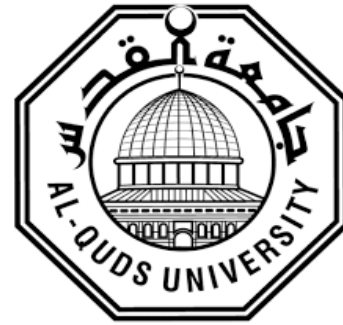


Deanship of Graduate Studies

Al-Quds University



**Knowledge, Attitudes, and Practices about Standard
Infection Control Precautions Among Healthcare Workers
at Governmental Primary Healthcare Facilities in
Southern Palestine**

M. Sc. Thesis

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Jerusalem – Palestine

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**Knowledge, Attitudes, and Practices about Standard
Infection Control Precautions Among Healthcare Workers
at Governmental Primary Healthcare Facilities in
Southern Palestine**

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**A thesis submitted in partial fulfillment of requirements for the
degree of Master of Policies & Health Management-Quality
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Thesis Approval

**Knowledge, Attitudes and Practices about Standard Infection Control
Precautions Among Healthcare Workers at Governmental Primary
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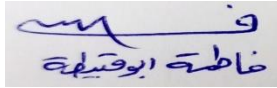
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Declaration

I declare that the contents of this thesis are the product of my efforts, except for what has been referred to wherever stated, and that this thesis as a whole or any part of it has not been submitted by others to obtain a scientific or research degree or title at any other educational or research institution.

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Date: 3/1/2024

Dedication

I dedicate this thesis to my family (my mother, father, my brothers Suhaib, Abd-al Hamid, and Moath, and my sister Saja).

Then I dedicate this thesis to my husband, who encouraged my study, and all the love to my dear children, Jwana, Mohammad, Anas, and Mira and to everyone who has given me advice, encouragement, and support.

I dedicate the results of my efforts to everyone who wished me well.

Acknowledgment

“I’d like to thank God, my parents, my husband, and my children.”.

“I would like to thank my supervisor Maysaa Osta for their time, effort, and understanding in helping me succeed in my study.”.

"I would like to express my sincere thanks to the academic staff who provided their expertise and guidance.”

"I express my gratitude to my committee members for making my defense a joyful experience and for their insightful comments and recommendations. Thank you."

"I want to sincerely thank all of the people whose efforts have culminated in the completion of this thesis or dissertation."

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Abbreviations

Abbreviation	Explanation
SICPs	Standard Infection Control Precautions
WHO	World Health Organization
CDC	Center for Disease Control and Prevention
HCAIs	Health Care Associated Infections
HAI	Hospital Acquired Infection
HCWs	Health Care Workers
PPE	Personal Protective Equipment
PHC	Primary Health Care
UHC	Universal Health Coverage
SDGs	Sustainable developmental Goals
IPC	Infection Prevention and Control
RQ	Research Question
H	Hypothesis
IC	Infection Control
HIV	Human Immunodeficiency Virus
TB	Tuberculosis
HBV	Hepatitis B Virus
HH	Hand hygiene
SPs	Standard Precautions

MRSA	Methicillin-Resistant Staphylococcus Aureus
ICP	Infection Control Protocol
RDs	Radiologic Departments
KAP	Knowledge,attitude, and practice
MOH	Ministry of Health
PCBS	Palestinian Central Bureau of Statistics
EMRO	Regional Office for the Eastern Mediterranean

Abstract

Standard Infection Control Precautions are the minimum level of infection control measures that should be applied, in the treatment of all patients. Standard Infection Control Precautions are the cornerstone for all activities to prevent infection transmission during health care. Health care associated infections are public health issues, and they have a major impact on morbidity, mortality, and cost. This study aims to assess relationships between knowledge, attitudes, and practices about standard infection control precautions among health care workers at governmental primary health care facilities in Southern Palestine. A descriptive cross-sectional design was employed. Cluster non-random sampling was used to select 270 health care workers from North Hebron Health Directorate, South Hebron Health Directorate, Hebron Health Directorate, and Yatta Health Directorate as well as Bethlehem Health Directorate. A self-administered questionnaire with four components addressing demographic data, knowledge, attitudes, and practices was used to collect data. The study findings revealed that 96.3% of the participants had good levels of knowledge and good levels of positive attitudes. In addition, 97.4% had high level of proper practices of standard infection control precautions. The results revealed that there is a significant correlation between participants' knowledge, attitude, and practice about standard infection control precautions, indicating that participants who have a high level of knowledge also have a high level of positive attitudes as well as high levels of practice. Finally, the moderator variable knowledge has a positive effect on the relationship between attitude and practice, but the moderator variable attitude does not affect the relationship between knowledge and practice. Therefore, it has been recommended to provide training programs on standard infection control precautions for all healthcare workers at regular intervals.

Chapter one

Introduction

1.1 Background:

Standard Infection Control Precautions (SICPs) are the minimum level of infection control measures that should be applied, in the treatment of all patients (World Health Organization [WHO], 2007). SICPs are based on a risk assessment and include the practice of hand hygiene before and after each patient contact and the usage of Personal Protective Equipment (PPE) such as impermeable gowns, gloves, masks, face shields, and eye protection. SICPs include a set of procedures to ensure the safe use and disposal of sharps, the use of an aseptic "non-touch" technique for all invasive procedures, proper use of skin disinfectants, reprocessing of reusable instruments and equipment, routine environmental cleaning, respiratory hygiene and cough etiquette, waste management, and appropriate handling of linen. These precautions were recommended by the Centers for Disease Control and Prevention (CDC) in 2018 to prevent and control infections in healthcare settings. SICPs are the cornerstone for all activities to prevent healthcare-associated infections (HAIs) [Merrill, 2014]. HAIs are infections that did not appear during the patient's admission and were acquired during the process of obtaining health care. HAIs develop at least 48 hours after admission. They may occur in different areas of healthcare delivery, such as in hospitals, ambulatory settings, long-term care facilities, and primary healthcare facilities, and may also appear after discharge. These infections can cause serious problems like sepsis, multi-drug resistant organisms, and even death (Cheung, 2020). These disorders are known as Hospital Acquired Infections (HAIs) and include bloodstream infections

related to central lines, pneumonia related to ventilators, and urinary tract infections caused by catheters. Surgical site infections are infections that can also develop at the locations of surgeries (CDC, 2004).

HCAIs can affect not only patients but also staff members (Sikora & Zahra, 2022). Occupational infections are a type of HCAI that staff can contract while on the job, and they can spread to staff colleagues, families, and social circles. However, with proper precautions, most occupational infections can be prevented (Aw & Blair, 2010). Within the medical field, the most common occupational illnesses are tuberculosis, hepatitis B and C, HIV/AIDS, and respiratory infections such as coronaviruses and influenza (Aw et al., 2017).

The first survey in the world on Infection Prevention and Control (IPC) in healthcare facilities, conducted by the World Health Organization (WHO) and published by Tomczyk et al. in 2022, has highlighted the importance of sustainable IPC programs to reduce the risk of outbreaks to global health security and confirm patient and healthcare worker safety. The survey found that evidence-based IPC interventions can prevent at least 50% of HCAIs.

HCAIs are a significant economic burden due to their association with prolonged hospital stays and indirect costs such as lost work, the need for isolation, increased drug consumption, and the use of extra laboratory or diagnostic tests. Vulnerable patients, such as the elderly, those with underlying diseases, or those receiving chemotherapy, are at a higher risk of infection (Khazaei & Ayubi, 2018). According to the WHO, HCAI affects 7% and 10% of hospitalized patients in industrialized and developing countries, respectively. This highlights a significant endemic burden, especially in low- to middle-income countries

(WHO, 2016). In the United States, approximately 2 million patients complain of HCAs each year, and nearly 90,000 are estimated to die as a result. The overall direct cost of HCAs to hospitals ranges from \$28 billion to \$45 billion. While HCAs are costly, most are preventable (Stone, 2009).

According to WHO's report in 2021, nearly 930 million people across the world are at risk of falling into poverty due to the high cost of healthcare, which accounts for 10% or more of their household income. United Nations International Children Emergency's Fund (UNICEF) and WHO have proposed a vision for primary healthcare in the 21st century that aims to achieve Universal Health Coverage (UHC) and the Sustainable Development Goals (SDGs). By expanding PHC interventions in low- and middle-income countries by 2030, up to 60 million lives can be saved and the average life expectancy can be increased by 3.7 years.

Healthcare practitioners have a vital responsibility in maintaining effective infection prevention and control measures. They are authorized to identify, evaluate, analyze, and manage any potential hazards, while also advocating for the safety and well-being of patients, medical staff, and the healthcare environment (Hughes et al., n.d.).

Implementing infection control schedules is cost-effective, but often hindered by a lack of support from administrators and poor adherence by nurses, doctors, and other health workers. Some health professionals believe they are always clean and sterile, known as the "Omo syndrome" (Saloojee, 2001). Health care workers sometimes struggle to comply with SICPs due to a lack of time 44.0%, and personal protective equipment (PPE) may not always be available (Akagbo, Nortey & Ackumey, 2017).

Primary healthcare (PHC) is a comprehensive approach that involves everyone in society to ensure the best possible level of health and well-being, with a focus on meeting people's needs as early as possible. This includes health promotion, disease prevention, rehabilitation, and palliative care (WHO, 2021)

1.2 Study Problem:

HCAIs are a major public health concern that poses a significant threat to patient safety, according to the WHO's reports in 2019 and 2022. Although preventable, 50% of adverse events related to healthcare in high-income countries still occur, leading to significant mortality, morbidity, and financial burden on patients, families, and healthcare systems. Unfortunately, most of these adverse events occur in low-income countries, further exacerbating the problem. One of the biggest challenges in addressing HCAIs is the lack of surveillance systems, making it difficult to measure the burden of the disease worldwide, as noted by Sikora and Zahra in 2022.

In healthcare settings, HCAIs cause 1 in 10 deaths in acute care hospitals and affect 4 in 10 patients in primary healthcare and outpatient clinics (WHO, 2022).

The United States Agency for International Development (USAID) Report 2018 sheds light on the major challenges that hospitals in Palestine face in reducing HCAIs. These challenges include working in poor infrastructure, shortage of supplies, high workload, staffing shortage, and lack of knowledge on HCAIs. The issue is further compounded by the lack of rules, procedures, and qualified personnel for infection control (Gasaba et al., 2020).

1.3 Study justification:

According to WHO in 2022, 70% of HCAs are preventable. Therefore, the WHO is urging all countries across the world to increase their investment in IPC programs. This is to ensure the quality of care, as well as the safety of patients and healthcare workers. Not only will this help protect populations, but it has also been shown that increased investment in IPC can improve health outcomes and reduce healthcare costs and out-of-pocket expenses.

Conducting a literature review, it was found that there are limited international studies about HCAs in primary care facilities, and no studies about the topic could be found in Palestine. This study aims to identify the importance of the knowledge of Palestinian healthcare providers about standard precautions for infection control. Regularly assessing compliance with Infection Control(IC) measures in any healthcare setting is crucial to reducing HCAs and improving IC practices, which can reduce the economic burden on society, as well as mortality and morbidity rates. This study will help inform policy and decision-makers regarding the knowledge, attitudes, and practices of healthcare workers about SICPs at governmental PHC facilities in southern Palestine. Such information can help in the development of HCAI prevention programs and strategic plans.

1.4 Purpose of the study:

This study aims to assess relationships between knowledge, attitudes, and practices about SICPs among HCWs at governmental PHC facilities in Southern Palestine.

1.5 Objectives:

To assess the level of knowledge about SICPs among HCWs at governmental PHC facilities in Southern Palestine.

To examine the level of attitude about SICPs among HCWs at governmental PHC facilities in Southern Palestine.

To examine the level of practice about SICPs among HCWs at governmental PHC facilities in Southern Palestine.

To assess the differences between knowledge, attitude, and practice about SICPs among HCWs at governmental PHC facilities in Southern Palestine related to the socio-demographic characteristics (age, gender, education, years of experience).

To determine the relationships between HCWs' knowledge, attitudes, and practices about SICPs at governmental PHC facilities in Southern Palestine.

To examine if moderator variable knowledge has a positive effect on the relationship between attitude and practice about SICPs among HCWs at governmental PHC facilities in Southern Palestine.

To examine if the moderator variable attitude has an affect the relationship between knowledge and practice about SICPs among HCWs at governmental PHC facilities in Southern Palestine.

1.6 Research Questions(RQ)&Hypothesis(H):

RQ1:What is the HCWs' level of knowledge about SICPsat governmentalPHC facilities in Southern Palestine?

H1: There is poor knowledge about SICPsamong HCWs at governmental PHC facilities in Southern Palestine.

RQ2:What is the HCWs' level of attitude about SICPsat governmental PHC facilities in Southern Palestine?

H2: There are poor attitudes about SICPsamong HCWs at governmental primary health care facilities in SouthernPalestine.

RQ3:What is the HCWs' level of practice about SICPsat governmental PHC facilities in Southern Palestine?

H3: There is poor PracticeaboutSICPsamong healthcare workers at governmental primary healthcare facilities in SouthernPalestine.

RQ4: Is there anassociation between Palestinian HCWs'knowledge about SICPsrelated to their socio-demographic variables (age, gender, education, years of experience)?

H4:There is no significant association between knowledge and socio-demographic variables (age, gender, education, years of experience).

RQ5: Is there anassociation between Palestinian HCWs' attitudes about SICPsrelated to their socio-demographic variables (age, gender, education, years of experience)?

H5:There is no significant association between attitudes and socio-demographic variables (Age, gender, education, years of experience).

RQ6: Is there an association between Palestinian HCWs' practices about SICPs related to their socio-demographic variables (age, gender, education, years of experience)?

H6: There is no significant association between practices and socio-demographic variables (Age, gender, education, years of experience).

RQ7: Is there an association between the level of knowledge, attitude, and practices about SICPs among HCWs at governmental PHC facilities in Southern Palestine?

H7: There is no significant association between the level of knowledge, attitude, and practice about SICPs among HCWs at governmental PHC facilities in Southern Palestine.

RQ 8: Will the workers' knowledge about SICPs moderate the relationship between their attitudes and practices?

H8: The relationship between workers' attitudes and practices of SICP will not be moderated by their knowledge.

RQ 9: Will the workers' attitudes moderate the relationship between their knowledge and practices?

H9: The relationship between workers' knowledge and practices of SICP will not be moderated by their attitudes.

Chapter Two

Literature review & Conceptual framework

2.1 Literature Review

In this chapter, we will review the literature related to the specific objectives of the study. Our literature search included any type of paper - international or regional - that described the three main domains of healthcare workers' knowledge, attitude, and practice regarding IPC measures.

A study conducted by Rizk, EL-Raghi, and Zein.(2021) in Egypt aimed to evaluate IC measures in PHC centers using both national and international assessment tools. The study highlighted the importance of IC in public sector facilities, as they are the only option available for most low-income groups, who constitute the majority of Egypt's population. However, little is known about the risks associated with the most common care procedures in primary healthcare, such as the insertion of intrauterine devices, dental procedures, and injections which can be relatively invasive and may result in adverse effects. There is a recognized risk associated with the acquisition of viruses such as hepatitis B and HIV. The study revealed that the national assessment tool did not include any objects for assessing employee health, such as controlling sharp injuries, tuberculosis screening, and monitoring of sharp injuries. The study also found that nurses were more likely to respond positively 73.5% towards the existence of a formal employee health program compared to doctors 46.2%. Moreover, 85.2% of the nurses reported the presence of an employee health education program in their facilities, while only half of the doctors confirmed the same. The study also found that 80% of the doctors and 91.1% of the nurses had received all three

doses of hepatitis B vaccination. Regarding the assessment of hand hygiene practices, the study observed that doctors only performed one hand hygiene practice 1.6% out of the 62 chances they had, while nurses performed two hand hygiene practices 10% out of the 20 chances they had.

A study was conducted by Amin and Al Wehedy in Saudi Arabia in 2009 to evaluate the knowledge of Standard Precautions (SPs) and IC among HCWs at the PHC level in Al-Hassa. The study aimed to identify possible factors that influence such knowledge. The results showed that the participants had knowledge deficits, especially in hand hygiene, managing sharps injuries, sharps disposal, and environmental cleaning. Only 19.5% of the participants knew the recommended duration for routine hand washing. More than 45.4% of the participants did not believe that hand hygiene was necessary when caring for patients with influenza-like illnesses. 40% of the participants believed that personal protective equipment was only for laboratory and cleaning staff, and not necessary for HCWs. Additionally, 30.8% of the participants thought gloves and masks could be reused after cleaning, and 56% agreed to use the same gloves when dealing with the same patient but with different procedures. About 35% of the participants believed that they should manage their own sharps injuries without reporting the incident. Furthermore, more than 60% of the participants could not correctly define the abbreviation MRSA as methicillin-resistant *Staphylococcus aureus*. Only 28.1% of the participants recognized the need for annual influenza vaccination. 32.3% agreed that health care workers should undergo yearly tuberculosis screenings, and just 23.3% understood the need for hepatitis B vaccination. Females had a higher score for knowledge of hand hygiene, sharps sanitation, and care of HCWs compared to males. The work experience of the participants at PHC centers

influenced their knowledge scores. Those with less than five years of experience had a lower score, while those with postgraduate degrees had a higher score. Participants who had previous training in infection control guidelines showed a higher score compared to those who did not. HCWs reported that the lack of training chances, excessive workload, and resource scarcity were the main reasons they did not use SPs for everyday jobs. The investigation concluded that HCWs at PHC in Al-Hassa had little awareness of SPs.

Tobin et al. (2014) conducted a study in fourteen Primary Health Centers and one Government hospital in Nigeria to evaluate the knowledge, attitude, and adherence to SPs among HCWs in Primary and Secondary healthcare facilities in Esan North East Local Government Area of Edo State, Nigeria. A total of one hundred and fifty-three HCWs, including doctors, nurses, laboratory scientists, community health workers, and health assistants, participated in the study. The study found that 59.6% of respondents had good knowledge of IC, while 25.3% had good practice, and 17.0% had poor practice. Moreover, the study found that good compliance with infection control was significantly associated with good knowledge.

Gasaba et al. (2020) conducted a cross-sectional survey to assess the Knowledge, Attitude, and Practices (KAP) towards IC measures among HCWs at Old Mutare Hospital in Zambia. Nosocomial infections were the leading cause of death in Zambia, and hospital overcrowding and understaffing were the main reasons for the high incidence of infections. There is a lack of rules, policies, and qualified personnel for infection control that contributes to the problem. Due to the staffing shortage, only 39 healthcare personnel (nurses, nurse-aides, and lab technicians) were selected using a purposive sample method. Doctors, anesthetists, dentists, pharmacists, cleaners, and food handlers were not included

in this study. The survey found that the best ways to prevent HCAs were proper hand washing, wearing caps, masks, and shoe covers, immunizing healthcare workers regularly, and isolating infected patients. 37.93% of the participants highlighted these strategies. However, 20.69% of the participants pointed out that appropriate management of infectious waste might be the most effective strategy. 10.34% pointed out that the cautious use of antibiotics might be the most effective strategy for preventing HCAs.

Some projects tried to improve the health sector in Palestine such as (the Flagship Project) which was prepared by the Ministry of Health (MOH) in 2004. Unfortunately, none of them gives clear protocols on how to control these infections (Palestine, 2023).

There have been limited studies in Palestine on the knowledge, attitude, and practice of HCWs towards SICPs. These studies have only been conducted in hospitals and have focused on nursing, midwifery, radiography, and dentistry. No studies have been conducted in PHC facilities.

Eljedi & Dalo conducted a cross-sectional study in 2014 to evaluate the compliance of healthcare providers with the Protocol at three government pediatric hospitals in Gaza governorates. The three hospitals, Al-Durrah Children's Hospital, Al-Nasser Pediatric Hospital, and Ranteesy Specialized Pediatric Hospital are all under the ownership and supervision of the Palestinian Ministry of Health. The study discovered that less than half of the participants 48.9% washed their hands before leaving the unit, while only a third of them 34.2% washed their hands before performing an invasive or aseptic procedure. Additionally, around 28% of the participants did not remove needles from used syringes before disposal, and 41% did not recap used needles before disposal. The study found that only 45.9% of the participants washed their hands properly, reflecting poor hand-washing practices. Furthermore, most participants were uninformed about the existence of the

Palestinian IPC Protocol and were not knowledgeable about IC techniques. According to the researcher's observations, there were no copies of the IPC Protocol in any department.

Al-Sharif & Hussein conducted a study in 2023 to evaluate the knowledge and adherence of dentists in the West Bank and Jerusalem to IPC guidelines. Infections can spread in both directions - from patients to dental professionals and vice versa. Contaminated tools may also spread infection from one patient to another. The Palestinian Ministry of Health's handbook of guidelines for IC in healthcare facilities, published in 2017, includes the dental department's regulations and a checklist for assessing dental clinics. Despite the low incidence of cross-infection in the dental context, the possibility of infection transmission should not be ignored. Retrospective research to determine the probability of a health-care-associated infection due to infection or a long incubation period can be difficult, particularly if there are no symptoms. Symptoms may appear weeks or months after actual transmission, increasing the risk of transmission in the dental setting. During patient treatment, 99.0% of participants reported that they always wore gloves, and 98.5% stated that they always changed gloves between patients. Only 11.6% of sterilization methods used biological markers, either alone or in conjunction with other indicators, to monitor the sterilization cycle. Autoclaving was used in 98.0% of sterilization methods.

Palestine.(2023)research to assess the governmental hospitals in the West Bank's compliance with (Infection Control Protocol) ICP by the medical staff, nurses, and administrators. There were 587 physicians and nurses in the study. Just 44.6% of respondents said that their department had an ICP copy, and 38.0% reported that they offered infection control instruction. As per the health annual report, infections rank among the top 10 causes of mortality in Palestine, accounting for 3.3% of all fatalities in the West

Bank in 2013. The acute surgical and orthopedic wards, as well as intensive care units, are the most common settings for these infections. Compared to doctors, nurses had a higher likelihood of receiving educational courses—47.4% versus 24.5%. A series of questions was posed to the respondents to assess their ICP practice. Merely 42.1% of the participants said that they consistently wash their hands before patient examination, but 72.1% stated that they constantly wash their hands following patient examination. Furthermore, just 42.6% of respondents claimed to always wear gloves when examining patients. When it comes to needles, 92.5% of respondents stated they always throw them and other sharp objects in a sharps box, whereas 39.5% claimed they recap the needle before throwing it. The limitations were a 55.0% shortage of resources, a 49.6% lack of training programs, a 44.1% lack of clear protocols, and a 44.0% huge patient population. There is no clear ICP; a basic understanding of these procedures is insufficient. Healthcare providers' ICP compliance is not at its best. Standardizing the Palestinian ICP is advised. Programs for instruction and training are strongly advised.

A study was conducted by Abuzaid in 2023 to evaluate the standard precautions and infection control knowledge and practice of radiographers in Gaza Strip government hospitals, as well as to determine the obstacles to radiographers' infection control implementation. Radiology departments (RDs) are particularly vulnerable to infection. RDs are essential to the precise diagnosis and tracking of illnesses. Hundreds of patients visit RDs every day, and any one of them could be a source of nosocomial diseases or susceptible to them. Chest stands, imaging tables, control panels, cassettes, exposure buttons, X-ray couches, and stands have all been identified as possible conduits for the spread of infection. 78.2% of radiologists have never received infection control training.

This is the overwhelming majority. 74.4% and 65.2%, respectively, of the total knowledge and practice levels were considered moderate.

2.2 Conceptual Framework:

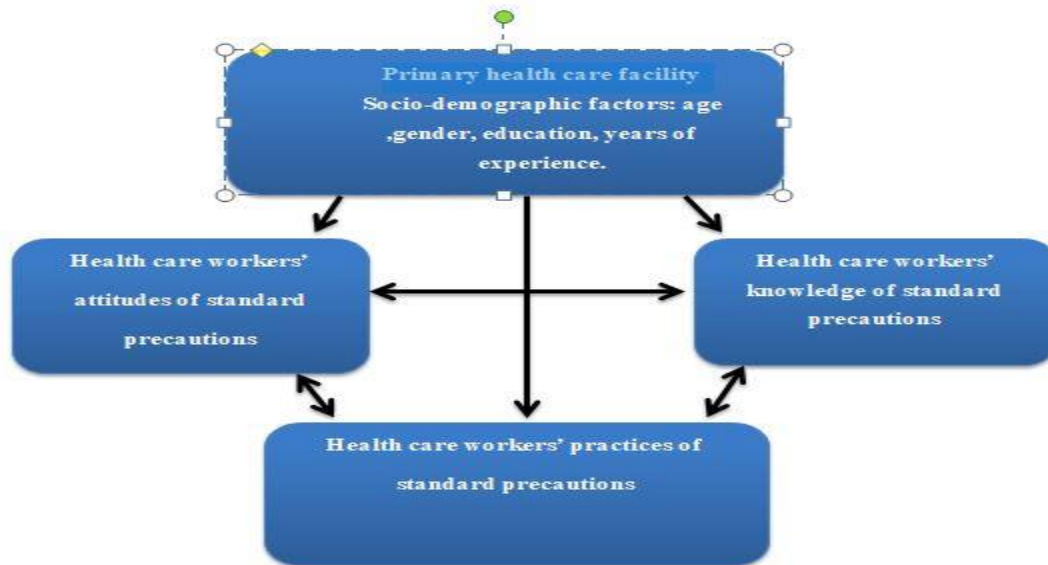


Figure 2.1 The relationship between knowledge, attitudes, and practices of HCWs towards SICPs.

This framework is based on the KAP Survey Theory, where "K" stands for knowledge about a particular condition or problem, "A" for attitude towards it, and "P" for preventative measures or practices to guard against it. Surveys are used to understand people's understanding of illnesses or other health issues. Attitude instruments gauge survey respondents' thoughts and feelings about the condition or problem, including both true and incorrect beliefs, which can be changed through health education. The affective component of attitude is the whole range of feelings towards each aspect of the attitude object. Practice demonstrates the acquisition of knowledge and any change in attitude that results in

preventive behaviors. This may reflect a reciprocal relationship between knowledge and attitude(Rav-Marathe et al., 2016)

.2.2.1 Theoretical Definitions:

Knowledge refers to information and skills gained through education or experience (Oxford Dictionary, 2020).Attitude refers to an individual's emotions or point of view towards something. This definition has been taken from the Cambridge Dictionary.

Practice refers to the action of regularly performing a task, typically as a habit or tradition, rather than just thinking or ideating about it (PRACTICE | English Meaning - Cambridge Dictionary, n.d.)

Standard precautions refer to the basic infection prevention methods that must be followed in all healthcare settings, regardless of whether the patient is suspected or confirmed to have an infection. This is according to the CDC guidelines in 2016.

2.2.2 Operational definition :

Independent variable:

Socio-demographic variables:

1. Gender
2. Age
3. Education level
4. Years of experiences

Dependent variable:

1. Variable related to knowledge
2. Variable related to attitude
3. Variable related to practice

Knowledge:The ability to acquire and maintain information on IPC is crucial in preventing HCAs. This can be achieved through education, experience, and skills.

Attitude:When faced with a problem involving IPC, healthcare professionals should use normal precautions. A person's point of view can influence how they see and interpret events.

Practice: Proficient application of knowledge and standards through specific procedures for IPC.

Chapter Three

Methodology

3.1 Study Design:

The current study utilized a descriptive cross-sectional survey design to outline the characteristics of the population or phenomenon being studied. The descriptive approach focuses more on the "what" rather than the "why" of the study topic. Cross-sectional design often employs a large sample size and cost-effective data collection methods. (Lauren, 2022).

3.2 Study Settings:

This research was carried out at primary healthcare facilities that are associated with the Ministry of Health in Southern Palestine. The area is made up of five directorates, one in Bethlehem (Bethlehem Health Directorate) and four in Hebron (Hebron Health Directorate, North Hebron Health Directorate, South Hebron Health Directorate, and Yatta Health Directorate).

3.2.1 Bethlehem Health Directorate:

The Bethlehem Health Directorate is located in the main center of the city on Jabal Street, as well as at the Motherhood & Childhood Center in Bab Al-Deir. It also has 21 peripheral clinics in the villages of the governorate to ensure comprehensive medical coverage for all people. The Directorate was established in 1968 and serves a population of approximately 230,000 people. The staff at the Bethlehem Health Directorate and its clinics and health centers includes around 245 medical, nursing, assistant technicians, and administrative service staff. The health activities and services provided by the Directorate include general

and specialty medicine clinics such as internal medicine, chronic diseases, dermatology, diabetes, pediatrics, gynecology, high-risk pregnancy, and psychology clinics. It also has a dental clinic, pharmacy, pharmaceutical inspection, nursing clinics, paramedical services, radiology department, preventive medicine department, school health department, maternal child health department, and health education services. Additionally, it offers environmental health services, a private medicine department, mental health services, mammography, medical committees, medical institutions, and health insurance. (MOH, 2023)

3.2.2 South Hebron Health Directorate:

The South Hebron Health Directorate is located in the city of Dura and serves a wide geographical area. It represents a quarter of the area of Hebron Governorate and includes Al-Samou', Al-Dhahiriyah, Al-Ramadin, Al-Rihiyya, Al-Fawwar camp, and the city of Dura along with its villages. The Directorate was established in 1987. The South Hebron area has a population of around 200,000 people with more than 77 villages. The city of Dura has around 100,000 people, while the city of Al-Dhahiria and its villages have 40,000 inhabitants and Al-Samou' has 28,000 inhabitants according to the Central Agency's statistics. The number of new births is about 5,000 newborns annually. The directorate has around 200 cadres working in various health and administrative specialties. The number of health centers affiliated with the directorate is 27 clinics and 22 maternity and childhood centers. There are specialty clinics such as the Diabetes and Chronic Diseases Center, the Diabetic Foot Clinic, the Dermatology Clinic, the Women's Clinic, the High-risk Pregnancy Clinic, the Ear, Nose, and Throat Clinic, the Endocrine Clinic, the Eye Clinic, the Children's clinic, and the chronic diseases, mammography clinic, radiography in the

hearing clinic, and mobile clinic. Additionally, there are 10 medical laboratories and two dental clinics, one in Doura and the other in Al-Dhaheriya.(MOH,2023)

3.2.3 North Hebron Health Directorate:

The North Hebron Health Directorate is situated in Halhul, which is located 3km north of Hebron. It serves a vast area of around 150 square kilometers, which is roughly 20% of the Hebron Governorate. This area spans from the Arroub camp in the north to MasaferBaniNa'im in the southeast. The Directorate was established in 2013 under the SICPs of the Minister of Health, Dr. JawadAwad, due to the increase in population in the region. It was separated from the Hebron Directorate. According to the Palestinian Central Bureau of Statistics in mid-2017, the number of population centers in the North Hebron region was around 178,500. The population census for the North Hebron regions was as follows: Halhul (30,000), BaniNaim and Khamat Al-Musafer (28,000), Al-Shuyoukh (12,000), Sa'ir (28,000), BeitUmmar (18,500), Surif (19,000), Kharas (9,500), Nuba (7,500), BeitUla (15,000), and Al-Aroub Camp (11,000). The number of births in the North Hebron area is approximately 5,000 newborns annually. The North Hebron Health Directorate has around 178 medical, nursing, assistant technician, and administrative service staff working in its clinics and health centers. The most important sections include the Department of Preventive Medicine and Communicable and Infectious Diseases Clinic, School Health Department, Medical Institution, Various Nursing Departments, Department of Environmental Health, Engineering Department, Medicines Warehouse, Health Insurance Department, Medical Committees, Human Resources Affairs, Medical Laboratory, X-ray Department, Department of Accounting, Department of Private Medicine (licensing and practicing the profession), and the Department of Mental Health.

3.2.4 Yatta Health Directorate:

The Yatta Health Directorate is a primary healthcare directorate affiliated with the Palestinian Ministry of Health. It was established in 2015 and covers a vast geographical area of 173,000 dunums. The directorate provides various health, technical, and administrative services to approximately 120,000 people from Sunday to Thursday, between 8 in the morning and 3 in the evening. The Directorate has many health professionals with diverse specializations, consisting of about 180 employees working in all departments and sections. The health services package provided includes maternal and newborn health, newborn and child health, vaccination, treatment and control of communicable diseases, treatment and prevention of non-communicable diseases, mental health, general medicine clinic, mouth and teeth health, nutrition, and other health services such as Health Insurance Department, Medical committees, Medical institution, Department of Environmental Health, Private medicine, Pharmacy service, and Laboratory services.(MOH,2023)

3.2.5Hebron Health Directorate:

One of the main healthcare directorates connected to the Palestinian Ministry of Health, the Hebron Health Directorate is situated in Hebron City and was established in 1964. The health cadre, which is made up of roughly 252 individuals who work in all departments and divisions, provides a range of health, technical, and administrative services to about 800,000 people through the Hebron Health Directorate. It includes the following areas: Qalqas, Tarqumiya, Ithna, BeitKahil, Hebron, and Khallet al-Dar. Below are the services that this directorate offers: Both the communicable and infectious diseases clinic and preventive medicine services are available. Health departments at schools, hospitals,

medical facilities, different nursing specialties, dental and environmental health departments, health insurance departments, medical committees, human resources departments, medical laboratories, x-ray departments, nutrition departments, accounting departments, and departments of private medicine (MOH,2023)

3.3 Research Target Population:

Data from human resource affairs in each of the five directorates indicated that 782 HCWs were employed in governmental PHC facilities in Southern Palestine. Participants in the study included HCWs such as doctors and dentists, nurses and midwives, pharmacists and pharmacist assistants, lab technicians, X-ray technicians, nutritionists, and health assistants.

3.4 Sample and sampling:

We contacted the human resources department of each targeted directorate to inquire about the number and specialization of healthcare personnel within each directorate. It was found that the following health directorates had the highest number of employees: 166 in Bethlehem, 137 in Yatta, 151 in South Hebron, 164 in Hebron, and 164 in North Hebron.

Through the use of an online sample size calculator, the least sample size required to investigate the study hypotheses was 258, with a confidence level of 95% and a marginal error of 5%.



Sample size calculator

What margin of error can you accept? 5% is a common choice	<input type="text" value="5"/> %	The margin of error is the amount of error that is acceptable. A larger amount of error than if the response is incorrect. Lower margin of error requires a larger sample size.
What confidence level do you need? Typical choices are 90%, 95%, or 99%	<input type="text" value="95"/> %	The confidence level is the amount of uncertainty you are willing to accept. 95% confidence level means that for one of the 100 times you repeat the study, you will get a different answer. Higher confidence level requires a larger sample size.
What is the population size? If you don't know, use 20000	<input type="text" value="782"/>	How many people are there to choose you from?
What is the response distribution? Leave this as 50%	<input type="text" value="50"/> %	For each question, what do you expect the proportion of correct answers to be? If you don't know, use 50%, which gives the largest sample size.
Your recommended sample size is	258	This is the minimum recommended size of sample to get a correct answer than you would from a smaller sample.

The proportion approach was used in cluster non-random sampling to determine how many healthcare workers from each directorate were selected. Yatta Health Directorate 45 (17% of the sample), North Hebron Health Directorate 54 (21% of the sample), Hebron Health Directorate 54 (21% of the sample), South Hebron Health Directorate 50 (19% of the sample), and Bethlehem Health Directorate 55 (21% of the sample) were the minimum required number of participants from each of the participating directorates. This was determined by dividing the total number of healthcare workers for each directorate by the total population and multiplying by the sample size.

The number of each specialty was divided by the total number for each directorate and multiplied by the number required for each directorate to determine the required number of each specialty in each directorate.

Table(3.4.1): Number of chosen nurses& midwives from each directorate :

Name of directorate	Number of nurses& midwives	Number of nurses& midwives in the test sample
Yatta Health Directorate	46	15
North Hebron Health Directorate	61	20
Hebron Health Directorate	58	19
South Hebron Health Directorate	59	19
Bethlehem Health Directorate	64	21

Table(3.4.2): Number of chosen physicians& dentists from each directorate :

Name of directorate	Number of physicians & dentists	Number of physicians & dentists in the test sample
Yatta Health Directorate	37	12
North Hebron Health Directorate	45	15
Hebron Health Directorate	47	15
South Hebron Health Directorate	34	11
Bethlehem Health Directorate	53	18

Table(3.4.3): Number of chosen laboratory technicians from each directorate :

Name of directorate	Number of laboratory technician	Number of laboratory technicians in the test sample
Yatta Health Directorate	14	4
North Hebron Health Directorate	21	7
Hebron Health Directorate	26	9
South Hebron Health Directorate	18	6
Bethlehem Health Directorate	20	7

Table(3.4.4): Number of chosen nutritionists, X-ray technicians, and health assistants from each directorate :

Name of directorate	Number of X-ray technicians, nutritionists, health assistants	Number of X-ray technicians, nutritionists, and health assistants in the test sample
Yatta Health Directorate	1,1,21	1, 1,7
North Hebron Health Directorate	8,0,11	2,0, 4
Hebron Health Directorate	4,2,3	1,1,1
South Hebron Health Directorate	1,0, 23	1,0,7
Bethlehem Health Directorate	4,0,0	1,0,0

Table(3.4.5): Number of chosen pharmacist & Pharmacist Assistant from each directorate:

Name of directorate	Number of pharmacist & Pharmacist Assistants	Number of pharmacist and pharmacist Assistants in the test sample
Yatta Health Directorate	17	5
North Hebron Health Directorate	18	6
Hebron Health Directorate	24	8
South Hebron Health Directorate	16	6
Bethlehem Health Directorate	25	8

There were 270 HCWs in this study.

3.5 Eligibility criteria;

The inclusion criteria:

All health workers who work at governmental primary health care facilities in southern Palestine were eligible to participate in this study regardless of their specialization.

Exclusion criteria:

It was entirely voluntary to participate. Consequently, the survey was not sent to any health professional who declined to take part in the study. The study results did not include healthcare students, HCWs involved in the pilot project, or participants who did not finish the questionnaire for whatever reason.

3.6 Tool of data collection:

The researcher created and pretested a structured, anonymous, self-administered questionnaire. Both closed-ended and open-ended inquiries were employed by the researcher to gather information.

After a review of relevant studies, the questionnaire parts about knowledge, attitudes, and practices of standard precaution of infection control were created (Abuduxike et al., 2021; Amin & Al Wehedy. 2009; Abalkhail et al., 2021).

Questionnaire sections:

- ◆ The first section of the questionnaire (20 questions) included two parts. The first part of the questionnaire asked questions about the sociodemographic traits of the participants, such as years of experience, place of employment, gender, age, and degree of education. The questions in the second part focused on SICPs and the participants' foundational training on IPC policy and procedures.
- ◆ The second section of the questionnaire contained 45 items asking participants about their knowledge of SICPs e.g. PPE, hand hygiene, sharp disposal, sharps injuries, environmental cleaning, and occupational infection. These were graded as

"yes," "no," or "I don't know," with "yes" receiving a score of "1," "no," and "I don't know" receiving a score of "0."

- ◆ The third section of the questionnaire contained 19 items assessing the participants' attitudes about SICPs, and a 5-point Likert scale was used to score the items, with "strongly disagree" = 1 and "strongly agree" = 5.
- ◆ The fourth section of the questionnaire contained 17 items measuring the participants' practices about SICPs and was scored using a 5-point Likert scale, with 5 representing "always" and 1 representing "never."

3.7 Validity of the Study:

The questionnaire was translated into the Arabic language for easier understanding, since Arabic is the mother language of the participants, and the original questionnaire is in English and derived from earlier research. The questionnaire was sent to 4 researchers and experts of IPC to evaluate the accuracy of the questionnaire (content validity), and the questions were modified after doing content validity.

Pilot study :

The pilot sample was taken from the Yatta health directorate 11 respondents were chosen conveniently to fill out a questionnaire and to identify problems that faced participants and the time taken by participants to fill out the questionnaire. After that, some questions were modified to make them easily understood. Some participants thought that those questions were redundant but they were not. Those questions were asked about different aspects (knowledge, attitude, and practice).

Based on the pilot result, some modifications were made to some questions. In the main questionnaire, question number 40 from the knowledge aspect and number 6,7,8,14,16,17 from the attitude aspect were modified.

These questions were before modifications :

Q40: يجب التخلص من حقن الأمبولات التي تم استخدامها في حاوية النفايات الطبية؟

Q6: اعتقد ان تطهير اليدين كاف عند وجود مادة متسخة على اليدين ولا نحتاج لغسل اليدين ؟

Q7: اعتقد أن ارتداء القفاز كافي و لا يحتاج مقدم الرعاية الأولوية إلى نظافة اليدين ؟

Q8: اعتقد أن إعادة الإبرة في غطائه (needle recap) تحد من العدوى المكتسبة من المنشأة الصحية ؟

Q14: اعتقد أن تغيير القفازات ليس ضروريا أثناء الإجراءات اذا كانت شديدة التلوث ؟

Q16: اعتقد انه ليس من السهل العمل بارتداء معدات الوقاية الشخصية (PPE) ؟

Q17: اعتقد انه ليس على العاملين في مجال الرعاية الصحية استخدام معدات الوقاية الشخصية حتى لو انها قد

تضر المرضى نفسياً ؟

3.8 Reliability of the study :

Cronbach's alpha value and Hotelling's t-squared test were used to determine whether the results were consistent. Obtain a Cronbach's alpha coefficient greater than 0.7 and a Hotelling T-square test p-value less than 0.05. The results, shown in Table 1, indicate that the instrument is considered reliable.

Table 3.8 Reliability Statistics (Cronbach's Alpha, and Hotelling's T-Squared)

Item	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	Hotelling's Squared	T-Sig
Knowledge	.71	.793	45	1078.138	.000
Attitudes	.819	.868	19	587.085	.000
Practice	.810	.854	17	398.836	.000
Total	.802	.849	81	493.117	.000

3.9 Data collection:

Three months were spent on the data collection process, which started with coordinating with the quality coordinator in each directorate to distribute the electronic version of the questionnaire on a Google Form link via WhatsApp. The researcher then visited each directorate to provide the hard copy to those who wanted to participate but were not able to fill out the electronic version of the questionnaire, which took ten to fifteen minutes to complete. Constantly monitoring responses from the Google Form and following up with the quality coordinator was done until a target sample was reached.

3.10 Data analysis

Google Forms were imported into an excel file, and paper-pencil filled questionnaire were transferred into the same file. Precoded data was checked and cleaned. To prepare and examine the data, version 23 of the Statistical Package for Social Sciences (SPSS) program was used. On the techniques for data analysis, a qualified statistician was consulted. Using

regression analysis, moderation regression analysis, t-test, chi-square test, and descriptive statistics, the results were reported. In every analysis, the tests were performed at a significance level of 0.05.

Period of study:

The pilot study and the main study were carried out between June 2023 and December 2023.

3.11 Ethical consideration:

This study was approved by the ethical committee and public health department of Al-Quds University. The Palestinian MOH permitted entering the targeted primary healthcare facilities and collecting data from the HCWs. The rights of the healthcare workers who consented to engage in this study were safeguarded using many tactics. Before administering the hard copy questionnaire, the healthcare personnel's verbal agreement was first acquired. The questionnaire included an informed consent form attached. The healthcare professionals were told about the goal of the study and their right to decline participation. In addition, all information was gathered voluntarily, kept discreetly, and utilized only for research. It was kept in a locked, private closet in the researcher's office. The healthcare staff was also informed that they may withdraw from the study at any time and that they could refuse to answer any questions. The questionnaires remained anonymous at all times.

Chapter Four

Results

A total of 270 copies of the questionnaire were turned in, with a final response rate of 92% (46) from the South Hebron Health Directorate, 97% (51) from the North Hebron Health Directorate, 94% (49) from the Bethlehem Health Directorate, 100% (54) from the Hebron Health Directorate, and 97% (42) from the Yatta Health Directorate. The results of the data analysis will be explained in this chapter.

4.1 Socio-demographic characteristics of the respondents in the sample

The socio-demographic distribution of healthcare workers at governmental primary healthcare facilities in southern Palestine is shown in Tables 4.1.1-4.1.7 below.

4.1.1 Distribution of the participants according to their gender:

The findings showed that 67.8% of the participants were female, as opposed to 32.2% of the male peers.

Table 4.1.1 Distribution of Gender Variable

Gender	Frequency	Percentages
Female	183	67.8
Male	87	32.2
Total	270	100.0

4.1.2 Distribution of the participants according to their age :

The majority 30.0% +31.1% of respondents were respectively between the ages of 30 and 37 and 38 and 45 years, with 15.2% of respondents being below the age of 30 years, 18.5% of them were between the ages of 46 and 53 years, and, 5.2% of them is over 53 and represents a tiny percentage of the older population.

Table 4.1.2. Distribution of Age Group

Gender	Frequency	Percentages
Less than 30 years	41	15.2
30 and less than 38 years	81	30.0
38 and less than 46 years	84	31.1
46 and less than 54 years	50	18.5
54 years and above	14	5.2
Total	270	100.0

4.1.3 Distribution of the participants according to their educational level:

The majority 63% of participants held a bachelor's degree, while less than a fifth of the participants held an intermediate or high school diploma and only about 17% held higher degrees, such as a higher diploma, a master's degree, or a doctorate.

Table 4.1.3 Distribution of Educational Level

Education	Frequency	Percentages
Diploma or Below	53	19.6
Bachelor	170	63.0
High Educated	47	17.4
Total	270	100.0

High Educated: High Diploma, Master, Ph.D

4.1.4 Distribution of the participants according to their occupation:

The bulk of participants in this study are nurses 35.9%, followed by physicians 28.1% and lab or x-ray technicians 16.8%. 13.3% of pharmacists or pharmacist assistants and 5.9% of health assistants.

Table 4.1.4. Distribution of Occupation

Occupation	Frequency	Percentages
Nurse	97	35.9
Lab, or Ray Technician	45	16.8
Pharmacist or Ph. Assistant	36	13.3
Health Assistant	16	5.9
Physician	76	28.1
Total	270	100.0
Ph. Assistant: Pharmacist Assistant		

4.1.5 Distribution of the participants according to their workplace:

As shown in Table 4.1.5, participants were almost evenly distributed among the work areas included in the study. The same as the results in Table 4.1.6, participants are roughly evenly distributed over the periods of experience.

Table 4.1.5. Distribution of Workplace

Workplace	Frequency	Percentages
North Hebron Health Directorate	52	19.3
Hebron Health Directorate (Center)	66	24.4
South Hebron Health Directorate	43	15.9
Yatta Health Directorate	57	21.1
Bethlehem Health Directorate	52	19.3
Total	270	100.0

Table 4.1.6. Distribution of Experience

Experience	Frequency	Percentages
Less than 8 years	61	22.6
8 and less than 13 years	62	23.0
13 and less than 18 years	54	20.0
18 and less than 23 years	49	18.1
23 years and above	44	16.3
Total	270	100.0

4.1.7 Distribution of the participants according to their Training on SICPs :

The findings showed that 74.4% of the participants had taken training on the standard precautions (SP) measure, and only 25.6% didn't take any training on the SSICPs measure.

Table 4.1.7 Distribution of training of SICPs

Training on SICPs measure	Frequency	Percentage
Yes	201	74.4
No	69	25.6
Total	270	100

4.1.8 Availability of written policies in their organization for IPC

The results indicated that 95.2% of participants had IPC policies in place at their organizations, while 4.8% did not.

Table 4.1.8 Availability of written policies of IPC

Availability of written policies of IPC	Frequency	Percentage
Yes	257	95.2
No	13	4.8
Total	270	100.0

4.1.9 Is there a team or person responsible for infection control?

The findings showed that 94.8% of participants had a team or person responsible for infection control but 5.2 % hadn't a team or person responsible for infection control.

Table 4.1.9 Availability of IPC committee

Availability of IPC committee	Frequency	Percentage
Yes	256	94.8
No	14	5.2
Total	270	100.0

4.2 Knowledge of SICPs:

The knowledge tool consists of binary questions no = 0, yes = 1, and the cut-off point is three-tenths. So we will adopt the following scale: 0 to 0.33 (low), 0.34 to 0.67 (moderate), and 0.67 to 1 (high). Thus the scale for the whole (45 items) knowledge axis is then given by: 0 to 15 (low), 15.1 to 30 (moderate), 30.1 to 45 (high)

Results on the respondents' knowledge about SICPs among HCWs at government PHC facilities in southern Palestine are shown in Table 4.2

Table 4.2. knowledge about SICPs

Item	Correct Responses		Item	Correct Responses		Item	Correct Responses	
	Frequency	%		Frequency	%		Frequency	%
SQ2_1	197	73.0%	SQ2_16	195	72.2%	SQ2_31	262	97.0%
SQ2_2	239	88.5%	SQ2_17	255	94.4%	SQ2_32	256	94.8%
SQ2_3	257	95.2%	SQ2_18	266	98.5%	SQ2_33	261	96.7%
SQ2_4	266	98.5%	SQ2_19	110	40.7%	SQ2_34	78	28.9%
SQ2_5	263	97.4%	SQ2_20	114	42.2%	SQ2_35	241	89.3%
SQ2_6	256	94.8%	SQ2_21	225	83.3%	SQ2_36	258	95.6%
SQ2_7	267	98.9%	SQ2_22	234	86.7%	SQ2_37	207	76.7%
SQ2_8	253	93.7%	SQ2_23	175	64.8%	SQ2_38	268	99.3%
SQ2_9	230	85.2%	SQ2_24	204	75.6%	SQ2_39	269	99.6%
SQ2_10	225	83.3%	SQ2_25	234	86.7%	SQ2_40	247	91.5%
SQ2_11	264	97.8%	SQ2_26	110	40.7%	SQ2_41	226	83.7%
SQ2_12	265	98.1%	SQ2_27	261	96.7%	SQ2_42	229	84.8%
SQ2_13	241	89.3%	SQ2_28	255	94.4%	SQ2_43	262	97.0%
SQ2_14	172	63.7%	SQ2_29	250	92.6%	SQ2_44	263	97.4%
SQ2_15	167	61.9%	SQ2_30	263	97.4%	SQ2_45	264	97.8%
Overall level of knowledge								
			Moderate	10	3.7%			
			Good	260	96.3			
				Min	Max	Mean	SD	Range
				23	44	38.17	3.260	21

It was found that the percentage of respondents' correct answers to the knowledge items Q2_19, Q2_20, Q2_26, and Q2_34 ranged from 28.9% to 40.7%, and respondents' correct answers to the knowledge items Q2_1, Q2_14, Q2_15, Q2_16, and Q2_23 ranged from 61.9% to 73%. However, the percentage of correct answers to the remaining items ranged from 75.6% to 99.6%, which is a very high rate. Moreover, the general trend of knowledge level was good at 96.3% and only 3.7% moderate, with 0% poor. Additionally, with a standard deviation of 3.26 and a mean knowledge score of 38.17, the results are higher above the cut-off mark and statistically significant ($t = 17.23$, $p\text{-value} < 0.01$). The initial null hypothesis is rejected by this outcome. As a result, we conclude that the knowledge level was good.

4.3 Attitudes of SICPs:

A Likert scale with three ranges: 1 to 2.33 (low), 2.34 to 3.67 (moderate), and 3.67 to 5 (high) makes up the attitudes instrument. As a result, the attitudinal axis scale for all 19 items is 19 to 44.7 (low), 44.8 to 69.73 (moderate), and 69.8 to 95 (high).

The study of the respondents' attitudes about SICPs among HCWs in government PHC in southern Palestine is displayed in Table 4.3.

Table 4.3. Attitude about SICPs

Item	Correct Responses		Item	Correct Responses		Item	Correct Responses	
	Frequency	%		Frequency	%		Frequency	%
SQ3_1	269	99.6%	SQ3_8	145	53.7%	SQ3_15	261	96.7%
SQ3_2	270	100.0%	SQ3_9	263	97.4%	SQ3_16	201	74.4%
SQ3_3	265	98.1%	SQ3_10	266	98.5%	SQ3_17	195	72.2%
SQ3_4	262	97.0%	SQ3_11	267	98.9%	SQ3_18	261	96.7%
SQ3_5	264	97.8%	SQ3_12	268	99.3%	SQ3_19	262	97.0%
SQ3_6	200	74.1%	SQ3_13	247	91.5%			
SQ3_7	225	83.3%	SQ3_14	239	88.5%			
The overall level of Attitude								
			Moderate	10	3.7%			
			Good	260	96.3			
				Min	Max	Mean	SD	Range
				63	95	84.61	7.22	32

Participants indicated that they had high level of attitude about SICPs, as evidenced by the mean response of 84.6 with a standard deviation of 7.22 which was greater than the Likert mean (cutoff). and is statistically significant $t = 23.4$, $p\text{-value} < 0.01$. This result rejects the Second null hypothesis. Therefore, we conclude that the level of attitude was good.

4.4 Practice of SICPs:

A Likert scale with three ranges: 1 to 2.33 (low), 2.34 to 3.67 (moderate), and 3.67 to 5 (high) makes up the practice instrument. As a result, the following scale represents the entire 17-item practice axis: 17 to 39.6 (low), 39.7 to 62.4 (moderate), and 62.5 to 85 (high).

The study of the respondents' practice about SICPs among HCWs at government PHC facilities in southern Palestine is displayed in Table 4.4.

Table 4.4: Practice about SICPs

Item	Correct Responses		Item	Correct Responses		Item	Correct Responses	
	Frequency	%		Frequency	%		Frequency	%
SQ4_1	242	89.6%	SQ4_7	266	98.5%	SQ4_13	264	97.8%
SQ4_2	258	95.6%	SQ4_8	253	93.7%	SQ4_14	220	81.5%
SQ4_3	244	90.4%	SQ4_9	257	95.2%	SQ4_15	167	61.9%
SQ4_4	250	92.6%	SQ4_10	268	99.2%	SQ4_16	222	82.2%
SQ4_5	232	85.9%	SQ4_11	267	98.9%	SQ4_17	266	98.5%
SQ4_6	201	74.4%	SQ4_12	265	98.1%			
Overall Level of Practice								
			Moderate	7	2.6%			
			Good	263	97.4%			
				Min	Max	Mean	SD	Range
				42	85	77.73	6.74	42

The mean response of 77.73 with a standard deviation of 6.74, which was higher than the Likert mean (cutoff), showed that participants had a high degree of practice with SICPs. and has a p-value less than 0.01, a statistically significant $t = 25.9$. The third null hypothesis is rejected by this outcome. As a result, we conclude that the practice quality was good.

4.5. Association between socio-demographic characteristics and level of knowledge about SICPs:

Odd ratios (OR), 95% Confidence intervals (95% CI), and the Chi-Square test were utilized to evaluate the association hypotheses. Regarding the association between the socio-demographic variables and the level of knowledge about SICPs among HCWs.

Results in Table 4.5 revealed that when compared to respondents who were younger than 30 years old, those who were 30 years or older had a higher likelihood of possessing adequate knowledge about standard precautions (OR: 9.82, 95% CI: 3.81- 18.55, $p < 0.05$). As anticipated, there was a roughly 12-fold increase in knowledge among those with greater education compared to those with lower education (OR: 12.13, 95% CI: 5.11- 22.71, $p < 0.05$). Additionally, individuals who had worked for more than eight years were more likely to have good knowledge than those who had worked for less time (OR: 9.82, 95% CI: 3.81–18.55, $p < 0.05$). Nevertheless, there was no statistically significant correlation found between gender and the degree of knowledge regarding SICPs ($p > 0.05$).

Table 4.5. Association between sociodemographic characteristics and level of knowledge about SICPs

Characteristics		Moderate%	Good%	OR (95% C. I.)	p-value
Gender	Female	4.4%	95.6%	1	.322
	Male	2.3%	97.7%	1.94 (0.404- 9.35)	
Age	Less than 30	6.6%	93.4%	1	.026
	30 or above	1.2%	98.8%	9.82 (3.81- 18.55)	
Education	Low Educated	8.5%	91.5%	1	.013
	High Educated	2.4%	97.6%	12.13 (5.11-22.71)	
Experience	Less than 8	6.9%	93.1%	1	.028
	8 or above	2.2%	97.8%	9.82 (3.81- 18.55)	

Significant level $\alpha=0.05$. C.I.: Confidence Interval

4.6. Association between sociodemographic characteristics and level of attitudes about SICPs:

Higher-educated individuals were about 12 times more likely to exhibit positive attitudes than lower-educated individuals (OR: 8.47, 95% CI: 4.23, 19.65, $p < 0.05$), according to Table 4.6's results. Furthermore, compared to respondents with less job experience, individuals with more than eight years of experience were more likely to hold positive attitudes (OR: 9.12, 95% CI: 3.29, 17.91, $p < 0.05$). Age and gender did not significantly correlate with the degree of attitudes on SICPs ($p > 0.05$).

Table 4.6. Association between sociodemographic characteristics and level of attitudes about SICPs

Characteristics		Moderate%	Good%	OR (95% C. I.)	p_Value
Gender	Female	3.3%	96.7%	1	.481
	Male	4.6%	95.4%	.71 (0.19, 2.56)	
Age	Less than 30	4.9%	95.1%	1	.328
	30 or above	3.5%	96.5%	1.42 (.29, 6.31)	
Education	Low Educated	8.2%	91.8%	1	.027
	High Educated	1.4%	98.6%	8.47 (4.23, 19.65)	
Experience	Less than 8	7.3%	92.7%	1	.023
	8 or above	2.5%	97.5%	9.12 (3.29, 17.91)	

Significant level $\alpha = 0.05$. C.I.: Confidence Interval

4.7 Association between sociodemographic characteristics and level of practices regarding SICPs:

Table 4.7 findings showed that individuals who were male had a lower likelihood of having good practices than those who were female (OR:.18, 95% CI: (.03,.51), $p < 0.05$). Additionally, individuals with greater education had a roughly ten-fold higher likelihood of having good practices compared to those with lower education (OR: 10.52, 95% CI: (5.18, 21.83), $p < 0.05$). There was no statistically significant correlation found between age and work experience and the amount of SICP practices ($p > 0.05$).

Table 4.7. Association between socio-demographic characteristics and level of practices about SICPs

Characteristics		Moderate%	Good%	OR (95% C. I.)	p_Value
Gender	Female	1.1%	98.9%	1	.037
	Male	5.7%	94.3%	.18 (.03, .51)	
Age	Less than 30	2.4%	97.6%	1	.381
	30 or above	2.6%	97.4%	2.65 (.13, 5.12)	
Education	Low Educated	7.3%	92.7%	1	.017
	High Educated	1.7%	98.3%	10.52 (5.18, 21.83)	
Experience	Less than 8	2.0%	98.0%	1	.356
	8 or above	2.7%	97.3%	1.41 (.23, 6.88)	

Significant level $\alpha = 0.05$. C.I.: Confidence Interval

4.8 Association between the level of knowledge, attitude, and practice about SICPs:

Results in Table 4.8 revealed that there is a direct correlation between knowledge, attitude, and practice about SICPs among healthcare workers at governmental PHC facilities in Southern Palestine ($p < 0.05$). This indicates that participants who have a high level of knowledge also have a high level of attitude as well as practice. Also, participants who have a high level of attitude have a high level of practice.

The group means are examined using the one-way ANOVA, which determines if any of the group means differ from the others statistically substantially. The one-way ANOVA in this instance demonstrates significance (Sig. = 0.000).

Table 4.8. Association between the level of knowledge, attitude, and practice about SICPs.

Paired Correlations	Pearson Correlation (r)	p_Value
knowledge * Attitude	.423	.000
knowledge * Practice	.364	.000
Attitude * Practice	.345	.000

Significant level $\alpha = 0.05$. The correlation was calculated based on total scores.

4.9 Correlation and regression between score of participants knowledge, attitude, and practice:

The regression model is statistically significant ($p_value < 0.05$), meaning that it fits the data better than the model without any predictor variables, according to ANOVA Table 4.9.1. Furthermore, Table 4.9.2 presents the results, which indicate that the interaction term (Inter_knowledge) has a P-value of 0.031. We may conclude that the moderator variable knowledge has a positive effect on the relationship between attitude and practice since the P-value is less than 0.05.

Table 4.9.1 ANOVA (knowledge moderated, attitude, and practice about SICPs)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	811.570	2	405.785	8.194	.000 ^b
	Residual	13222.815	267	49.524		
	Total	14034.385	269			

a. Dependent Variable: Attitude

b. Predictors: (Constant), Inter_knowledge, practice

Table 4.9.2 Coefficients of the regression model(a).

Coefficients	Understand.	Stand. Coefficients		t	p-Value
	Coefficients	Beta			
	B				
(Constant)	65.281			12.867	.000
Practice	.249	.232		3.835	.000
Inter_ knowledge	.142	.131		2.12	.031

a. Dependent Variable: Attitude

The ANOVA Table 4.9.3 revealed that the regression model is statistically significant ($p_value < 0.05$), i.e. the model fits the data better than the model with no predictor variables. However, results in Table 4.9.4 show that the interaction term (Inter_attitude) has a P-value of .352. which is greater than 0.05, indicating that the moderator variable attitude does not affect the relationship between knowledge and practice.

Table 4.9.3 ANOVA (Attitude moderated, knowledge, and practice about SICPs).

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	868.252	2	434.126	10.201	.000 ^b
	Residual	11363.011	267	42.558		
	Total	12231.263	269			

a. Dependent Variable: Practice

b. Predictors: (Constant), Inter_Attitude, knowledge

Table 4.9.4 Coefficients of the regression model(b)

Coefficients	Unstand.	Stand. Coefficients		T	p-Value
	Coefficients	Beta			
	B				
(Constant)	26.564			.484	.629
Knowledge	-.883	-.385		-.554	.580
Inter_ attitude	1.341	.648		.931	.352

a. Dependent Variable: practice

Chapter Five

Discussion

This chapter will address the study's findings about the sample distribution and the verified hypothesis's outcomes. The study's findings will be contrasted with those of related research conducted both locally and internationally.

5.1 Socio-demographic characteristics :

According to the current study, 32.2% of the population under investigation was male and 67.8% of the population was female. Table 4.1.1. These findings corroborated those of another study (Ochie et al., 2022) in which 65.7% of the participants were female. However, this conclusion was in line with the study's designation by Gasaba et al. (2020), which indicated that 86.2% of the subjects were women. This finding contrasts with that of the Palestinian Central Bureau of Statistics (PCBS), which indicated that men made up 50.9 percent of Palestine's overall population in 2020. 40.1% of the population was female.

In terms of participant age, Table 4.1.2 showed that 30.0% and 31.1% of respondents, respectively, were between the ages of 30 and 37 and 38 and 45. This result is consistent with Ochie et al. (2022), who showed that the mean age of the majority of study participants was 39.86 ± 9.62 years. This could be brought on by a lack of employment and job opportunities.

Regarding educational level, Table 4.1.3 showed that the majority 63% of participants held a bachelor's degree. The result is similar to the study done in Saudi Arabia(Al-

Ahmari et al., 2021), which showed that most participants had Bachelor's degrees 68.9%. This might be due to the Palestinian Ministry of Health employing medical personnel who hold a bachelor's degree (WHO EMRO, 2023).

Regarding occupation Table 4.1.4 showed that nurses make up the majority 35.9% of participants, followed by physicians 28.1% and lab, or ray technician 16.7%. pharmacist or pharmacist assistants 13.3% and health assistants 5.9%. That might be due to the largest segment of primary care employees being nurses, followed by doctors (Ayed, 2015). The current finding is opposite to the study done in Saudi Arabia (Al-Ahmari et al., 2021), which showed that most participants were physicians.

In terms of experience According to Table 4.1.6, 23% of participants had experience ranging from 8 to fewer than 13 years, 22.6 percent had experience covering less than 8 years, and 20% had experience ranging 13 to less than 18 years. This could be because there aren't as many available jobs, people aren't working, and fewer people are retiring or giving up their jobs. According to Al-Ahmari et al. (2021), another Saudi Arabian study, 51.9% of participants had spent fewer than five years in PHC.

Regarding training on SICPs Table 4.1.7, it was shown that 74.4% of the participants had taken training on the SICPs measure. This might be due to there is that 94.8% had a team or person responsible for IC. This finding is consistent with a study conducted in 2021 by Al-Ahmari et al., which showed that only 55.7% of participants attended infection control training sessions. These results were in agreement with (Ochie et al., 2022), which found that 84.7% of the respondents had previous IPC training.

5.2 Knowledge of SICPs:

The results of this study As can be seen from Table 4.2, 96.3% of participants had a high overall understanding, with 74.4% having completed training on the SICPs measure and 95.2% having IPC policies. The results of the current study are in opposition to those of a previous Saudi Arabian study (Amin & Al Wehedy, 2009), which suggested that HCWs at the PHC in Al-Hassa had inadequate knowledge of SPs. These results corroborated Tobin et al.'s findings(2014) Nigeria found that 59.6% of respondents had some knowledge of infection control. Ayed (2015) limited the scope of her previous research to the nursing staff of Palestinian hospitals located in the South West Bank. 38.2% of the nurses had fair knowledge, according to the statistics, and 37.8% had good knowledge.

5.3 Attitude of SICPs:

Table 4.3 of the current study made it clear that 96.3% of participants had (high level) positive sentiments regarding the common infection control precautions. It could be because knowledge and attitude are directly correlated, meaning that those with high knowledge levels also tend to have high attitudes. The above-mentioned results were in line with a Saudi Arabian study (Al-Ahmari et al., 2021) that indicated 88.2% of respondents had a favorable opinion of infection control policies and practices. According to results from a different earlier study done in Zimbabwe by Gasaba et al. (2020), participants had an impartially positive attitude (fair attitude).

5.4 Practice of SICPs:

Table 4.4 of the present investigation revealed that 97.4% of participants possessed a high level of practice with routine infection control precautions. It could be because there is a direct correlation between knowledge, attitude, and practice regarding SICPs, meaning that those with high knowledge also tend to have high attitudes and practices, it might be due to behavioral learning theory which focus on learning is a change in observable behavior that results from experience(Behaviorism in Education_ What Is Behavioral Learning Theory_, n.d.). This finding contradicts the WHO EMRO (2019) study, which found that there was low overall compliance with IPC recommendations among dentists in the West Bank and Jerusalem (18.5% of respondents reported good compliance).

In other studies, in Nigeria, Tobin et al. (2014) found that 25.3% of respondents had good practice. Another study done by Gasaba et al.(2020) in Zimbabwe indicated that practices among participants were impartially good (fair practice). Ayed (2015) conducted a study on nursing staff working in South West Bank areas at a Palestinian hospital, and the results showed that over half of the participants 52.9% had a fair level of practice.

According to Al-Sharif and Hussein's (2023) research, developing countries frequently fail to comply with IPC principles due to a lack of resources and a lack of knowledge. Training and expertise, as well as the existence of detailed protocols for the application and oversight of the procedures, may have an impact on adherence to the recommendations.

5.5. Association between sociodemographic characteristics and level of knowledge about SICPs:

When compared to younger respondents under 30, the older respondents (30 years of age or more) were more likely to have strong awareness about standard precautions, according to the current study. It might be the case that wisdom and experience increase with age. This result contrasts with that of a 2009 study by Amin & Al Wehedy, which revealed that participants' knowledge was unaffected by the age of the providers.

The present study found that the likelihood of having strong knowledge was around 12 times higher in those with higher education than in those with lower education. In addition, people who had worked for more than eight years were more likely than those who had less job experience to possess solid expertise. That might be because knowledge improves with education because a greater percentage of reading, research, and information is gathered; on the other hand, experience increases with the number of courses and workshops attended, which also enhances knowledge. Additionally, a postgraduate degree and more than five years of experience in primary healthcare were found to be positive correlates of knowledge, which was also in agreement with the results presented by Amin & Al Wehedy (2009).

However, the results of this study showed that there was no statistically significant correlation between gender and awareness of infection control best practices. Additionally, a study carried out in Saudi Arabia showed that the knowledge score in primary healthcare was positively correlated with the gender of the female provider (Amin & Al Wehedy, 2009). However, this conclusion was in line with the findings of a study by Tobin et al.

(2014), which showed a strong correlation between knowledge and gender identity as a woman.

According to Al-Ahmari et al. earlier study from 2021, there were no appreciable variations in participants' knowledge based on their sociodemographic traits.

5.6. Association between sociodemographic characteristics and level of attitudes about SICPs:

According to the results of the current study, those with greater levels of education had a positive attitude roughly 12 times more frequently than those with lower levels of education. Additionally, compared to individuals with less job experience, those with over eight years of experience were more likely to have positive attitudes. It can be because a person's level of awareness increases, their feelings or opinions about something improve, and their attitude therefore improves with further education and experience, due to attitude learning theory (Kumar, 2022). Age and gender did not significantly correlate with the degree of opinions regarding SICPs.

According to the results of Al-Ahmari et al. previous study from 2021, there were no significant differences in the attitude of the participants based on their sociodemographic characteristics. However, this result was consistent with research by Mudenda et al. (2023) among undergraduate pharmacy students in Zambia, which showed that there was no relationship between sociodemographics and attitude toward IPC.

5.7 Association between sociodemographic characteristics and level of practices regarding SICPs:

According to the results of the current study, male participants were less likely than female participants to have good behaviors. Additionally, compared to those with less education, people with higher education levels were around ten times more likely to have good behaviors. According to this study, there was no statistically significant correlation between age or job experience and the degree of standard infection control preventative procedures. However, the earlier study by Al-Ahmari et al. (2021) found that the practices of those who had received infection control training and those with less than five years of primary care experience were much better.

According to Tobin et al. (2014) and other studies, there was a strong correlation between the practice and being male, older than 50, and having worked for more than ten years. A 2019 WHO EMRO survey of dentists in the West Bank and Jerusalem found a substantial correlation between high compliance and age, years of experience, and graduation year.

Furthermore, the study approach conducted among undergraduate pharmacy students in Zambia by Mudenda et al. (2023) illustrated that there was no association between sociodemographics and practice concerning IPC.

5.8 Association between the level of knowledge, attitude, and practice about SICPs:

According to the current results, individuals with high knowledge levels also seem to have high levels of practice and attitude. High practice levels are also exhibited by participants with positive attitudes due to KAP theory. The current results are in contrast to a Saudi Arabian study by Al-Ahmari et al. (2021), which discovered that 39.5% of participants had

poor practice levels, 31.6% had poor knowledge about infection control, and 88.2% had positive attitudes toward infection control policies and procedures.

According to Tobin et al. (2014), a Nigerian study, having high knowledge was significantly correlated with good compliance with infection control, as compared to other countries. Health care workers (HCWs) in Nigeria's primary and tertiary levels exhibited strong knowledge but poor practice of social work, according to a different study conducted by Arinze-Onyia et al. (2018). This study used a qualitative design and included a case study.

Studies conducted at a hospital in Zimbabwe, such as Gasaba et al. (2020), revealed that although the participants had a fair attitude and behavior toward infection control, their knowledge was poor.

5.9 Correlation and regression between score of participants knowledge, attitude, and practice:

The current finding seems to demonstrate both the positive influence of the moderator variable knowledge on the link between attitude and practice as well as the absence of effect of the moderator variable attitude on that relationship. The current finding is opposite to that study conducted by(Ogoina et al., 2015) which shows thatPractice scores have no discernible link with either knowledge or attitude scores, however, knowledge scores showed a favorable correlation with attitude scores.

Chapter Six

Conclusion & recommendations

6. Conclusion and recommendation

This chapter includes recommendations and a conclusion regarding the findings of our study.

6.1 Conclusion :

This study is the first of its kind in Palestine, assessing relationships between knowledge, attitudes, and practices about SICPs among HCWs at governmental PHC Facilities in Southern Palestine. The study reported that the level of knowledge was good. Participants had a high level of attitude about SICPs, and the level of practice was good.

The study reported that there is a direct correlation between the knowledge, attitude, and practice about SICPs. This indicates that participants who have a high level of knowledge also have a high level of attitude as well as practice. Also, participants who have a high level of attitude have a high level of practice.

Finally, we conclude that the moderator variable knowledge has a positive effect on the relationship between attitude and practice but that the moderator variable attitude does not affect the relationship between knowledge and practice.

6.2 Recommendations :

6.2.1 Emphasizing in continuous education and training programs the significance of adhering to the most recent evidence-based practices of IC to all HCWs.

6.2.2 Providing training programs for new HCWs about SPs at regular intervals.

6.2.3 Further research should be conducted to assess the knowledge, attitude, and practice about SICPs among HCWs at governmental PHC Facilities in the north, middle of Palestine, and Gaza.

6.2.4 Conducting further observational studies to assess the practice of SPs because it is more accurate than using questionnaires.

6.2.5 Introducing SPs to HCWs Curricula and pre- employment education

6.2.6 Develop a research study to identify the obstacles that interfere with adherence to universal IPC measures.

6.2.7 Further research to assess hepatitis titer among HCWs during their working period.

Limitation of the study:

The results cannot be applied to healthcare professionals in other areas of Palestine because the study was conducted at government PHC facilities in Southern Palestine. In order to accurately represent the Palestinian HCW population, more research is required to look at HCWs in additional Palestinian PHC facilities.

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العنوان:

معرفة ومواقف وممارسات الكادر الصحي حول المعايير الوقائية لضبط العدوى في مراكز وعيادات الرعاية الصحية الأولية الحكومية في جنوب فلسطين.

اعداد:

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اشراف:

د. ميساء الأسطة

الملخص:

الاحتياطات القياسية لمكافحة العدوى هي الحد الأدنى من تدابير مكافحة العدوى التي ينبغي تطبيقها في علاج جميع المرضى. تعتبر الاحتياطات القياسية لمكافحة العدوى حجر الزاوية لجميع الأنشطة الرامية إلى منع انتقال العدوى أثناء الرعاية الصحية. تعد العدوى المرتبطة بالرعاية الصحية من مشكلات الصحة العامة، ولها تأثير كبير على معدلات الإصابة بالمرض والوفيات والتكلفة. تهدف هذه الدراسة إلى تقييم العلاقات بين المعرفة والمواقف والممارسات حول الاحتياطات القياسية لمكافحة العدوى بين العاملين في مجال الرعاية الصحية في مرافق الرعاية الصحية الأولية الحكومية في جنوب فلسطين. تم استخدام التصميم الوصفي المقطعي. تم استخدام العينات العنقودية غير العشوائية لاختيار 270 من العاملين في مجال الرعاية الصحية من مديرية صحة شمال الخليل، ومديرية صحة جنوب الخليل، ومديرية صحة الخليل، ومديرية صحة يطا بالإضافة إلى مديرية صحة بيت لحم. تم استخدام استبيان ذاتي يتكون من أربعة مكونات تتناول البيانات الديموغرافية والمعرفة والمواقف والممارسات لجمع البيانات. وأظهرت نتائج الدراسة أن 96.3% من المشاركين لديهم مستويات جيدة من المعرفة ومستويات جيدة من الاتجاهات الإيجابية. بالإضافة إلى ذلك، كان لدى 97.4% مستوى عالٍ من الممارسات الصحيحة للاحتياطات القياسية لمكافحة العدوى. وكشفت النتائج أن هناك علاقة ذات دلالة إحصائية بين معرفة المشاركين ومواقفهم وممارساتهم بشأن الاحتياطات القياسية لمكافحة العدوى، مما يشير إلى أن المشاركين الذين لديهم مستوى عالٍ من المعرفة لديهم أيضًا مستوى عالٍ من المواقف الإيجابية بالإضافة إلى مستويات عالية من الممارسة. وأخيراً، فإن المتغير الوسيط للمعرفة له تأثير إيجابي على العلاقة بين الاتجاه والممارسة، ولكن المتغير الوسيط للاتجاه لا يؤثر على العلاقة بين المعرفة والممارسة. ولذلك، يوصى بتوفير برامج تدريبية حول الاحتياطات القياسية لمكافحة العدوى لجميع العاملين في مجال الرعاية الصحية على فترات منتظمة.

Annex (1): research participant consent form

نموذج الموافقة

عزيزي/عزيزتي المشارك:

أطلب منك المشاركة في دراسة بحثية بعنوان:

معرفة ومواقف وممارسات الكادر الصحي حول المعايير الوقائية لضبط العدوى في عيادات ومراكز الرعاية الصحية الأولية الحكومية في جنوب فلسطين

لقد وقع عليك الاختيار للمشاركة في الدراسة وذلك لأنك من موظفي عيادات الرعاية الأولية الحكومية في منطقة جنوب فلسطين

يعتبر هذا البحث شرطا أساسيا لمتطلبات الحصول على درجة الماجستير من كلية الدراسات العليا - برنامج سياسات وإدارة صحية :مسار جودة وسلامة مريض- جامعة القدس ابوديس. الباحث نفسه يمول هذا البحث سيتم استخدام هذا البحث لأغراض البحث العلمي فقط. لذا نأمل منكم الإجابة بموضوعية على أسئلة الاستبيان ,بوضع إشارة على الإجابة التي ترونها مناسبة في المكان المخصص لها.

لديك كل الحق في معرفة ما سيطلب منك القيام به حتى تتمكن من تحديد ما إذا كنت ستستجيب في الدراسة أم لا . مشاركتك في هذه الدراسة اختيارية، إذا كنت لا ترغب في المشاركة في الدراسة، فيمكنك رفض المشاركة أو الخروج من الدراسة في أي وقت دون عقوبة.

سيتم احترام إجابتك وسرية التعامل معها حيث سيتم استخدامها لأغراض الدراسة فقط. ولن يتم الاطلاع عليها إلا من قبل فريق البحث العلمي. لن تؤثر مشاركتك في هذه الدراسة بأي شكل من الأشكال على حياتك المهنية او وضعك الوظيفي , لن يكون هناك إمكانية لربط إجابتك مع اسمك .سيتم تخزين المعلومات التي تنتجها هذه الدراسة في ملف خاص وتحديدها برقم رمز فقط .

جميع البيانات الواردة من المشاركين ستعامل بشكل جماعي وليس فردي وسيتم تحليلها بشكل جماعي . علما بان مشاركتك في هذه الدراسة ستسهم في رفع مستوى البحث العلمي.

(شاكرين لكم حسن تعاونكم)

لمزيد من التفاصيل حول الدراسة اتصل بالباحث على جوال رقم 0592925410

موافق

غير موافق

الباحث:

فاطمة محمد عبد الحميد ابو قبيطة

ايميل:

Fatima.qubaita@students.alquds.edu

توقيع المشترك:

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Annex (2) :Research Tool

المحور الاول: الخصائص الاجتماعية والديموغرافية:

الرجاء الاجابة على ما يلي بوضع اشارة x مقابل الجواب المناسب :

1. الجنس 1. ذكر 2. انثى

2. العمر : _____
 3. المستوى التعليمي :
 1. دبلوم
 2. بكالوريوس
 3. ماجستير
 4. دكتوراه
 5. غير ذلك (حدد/ي) . _____

4. الوظيفة
 1. طبيب
 2. ممرض
 3. صيدلي
 4. فني مختبر
 5. غير ذلك _____

5. مكان العمل:
 1. مديرية صحة بطن
 2. مديرية صحة شمال الخليل
 3. مديرية صحة جنوب الخليل
 4. مديرية صحة الخليل
 5. مديرية صحة بيت لحم

6. عدد سنوات العمل في المؤسسة الحالية: _____
 7. عدد سنوات الخبرة: _____
 8. هل اصبت سابقا بعدوى خلال عملك؟ 1. نعم 2. لا
 9. هل تذكر نوع العدوى ؟ 1. نعم 2. لا
 10. هل تعرف مصدر العدوى ؟ 1. نعم 2. لا
 11. كيف تم متابعتك ؟ _____
التدريب:

12. هل تلقيت أي برنامج تدريبي خاص بالوقاية من العدوى ومكافحتها؟ 1. نعم 2. لا
 13. ما نوع التدريب الذي تلقينته ؟
 1. ضد فيروس كورونا 2. الاحتياطات المعيارية 3. الحقن الامن 4. الامراض المنقولة بالدم
 14. ما نوع اللغة المستخدمة بالتدريب ؟ 1. اللغة العربية 2. اللغة الانجليزية
 15. كم استمرت مدة التدريب ؟ _____
 16. متى كان اخر تدريب تلقينته ؟ _____
 17. هل يوجد سياسات مكتوبة في مؤسستك خاصة بالوقاية من العدوى ومكافحتها؟ 1. نعم 2. لا
 18. هل يوجد فريق او شخص مسؤول بمكافحة العدوى؟ 1. نعم 2. لا
 19. هل تلقيت لقاح ضد مرض التهاب الكبد الوبائي B ؟ 1. نعم 2. لا
 20. هل تلقيت تطعيم ضد فيروس كورونا او أي تطعيم اخر ؟
 1. نعم 2. لا (اذا كانت الاجابة نعم، اذكر اسم التطعيم) _____

المحور الثاني: اسئلة تتعلق بالمعرفة بالمعايير الوقائية لضبط العدوى:

يرجى الاجابة على الاسئلة التالية بوضع اشارة x في الخانة المناسبة:

الرقم	السؤال	نعم	لا	لا اعلم
1.	يتم استخدام الاحتياطات القياسية لرعاية جميع المرضى بغض النظر عن تشخيصهم وحالة العدوى لديهم ؟			
2.	احتياطات العزل هي إحدى المعايير الوقائية ؟			
3.	يجب غسل اليدين بالماء والصابون قبل وبعد التعامل مع المواد التي يحتمل أن تكون معدية بغض النظر عن ارتداء القفازات ؟			

4.	يجب استخدام القفازات عند التعامل مع مريض لديه احتمالية لخروج دم او سوائل الجسم ؟
5.	يجب ارتداء القفازات في كل مرة أثناء التعامل مع المواد التي يحتمل أن تكون معدية ؟
6.	الغرض من استخدام المعطف الطبي (lab coat) هو حماية الملابس من تتناثر أو رذاذ الدم وسوائل الجسم ؟
7.	تنظيف بيئة مراكز الرعاية الأولية بالمطهرات بشكل مناسب له دور في تقليل العدوى المرتبطة بالرعاية الصحية؟
8.	يجب تنظيف سرير الفحص بعد كل مريض ؟
9.	يستخدم الكحول المركز بنسبة 70 ٪ لتعقيم الأدوات الطبية المستخدمة قبل استخدامها مع مريض آخر في حالة عدم توفر معدات معقمة ؟
10.	يجب تغيير شراشف سرير الفحص بين كل مريض وآخر؟
11.	جميع مقدمي الرعاية الصحية معرضون لخطر العدوى المهنية ؟
12.	غسل اليدين يقلل من حدوث العدوى المتعلقة بالرعاية الصحية ؟
13.	يشمل غسل اليدين القياسي غسل كل من اليدين والمعصمين ؟
14.	فرك اليدين بالكحول هو بديل لغسل اليدين حتى لو كانت الأيدي متسخة ؟
15.	يجب غسل اليدين بين المهام والإجراءات لنفس المريض الواحد ؟
16.	يحل استخدام القفازات محل الحاجة إلى غسل اليدين ؟
17.	يجب غسل اليدين بعد خلع القفازات ؟
18.	يجب اختيار معدات الحماية الشخصية وفقاً لنوع التعرض والإجراءات ؟
19.	استخدام معدات الوقاية الشخصية يقضي تماماً على مخاطر الإصابة بالعدوى المهنية ؟
20.	معدات الحماية الشخصية مناسبة حصرياً للمختبرات وموظفي التنظيف لحمايتهم ؟
21.	يمكن إعادة استخدام القفازات والأقنعة في حالة التعامل مع نفس المريض ؟
22.	يجب معالجة الإصابات الحادة دون الحاجة إلى الإبلاغ ؟
23.	إصابات الإبرة هي الأقل شيوعاً في الممارسة العامة ؟
24.	قد تنتقل جراثمة MRSA على أيدي مقدمي الرعاية الصحية ؟
25.	يجب الحصول على تاريخ التحصين لمقدمي الخدمة قبل التوظيف ؟
26.	يمنع التحصين من خطر الإصابة بالتهاب الكبد B بعد التعرض ؟
27.	للقاية من التهاب الكبد B ، يوصى بالتطعيمات لجميع العاملين في الرعاية الصحية ؟
28.	من اللحظات الخمسة التي يجب فيها تنظيف اليدين هي قبل لمس المريض؟
29.	من اللحظات الخمسة التي يجب فيها تنظيف اليدين هي بعد لمس المريض ؟
30.	من اللحظات الخمسة التي يجب فيها تنظيف اليدين هي قبل أي إجراء طبي او جراحي للمريض ؟
31.	من اللحظات الخمسة التي يجب فيها تنظيف اليدين بعد التعرض لسوائل او دم من جسم المريض ؟
32.	من اللحظات الخمسة التي يجب فيها تنظيف اليدين هي بعد ملامسة بيئة المريض ؟
33.	نظافة اليدين هي اهم جزء في الوقاية من العدوى ومكافحتها؟
34.	ذلك اليدين باستخدام الكحول تستخدم بعد خلع القفازات ؟
35.	تعد معدات الوقاية الشخصية (PPE) مهمة في مكافحة العدوى لأنها تعمل كحاجز بين المواد المعدية مثل الملوثات الفيروسية والبكتيرية وجلدك أو فمك أو أنفك أو عينيك (الأغشية المخاطية) ؟
36.	يجب تغيير القفازات أثناء رعاية المريض إذا قمت بنقل يديك من "موقع الجسم الملوث" إلى "موقع الجسم النظيف" ؟
37.	نقوم بخلع جميع معدات الحماية الشخصية (PPE) قبل مغادرة بيئة المريض ؟
38.	يمكن أن تكون القرطاسية والهواتف ومقابض الأبواب مصادر للعدوى ؟
39.	فصل النفايات الطبية والعادية له دور مهم في منع انتشار العدوى ؟
40.	يجب التخلص من حقن الأمبولات التي تم استخدامها في صندوق الادوات الحادة (sharpbox) و ثم الى حاوية النفايات الطبية؟
41.	اعادة الإبرة في غطائها (recapping) بشكل عام ، غير مناسب؟

			42. التدبير الفوري لإصابات الأدوات الحادة الغسيل بالماء الجاري والصابون ؟
			43. إذا ثقبت يدك بأدوات حادة ، يجب عليك إبلاغ السلطات المختصة (منسق ضبط العدوى وطبيب الطب الوقائي) ؟
			44. يجب استخدام الحاويات المقاومة للثقوب للتخلص من الأدوات الحادة ؟
			45. يجب وضع كمامة على مرضى السعال لمنع احتمال انتشار إفرازات الجهاز التنفسي المعدية من المريض للآخرين ؟

المحور الثالث : اسئلة تتعلق بتوجهات ومواقف الكادر الصحي تجاه المعايير الوقائية لضبط العدوى :

الرقم	الاسئلة	موافق بشدة	موافق	محايد	غير موافق بشدة	غير موافق
1.	أعتقدان الاخذ بمعايير الوقائية تقلل من انتشار العدوى المرتبطة بالرعاية الصحية؟					
2.	اعتقد انه يلزم استخدام معدات الحماية الشخصية عند التعامل مع الامراض المعدية؟					
3.	اعتقد ان استخدام محلول المنظفات الطبية لتنظيف عيادات ومراكز الرعاية الاولية يؤدي الى تقليل حدوث العدوى المرتبطة بالرعاية الصحية ؟					
4.	اعتقد انه عندما ان تكون بيئة العيادات ومراكز الرعاية الاولية هادئة وغير مزدحمة تقلل من انتشار العدوى المكتسبة من المنشأة الصحية ؟					
5.	اعتقد ان تطهير اليدين بين المرضى يحمي العاملين والزوار والمرضى كذلك؟					
6.	اعتقد ان تطهير اليدين كافي عند وجود مادة متسخة على اليدين ونحتاج لغسل اليدين؟					
7.	اعتقد ان ارتداء القفاز غير كافي ويحتاج مقدم الرعاية الاولية الى نظافة اليدين؟					
8.	اعتقد أن إعادة الإبرة في غطائها (needle recap) لا تحد من العدوى المكتسبة من المنشأة الصحية ؟					
9.	اعتقد انه يجب تنظيف اليدين قبل وبعد لمس المريض ؟					
10.	اعتقد انه يجب تنظيف اليدين قبل أي تدخل مع المرضى ؟					
11.	اعتقد انه يجب تنظيف اليدين بعد التعرض لسوائل أو دم من جسم المريض ؟					
12.	اعتقد انه يجب تنظيف اليدين بعد ملامسة بيئة المريض ؟					
13.	اعتقد انه يمكن استخدام معدات الوقاية الشخصية أثناء حالات الطوارئ					

					؟
					14. اعتقد أن تغيير القفازات ضروري أثناء الاجراءات اذا كانت شديدة التلوث؟
					15. اعتقد انه يجب تغيير القفازات بين مريض وآخر؟
					16. اعتقد انه من السهل العمل بارتداء معدات الوقاية الشخصية(PPE)؟
					17. اعتقد انه على العاملين في مجال الرعاية الصحية استخدام معدات الوقاية الشخصية حتى لو انها تضر المرضى نفسيا؟
					18. اعتقد أن القرباسية والهواتف ومقابض الأبواب هي مصادر للعدوى؟
					19. اعتقد أنه يجب ضمان التطهير المناسب للمعدات الطبية من قبل جميع العاملين في مجال الرعاية الصحية؟

المحور الرابع: اسئلة متعلقة بممارسات المعايير الوقائية لضبط العدوى

الاسئلة	دائما	غالبا	أحيانا	نادرا	أبدا	الرقم
1. أقوم بتنظيف الأيدي قبل لمس المريض؟						
2. أقوم بتنظيف الأيدي بعد لمس المريض؟						
3. أقوم بتنظيف اليدين قبل أي تدخل مع المرضى؟						
4. أقوم بغسل اليدين بعد استخدام القفازات؟						
5. أقوم بارتداء القفازات عند عملية سحب الدم وثقب الوريد؟						
6. لا أقوم بإعادة تغطية الإبرة بعد الاستعمال؟						
7. أقوم برمي الإبر المستخدمة أو الأدوات الحادة في صناديق التخلص من الأدوات الحادة على الفور؟						
8. عند حدوث الإصابة بأداة حادة اغسل الموقع بالمياه الجارية؟						

					9. أقوم بممارسة الاحتياطات المعيارية عند التعامل مع جميع المرضى ؟
					10. اغسل يدي فورًا بعد ملامسة أي دم أو سوائل بالجسم أو إفرازات أو مواد متسخة ؟
					11. ارتدي القفازات عند التعامل مع الغشاء المخاطي للمريض؟.
					12. ارتدي القفازات عند تغيير على الجروح؟
					13. أقوم بارتداء القفازات دائمًا عند التعامل مع جلد المريض المصاب (المجروح) ؟
					14. ارتدي قناع الوجه دائمًا عند عمل الإجراءات التي قد تؤدي إلى رش الدم أو سوائل الجسم أو الإفرازات ؟
					15. ارتدي واقي للعين أو نظارة واقية عند عمل الإجراءات التي قد تؤدي إلى رش الدم أو سوائل الجسم أو الإفرازات؟
					16. ارتدي رداء واقئيًا عند عمل الإجراءات التي قد تؤدي إلى رش الدم أو سوائل الجسم أو الإفرازات ؟
					17. أتخلص من الإبر أو الشفرات أو أي أدوات حادة أخرى تستخدم لمرة واحدة في حاوية التخلص الحادة بعد الاستخدام؟

شكرا لتعاونكم وأتمنى لكم دوام الصحة والعافية

First axis: Socio-demographic Characteristic:

Please answer the following by marking an x next to the appropriate answer:

1. Gender: 1. Male 2. Female
2. Age: _____
3. Educational level:
 - 1.Diploma 2. Bachelor's 3.Master 4.Ph.D
 - 5.Others _____

4. Occupation:

1. Doctor 2. Nurse 3. Pharmacist 4. Lab technician 5. Others

5. Workplace:

1. Yatta Health Directorate 2. North Hebron Directorate 3. South Hebron Directorate
 4. Hebron Health Directorate 5. Bethlehem Health Directorate

6. Number of years working in the current organization: _____

7. Experience years: _____

8. Exposed to infection while working? 1. Yes 2. No

9. Do you remember the type of infection? 1. Yes 2. No

10. Do you know the source of infection? 1. Yes 2. No

11. How you are treated? _____

Training:

12. Have you received any training programs on infection prevention and control?

1. Yes 2. No

13. What type of training did you receive?

1. Coronavirus 2. Standard precautions 3. Safe injection 4. Blood borne disease

14. What type of language is used in training?

1. Arabic language 2. English language

15. How long did the training last? _____

16. When was the last training you received? _____

17. Are there written policies in your organization regarding infection prevention and control? 1. Yes 2. No

18. Is there a team or responsible person for infection control?

1. Yes 2. No

19. Have you received a Hepatitis B Vaccine? 1. Yes 2. No

20. Have you received the coronavirus vaccine or any other vaccine?

1. Yes _____ 2. No (If the answer is yes, mention the name of the vaccination)

The second axis: knowledge about Standard Infection Control

Precautions:

Please answer the following questions by putting an x in the appropriate box:

No.	Questions (Correct Response)	Yes	No	Un known
1.	Standard precautions are used for the care of all patients regardless of their diagnosis and perceived infection status (Yes).			
2.	Isolation precaution is one of the elements in standard precaution (Yes).			
3.	Hands should be washed with soap and water before and after handling potentially infectious materials irrespective of wearing gloves (Yes).			
4.	Gloves must be worn when dealing with a patient who has the possibility of blood or body fluids coming out? (Yes).			
5.	Gloves must be worn every time during handling potentially infectious materials (Yes).			
6.	The purpose of using a gown or apron is to protect clothes from splashes or sprays of blood and body fluids (Yes).			
7.	Cleaning environment of primary care centers with disinfectants has a role in reducing healthcare-associated infections?.(Yes)			
8.	Cleaning the couch must be done after each patient? (Yes)			
9.	70% concentrated alcohol used to sterilize used medical instruments before using them on another patient if sterile equipment is not available? (Yes)			
10.	Linen should be changed between each patient?(Yes)			
11.	All health care providers are at risk of occupational infection?(Yes)			
12.	Hand washing reduces the incidence of healthcare-related infections?(Yes)			
13.	Standard hand washing includes washing of both hands and wrists? (Yes)			
14.	Alcohol hand rub substitutes hand washing even if the hands are soiled? (No)			
15.	Hand washing is indicated between tasks and procedures on the same patient?(Yes)			
16.	Use of gloves replaces the need for hand washing?(No)			
17.	Hand washing is indicated after removal of gloves?(Yes)			
18.	PPE should be chosen according to type of exposure and procedures?(Yes)			
19.	Use of PPE completely eliminates risk of acquiring occupational infections?(No)			
20.	PPE is exclusively suitable to laboratory and cleaning staff for their protection?(No)			
21.	Masks and gloves can be re-used if dealing with same patient? (No)			
22.	Sharps injuries should be managed without the need of reporting? (No)			
23.	Needle-stick injuries are the least commonly encountered in general practice?(No)			
24.	MRSA may be transmitted on hands of healthcare providers? (Yes)			
25.	Immunization history of providers should be obtained before recruitment?(Yes)			
26.	immunization prevents the risk of hepatitis B infection following exposure?(Yes)			
27.	For the prevention of hepatitis B, immunizations are recommended for all			

	healthcare workers? (Yes)			
28.	One of the five moments in which hands must be cleaned is before touching the patient?(Yes)			
29.	One of the five moments in which hands must be cleaned is after touching the patient?(Yes)			
30.	One of the five moments in which hands must be cleaned is before clean/aseptic procedure?(Yes)			
31.	One of the five moments in which hands must be cleaned is after body exposure?(Yes)			
32.	One of the five moments in which hands must be cleaned is after touch patient's surrounding?(Yes)			
33.	Hand hygiene is the most important part of infection prevention and control?(Yes)			
34.	Alcohol-based rubs are used after removing gloves? (No).			
35.	PPE is important in infection control because it acts as a barrier between infectious materials such as viral and bacterial contaminants and your skin, mouth, nose, or eyes (mucous membranes)? (Yes).			
36.	Gloves must be changed during patient care if you move hands from 'contaminated body site' to 'clean body site'? (Yes).			
37.	Removed all personal protective equipment (PPE) before leaving the patient's environment? (Yes).			
38.	Stationary, telephones kept in wards, and doorknobs can be sources of infections? (Yes).			
39.	Segregation of clinical and non-clinical waste is important for preventing the spread of infection ?(Yes).			
40.	Ampoules injection that has been used must be disposed of in sharp box then in the clinical waste bin? (Yes).			
41.	Recapping of needles, in general, is not appropriate? (Yes).			
42.	Immediate management of sharps injuries includes washing in running water and soap? (Yes)			
43.	If you puncture hand with sharp instruments, you must report to the concerned authorities? (Yes).			
44.	Puncture-proof containers should be used for disposal of sharps objects? (Yes).			
45.	Mask must be placed on coughing patients to prevent potential dissemination of infectious respiratory secretions from the patient to others ? (Yes).			

The third axis: Attitude about Standard Infection Control

Precautions:

No.	Questions (Correct Response)	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
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1.	I believe that standard precautions reduce the spread of healthcare-associated infections?(strongly agree/agree)					
2.	I believe it is necessary to use personal protective equipment when dealing with infectious diseases?(strongly agree/agree)					
3.	I believe that using medical detergent solutions to clean primary care clinics and centers leads to reducing the incidence of health care-associated infections?(strongly agree/agree)					
4.	I believe that when the environment of clinics and primary care centers is calm and not crowded, it reduces the spread of infections acquired from the health facility?(strongly agree/agree)					
5.	I believe disinfecting hands between patients protects workers, visitors, and patients as well?(strongly agree/agree)					
6.	I believe that disinfecting the hands is not enough when there is dirty material on the hands and we need to wash the hands? (strongly agree/agree)					
7.	I believe that wearing gloves is not enough and the caregiver need hand hygiene?(strongly agree/agree)					
8.	I believe that needle recap does not limit health care-associated infections?(strongly agree/agree)					
9.	I believe that Prefers to perform hand hygiene before and after any intervention with patient? (strongly agree/agree).					
10.	I believe that hands should be cleaned before any intervention with patients?(strongly agree/agree).					
11.	I believe that hands should be cleaned after exposure to fluids or blood from the patient's body?(strongly agree/agree).					
12.	I believe hands should be cleaned after touching the patient's surrounding?(strongly agree/agree).					
13.	I believe PPE can be used during emergencies? (strongly agree/agree).					
14.	I believe changing gloves is necessary during procedures even if heavily contaminated? (strongly agree/agree).					
15.	I believe gloves must be changed between patients?(strongly agree/agree).					
16.	I believe It is easy to work with wearing PPE?(strongly agree/agree).					
17.	I believe HCWs should use PPE although it may harm patients psychologically?(strongly agree/agree).					
18.	I believe stationeries, telephones, and doorknobs are sources of infections?(strongly agree/agree).					
19.	I believe adequate disinfection of medical					

equipment should be ensured by all HCWs ?(strongly agree/agree).						
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The fourth axis: Practice about Standard Infection Control Precautions:

No.	Questions (Correct Response)	Always	Often	Sometime	Rare	Never
1.	I wash/rub my hands before touch patient ?(Always/Often)					
2.	I wash/rub my hands after touch patient ?(Always/Often)					
3.	I wash/rub my hands before any procedure with patient ?(Always/Often)					
4.	I wash my hands after taking off gloves?(Always/Often).					
5.	I wear gloves when drawing blood samples?(Always/Often)					
6.	I don't recap the used needle after injection?(Always/Often)					
7.	I dispose of needles, blades, or any other single use sharp objects in a sharp disposal container after use?(Always/Often).					
8.	When needle stick occur, I wash the site with running water.?(Always/Often).					
9.	I use standard precautions when dealing with all patients?(Always/Often).					
10.	I wash my hands immediately after contacting any blood, body fluid, secretion, excretion, or dirty substances?(Always/Often)					
11.	I wear gloves when handling the patient's mucosa?(Always/Often).					
12.	I wear gloves when dressing wounds?(Always/Often)					
13.	I wear gloves when handling impaired patient skin.?(Always/Often)					
14.	I wear mask when performing procedures that might induce the spraying of blood, body fluid, secretions, or excretions?(Always/Often)					
15.	I wear a protective eye patch or goggle when performing procedures that might induce spraying of blood, body fluid, secretions, or excretions.?(Always/Often)					
16.	I wear protective suits or gown when performing procedures that might induce spraying of blood, body fluid, secretions, or excretions?(Always/Often)					
17.	I dispose of needles, blades, or any other single use sharp objects in a sharp disposal container after use?(Always/Often.)					

Thank you for your cooperation and I wish you good health and wellness

Annex (3):The List of experts

Name	Place of work
Dr. Nuha El Sharif	Al-Quds University–Coordinator Of Master Infectious Disease Program
Dr.DiaaHjaje	Palestinian Ministry Of Health- Director of the Preventive Medicine Unit at the Ministry

Ms.DinaNaser	Catholic Relief- Infection Control Coordinator inWest Bank & Gaza
Mr.YaseerAyad	Al-Quds University at the Jerusalem Center for Statistical Studies

Annex(4): Ethical Approval



التاريخ: 2023/2/18

عزيزتي الطالبة فاطمة ابو قبيطة المحترمة
برنامج ماجستير السياسات والادارة الصحية

الموضوع: موافقة لجنة أخلاقيات البحث العلمي

قامت اللجنة الفرعية لأخلاقيات البحث التابعة لكلية الصحة العامة بمراجعة مشروع الرسالة بعنوان:

" Knowledge ,attitudes and practices about standard precautions of infection control among healthcare workers at governmental primary healthcare facilities in southern Palestine"

المقدم من (مشرف البحث/د. ميساء الانطا).

يعتبر مشروعك مستوفياً لمتطلبات أخلاقيات البحث في جامعة القدس.

تمنى لكم كل التوفيق في تدبير المشروع.

ملاحظة: في حالة الحاجة الى موافقة من اللجنة المركزية في الجامعة، تستطيع التقدم باستخدام هذه

الموافقة على الرابط: <https://research.alquds.edu/en/ethics/48-how-to-apply.html>

رئيسة اللجنة الفرعية لأخلاقيات البحث
كلية الصحة العامة
د. نهى الشريف



نسخة/ أعضاء لجنة البحث
نسخة/ الملف

Annex (5) :Facilitating the task of a researcher from the Ministry of Health

Ref.:
Date:

الرقم: ٤٠٢ / ٦٣٣ / ٢٠٢٣
التاريخ: ٢٠٢٣ / ٠٦ / ٢١

عطوفة الوكيل المساعد لشؤون الصحة العامة وصحة الاسرة المحترم،،،
تحية واحترام...

الموضوع: تسجيل مهمة بحث
يرجى تسجيل مهمة الطالبة: فاطمة أبو قببطة - ماجستير سياسات وإدارة صحية/ جامعة القدس، في عمل بحث بعنوان:

" Knowledge, attitude and practice of standard precautions among healthcare professional at Governmental Primary Health Care Facilities in Southern Palestine"

من خلال السماح للطالبة بالحصول على معلومات من خلال تعبئة استبانة من قبل الكادر الطبي (بعد أخذ موافقتهم)، وذلك في:

- مديريات صحة بيت لحم
- مديريات صحة الخليل (شمال - وسط - جنوب) →

على ان يتم الالتزام بالاياب وإخلاقيات البحث العلمي.
على ان يتم تزويد الوزارة بنسخة PDF من نتائج البحث.
مع التقدير،،،

د. عبد الله القواسمي
مدير التعليم الصحي والبحث العلمي

دولة فلسطين
وزارة الصحة
مديرية شؤون الاسرة وصحة العامة
دائرة الشؤون الامارية والثانية
الوارد ١٥١٥
٢٠٢٣
٢١-٦-٢٠٢٣
نسخة: عميد كلية الصحة العامة المحترم/ جامعة القدس

رئيسة
وزارة الصحة
شؤون الصحة العامة وصحة الاسرة
مديرية صحة بيت لحم
الرقم 4501
التاريخ 22/6/2023

Annex(6): Study Activities Timetable

Activity	Duration	Date
Proposal writing	2 months	Nov-Dec/ 2022
Proposal defense and approval	2 month	Jan –Feb /2023
Design research instrument tool	1 month	March /2023
The expert committee checks for the validity of the research instrument	2 month	April- May /2023
Pilot study & analysis	1 month	June/ 2023
Data collection & data entry	3 months	July-Sep/ 2023
Data analysis	2 week	Sep /2023
Research writing	3 months	Sep-Dec /2023
Modification	1 month	Jan/ 2024

Annex (7):Data Collection Period

Primary care directorate	Period of data collection
South Hebron Health Directorate	2/7- 4/9 /2023
Yatta health directorate	5/7-29/8 / 2023
North health directorate	9/7-13/8 /2023
Hebron health directorate	13/7-3/8 /2023
Bethlehem health directorate	30/7-31/8 /2023