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**ASSESSING NURSES' KNOWLEDGE AND PRACTICES ON INFECTION
PREVENTION IN THE WARD AT HOLY FAMILY HOSPITAL, BEREKUM.**

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DECLARATION

We hereby declare that this submission is our work towards the Diploma in General Nursing and that, to the best of our knowledge, it contains no material previously published by another person nor material which has been accepted for the award of the diploma of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

The study focused on evaluate the knowledge and practice infection prevention and control measures among staff nurses at the Holy Family Hospital, Berekum. A descriptive cross-sectional survey was used in this study. This design was employed because nurses have unique or different characteristics that need to be studied at a point in time. The target population for the study is all staff nurses in the Berekum Municipality and the accessible population is the staff nurses of the Holy Family Hospital, Berekum. A total of fifty (50) staff nurses were selected for the study. The respondents were obtained using the convenient sampling method. Data collection was done through the use of structured questionnaires consisting of both closed-ended and open-ended questions for easy expression of views and ideas. The data obtained from the study were checked for accuracy, utility, and completeness. The study found that majority are young nurses' ages between 26-33 years and experience (1-4 years). Sixty percent (60%) were females and 40% were males. The study attempted to assess nurse's knowledge relevant to infection control measures.

The study recommended that interactive infection control courses that promote critical thinking are implemented at undergraduate level along with more stringent forms of assessments focusing on infection prevention and control, during clinical training, also nurse managers need to be supervising the staff nurses on the practicing infection prevention standards and techniques and monitoring nursing adherence to policies of the hospital and administrators should promote feedback of practice, individual reinforcement and appropriate rewards for the good practice.

The study concluded that majority of the sample had good knowledge about infection control measures and it showed lack of practice in hand washing and using gloving which are the most significant items to prevent transmission of infection.

ABBREVIATION

WHO	World Health Organization
CDC	Centre for Disease Control
GHS	Ghana Health Service
HIV	Human Immune Virus
AIDS	Acquire Immune Defficiency Syndrome
IPC	Insecticide Treated Net
HCAI	Healthcare Associated Infection
MOH	Ministry of Health

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CHAPTER ONE

INTRODUCTION

1.0 Background of the study

Globally, over 1.4 million people are affected by HCAs (World Health Organization, 2019). The prevalence of patients affected by HAIs in developed countries is ranging from 5% to 10% and about 15% to 40% of the patients are in critical care units (Centre for Disease Control, 2017). The prevalence of Hospital Acquired Infections in Africa is varying from 2.5% to 14.8% in Algeria, Senegal, Burkina Faso, and Tanzania (WHO, 2011). In hospitals, infected patients are a source of infection transmission to other patients, health care workers and visitors (Sydor, 2017). Healthcare related infections have a considerable impact on the morbidity and mortality rates in 2017). the intra- and extra-hospital environment, resulting in an increase in the time spent and costs of hospitalization, and are thus recognized as a serious world public health problem (Sousa & Matos, 2017). Nosocomial infection, also known as hospital-acquired infections is one of the leading causes of death and has much economic cost due to increased hospitalization and prognosis (World Health Organization, 2015). The prevention and control of infections are critical for a well-functioning health system (Khama, 2018). Infection control practice is a fundamental aspect of modern health care. World Health Organization in 2018 defined infection control as infection prevention and control measures that aims to ensure the protection of those who might be vulnerable to acquiring an infection both in the general community and in hospitals while receiving care due to health problems. The basic principle of infection prevention and control is hygiene. Hand hygiene is widely acknowledged to be the most important activity that reduces the spread of infection (Aziz, 2017). Nurses play a crucial role in preventing and controlling transmission of an infection through the application of standard precautions and maintenance of the health care

environment. All, nurses, in all roles and settings, can demonstrate leadership in infection prevention and control by using their Knowledge, skills, and judgment to initiate appropriate and immediate infection control procedures. WHO classified some role of nursing staffs for infection control? Nurses at different levels, namely: the senior nursing administrator, the ward charge nurse and the nurse in charge of infection control. In addition, control committee needs to be established for developing training programmer for members of the nursing staff; supervising the implementation of techniques for the prevention of infections (WHO, 2020). Most health care infections are transmitted by health care personnel who fail to practice proper hand washing procedures and change gloves between client contacts. Therefore, infection control guidelines from the national and international organization have supported that hand washing remains the most effective measure in reducing the incidence of health care infections (Wilkins, 2018). Brooker, Waugh, and Waston stated that hospitalized patient exposed to infection resulting from a surgical or medical treatment called iatrogenic infection is frequently attributed to an invasive procedure and reported that over 60% of blood infection introduced by intravenous lines or catheter. In addition it has been reported that the incidence of nosocomial infections in the intensive care unit is about 2 to 5 times higher than in the general inpatient hospital population. Health care infections are considered a major public health problem in both epidemic and endemic form because they are the main causes of morbidity, mortality and economic burden (CDC, 2019). On the other hand, health care providers have exposed to blood born infection especially hepatitis B, C and HIV due to recapping of a needle and sharps injuries. In 2002, the WHO report published data demonstrating that 2.5% of HIV cases and 40% of hepatitis Band C cases among health care workers worldwide are the results of occupational exposure (WHO, 2019). According to the Joint

United Nations Program on HIV/acquired immune deficiency syndrome (AIDS) (UNAIDS), about 34 million people are infected with HIV worldwide.

Okai (2019) conducted in Greater Accra Region which aimed at assessing the knowledge, compliance and factors influencing compliance with IPC practices among nurses. A descriptive cross-sectional study involving 237 nurses from three hospitals in the Greater Accra Region of Ghana was conducted. The hospitals were randomly selected through balloting and proportionate sampling method was used to select nurses from the three hospitals. In the facilities, nurses were conveniently selected to participate in the study if they met the inclusion criteria and gave their consent. Validated standardized questionnaires were used to collect the data. Findings from the study showed that, majority (83.7%) of the nurses had good knowledge of IPC practices in general, however; only 25% and 43% of the nurses were knowledgeable about nosocomial infections and safe injection practices respectively. The study also showed high level (79.1%) of self-reported compliance with IPC practices among nurses. Majority of the nurses (68.4%) reported they recapped needles after use. About 93.5% of the nurses reported they always washed hands with soap under running water in their units, however, only 50% were observed to practice frequent hand wash with soap under running water. The study revealed that the level of knowledge and compliance of nurses with IPC practices were generally good. However, there were some lapses in knowledge and compliance with respect to the various IPC procedures and what was observed in practice

1.1 Problem statement

A research problem is an area of concern in which there is a gap in the knowledge base needed for nursing practice (Burns & Grove, 2018). The researcher has observed that nurses do not apply infection prevention and control measures in the hospital setting which is required to ensure patient

safety. Nurses play a pivotal role in healthcare delivery and they are responsible for ensuring the safety of patients as well as their own safety in the clinical setting. Nurses are in more contact with patients than other healthcare professionals and hold the key to infection prevention and control challenges. Inadequate knowledge and failure of nurses to comply with infection prevention and control (IPC) practices at healthcare settings is a major contributory factor to the burden of healthcare associated infections (HCAIs). Lack of knowledge, attitude and practices in infection prevention and control contribute to high rates of hospital-acquired infections (Jain, 2016). Uncontrollable nosocomial infection contributes to prolonged stay, morbidity and mortality which put stress on health care economics of the country (Mishta, Banerjee & Gosain, 2014).

1.2 General Objective

To evaluate the knowledge and practice infection prevention and control measures among staff nurses at the Holy Family Hospital, Berekum.

1.3 Specific Objectives

1. To assess the knowledge and practice of infection prevention protocols among nurses at the Holy Family Hospital, Berekum.
2. To identify the factors influencing adherence of infection prevention and control among staff nurses at the Holy Family Hospital, Berekum.
3. To evaluate the effects of poor practicing of infection prevention measures among staff nurses at the Holy Family Hospital, Berekum.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter contains a review of relevant literature related to the research topic. The review is organized along the lines of the specific objectives of the study. The sources of information include books, journals, online articles, and research reports.

2.1 Overview

Globally, over 1.4 million people are affected by HCAs (WHO, 2019). The prevalence of Hospital Acquired Infections in Africa is varying from 2.5% to 14.8% in Algeria, Senegal, Burkina Faso, and Tanzania (WHO, 2018). The end results of HCAs in accordance to WHO, 2017 and New York State Department of Health 2019, are the prolonged stay in the hospital, functional disability or reduced quality of life, high resistance to antimicrobial agents, emotional stress, additional financial costs for both the patients and their families and finally unnecessary deaths. HCAs have drawn a lot of attention of patients, government and other regulatory bodies including associations, because most of these HCAs are actually preventable. According to MOH (2011), the spread of HCAs like Human Immunodeficiency Virus, Hepatitis and other Bacteria. The end results of HCAs in accordance to WHO, 2009 and New York State Department of Health 2014, are the prolonged stay in the hospital, functional disability or reduced quality of life, high resistance to antimicrobial agents, emotional stress, additional financial costs for both the patients and their families and finally unnecessary deaths. A violation in infection control customs assists in the spread of infections either from patient to patient, patient to health workers and health worker to patient and attendants or even among staffs therefore all the HWs, attendants, patients should strictly stick on Infection Control instructions (CDC, 2019).

Globally, the knowledge about prevention and control of Hospital Acquired Infections by nurses is rated high as compared to the Attitude, Practices and compliance which are low as a result of lack of resources and training opportunities and excessive workloads in Saudi Arabia and Italy as stated by Amin and Al Wehedy (20) and Permezziani (2018) respectively.

2.2 Knowledge on the infection prevention protocols.

Okwii (2018) conducted a descriptive cross sectional study with the aim to assess the knowledge, compliance and factors influencing compliance with Infection Prevention Control practices among nurses. The study involved 237 nurses from three hospitals in the Greater Accra Region of Ghana. The hospitals were randomly selected through balloting and proportionate sampling method was used to select nurses from the three hospitals. In the facilities, nurses were conveniently selected to participate in the study if they met the inclusion criteria and gave their consent. Validated standardized questionnaires were used to collect the data. Descriptive statistics and inferential statistics using bivariate analysis (Chi-square and Fisher's exact test) and multivariable logistics regression were used to analyze the data with the help of Stata IC version 15.0 Results Findings from the study showed that, majority (83.7%) of the nurses had good knowledge of IPC practices in general, however; only 25% and 43% of the nurses were knowledgeable about nosocomial infections and safe injection practices respectively. The study also showed high level (79.1%) of self-reported compliance with IPC practices among nurses. Majority of the nurses (68.4%) reported they recapped needles after use. About 93.5% of the nurses reported they always washed hands with soap under running water in their units, however, only 50% were observed to practice frequent hand wash with soap under running water. The study concluded that the level of knowledge and compliance of nurses with IPC practices were generally good. However, there were some lapses in knowledge and compliance with respect to the various IPC procedures and what

was observed in practice. Health institutions need to intensify training and education on the various IPC procedures to achieve complete and accurate IPC practices in the clinical settings for safe healthcare delivery. There is the need for larger observational studies using observational checklist to ascertain compliance with IPC practices.

Heuum (2018) conducted a survey in Soroti in Uganda. The purpose of the study was to determine the knowledge, attitude and practices of the nurses on prevention and control of Hospital acquired infections in Soroti Regional Referral Hospital. This study was a descriptive, cross-sectional study which employed simple random sampling method and a semi structured questionnaire was used to collect data from nurses in Soroti regional referral hospital. The sample size of 88 participants was used. Data was analyzed and tables, graphs, pie charts and percentages were generated. The findings of the study revealed that 65.9% of the respondents were female while 34.1% were male. The diploma nurses constituted 48.9%, enrolled 29.5% and 21.6% of the respondents were graduates with degree award. Greater percentage of the respondents were diploma holder. Modal age group is 21-29 (48.9%, majority the respondents had experience of 1-5 years (58%). 51.1% of the respondents were very knowledgeable about hospital acquired infections, 37.5% of the respondents were quite knowledgeable about Hospital acquired infections. 81.8% of the respondents strongly agreed that every patient should be treated as if they carry blood borne. On the same note, 83.0% of the respondents said they always observe the infection control practices 90.9% of the respondents stated that they don't recap needles after use. 96.6% of the respondents said they place disposable sharps in safety box immediately after use. Results also indicate that, 96.6% of the respondents always use gloves when doing procedure while 3.2% of the respondents sometimes use gloves when doing procedure.

2.3 Factors influencing adherence of health-care staff with infection prevention and control.

Xiang and Wijaya (2018) conducted a study designed to assess the awareness and practices of Infection Prevention and Control guidelines and to identify barriers and motivators for healthcare workers' adherence to Infection Prevention and Control guidelines. The current study was a cross-sectional study conducted in the medical institutions of Punjab in India. A semi-structured self-made pre-validated questionnaire was circulated among the health-care staff through Google Forms sent in different WhatsApp groups of the healthcare workers. Data collected were analyzed using Epi-Info statistical package for Windows. The knowledge level of the participants regarding all the other infection prevention and control (IPC) practices was good except for the recommended duration of hand hygiene. The practice of recommended steps of hand hygiene was poor and was fair in case of other parameters. The major barriers in the adherence of IPC were lack of training and unavailability of necessary infrastructure and equipment. Hand hygiene practice was found to be significantly associated with working experience and number of IPC training attended. The knowledge level of infection prevention and control measures among the respondents was good but the practice was poor. The infection control guidelines need to be vigorously enforced; nurses need to be properly oriented, trained, and retrained on the infection control measures and the needed consumables, and supplies should be provided, to ensure the strict adherence to the infection control guidelines at all times.

2.4 Effects of poor practicing of infection prevention measures.

Lowe, Woods and Graham (2020) conducted a study in January and February of 2020, they conducted semi-structured interviews with hospital staff working for the International Committee of the Red Cross across eight conflict-affected countries (Central African Republic, South Sudan, Democratic Republic of the Congo, Mali, Nigeria, Lebanon, Yemen and Afghanistan). The study

explored barriers and facilitators to IPC, as well as the direct impact of conflict on the hospital and its' IPC programme. Data was analysed thematically. The results showed that inadequate hospital infrastructure, resource and workforce shortages, education of staff, inadequate in-service IPC training and supervision and large visitor numbers are barriers to IPC in hospitals in this study, similar to barriers seen in other resource-limited settings. High patient numbers, supply chain disruptions, high infection rates and attacks on healthcare infrastructures, all as a direct result of conflict, exacerbated existing challenges and imposed an additional burden on hospitals and their IPC programmes. The study also found examples of local strategies for improving IPC in the face of limited resources, including departmental IPC champions and illustrated guidelines for in-service training. The study concluded that, Hospitals included in the study demonstrated how they overcame certain challenges in the face of limited resources and funding. These strategies present opportunities for learning and knowledge exchange across contexts, particularly in the face of the current global coronavirus pandemic. The findings are increasingly relevant today as they provide evidence of the fragility of IPC programmes in these settings. More research is required on tailoring IPC programmes so that they can be feasible and sustainable in unstable settings.

Eyayu (2021) conducted a survey aiming to assess the levels of practices and associated factors of infection prevention of nurses working in public and private hospitals toward coronavirus 2019 (COVID-19) in Bahir Dar City, Ethiopia. An institution-based cross-sectional study design employed in public and private hospitals in Bahir Dar city from 26 March 2021 to 8 April 2021. A total of 442 study participants were recruited using stratified followed by simple random sampling techniques. A self-administered questionnaire was prepared and pretested on 5% of the total sample. The collected data were checked for completeness and consistency, and then the data were coded, entered, and cleaned with SPSS version 25 software. Descriptive statistics were

carried out to display the means and proportions of sociodemographic characteristics. Logistic regression analysis was used to assess the association between the level of prevention practices and the independent variables. An adjusted odds ratio with 95% confidence interval was used to report the results. A significant association was set at p-value <0.05. Of the total 442 samples, 431 (with response rate of 97.5%) answered the questions completely. The mean (\pm standard deviation) age of the participants was 29.33 (\pm 5.62) years and 217 (50.3%) were females. The proportion of good prevention practices of nurses toward COVID-19 was 39.4% (95% confidence interval: 35%–44%). Female (adjusted odds ratio = 1.77, 95% confidence interval: 1.18–2.68), have training on COVID-19 (adjusted odds ratio = 1.65, 95% confidence interval: 1.10–2.48), personal protective equipment access (adjusted odds ratio = 1.57, 95% confidence interval: 1.01–2.44), availability of infection prevention guideline (adjusted odds ratio = 1.63, 95% confidence interval: 1.06–2.49), and favorable attitude (adjusted odds ratio = 2.05, 95% confidence interval: 1.25–3.36) were factors significantly associated with good infection prevention practices. The study revealed in conclusion that, most nurses in Bahir Dar City public and private hospitals had poor prevention practices against COVID-19. Training provision, infection prevention guidelines distribution, sustainable personal protective equipment access, and promotion to change their attitudes are intervention areas that required emphasis.

CHAPTER THREE

MATERIALS AND METHODS

3.0 Introduction

This chapter talks about the study area, study population, study design, sampling techniques, data collection method and instrument, data analysis techniques, ethical consideration, and the limitations of the study.

3.1 Study area

The study was conducted at the Holy Family Hospital, Berekum. The hospital is a Christian Health Association of Ghana (CHAG) facility under the National Catholic Health Service (Catholic Diocese of Sunyani). The facility is located on the Biadan road, and 36.8km from Sunyani which serves as a Municipal Hospital. Due to the strategic location of the hospital, patients from other parts of Ghana and neighboring countries like La Cote D'Ivoire visit the hospital. The hospital has a bed capacity of about 200 beds and provides services such as; inpatient (Paediatric, Males, Females, and Surgical) wards, outpatient, Reproductive and Child Health Clinic, Maternity and Labour and Emergency, Psychiatric unit, Eye clinic: Ear, Nose and Throat clinic, Dental clinic and Theater. The Post-Natal services are part of the Reproductive and child health department where care is provided for babies and mothers on five (5) working clinic days per week.

3.2 The study population

The target population for the study is all staff nurses in the Berekum Municipality and the accessible population is the staff nurses of the Holy Family Hospital, Berekum.

3.3 Study design

A descriptive cross-sectional survey was used in this study. This design was employed because nurses have unique or different characteristics that need to be studied at a point in time. The design also paved way for data collection to be done at the same time from people who are similar on other characteristics but different on key factors of interest such as age, gender, clinicals experience, income levels, or geographic location. A descriptive study was employed to describe objectively the state of infection prevention protocols practices among nurses at the Holy Family Hospital, Berekum.

3.4 Sampling technique and size

A total of fifty (50) staff nurses were selected for the study. The respondents were obtained using the convenient sampling method. This method was used because it is inexpensive and respondents are easy to reach. Fifty (50) staff nurses who were working within a week from the hours of 9:00am to 2:00pm were selected.

3.5 Data collection methods and instruments

Data collection was done through the use of structured questionnaires consisting of both closed-ended and open-ended questions for easy expression of views and ideas. This was chosen as the method of data collection because it is relatively cheaper, avoided embarrassment on the part of the respondents, and the complete anonymity of respondents. Questionnaires were shared to the nurses who were at the ward. We explained to them how the questionnaires were to be filled. Each nurse used a maximum of 20 minutes to complete the questionnaire.

3.6 Data analysis techniques

The data obtained from the study were checked for accuracy, utility, and completeness. Data were analyzed using Microsoft Excel 2013 and results were presented in tables and figures.

3.7 Ethical consideration

An introductory letter was sent to the Management of the Holy Family Hospital, Berekum for approval to conduct the study. Participants were informed of the benefits, risks, purpose, and procedure of the study and their right to withdraw from the study at any point without penalty. All participants agreed voluntarily to be part of the study. Respondents were assured of anonymity and confidentiality by not providing any form of identification on the questionnaire. However, identification codes were used to represent the respondent according to their chronologic entry into the study.

3.8 Limitations of the study

The study was limited by the convenience sampling method that was used to select participants since not every participant had an equal and independent chance of being selected. Also, it was difficult to generalize our findings since a small sample size and one facility were used

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.0 Introduction

This chapter presents a detailed analysis of the data gathered from the field. The results are presented in tables and figures. The analysis data was done according to the specific objectives of the study. The results are categorized into the demographic characteristics of the respondents, the knowledge and practice of infection prevention protocols among nurses, the factors influencing adherence of infection prevention and control among staff nurses and the effects of poor practicing of infection prevention measures among staff nurses at the Holy Family Hospital, Berekum.

4.1 Demographic Characteristics of the Respondents

Table 1: Age Distribution of Respondents

Variable	Categories	Frequency (n)	Percentage (%)
Age	18-25	13	26
	26-33	21	42
	34-41	15	30
	Above 41	1	2

From Table 1, less than half of the respondents (26%) were aged between 18-25 years, most of the respondents (42%) were aged between 26-33 years. Thirty percent (30%) of the respondents were aged between 34-41 years and two percent (2%) were aged above 41 years.

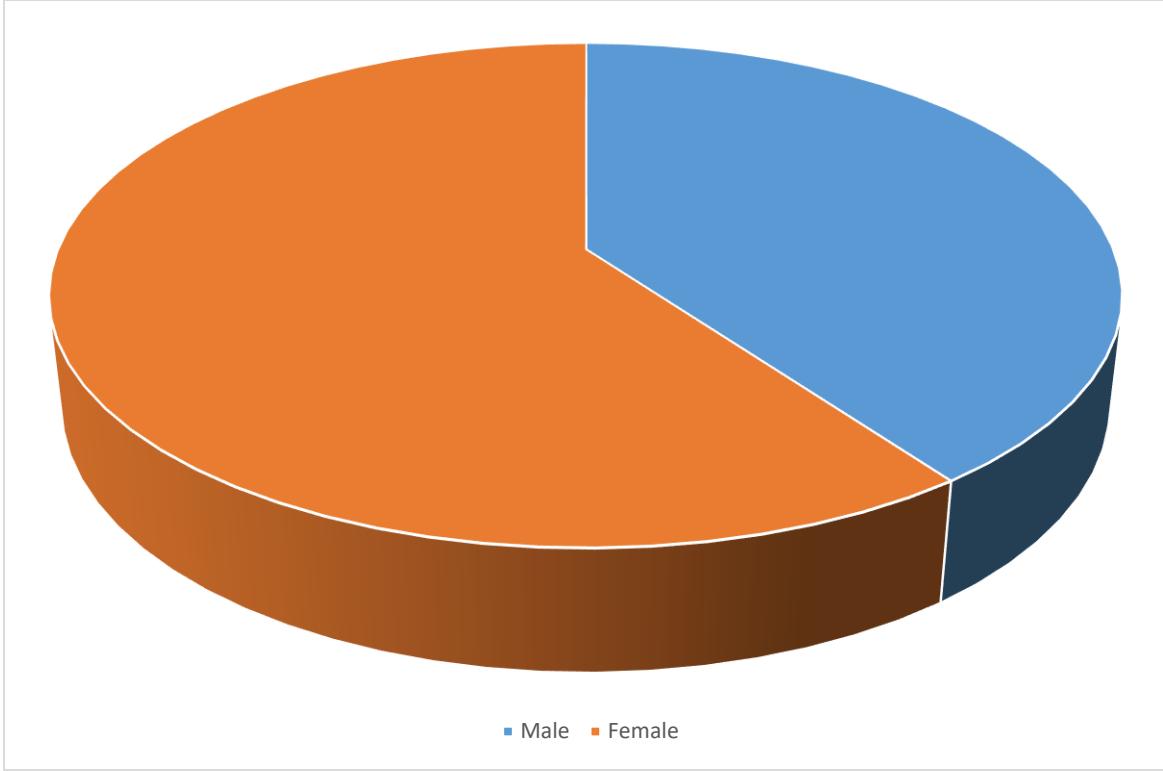


Figure 1: Respondents Gender

From figure one, majority (60%) of the respondents were females and 40% were males.

Table 2: Marital Status of Respondents

Variable	Categories	Frequency (n)	Percentage (%)
Marital status	Single	18	36
	Married	30	60
	Divorced	0	0
	Widowed	2	4

Most of the respondents (60%) were married, 36% of the respondents were single, none of the respondents were divorced and 4% of the respondents were widowed.

Table 3: Respondents years of experience.

Categories	Frequency (n)	Percentage (%)
1-4 years	25	50
4-7 years	10	20
7-10 years	10	20
Above 10 years	5	10

Few of the respondents (10%) had working experience above 10 years, 20% of the respondents had 4-7 years working experience, the same 20% of the respondents had 7-10 years working experience and most of the respondents (50%) had 1-4 years working experience.

Table 5: Religions of Respondents

Variable	Categories	Frequency (n)	Percentage (%)
Religion	Christianity	35	70
	Islamic	12	24
	Traditional	3	6
	Others	0	0

From table 5, most of the respondents (70%) are Christians, 24% of the respondents are Moslems and 6% of the respondents are Traditionalists.

4.2 Knowledge level about Infection Prevention and Control

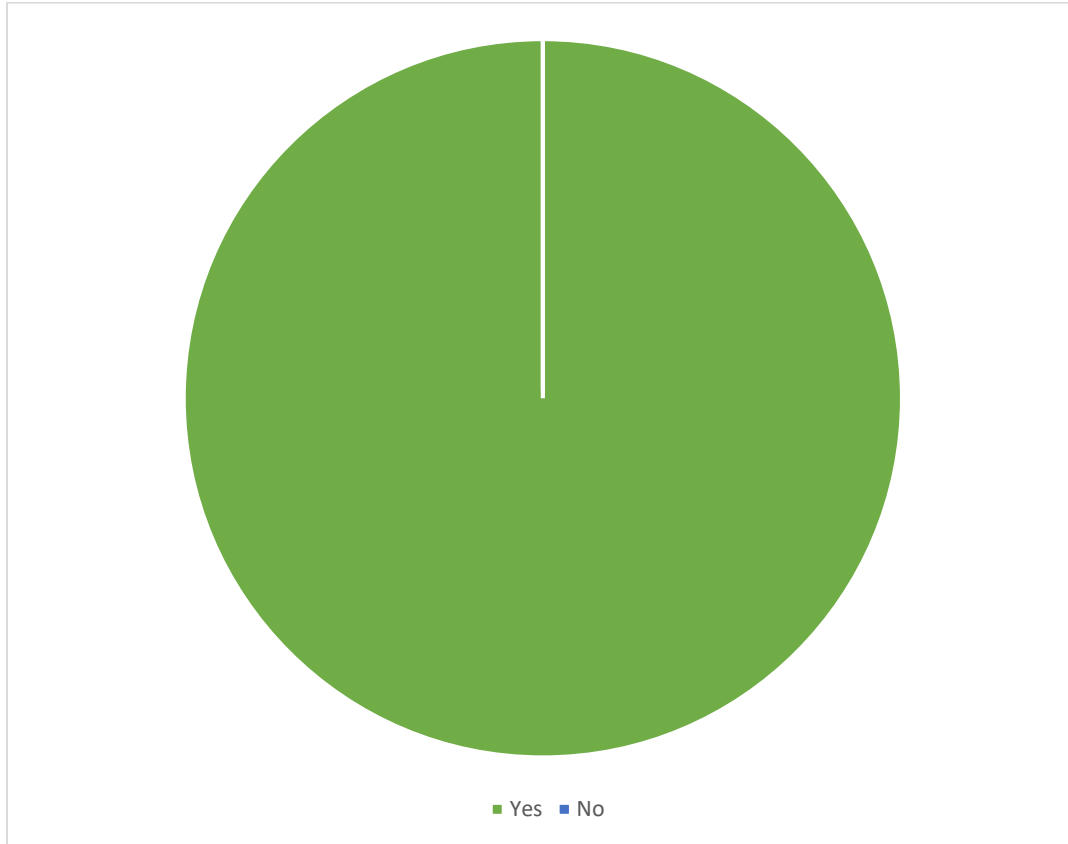


Figure 2: Respondents knowledge on IPC

From figure two, most of the respondents (100%) indicated that they do know about IPC and none of the respondents indicated that they do not know about IPC.

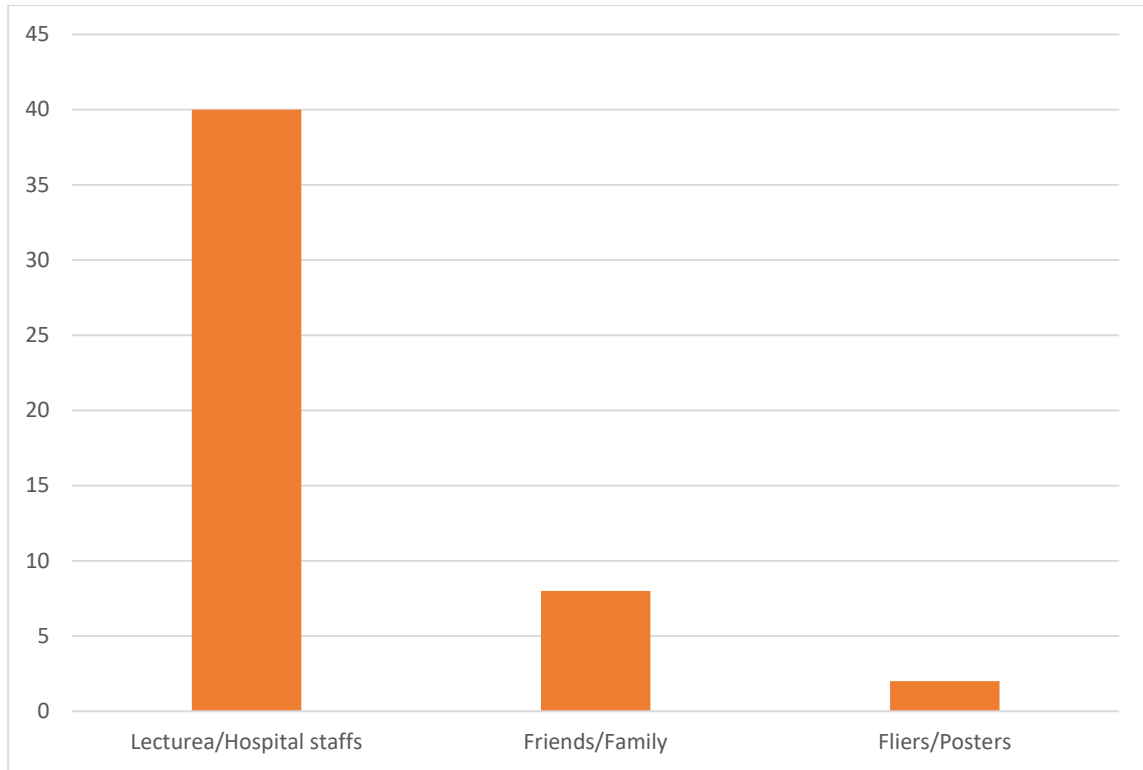


Figure 3: Respondents source of information.

From figure three, majority of the respondents, about eighty percent (80%) indicated they heard it from the lectures\hospital staffs, sixteen percent (16%) of the respondents indicated they heard it from friends/family and four(4%) of the respondent indicated fliers/posters.

Table 6: Respondent knowledge on standard precautions

Statement	Strongly disagree	Strongly agree	Disagree	Agree	Total
Appropriate handling of patient care equipment and soiled linen	0	50	0	50	100
Prevention of needle-stick /sharp injuries	8	10	22	60	100
Environmental cleaning and spills-management	30	40	10	20	100
Appropriate handling of health care wastes / sharps	25	10	15	50	100
Using tap water only is enough for hand washing.	80	0	15	5	100

Out of the 50 nurses, 50% of the respondents strongly agreed to appropriate handling of patient care equipment and soiled linen with another 50% agreeing whereas none of the respondents indicated they strongly disagree and also disagree.

Also most of the respondent 8% strongly disagree to ‘prevention of needle-stick /sharp injuries’ with 10% strongly agreeing, 22% disagreeing and 60% agreeing.

Moreover, concerning the environmental cleaning and spills-management, 30% strongly disagree, 40% strongly agree, 10% disagree and 20% strongly agreeing.

With regards to the appropriate handling of health care wastes /sharps, 25% strongly disagree, 10% strongly agree, 15% disagree and 50% strongly agreeing.

Also on ‘Using tap water only is enough for hand washing’ majority of the respondents (80%), none of them strongly disagree, 15% disagree and 5% of them agreeing.

4.3 Factors influencing the adherence of infection prevention and control among health care staff.

Statement	Strongly disagree	Strongly agree	Disagree	Agree	Total
Shortage of staff	0	75	0	25	100
Work load	2	60	8	30	100
Inadequate finances	10	40	10	30	100
Negative attitude of some nurses	25	10	15	50	100
Overcrowding of patients and limited space	0	80	15	5	100

Out of the 50 nurses who participated, 75% of the respondents strongly agreed to the fact that shortage of staff has a greater influence with 25% agreeing where none of them disagreed and strongly disagreed.

Also most of the respondent (60%) strongly agree to workload influencing the adherence of infection prevention and control among health care staff, as a factor influencing the adherence of infection prevention and control among health care staff with 30% agreeing, 2% disagreeing and 8% strongly disagreeing.

With regards to the financial issues as a factor influencing the adherence of infection prevention and control among health care staff, 30% strongly disagree, 40% strongly agree, 10% disagree and 20% strongly agreeing.

Moreover, concerning the negative attitude of some nurses, majority of the respondents (80%), none of them strongly disagree, 15% disagree and 5% of them agreeing.

4.4 Effects of poor practicing of infection prevention measures.

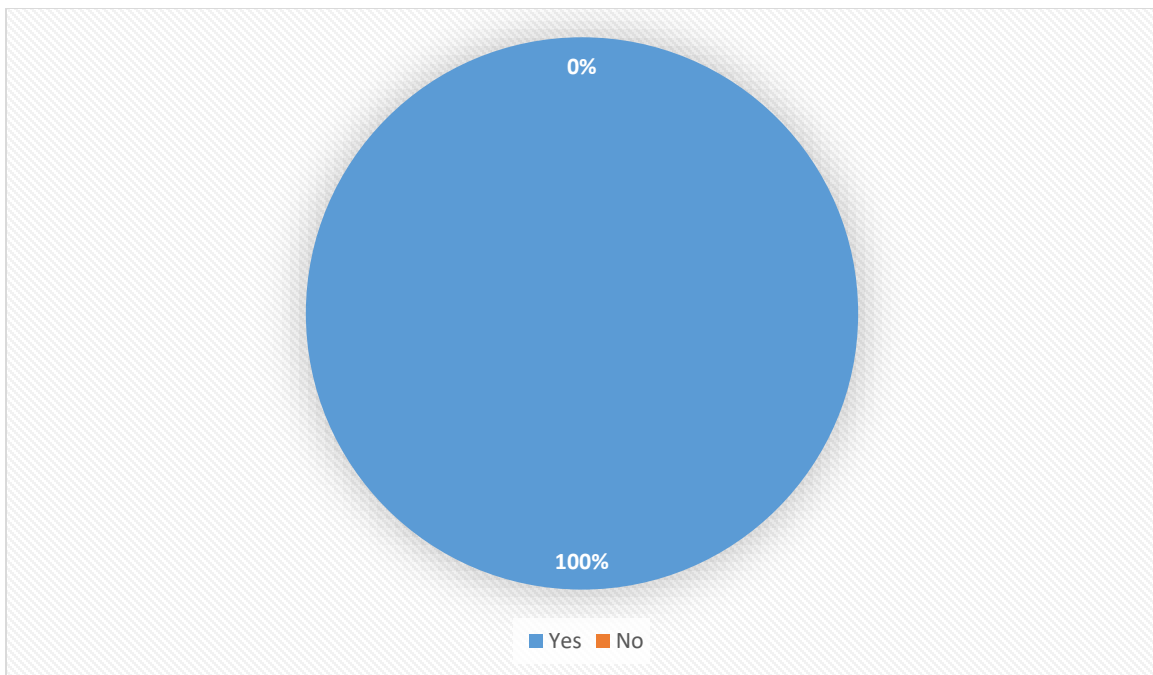


Figure 4: Respondent perception whether poor IPC has an effect.

From figure four, all the respondents indicated that poor IPC have a great effect at the ward.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS, RECOMMENDATIONS

5.0 Introduction

This chapter deals with the discussion of findings of the study. It compares the findings with that of the literature review. It also includes the drawing of conclusion and making recommendations based on the findings. This discussion is based on the specific objectives of the study.

5.1 Discussions

The study was conducted on a sample of 50 nurses. The majority are young nurses' ages between 26-33 years and experience (1-4 years). Sixty percent (60%) were females and 40% were males. The study attempted to assess nurse's knowledge relevant to infection control measures.

5.1.1 Knowledge level about Infection Prevention and Control

Most of the respondents (100%) indicated that they do know about IPC and none of the respondents indicated that they do not know about IPC. Also majority of the respondents (98%) said they heard it from the lectures\hospital staffs, 2% of the respondents indicated they heard it from friends/family and none of the respondent indicated fliers/posters.

Out of the 50 nurses, 50% of the respondents strongly agreed to appropriate handling of patient care equipment and soiled linen with another 50% agreeing. Also most of the respondent 8% strongly disagree to 'prevention of needle-stick /sharp injuries' with 10% strongly agreeing, 22% disagreeing and 60% agreeing. On 'environmental cleaning and spills-management' 30% strongly disagree, 40% strongly agree, 10% disagree and 20% strongly agreeing. Also on 'Using tap water only is enough for hand washing' majority of the respondents (80%), none of them strongly disagree, 15% disagree and 5% of them agreeing. Similarly, a study conducted by Okai in the year

2019 revealed that the level of knowledge and compliance of nurses with IPC practices were generally good. However, there were some lapses in knowledge and compliance with respect to the various IPC procedures and what was observed in practice.

5.1.2 Factors influencing the adherence of infection prevention and control among health care staff.

Out of the 50 nurses, 75% of the respondents strongly agreed to shortage of staff with another 25% agreeing. Also most of the respondent (60%) strongly agree to 'workload' with 30% agreeing, 2% disagreeing and 8% strongly disagreeing. On 'financial issues' 30% strongly disagree, 40% strongly agree, 10% disagree and 20% strongly agreeing. Also on 'negative attitude' majority of the respondents (80%), none of them strongly disagree, 15% disagree and 5% of them agreeing. According to Xiang and Wijaya (2018) a study was designed to assess the awareness and practices of Infection Prevention and Control guidelines and to identify barriers and motivators for healthcare workers adherence to Infection Prevention and Control guidelines.

5.1.3 Effects of poor practicing of infection prevention measures

Respondents were asked whether poor practicing of IPC has effect, all the respondents (100%) indicated yes. Similarly, according to Lowe, Woods and Graham (2020), a study was conducted to explore the barriers and facilitators to IPC, as well as the direct impact of conflict on the hospital and its' IPC programme. The results showed that inadequate hospital infrastructure, resource and workforce shortages, education of staff, inadequate in-service IPC training and supervision and large visitor numbers are barriers to IPC in hospitals in this study, similar to barriers seen in other resource-limited settings. High patient numbers, supply chain disruptions, high infection rates and attacks on healthcare infrastructures, all as a direct result of conflict, exacerbated existing challenges and imposed an additional burden on hospitals and their IPC programmes. The study

also found examples of local strategies for improving IPC in the face of limited resources, including departmental IPC champions and illustrated guidelines for in-service training. The study concluded that, Hospitals included in the study demonstrated how they overcame certain challenges in the face of limited resources and funding. These strategies present opportunities for learning and knowledge exchange across contexts, particularly in the face of the current global coronavirus pandemic. The findings are increasingly relevant today as they provide evidence of the fragility of IPC programmes in these settings.

5.2 Conclusion

The following conclusions were drawn from the study:

1. It was concluding that the majority of the sample had good knowledge about infection control measures
2. It showed lack of practice in hand washing and using gloving which are the most significant items to prevent transmission of infection.

5.3 Recommendations

Based on the findings of the study, the following recommendations are made:

1. It is recommended that interactive infection control courses that promote critical thinking are implemented at undergraduate level along with more stringent forms of assessments focusing on infection prevention and control, during clinical training.
2. This study we recommended that Nurse managers need to be supervising the staff nurses on the practicing infection prevention standards and techniques and monitoring nursing adherence to policies of the hospital.

3. The Administrators should promote feedback of practice, individual reinforcement and appropriate rewards for the good practice.

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APPENDIX
QUESTIONNAIRE

INTRODUCTION

Dear Respondent,

We are students of the Holy Family Nursing and Midwifery Training College, Berekum researching the topic; “assessing nurses’ knowledge and practices on infection prevention in the ward at Holy Family Hospital, Berekum”.

Kindly answer the under-listed questions by ticking (√) the appropriate box or writing in the space provided. Any information you provide is confidential. Your opinion is neither considered right nor wrong. You can choose to withdraw your participation at any time without any penalty. It will take approximately 20 minutes to answer this questionnaire.

Thank you.

PLEASE TICK [√] THE APPROPRIATE BOX WHERE APPLICABLE

SECTION A: BIOGRAPHICAL INFORMATION

1. Age: A. 18 - 25 years [] B. 26 - 33 years [] C. 34 - 41 years [] D. above 41 years []

2. Gender: A. Male [] B. Female []

3. Marital status: A. Single [] B. Married [] C. Divorced [] D. Widowed []

4. Years of experience: A. 1-4 years [] B. 4-7 years [] C. 7-10 years []
D. above 10 years []

5. Religion A. Christianity [] B. Islamic [] C. Traditional []

D. Other, please specify.....

SECTION B: KNOWLEDGE ON INFECTION PREVENTION AND CONTROL

6. Do you know about infection control? A. Yes [] B. No []

7. Source of information: A. Lectures/hospital staffs [] B. Friends/Family [] C. Fliers/Posters []

8. Do you think it is important to prevent cross-infection in health care settings?

A. Yes [] B. No [] C. Do not know []

What are the standard precautions of infection control in protecting patients, health workers and visitors?

	Statement	Strongly disagree	Strongly agree	Disagree	Agree
9	Appropriate handling of patient care equipment and soiled linen				
10	Prevention of needle-stick /sharp injuries				
11	Environmental cleaning and spills-management				
12	Appropriate handling of health care wastes / sharps				

13. Using tap water only is enough for hand washing.

A. True [] B. False []

SECTION C: FACTORS INFLUENCING THE ADHERENCE OF HEALTH CARE STAFF.

Indicate whether any of the statement below can be a factor.

	Statement	Strongly agree	Agree	Disagree	Strongly disagree
14.	Shortage of staff				
15.	Work load				
16.	Inadequate finances				
17.	Negative attitude of some nurses				
18.	Overcrowding of patients and limited space				

SECTION D: EFFECTS OF POOR PRACTICING OF INFECTION PREVENTION MEASURES.

19. Do you know poor practicing of infection prevention measures at the ward has effect?

A. Yes [] B. No []

20. The greater effect is on;

A. Patient [] B. Colleague Staffs [] C. Family [] D. All of them []

NATIONAL CATHOLIC HEALTH SERVICE (DIOCESE OF SUNYANI)
HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE
BEREKUM



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Your Ref.



P. O. Box 21,
Berekum, B/A
Ghana, W/Africa
Tel. 0352222124
Fax: 0352222474

August 1, 2022

Date

The Administrator
Holy Family Hospital
Berekum



Dear Administrator

PERMISSION TO CONDUCT RESEARCH

I wish to introduce to you the under-listed names of final-year students of the College:

1. Naku Joan
2. Nalesu Rita

As part of the pre-requisite for the award of Diploma in Nursing, they are to conduct a research study, hence the data collection on **"Assessing Nurses Knowledge and Practice on Infection Prevention in the Ward at Holy Family Hospital, Berekum"**

I would be grateful if you could assist them with any material or help they may need to accomplish this task.

Thank you.

Yours faithfully

Emmanuel Ali
Supervisor

For: Principal

*Approved
To meet Dr. Inchi*