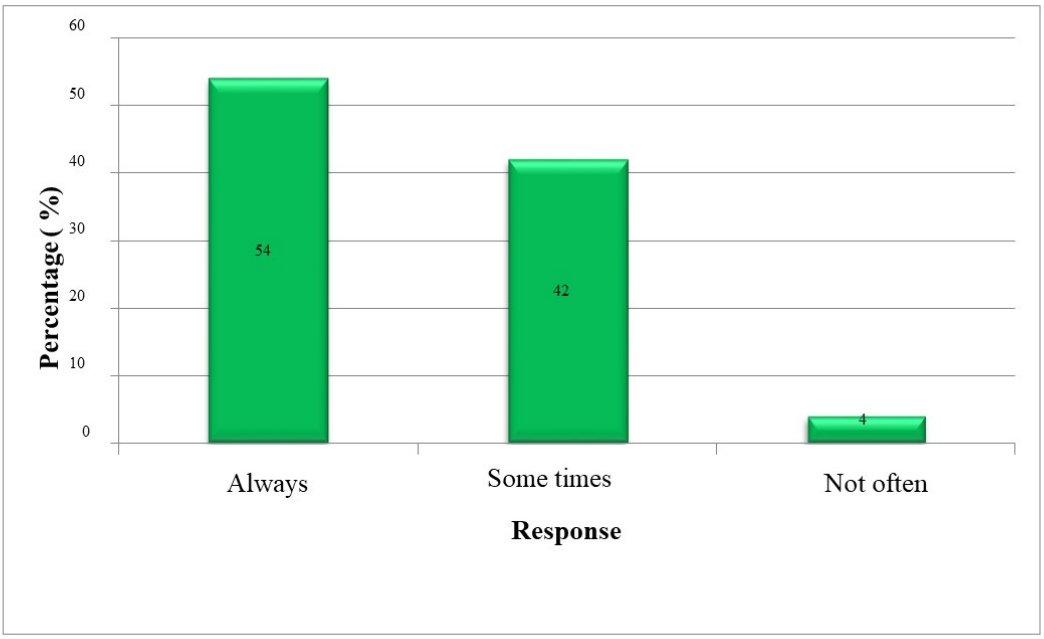

Figure 7. Shows the distribution of respondents according to how often do they wash their hands with soap and water before and after patients care (N=50)

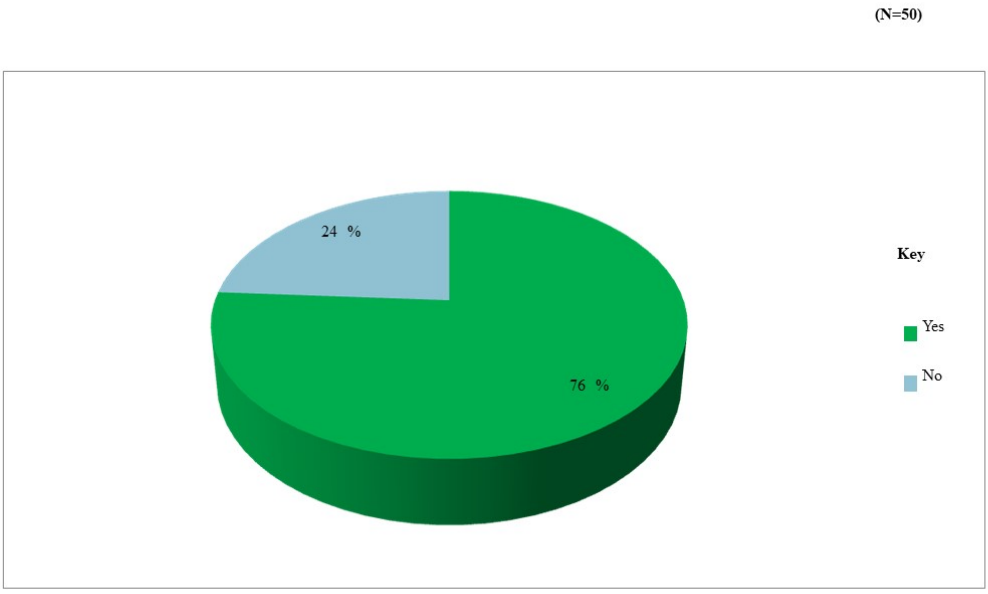

Figure 8. Shows the distribution of respondents according to whether they had pictorial/ pinned adverts regarding acquired infection prevention measures either to patients or health workers in their departments

Table 8. Shows the distribution of respondents according to the reasons for irregular use of PPE (N=18)

Response	Frequency (f)	Percentage (%)
In adequate access to PPE	8	44
PPE are not always necessary	1	6
Forgetfulness	5	28
Others	4	22
Total	**18**	**100**

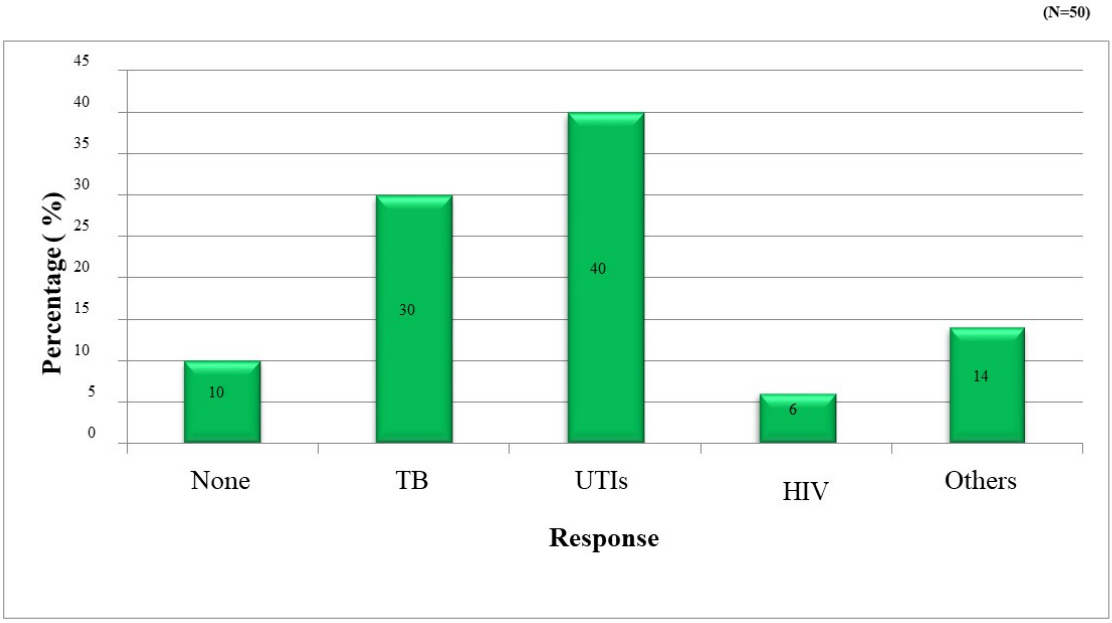

Figure 9. Shows the distribution of respondents according to types of infection they had ever been exposed too

Table 9. Shows the distribution of respondents according to whether they had enough medical waste disposal equipment at the facility (N=50)

Response	Frequency (f)	Percentage (%)
Yes	28	56
No	22	44
Total	**50**	**100**

From the table above, most of the respondents (56%) reported that they have enough medical waste disposal equipment at the facility whereas the least (44%) reported that they never had enough medical waste disposal equipment at the facility.

5 Discussion, Conclusion, and Recommendations

Discussion

Knowledge of infection prevention among health workers

About the study findings, it was discovered that all the respondents (100%) had ever heard about infection prevention. This was extremely expected

since study participants were health workers who majorly manage infections.

The current study findings were in agreement with Muna et al (2020), where findings showed that all health workers (100%) were aware of infection prevention.

The study also revealed that the majority of the respondents (60%) obtained information about infection prevention from tutors. This is attributed to the fact that all the study participants had attained professional qualifications and chances of being informed about the study context from tutors were expected to be high. The study results were consistent with Kemal et al, (2020), where (72%) reported lecturers as the main source of information regarding infection control and prevention.

In addition, half of the respondents (50%) reported respiratory tract infections as healthcare-acquired infections. This could be attributed to the fact that respiratory infections were the common categories of infections within the facility.

The study revealed that more than half of the respondents (60%) reported patients as the common sources of infections in health facilities and this is attributed to the fact that most patients are admitted with bacterial infections. The study results were not in line with Nag et al (2018), where results showed that the most commonly recognized sources of hospital-acquired infections were mattresses and pillows (39.5%).

Findings from the study showed that the majority of the respondents (68%) knew 20 seconds as the correct minimal time required for hand washing. This indicates that a substantial number of respondents were aware of the required minimum time for hand washing. This was consistent with Chanrashekhar et al (2017), where findings revealed that 80% of the participants knew 20 seconds as the required minimum time for hand washing.

Given the study findings, more than half of the respondents (58%) knew hand washing with soap and water as the effective standard precaution for infection prevention. This indicates a significant relationship between different sources of information and the general awareness about infections among the study participants. The study results were consistent with Ogoina et al (2015), where the majority of the participants (95.8%) knew that hands should be washed before and after touching a patient as a standard precaution for infection prevention. Attitude towards infection prevention among health workers

The study further revealed that almost all the respondents (90%) strongly agreed that they were at risk of acquiring infections. This implies that a substantial number of respondents were afraid of being exposed to infections because infections can easily be spread. The study results were in disagreement with Sound et al (2018), where (71.43%) of the study participants did not consider that all health care workers, patients, and the community are at risk of infection from their health facility wastes.

In addition, half of the respondents (50%) reported that they feel guilty when they omit hand hygiene precautions. This gives a clear view that health workers perceived infections to be a great threat at work. The current study results were in line with a study that was done by Muna et al (2020), where 81.7% of HCWs admitted that they felt guilty if they did not perform hand hygiene.

Findings from the study also showed that most of the respondents (60%) agreed that standard precautions for infection prevention should be followed all the time, for all patients, and signifies that health workers surely perceived a positive attitude towards infection prevention. This is in line with a study that was done by Deress et al (2019), where (99.3%) responded that safety precaution is important for the healthcare facilities and should be followed all the time.

The study also showed that most of the respondents (52%) would not feel free to report safety violations done by their fellow workmates regarding infection prevention. This gives a clear overview that health workers at this facility were annihilating their working ethics. The results were in agreement with Fatima et al (2018), where (48.2%) of medical students felt that they don't feel free to report safety violations regarding ICMs.

The study revealed that the majority of the respondents (88%) noted that infection prevention equipment in this facility was effective. This was also clearly observed by the researcher. The study results were consistent with Osama et al (2017), where the majority of the respondents (88%) reported that infection prevention equipment in this facility was effective.

Study findings showed that the majority of the respondents (70%) agreed that they would change the working environment due to increased exposure to infections. This is attributed to the fact that

a significant number of study participants were afraid of being at risk of acquiring infections. The study results were consistent with Nag et al (2018), where findings showed that 60.2% of the respondents were willing to change their working environment to avoid hospital-acquired infection.

Practices towards infection prevention among health workers

The majority of the respondents (80%) were fully vaccinated for common pathogens. This indicates that a significant number of health workers were protecting themselves against health facility-acquired infections. This was in agreement with findings from a study that was done by Geberemariyam *et al* (2018), where (88.3%) of health workers were fully vaccinated for common pathogens.

The study also showed that more than half of the respondents (64%) reported that they regularly use personal protective equipment. The researcher had to take note of this and confirmed that an average number of participants were using PPE. This was inconsistent with a study that was done by Muna *et al* (2020), where findings showed that 64.4% of the HCWs reported that sometimes they would forget to clean their hands.

Among the study participants who irregularly didn't use the PPE, almost half of the respondents (44%) reported inadequate access to PPE as a reason for irregular use of PPE. This implies that the health facility had inadequate access to PPE as referred to the ratio of patients the facility receives. The study results were in agreement with Ogoina *et al* (2015), who reported that 66.1% of respondents identified a lack of appropriate or adequate resources to practice standard precautions as the main challenge that prevented the practice of standard precautions as identified.

Most of the respondents (54%) reported that they always wash their hands with soap and water before and after patients care. This implies that an average number of study participants were following infection prevention measures. The current study findings were in agreement with Nag et al (2018), where results showed that 90.2% of the study participants washed their hands after handling the patients.

Study results also showed that the majority of the respondents (76%) had pictorial/ pinned adverts regarding acquired infection prevention measures either to patients or health workers in their departments and the researcher surely observed this. The study results were in line with Desta *et al* (2018), where it was observed that (88%) of the departments had pictorial/ pinned adverts regarding acquired infection prevention measures either to patients or health workers.

From the study findings, most of the respondents (40%) reported that UTIs as the infection they had ever been exposed to. This could be attributed to the fact that UTIs were the most common infection health workers within this facility had ever been exposed to. The study results were in disagreement with Deress *et al* (2019), where it was discovered that only 49 (17.4%) had taken HIV post-exposure prophylaxis.

Findings in regards to medical waste disposal equipment showed that most of the respondents (56%) reported that they had enough medical waste disposal equipment at the facility. To confirm this, the researcher had to be well observant since it was easy for her to count and confirm. This was in line with Kemal *et al* (2020), where results showed that 69.8% of the respondents mentioned that a dust bin and adequate safety box were accessible in their working area, respectively.

6 Conclusion

Given the overall findings that were discovered from the study, the following conclusions were made by the researcher:

The study established that health workers possessed pleasant knowledge about infection prevention since it was discovered that all the respondents (100%) had ever heard about infection prevention, (60%) obtained information about infection prevention from tutors, (50%) knew respiratory tract infections as the health acquired infection, (60%) knew patients as the common source of infections in health facilities, (68%) knew 20 seconds as the correct minimal time required for hand washing, and (58%) knew hand washing with soap and water as the effective standard precaution for infection prevention.

The study also showed that attitude towards infection prevention among health workers was fairly positive because (90%) of respondents strongly agreed that they were at risk of acquiring infections, (50%) reported that they feel guilty they omit hand hygiene precautions, (and 60%) agreed that standard precautions for infection prevention should be followed all the time, for all patients,

(52%) would not feel free to report safety violation done by their fellow workmates regarding infection preventions, (88%) noted that infection prevention equipment in this facility is effective and (70%) agreed that they would change working environment due to increased exposure of infections.

The study further discovered that practices towards infection prevention among health workers were notably pleasing since (80%) of the respondents were fully vaccinated for common pathogens, (64%) reported that they regularly use the personal protective equipment, (and 54%) always wash their hands with soap and water before and after patients, (76%) had pictorial/ pinned adverts regarding acquired infection prevention measures either to patients or health workers in their departments and (56%) reported that they have enough medical waste disposal equipment at the facility.

Generally, the researcher concluded that the knowledge, attitude, and practices of health workers towards infection prevention were equitably delightful despite a few noted and observed issues that need to be worked upon by the facility administration to enhance fully infection standard preventive measures.

6.1 Recommendations:

Since the COVID19 pandemic increased the spread of nosocomial infections from different facilities, the researcher recommends that the Ministry of Health with the collaboration of other stakeholders set and implement new strategies to update the knowledge and practice of health care workers regarding infection prevention activities with pre-service or in-service training, fulfilling necessary infection prevention supplies, developing of professionals educational level, introducing healthcare workers infection prevention standard of practice and continuous mentorship/supervision to improve HCWs adherence to infection prevention.

Additionally, Bugiri hospital administration should provide enough infection prevention facilities and supplies, continuous water supply, hand washing sinks, and all necessary PPE to improve infection prevention practices of healthcare workers.

The researcher strongly recommends health workers at Bugiri hospital feel free to notify the responsible administrators about fellow workmates who violate effective standard precautions for infection prevention and control.

Acknowledgment

My gratitude and thanks go first to Almighty God for giving me health, capacity, and hope during the whole course and to complete this study.

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A References:

1) Auta Asa, Adewuyi O Emmanuel, Amom Tor-Anyiin , David Aziz , Esther Ogbole , Brian O Ogbonna & Davies Adeloye (2017). Health-care workers' occupational exposures to body fluids in 21 countries in Africa: systematic review and meta-analysis; Bulletin of the World Health Organization, vol.95, 831-841pp.https://doi.org/10.2471/BLT.17.195735PMid:29200524 PMCid:PMC5710084

2) Bayleyegn, B., Mehari, A., Damtie, D., & Negash, M. (2021). Knowledge, Attitude and Practice on Hospital-Acquired Infection Prevention and Associated Factors Among Healthcare Workers at University of Gondar Comprehensive Specialized Hospital, Northwest Ethiopia. Infection and drug resistance, 14, 259-266.https://doi.org/10.2147/IDR.S290992PMid:33536767 PMCid:PMC7850400

3) Chandrashekhar G. Unakal, Anoop Nathaniel, Bajnath Keagan, Bharat Alexandria, Burgess Lauralee, Chatoo Varun, Defour Reneé, Duverney Sarah, Thurston Uniqué, Patrick E. Akpaka (2019). Assessment of knowledge, attitudes and practices towards infection prevention among healthcare workers in Trinidad and Tobago; Int J. Community Med Public Health. Jul; 4 (7):2240-2247https://doi.org/10.18203/2394-6040.ijcmph20172813

4) Deress Yazie Teshiwal, Sharew Bewket Gezahegn Abebe Wondwossen(2019).Knowledgeattitude, and practice of healthcare professionals regarding infection prevention at Gondar University referral hospital, northwest Ethiopia: a cross-sectional study; BMC

Table 10. List of Abbreviations

HAIs	:	Hospital Acquired Infections
HCAIs	:	Health Care Acquired Infections
HCWs	:	Health Care Workers
MoH	:	Ministry of Health
NIs	:	Nosocomial Infections
PEP	:	Post-Exposure Prophylaxis
PPE	:	Personal Protective Equipment
TB	:	Tuberculosis
UTIs	:	Urinary Tract Infections
WHO	:	World Health Organization

Table 11. Definition Of Key Terms

Attitude	:	Refers to personal view of health care workers on infection prevention activities when caring for patients.
Blood -borne pathogens	:	These are diseases that can be spread through contamination by blood and other fluids
Hand washing	:	Is a way of cleaning one's hands that substantially reduces potential pathogens (harmful microorganisms) on the hands.
Infection prevention	:	Refers to application of basic infection prevention precautions
Hospital-acquired infections	:	Are sometimes termed as nosocomial infections (NIs), which the patient acquires during his stay or healthcare workers (HCWs) get during their day-to-day hospital activities.
Knowledge	:	Refers to clear awareness and understanding of healthcare workers on infection prevention activities when caring for patients.
Practices	:	Things done by the health workers for infection prevention
Prevention	:	Is the act or practice of stopping something bad from

Res Notes,12:563https://doi.org/10.1186/s13104-019-4605-5PMid:31500659 PMCid:PMC6734428

5) Hunter E, Price D A, Murphy E (2020). First experience of COVI D - 1 9 screening of health - care workers in England. The Lancet. 2020; 395(10234):e77-e78https://doi.org/10.1016/S0140-6736(20)30970-3

6) Irek EO, Amupitan AA, Obadare TO, Aboderin AO. A systematic review of healthcare-associated infections in Africa: An antimicrobial resistance perspective. Afr J Lab Med. 2018 Dec 6;7(2):796.. PMID: 30568902; PMCID: PMC6296034.https://doi.org/10.4102/ajlm.v7i2.796PMid:30568902 PMCid:PMC6296034

7) Kemal Jemal , Ketema Gashaw, Tadele Kinati, Worku Bedada and Belete Getahun (2020). Clean and safe healthcare environment: knowledge, attitude and practice of infection prevention and control among health workforce at North Showa Zone Oromiya Regionhttps://doi.org/10.1155/2020/6021870PMid:33178291 PMCid:PMC7648680 Journal of Environmental and Public Health, Vol. 2020. 10 pages.

8) Muna Yousif, Tara Tancred and Marwa Abuzaid (2020). Knowledge, attitudes and practices regarding hand hygiene among doctors and nurses in Ribat university Hospital; International Journal of Medical Reviews and Case Re-

ports, 4(2):19-27pphttps://doi.org/10.5455/IJMRCR.hand-hygiene-doctors-nurses

9) Nag Kaushik, Datta Anjan, Nabarun Karmakar, Chakraborty Tamal (2018). Knowledge, attitude and practice about hospital acquired infection among health care personnel in a tertiary care hospital of Tripura; International Journal of Research in Medical Sciences; Vol 6 | Issue 10, 3303-3308pphttps://doi.org/10.18203/2320-6012.ijrms20184037

10) Ogoina Dimie, Pondei Kemebradikumo, Adetunji Babatunde, Chima George, Isichei Christian andSanusi Gidad (2015). Knowledge, attitude and practice of standard precautions of infection control by hospital workers in two tertiary hospitals in Nigeria; Journal of Infection Prevention, Vol. 16(1) 16-22pphttps://doi.org/10.1177/1757177414558957PMid:28989394 PMCid:PMC5074133

11) Osama E. Salama, Heba M.T. Elweshahi, Asmaa M.G. Abd El Raheem (2017). Knowledge, attitudes and compliance with hand hygiene practices among health care workers in Alexandria Main University Hospital; High Institute of Public Health, vol. 47, No.2, 39-47pphttps://doi.org/10.21608/jhiph.2017.19961

12) Suoud Jemal, Mulusew Zeleke, Simachew Tezera, Suleyman Hailu, Ahmedzakir Abdosh, Mensur Biya, Seida Abduljelil (2018). Health care workers' knowledge, attitude and practice towards infection prevention in Dubti Referral Hospital, Dubti, North East Ethiopia; International Journal of Infectious Diseases and Therapy, vol.3(4): 66-73 pp

13) WHO (2017). Trends of hospital acquired Infections. Geneva Switzerland 14) Yazie, T.D., Sharew, G.B. & Abebe, W. Knowledge, attitude, and practice of healthcare professionals regarding infection prevention at Gondar University referral hospital, northwest Ethiopia: a cross-sectional study. BMC Res Notes 12, 563 (2019).https://doi.org/10.1186/s13104-019-4605-5PMid:31500659 PMCid:PMC6734428

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