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PERCEPTION AND PRACTICE OF HANDWASHING AMONG HEALTH WORKERS AT THE MATERNITY WARD OF HOLY FAMILY HOSPITAL, BEREKUM AMID COVID 19.

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DECLARATION

We hereby declare that this submission is our own work towards the Diploma in Registered Midwifery 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 diploma of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

The study focused on the perception and practice of handwashing among health workers at the maternity ward of Holy Family Hospital, Berekum amid COVID 19. A descriptive study design was used to collect in-depth information for the study. The sample population was obtained using a convenience sampling technique. A total of 20 respondents were sampled for the study. The data for the study was collected by administering the questionnaire to the participants.

The study found that 90% (18) of the respondents indicated that the tap flows always during the day.5% (1) of the respondent indicated veronica bucket and 5% (1) of the respondent also indicated during the day. It came out to be that 50% (10) indicated regular handwashing, 25% (5) indicated washing of instruments after use, 15% (3) indicated wearing of gloves and 10% (2) indicated isolation. It turned out to be that 90% wash their hands before the Start of every procedure. (iii) after a procedure, it turned out to be that 95% of the respondents wash their hands after every procedure.

The study recommended that healthcare personnel were good and same can be done elsewhere. Continuous workshops and education should be done to orientate new staff to continue the best practice.

The study concluded that respondents have good perception about handwashing as most knew that it is possible to prevent healthcare-associated infections through handwashing and they also gave high priority to handwashing. colleges were the main reminder of respondents when it comes to handwashing.

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ABBREVIATION

COVID-19	Coronavirus Disease of 2019
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
WHO	World Health Organisation
HCWs	Health Care Workers
CDC	Center for Disease Control

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CHAPTER ONE

INTRODUCTION

1.0 Background of the study

Hand washing is the act of cleaning hands for the purpose of removing soil, dirt, and microorganisms (Dubik S. Dajaan, 2018). Hand washing has been globally acknowledged and accepted as a low cost and effective technique in preventing communicable diseases by countries all over the world, including WASH programme by UNICEF (United Nations Children's Emergency Fund, 2019) (Priyanka P. Gawai, 2020). Hand washing is identified as a critical component for promoting patient safety and for the prevention of pathogenic infections.

Hand washing is widely recognized as essential measure in preventing healthcare associated infections in hospitals. Infectious diseases are still the most common and deadly group of diseases for developing world. Healthcare associated infections are one of the main sources of mortality and morbidity in hospitals and contribute to the high cost of healthcare services for patients and healthcare services. Annually, more than 3.5 million children under 5 die from diarrhea and acute lower respiratory-tract infections. In case of proper hand washing there would be a significant reduction in the incidence of these diseases.

The center for disease control and prevention (CDC) declared that healthcare associated infections were caused by nonadherence of healthcare professionals to standard precautions of infection controls and recommended hand washing during the course of providing patient care. Although there are several evidenced-based recommendations to promote compliance with hand washing and numerous evidence of the advantages of performing hand washing, inadequate levels of compliance with handwashing among healthcare professionals continue

to be reported repeatedly. Nurses are frequently exposed to a variety of sources of infections throughout the process of performing nursing activities.

The Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) is the infectious agent that causes Coronavirus Disease (COVID-19) (Deng & Peng, 2020). A novel coronavirus strain, COVID-19, was discovered for the first time in January 2020. (Li, Zhang, & Hu, 2020). With significant mortality and morbidity, the virus has spread quickly throughout the entire world (World Health Organization [WHO], 2020). The coronavirus was originally discovered in China, more especially in Wuhan city, in the winter of 2019. Every aspect of human life has been impacted by the pandemic, including religious practices, funerals, companies, institutions of higher learning, public healthcare systems, and social gatherings (World Bank, 2020). When a person with COVID-19 exhales tiny droplets from their mouth or nose, they can spread the illness to others.

The COVID-19's global effects are extensive and may be seen in practically every sphere of life, but especially in the fields of health, economy, and education. There have been several daily reports on the virus's impact on the lives of millions of people worldwide since since the virus was declared a pandemic in March 2020. Globally, 169,118,995 confirmed cases of COVID-19, including 3,519,175 fatalities, have been reported to WHO as of 3:24 p.m. CEST on May 29, 2021, according to WHO (2021). There have been 1,546,316,352 doses of vaccination provided as of May 27, 2021. In Ghana, there have been 93,775 confirmed cases of COVID-19 with 784 fatalities reported to WHO between January 2020 and April.

The transmission of COVID-19 is thought to happen mostly through respiratory droplets. During individual coughs, sneezes, or talks the virus is released within the respiratory secretions and can infect another person if it makes direct contact with the mucous membranes. Another mode of viral transmission is when a person touches a contaminated surface with the virus and then touches his or her nose, mouth, and eyes. The time betweenIt

is believed that respiratory droplets play a major role in the transmission of COVID-19. When a person talks, sneezes, or coughs, the virus is discharged in their respiratory secretions and has the potential to spread to another person if it comes into touch with their mucous membranes. Another way for a virus to spread is when a person touches something that has the virus on it and then touches their eyes, nose, or mouth. Most occurrences of COVID-19 occur five to six days after exposure, with the expected interval between exposure and the start of symptoms being 14 days (Chang, Yuan, & Kok, 2020).

The leading cause of cardiovascular disease, which can result in myocarditis, heart failure, pericarditis, and cardiac conduction abnormalities, is COVID-19 (Vuorio, Watts, & Kovanen, 2020). Furthermore, COVID-19 can alter the course of the underlying disease and increase mortality in people with a history of cardiovascular disorders (Guo, Fan, & Chen, 2020). Blood glucose levels that are too high might damage people's immune systems, making it harder for them to fight off various diseases like COVID-19. As a result, the virus may manifest itself in the body in more atypical ways (Ma & Holt, 2020).

According to a Chinese study, individuals with cardiovascular illness are at an increased risk of developing a severe COVID-19 infection. A significant observational study that involved 1099 COVID-19 patients found that 16.2% of those with diabetes mellitus and 23.7% of those with severe illness also had concomitant hypertension (Guan, Ni, & Hu, 2020).

As a result, each nation's top priority now is to stop the virus from spreading and to lessen its consequences on society as a whole, and on the most vulnerable populations in particular (Osman, 2020). Communities must adhere to recognized infection control procedures to reduce the risk of coronavirus transmission. These steps consist of regular hand washing with soap and water, hand rubbing with an alcohol-based sanitizer, social withdrawal, awareness of symptoms frequently, using a mask in public, and maintaining good respiratory hygiene (Ghosh, et al., 2020).

However, the ideal definition of hand washing is the process of washing one's hands with soap and water to remove any dirt, grease, bacteria, viruses, or other hazardous or unpleasant substances that may have become stuck to the hands. As wet and moist hands are more easily recontaminated, drying the cleansed hands is a necessary step in the process (Huang, Ma, & Stack, 2018). Hands should be washed for at least 20 seconds, per the WHO (2020). It has been demonstrated that practicing good hand hygiene, such as washing hands with soap and water or using hand sanitizers, can reduce the spread of infectious diseases, particularly respiratory tract infections (Azor-Martnez et al., 2017). However, encouraging good hand hygiene habits is a challenging task (Stone, Teare, & Cookson, 2018).

Washing your hands is quite simple and can save your life. Average compliance among health care workers (HCWs) is still low (Yousif, Tancred, & Abuzaid, 2020). There are individual, group, and institutional factors that contribute to recommendations not being implemented (Pittet, 2019). Personal traits including social cognitive and psychological variables (i.e., knowledge, attitude, intentions, beliefs, and perceptions) might provide additional insight into hand hygiene behavior (Kretzer & Larson, 2019). Some of the reported obstacles to adhering to guidelines for hand hygiene practices include access to hand hygiene materials, forgetfulness, ignorance of rules, and lack of time for hand hygiene (Ojong, 2016). Despite significant efforts, hand hygiene compliance is still poor and cleanliness standards are inadequate in both community and healthcare settings in African nations (Pengpid & Peltzer, 2020).

The first historical evidence on the importance of hand hygiene was revealed in a maternity clinic in Vienna in 1847. Cleaning hands by medical personnel reduced maternal mortality (Ahmet Ergin, 2019). Hand hygiene before and after certain activities (e.g. before eating food and after going to the toilet) is considered as most effective in removing germs thus protecting one against infectious diseases like diarrhoea and pneumonia and also in

preventing transmitting disease causing germs to others (Priyanka P. Gawai, 2020). UNICEF has published extensive material on school sanitation and hygiene intended at facilitating that learners be agents for change as the live within the community. This is achieved by evaluation of the hardware aspects, such as the physical infrastructure, sanitation facilities at schools and the availability of safe water. The softer side includes the provision of knowledge on hygienic methods followed by their continued use (practices) at the schools. The ultimate goal is the reduction in water and sanitation related diseases otherwise if the facilities are rundown they might be the source of infections (Gumbo J. E., 2017).

Learning, hygiene and health are strongly inter-linked as students miss school or perform poorly when they are suffering from disease related to poor hand hygiene. These illnesses spread fast where many students are together for many hours at school. With this in mind, the School Health Education Program (SHEP) Unit of Ghana Education Service (GES) in collaboration with the Community Water and Sanitation Agency (CWSA) and other NGOs have undertaken a number of hand washing with soap promotional activities in schools across Ghana. Students and their teachers have been taken through the need to observe hand washing with soap at critical times, the importance of hand washing, the steps in hand washing and practical demonstration of hand washing (Dubik S. Dajaan, 2018).

Consequently, this research is being done to determine the Perception, practice of handwashing among health workers at the maternity ward of Holy Family Hospital, Berekum amid COVID 19.

1.1 Problem statement

According to Semmelweis' Germ Theory the common practice of hand washing nowadays was once considered odd during the 19th century. Moreover, the diseases like malaria and typhoid were associated with the contact with water. Semmelweis discovered that puerperal

sepsis (a type of septicaemia) commonly known as childbed fever in new mothers could be prevented if doctors washed their hands. He insisted upon the use of chlorinated lime solutions for handwashing by medical students and doctors before they treated obstetrical patients (Explorable.com, 2020).

The World Health Organization (WHO) declared COVID-19 to be a public health emergency of international concern on January 30, 2020. The mortality rate was found to be 3.9% according to the data at that time (WHO, 2020). As COVID-19 can spread through contact with contaminated surfaces, hand hygiene remains a fundamental control and prevention measure and is strongly recommended to curb its transmission, especially in the absence of a clinically approved vaccine or antiviral prophylaxis (WHO, 2020).

Although there are several evidence-based recommendations to promote compliance with handwashing and numerous pieces of evidence of the advantages of performing hand washing, inadequate levels of compliance with handwashing among healthcare professionals continue to be reported repeatedly (Center for Disease Control [CDC], 2019).

The knowledge of hand washing was not recognized in the 19th century but was seen as very important to help prevent infection. The medical and clinical team as at that time didn't see the essence of handwashing at the clinical area (Explorable.com, 2020).

1.2 General objective of the study

The main objective is to find out the perception and practice of handwashing among health workers at the maternity ward of Holy Family Hospital, Berekum amid COVID 19.

1.3 Specific Objective

1. To know the equipment used for handwashing among health workers.
2. To find out the perception of handwashing among health workers.

3. To find out how frequently health workers practice handwashing amid COVID-19

1.4 Operational Definition

Hand hygiene: use of recommended means of keeping the hands free from germs.

Practice: defined as the act of carrying out a particular procedure in accordance with a predetermined standard.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter includes a survey of pertinent literature connected to the study's subject: “Knowledge, perception, and practice of handwashing among students of Holy Family NMTC, Berekum amid COVID 19”. Books, journals, internet papers, and research reports are some of the sources of information.

2.1 Perception of Handwashing

A cross-sectional study was conducted among nurses and physicians providing direct patient care in four hospitals in Hong Kong on perceptions of the importance and impact of health care associated infections and hand hygiene. Among respondents a total of 60% of the nurses and 46% of the physicians acknowledged that over 75% of healthcare-associated infections can be prevented by hand hygiene (Tai, Mok, Ching, Seto, & Pittet, 2017).

Appropriate hand hygiene practices such as handwashing and hand sanitization can possibly result in the reduction of the spread of infection and the resulting lost days of school/work because of absenteeism (White et al., 2018). One way of reducing illness related absenteeism is to promote good hand hygiene practices as proper hand hygiene is a well-known preventive measure for many infectious diseases (Heymann, 2018).
Between July 31 and August 3, 2020, Mahdi et al. (2020) performed a cross-sectional survey among Saudi Arabian citizens who visited the prophet's Mosque in Al Madinah city. The purpose of the study was to evaluate the visitors' knowledge, attitudes, and practices about hand hygiene at the Prophet's Mosque in Al Madinah City, Saudi Arabia. Data were gathered using a self-administered computerized questionnaire. The poll was completed by 400 people between the ages of 18 and 65, of whom 215 (53.8%) were female. The majority of

participants in the survey considered that washing hands with antiseptic/antibacterial soap and water (263, 65.8%), regular soap and water (195, 48.8%), and alcohol-based hand rubs (224, 56%) are extremely good hand hygiene techniques, whereas 60 (15%) thought the same about plain water. It was determined that the majority of mosque visitors had a favorable opinion of the effectiveness of hand cleanliness in eradicating viruses that present on our hands, including coronavirus.

A pretest-posttest methodology was used by Larbi et al. (2019) to perform an observational study in 15 healthcare institutions, including 2 district hospitals and 13 health centers, in the Kpandai and Tatale-Sanguli districts of Ghana's Northern Region. According to the survey, over half of the respondents (48.1%) believed that healthcare-associated infections had a minimal (38.2%) to negligible (9.9%) influence on patients' clinical results. At the outset, the majority of healthcare professionals (85.5%) believed that hand hygiene was extremely (47.7%) or very highly (41.6%) effective in preventing healthcare-associated infections. The majority of respondents (70%) gave the necessity of institutional hand hygiene a high priority (36.5%) and a very high priority (33.8%).

From May 28 to June 12, 2020, 896 valid responses from Indonesian residents over the age of 18 were collected as part of a cross-sectional online survey performed by Dwipayanti, Lubis, and Harjana (2021). To gather information, a Google Forms online survey was made. In this study, 66.9% of participants thought their risk of getting COVID-19 was medium to low, and 65% said that if they did get COVID-19, their symptoms would be light to nonexistent. In accordance with many respondents' beliefs (61.3%), handwashing is an effective way to avoid diseases like COVID-19 and other disorders (77 percent).

2.3 Frequency of Practice of Hand Washing

Nazako (2018) indicates that student nurses often fail to practice hand hygiene because they are busy and they feel hand hygiene take up precious time, they often perceive that gloves can be used a s an alternative to hand hygiene. They usually tend to remove the gloves without washing their hand or use the same gloves to deliver intended care to multiple patients. Even when they remove their gloves, only 20% 0f them actually clean their hands while studies claim that student nurses are frightened that skin problems such as dermatitis could develop, especially with alcohol hand-rubs.

A study carried out by Khaled M. Abdelaziz at Ain Shams University, Cairo, where in 23.2% of observed candidates showed inappropriate hand washing time length (less than 30 seconds). Also this finding in line with the study done by Maheshwari et al, where participants had answered below satisfaction level regarding the type of hand hygiene method required for decontaminant hands in the different clinical situations. Yawson and Hesse (2018) conducted a cross-sectional study on nurses and doctors working in Rabit University Hospital, Sudan. A sample size of 237 health workers comprising 138 nurses and 99 doctors were used. The study found out that good hand hygiene practices were found in only 18.1% of healthcare workers. The study added that most healthcare workers believed that notice boards reminded them to carry out hand hygiene.

In order to ascertain how frequently good hand hygiene is practiced, Andriana and Nadjib (2018) carried out a cross-sectional study on community-dwelling participants using a proportionate random sample from all Lebanese governorates (Beirut, Mount Lebanon, North, South, and Bekaa). Two thousand two hundred and eighty-nine (2289) people in all were enrolled in the study. SPSS Version 23 was used for the data analysis. The study's findings demonstrated that despite the various published guidelines, hand hygiene compliance is still a problem. The lack of compliance among health workers has been linked

to factors from the health workers themselves, including skin-irritating soap, hard-hand soap, a lack of awareness of the significance of hand cleanliness, forgetfulness, and a busy schedule. Health professionals also only wash their hands when it is absolutely necessary, not always when they are more likely to be highly polluted and the technique is still subpar.

In order to evaluate the knowledge, attitudes, and handwashing behaviors among Health Care Workers (HCWs) in Ain-Shams University hospitals and to evaluate the different wards' handwashing facilities, Khaled et al. (2016) conducted a cross-sectional descriptive and observational study. According to the study's findings, doctors demonstrated much higher observational compliance (37.5 percent) than other groups of HCWs. Only 11.6% of them, however, had properly washed their hands. Routine hand washing (64.2 percent) and antiseptic handwashing were the two types of hand hygiene most frequently used by HCWs (3.9 percent). The most frequent type of incorrect handwashing was having a brief contact time and improper drying (23.2%). The study found that there was little handwashing compliance.

A cross-sectional survey was done by Mahdi et al. (2020) among Saudi Arabian residents who visited the prophet's mosque in Al Madinah city between July 31 and August 3, 2020. Data for the study were gathered via a self-administered online questionnaire. The poll was completed by 400 individuals, 215 (53.8%) of them were female and were between the ages of 18 and 65. According to the study, only 25.6% of people wash their hands with soap and water after sneezing or coughing, and 12.6% use alcohol-based hand sanitizer after shaking hands (28.6% and 26.8%, respectively). The highest percentage (27.6%) use handkerchiefs after sneezing even though they had just washed their hands with soap and water before. Equally, approximately 27% of the Saudi Arabian citizens did not wash their hands after nose-blowing, coughing, or sneezing amid the COVID-19 pandemic.

Over 90% of pilgrims cleansed their hands with soap and water or sanitizers after coughing and sneezing, before eating or preparing food, and after using the restroom, according to Tobaiqy et al. (2020) cross-sectional descriptive research of 387 Umrah pilgrims.

2.4 Equipment Used for Handwashing

A cross-sectional study was conducted in New Delhi, India on basic handwashing facilities in developing countries. The study was based on a sample of 94 countries for 10 years (2008 to 2017). The study reported that access to handwashing facility is considered basic personal hygiene practice which has positive externality in terms of public health benefits. The access to handwashing facilities is contingent upon access to safe water supply of adequate quantity and affordable price. Therefore, access to safe water is basic condition to have access to handwashing facility (Mukherjee, 2020).

A cross-sectional study was conducted in rural parts of the province of Ngozi in the north of the Republic of Burundi and in urban suburbs of Harare, the capital of the Republic of Zimbabwe. Interviews were conducted with 669 children enrolled in 20 primary schools in Burundi and 524 children in 20 primary schools in Zimbabwe. The findings of this study strongly suggest that similar handwashing programs providing education on handwashing issues along with adequate infrastructure could induce behavioral change thereby helping to promote hand washing practices (Seimetz, Slekiene, Friedrich, & Mosler, 2017).

A study was undertaken in Uganda through non-participant observations of healthcare worker hand washing practices, documentation of hand hygiene facilities and semi-structured interviews with clinical staff. For this study, hospitals were randomly allocated as hospital A and hospital B. It was reported that simple, low-cost interventions to improve hand hygiene could include increased provision of hand towels and running water and improved staff education to challenge their views and perceived barriers to hand hygiene (Mearkle, et al., 2016).

CHAPTER THREE

MATERIALS AND METHODS

3.0 Introduction

This chapter details, the study area and 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

In Ghana's Bono Region, near Biadan, the Holy Family Hospital, Berekum, is where the study will be carried out. The hospital is a Catholic Diocesan Hospital which serves as a Municipal Hospital. Holy Family Hospital Berekum was established in 1948 by the Medical Mission Sisters and became a Diocesan Hospital in 1978. The major catchment area of the facility is Berekum Municipality. The Hospital provides a 24hour specialist and general services on both out-patient and in-patient basis. The hospital has a total of 11 units/wards. The various units with their respective staff (nurses and midwives) strengths and associated bed capacities are as follows; Accidents and Emergency Unit (30 staffs, 27 beds), Females Ward (25 staffs, 21 beds), Males Ward (26 staffs, 19 beds), Surgical Ward (28 staffs, 23 beds), Paediatric Ward (27 staffs, 22 beds), Maternity Ward (32 staffs, 35 beds), Labour Ward (30 staffs 38 beds), Neonatal Intensive Care Unit (25 staffs, 25 beds), PHC (12), ANC Unit (17), And Fevers Unit (17).

3.2 The study population

The entire population of health workers at the maternity ward is 20. The target population will be the health workers at the maternity ward of Holy Family Hospital, Berekum

3.3 Study design

The investigation will be conducted using a descriptive study approach. Because it will be necessary to describe the traits of the phenomenon under examination. The layout will also enables us to watch the midwives in their unaltered and natural surroundings. In-depth knowledge about the study problem can be gathered thanks to descriptive research's data collection.

3.4 Sampling technique and Size

As far as this study will be concerned, a convenience sampling methodology will be chosen to choose participants because it was incredibly quick, simple, and affordable.

The Slovin;s formula will be used to calculate the sample size for the study.

Where: n = sample size, N = total population, e = acceptable error margin (0.05)and Confidence level = 95% giving us an Alpha level of 0.05

n = 19.05

Therefore, the sample size will be approximately 20.

3.5 Data collection methods and instruments

Structured questionnaires with both closed-ended and open-ended questions will be used to collect the data, allowing for the simple expression of opinions and ideas. This will be selected as the technique of data collecting since it is substantially less expensive, prevents embarrassment for the respondents, and completely ensures their anonymity. The participants will use about 20 minutes to answer the questionnaire.

3.6 Data analysis techniques

Microsoft excel software will be used to analyze the data and the results will be presented in the form of tables and figures.

3.7 Ethical consideration

We will request an introductory letter from the College before we begin our studies. The goal of the study will be clearly explained to the respondents, and their agreement will be requested. By refusing to include any form of identification on the questionnaire, respondents will be guaranteed of both anonymity and secrecy. However, according to their chronological enrollment into the study, the responder will be represented by identifying codes. Respondents will be free to opt in and out of the study at any time without incurring any penalties.

3.8 Limitation of the study

The time given to complete the study coincided with the usual lecture hours hence the research team members could not concentrate fully on the project alone.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.0 Data Presentation & Analysis

This chapter deals with the analysis of data collected from the field of study and the results obtained from the analysis. The study findings are presented in tables or figures.

4.1 Demographic Profile of Respondents

In soliciting for information, of demographic profile among the of respondents it came out to be that, 50% (10) were aged between 30-35 years, 30% (6) were aged between 24-29 years, 15% (3) were aged between 18-23 years and 5% (1) were aged above 35 years. The marital status of the respondents, 70% (14) of the respondents were married and 30% (6) of the respondent were single. The qualifications of the respondent, 95% (19) of the respondent had diploma qualification and 5% (1) had degree qualification. the years of practice among the respondents 50% (10) had 1-5 years' experience 25% (5) had 6-10years and 25% (5) had 10 and above.

Table 1: Demographic variables

Variable	Categories	Frequency (n)	Percentage (%)
Ages	30-35	10	50
	24-29	6	30
	18-23	3	15
	Above 35	1	5
Marital status	Married	14	70
	Single	16	30
Qualification of Respondent	Diploma	19	95
	Degree	1	5
Respondent Years of Practice	1-5 years	10	50
	6-10 years	5	25
	10 years and above	5	25

4.2 Handwashing Equipment's

In trying to know the equipment used for handwashing, respondent were asked about how long the tap flows within 24hours, 90% (18) of the respondents indicated that the tap flows always during the day.5% (1) of the respondent indicated veronica bucket and 5% (1) of the respondent also indicated during the day

Table 2: Respondents on tap flow

Variable	Categories	Frequency (n)	Percentage (%)
How long does the tap flow within 24 hours?	Always	18	90
	Veronica bucket	1	5
	During the day	1	5
	Once a while	0	0

In trying to know the available equipment at the facility for handwashing, it turns out to be that, 75% (15) of the respondents mentioned water, 70% (14) of the respondents mentioned soap, and 70% (14) also mentioned veronica bucket and 5% (1) of the respondent mention tissue as equipment's available at their facility

Table 3: Respondents on available equipment's

Variable	Categories	Frequency (n)	Percentage (%)
What equipment are available at the facility for hand washing?	Water	15	75
	Soap	14	70
	Veronica bucket	14	70
	Tissue	1	5

In trying to know the materials that are used after handwashing, it came out to be that 70% (14) of the respondents indicated they use hand towel after hand washing. 30% (6) mentioned they used tissue after handwashing.

Table 4: Respondents on equipment's used after handwashing

Variable	Categories	Frequency (n)	Percentage (%)
Which materials/equipment are used after hand washing?	Hand towel	14	70
	Tissue	6	30
	Handkerchief	0	0
	Hand dryer	0	0

In soliciting the challenges of hand washing, it turned out that 45% (9) of the respondents indicated shortage of water, 25% (5) mentioned shortage of towels 25% (5) indicated not enough soap, 20% (4) also mentioned inadequate tissues and 5% (1) said there are no veronica bucket.

Table 5: Respondents on challenges to handwashing

Variable	Categories	Frequency (n)	Percentage (%)
What are the challenges you face in relation to hand washing?	Shortage of water	9	45
	Shortage of towels	5	25
	Not enough soap	5	25
	Inadequate tissues	4	20
	No veronica bucket	1	5

4.3 Perception about handwashing

In trying to know the perception on handwashing the following ideas were solicited, finding out ways to prevent healthcare-associated infections, it came out to be that 50% (10)

indicated regular handwashing, 25% (5) indicated washing of instruments after use, 15% (3) indicated wearing of gloves and 10% (2) indicated isolation.

Table 6: Respondent's perception of handwashing

Variable	Categories	Frequency (n)	Percentage (%)
Finding out ways to prevent healthcare-associated infections	Regular handwashing	10	50
	Proper washing of instruments after use	5	25
	Wearing of gloves	3	15
	Isolation	2	10

In soliciting for information about how often respondents wash their hands at a shift, it came out to be that 75% (15) of the respondent washed their hands more than 7times at a shift, 15% (3) of the respondents wash their hands 5times at a shift and 10% (2) of the respondents wash their hands 3times at a shift.

Table 7: Respondent's handwashing at a shift

Variable	Categories	Frequency (n)	Percentage (%)
How often do you wash your hands averagely at a shift?	7 and above	15	75
	5 times	3	15
	3 times	2	10

In assessing the level of priority of hand hygiene among respondent on a scale of 1-5, which 5 is the highest 95%(19) of the respondents gave high level priority to hand hygiene which is scale 5 and 5%(1) of the respondents rated scale 4.

Table 8: Respondent's level of priority on hand hygiene

Variable	Categories	Frequency (n)	Percentage (%)
What level of priority do you give to hand hygiene?	5	19	95
	4	1	5
	3	0	0
	2	0	0
	1	0	0

In trying to know the ways to improve handwashing at the ward, 50% (20) of the respondents mentioned that provision of handwashing materials such as tissues, soaps and hand towels will help improve handwashing, 35% (7) of the respondent indicated education on the need for hand hygiene and 15% (5) indicated prompt repair of handwashing equipment's.

Table 9: Respondent's on how to improve handwashing

Variable	Categories	Frequency (n)	Percentage (%)
What can be done to improve handwashing at the ward?	Provision of hand washing materials	20	50
	Education	7	35
	Prompt repair of handwashing equipment	5	15

4.4 Frequency of handwashing practice

In measuring the frequency of handwashing practice, respondents were asked about their primary source of information on handwashing .it turn out to be that 50% (10) of the respondent had their primary source from various colleges. 20% (4) of respondents indicated that their source of information is from the notice board. and 20% (4) had theirs from pictures. 10% (2) of the respondents had theirs from the television through advertisement.

Table 10: Respondents on what reminds them to practice hand hygiene

Variable	Categories	Frequency (n)	Percentage (%)
What reminds you to practice hand hygiene?	College	10	50
	Pictures	4	20
	Pictures	4	20
	Friends	0	0
	Television	2	10

In rating the respondent on their compliance with handwashing on the scale of 1-5, where 5 is the highest. 50% (10) of the respondent rated 4, 25% (5) of the respondent rated 5, 20% (4) rated 3, 5% (1) rated 2

Table 11: Respondents on handwashing rating

Variable	Categories	Frequency (n)	Percentage (%)
How would you rate your overall compliance with handwashing?	Four	10	50
	Five	5	25
	three	4	20
	Two	1	5
	One	0	0

In collecting information, respondents were asked how often they wash their hands in the following instances; (i) after visiting the washroom, it turns out to be that 100% of the respondent indicated they wash their hands always after visiting the washroom. (ii) before a procedure, it turned out to be that 90% wash their hands before the Start of every procedure. (iii) after a procedure, it turned out to be that 95% of the respondents wash their hands after every procedure. (iv) on arrival at the ward, 60% of the respondents mentioned that they sometimes wash their hands on arrival at the ward. (v) in between some procedures, 65% of

the respondents mentioned that they always wash their hands in-between procedures. (vi) coming in contact with body fluids, 100% of the respondents indicated that they always wash their hands when they come in contact with body fluids.

Table 12: Respondent's frequency of handwashing

Variable		Always	Sometimes	Never
After visiting the washroom	N	20	0	0
	%	100	0	0
Before procedure	N	18	2	0
	%	90	10	0
After procedure	N	19	1	0
	%	95	5	0
On arrival at the ward	N	6	12	2
	%	30	60	10
In-between some procedures	N	13	7	0
	%	65	35	0
Coming in contact with body fluids	N	20	0	0
	%	100	0	0

CHAPTER FIVE

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

5.0 Introduction

This chapter provides an in-depth look at the major findings that emerged out of the research, comparison of the analyzed data with findings from other literature, conclusion, and recommendations.

5.1 Discussions

1. Handwashing Equipment's

In trying to know the equipment used for handwashing among health workers, the current study most of the respondents mentioned availability of water (veronica buckets were in place) soap were available as well as hand washing towels. So basic equipment for handwashing was available. This might be attributed to high qualification of the respondents(diploma) who might have completed school not quiet long and apply their theory into practice. Mahdi et al. (2020) found that most participants 65.8% believed cleansing hands with soap and water is a very effective hand hygiene method.

2. Perception about handwashing s

In trying to know the perception on handwashing the following ideas were solicited, finding out ways to prevent healthcare-associated infections the present study indicated that respondent washed their hands regularly, (more than 7 times) others perceived high level of priority to hand washing as well as providing the necessary equipment for hand washing. To help prevent possible healthcare-associated infections. Which was highly acknowledged due to their high level of maturity. WHO (2020) reported that as infections can spread through contact with contaminated surfaces, hand hygiene remains a fundamental control and prevention measure and is strongly recommended to curb the transmission of infections?

Dwipayanti et al. (2021) added that 61.3% of respondents perceived handwashing as an effective measure to prevent COVID-19 and other diseases. Andriani and Najib (2018) affirmed that the main aim of hand hygiene is to remove dirt, limit the microbial counts on the hand, prevent cross-transmission of pathogens and more importantly break the chain of infection. Mahdi et al. (2020) reported that most of the visitors to the mosque had a positive perception of the effectiveness of hand hygiene in killing viruses existing in our hands, including the coronavirus.

3. Frequency of handwashing practice

In measuring the frequency of handwashing practice, respondents were asked about their primary source of information on handwashing. The current study found that most of the respondents had their source of information from their various colleges through knowledge acquired during teaching and learning. overall compliance with hand washing rated highly as well as washing hands always after every visit to the washroom. So, handwashing was done frequently which might be credited to their years of working experience.

Akwaah, Abankwa, and Siaw (2019) found that 2% of the students washed their hands once every day, 7.7% washed twice every day, 89.8% of the students washed their hands as many times as possible every day, and 0.4% did not wash their hands at all. Andriana and Nadjib (2018) which revealed that despite the continuous efforts, healthcare professionals' compliance with hand hygiene guidance remains sub-optimal. Van De Mortel et al. (2018) reported that nursing students' hand hygiene compliance and self-reported hand hygiene practices were significantly higher.

Tobaiqy et al. (2020) found that over 90% of pilgrims washed their hands with soap and water or sanitizers after using the bathroom.

. These findings are in line with a study conducted by Ojong (2016) who reported that observations on the practice of handwashing revealed that most (42.2%) of respondents always practiced hand washing.

5.2 Conclusion

The study concluded that respondents have good perception about handwashing as most knew that it is possible to prevent healthcare-associated infections through handwashing and they also gave high priority to handwashing. colleges were the main reminder of respondents when it comes to handwashing. Self-acquired information on handwashing and compliance was high. Respondents have good handwashing practice. The leading challenge to handwashing was shortage of tissue.

5.3 Recommendations

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

1. Healthcare personnel were good and same can be done elsewhere.
2. Continuous workshops and education should be done to orientate new staff to continue the best practice.
3. Similar research could be emulated elsewhere.

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LETTER

APPENDICES

QUESTIONNAIRE

Dear Respondent,

We are students from holy family nursing and midwifery training collage Berekum researching on the topic; **perception and practice of handwashing among health workers at the maternity ward of Holy Family Hospital, Berekum amid COVID 19**. Kindly answer the under-listed questions by ticking (√**)** the appropriate box or writing in the space provided. Any information you provide is confidential. No opinion is considered wrong. You can choose to withdraw your participation at any time. It will take approximately 20 minutes to answer this questionnaire.

Thank you.

PLEASE TICK [√] THE APPROPRIATE BOX WHERE APPLICABLE

SECTION A: DEMOGRAPHIC DATA

1. Age: a. 18 – 23 years [] b. 24 – 29 years [] c. 30 – 35 years [] d. above 35 years []
2. Marital status: a. Married [] b. Single [] c. Divorced [] d. Widowed []
3. Qualification: …….…….
4. Years of practice……..

SECTION B: HANDWASHING EQUIPMENTS

Kindly answer the under- listed questions by writing in the space provided

5. How long does the tap flow within 24 hours?

a. Always []

b. Once a while []

c. During the day []

d. Using veronica bucket []

6. What equipment are available at the facility for hand washing?

……..

7. which materials/equipment are used after hand washing?

   a. Tissue []

   b. Hand towel []

   c. Individual handkerchief []

   d. Hand dryer []

8. What are the challenges you face in relation to hand washing?

   ……..

SECTION C: PERCEPTION ABOUT HANDWASHING

The following questions assess your perception on handwashing,

9. Finding out possible ways to prevent healthcare-associated infections?

   ……

10. How often do you wash your hands averagely at a shift?

    …….

11. On a scale of 1 to 5 what level of priority do you give to hand hygiene ? Where 1 is the lowest and 5 is the highest.

12. What can be done to improve handwashing at the ward?

……

SECTION D: FREQUENCY OF HANDWASHING PRACTICE

The following questions seeks to assess your frequency of hand hygiene practice, tick the appropriate checkbox or write your answer in the space provided.

13. What is your primary source of information on hand washing practice? (Select only one)

    a. Television []

    b. Notice board []

    c. Pictures []

    d. Friends []

    e. Collages []

14. On a scale of 1 to 10 How would you rate your overall compliance with handwashing? Where 1 is the lowest and 5 is the highest

15. Indicate how often you wash your hands in the following instances;

    I. After visiting the washroom

    a. Always []

    b. Sometimes []

    c. Never []

    II. Before a procedure

    a. Always []

    b. Sometimes []

c. Never []

III. After a procedure

a. Always []

b. Sometimes []

c. Never []

IV. On arrival at the ward

a. Always []

b. Sometimes []

c. Never []

V. In-between some procedures

a. always []

b. sometimes []

c. never []

VI. Coming in Contact with body fluids

a. always []

b. sometimes []

c. Never []

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Our Ref. HFNMTC/GC/011/112122

Your Ref. .....

Date ..... November 21, 2022

21/11/22
REGD
BEREKUM

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. **Bassaw Francisca**
2. **Leticia Adjei-Yiwaah**
3. **Tutuwaa Bowiansah Jennifer**

As part of the pre-requisite for the award of Diploma in Midwifery, they are to conduct a research study, hence the data collection on **"Perception and Practice of Handwashing among Health Workers at the Maternity Ward of Holy Family, Berekum amid COVID-19."**

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

.....
Martha Kyeremaa
Supervisor

ACADEMIC CO-ORDINATOR - MIDWIFERY
HOLY FAMILY NURSING & MIDWIFERY
TRAINING COLLEGE, BEREKUM

For: Principal

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