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Patient safety culture: assessment of nurses' perceptions in Palestinian Hospitals

M. Sc. Thesis

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Patient safety culture: assessment of nurses' perceptions in Palestinian Hospitals

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Patient safety culture: assessment of nurses' perceptions in Palestinian Hospitals

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Dedication

I dedicate this valuable work to God Almighty that gave me the courage and power I needed to pursuit my goals. To my family for their love and endless support. To my parents who encouraged me to pursuit my dreams. To my supervisor Dr. Farid Ghrayeb for his encouragement and support to finalize this work. Many thanks go to my friends for their support and continuous motivation to reach my goals and finalizing my thesis. To all my colleagues at Beit-Jala Governmental Hospital. I would like to express my sincere gratitude to all participants in the study.

Declaration

I certify that this thesis which is submitted to the Deanship of Graduate Studies to get the degree of master in on filed Nursing Management, this is my own research and my own work and it doesn't submit to any other universities or any institutions.

Signed: ..... 

Dia Hijjazi

Date: 23/5/2023

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Abstract

Background: Patient safety in healthcare organizations attracted international attention following the publication of the Institute of Medicine's seminal study, "To Err Is Human: Building a Safer Health System,". Where it was estimated that medical mistakes cause 44,000–98,000 patient deaths in US hospitals each year. Comparable rates of mistake and preventable injury have been shown in several research investigations conducted in numerous contemporary health systems worldwide.

"Safety Culture" has been recognized as a critical component of healthcare organizations' capacity to learn from mistakes and lessen patients' avoidable injury as a result of receiving medical care. There is increasing interest in evaluating safety culture in healthcare organizations due to the belief that it improves patient safety and has an effect on patient outcomes. One of the most often used techniques for evaluating safety culture is the use of safety climate surveys. These surveys are intended to aid in gauging the opinions of healthcare professionals about the general safety culture, or "safety climate," in their workplaces. This thesis looked on patient safety climate in Palestinian hospitals since no valid nor trustworthy survey tools nor safety climate surveys have been done at public hospitals in the state.

Study aim: To assess nurses perception toward patient safety culture in Palestinian hospitals, as well as the factors of its adoption of a positive patient safety culture from the perspective of nurses.

Methods: a cross-sectional study of 318 nurses from different Palestinian hospitals using a convenience sampling method was carried out to achieve the objectives of the study. In terms of usability, applicability, and reliability qualities, the Hospital Survey on Patient Safety Culture (HSOPSC) was determined to be the most suitable for this study. It underwent a little amount of adjustment throughout its pilot testing.

Results: Out of 42 questions, 9 have been found to have an impact on nurses' views of safety; these items had an average of ≥70% favorable replies. Of the forty-two questions, 32 had average favorable answers of > 50%, indicating that there is an area for improvement in this area of the instruction. The remaining item scored less than 50% or below average for positive responses, and so were considered areas for improvement.

In general, all Patient Safety Culture (HSOPSC) domains were identified as areas in need of

improvement.

Conclusions: It is recommended that future studies of patient safety culture and climate combine quantitative and qualitative methods as well as take a system-wide approach to inform safety climate theory and questionnaire development in order to strengthen the frameworks guiding safety culture research and practice.

Key words: Patient safety culture, Healthcare providers, Palestinian Hospitals, Healthcare quality, Nurses Perception

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1.1 Background

Patient safety is an international health concern affecting patients in various health care settings , patient safety as a health care discipline has emerged as a major concern due to the complexity of health care systems and the increase in unsafe care delivered to patients in various health services institutions (Hamdan and Saleem, 2018) , and it is increasingly a global concern (World Health Organization (WHO), 2014) . This is due to estimates that ten million individuals worldwide suffer needlessly from crippling injuries or pass away as a result of improper medical procedures and treatment (WHO, 2014). As a result, patient safety is seen as a key component of high-quality healthcare and is one of the key indicators that healthcare organizations around the world keep an eye on (WHO, 2014). Unquestionably, for healthcare organizations to address and lower the risks faced by patients, a strong patient safety culture is essential. The culture of patient safety is changing, but it typically involves healthcare staff avoiding mistakes. According to Alkorashy (2013), patient safety culture is made up of interactions between attitudes, beliefs, skills, and behaviors. This definition highlights the dedication of healthcare professionals to workplace safety management. Effective quality managers encourage a methodical approach to preventing and minimizing the possibility that patients would suffer damage (Al Dhabbari et al., 2015; WHO, 2014).

Benchmarks to assess performance are thought to be essential in Palestine, where enhancing the performance of the healthcare system is high on the policy agenda (Sherwood and Zomorodi, 2014). Because Palestine lacks the infrastructure, procedures, and guidelines necessary for

effective care delivery, implementing quality measures to achieve better patient safety outcomes presents a substantial challenge to healthcare workers (Appendix 1). There are still a lot of problems with patient safety research, and it will take a lot of work to make progress. Currently, important criteria include the necessity to build a focused research program in order to examine the cost-benefit ratio when analyzing safety improvement efforts (Sorra et al., 2014). Patient safety improvements are consistent with those currently made to deliver better service and fulfill patients' increased expectations (WHO, 2014).

To meet people's healthcare needs and encourage healthy living and safer behaviors in the hospital setting is one of the reasons healthcare workers in the healthcare sector want change (Taher et al., 2014; Homauni et al., 2014). The main causes of calls for increased performance in the healthcare industry are the rise of chronic diseases and the aging population (Sherwood and Zomorodi, 2014). Information interchange between executives and frontline employees is recognized as essential for developing a functional patient safety culture and for effectively communicating about quality metrics (Sherwood and Zomorodi, 2014). Building efficient mechanisms and educating personnel about the need for change are thus essential. There isn't enough study being done in this field, especially in Palestine.

1.1.1 Patient safety – a global concern

Healthcare organizations around the world are prioritizing patient safety as a critical healthcare concern (Sammer et al., 2010, Vincent and Amalberti, 2015, Dekker, 2016). As a result, the idea of patient safety itself is defined variously and in conjunction with a number of related words, all of which are covered in great detail in Chapter Three's literature review. Both healthcare professionals and patients have paid close attention to the risk of injury and risky practices in healthcare organizations (Vincent and Amalberti, 2015; Flott et al., 2019). The

report "To Err is Human" estimated that between 44,000 and 98,000 people die each year in United States of America (USA) hospitals as a result of medical errors, leading to this focus (Kohn et al., 2000). The relationship between safety culture variables and safety results is widely acknowledged (Kohn et al., 2000; DiCuccio, 2015; Najjar et al., 2015). International healthcare systems are paying more attention to patient safety as the clinical and financial costs of providing subpar care rise (Flott et al., 2019). According to Panagioti et al. (2019), one in 20 individuals worldwide may experience avoidable damage in healthcare settings. According to Panagioti et al. (2019), the concept of preventable harm is when it results from a variable cause and may be prevented from happening again by adhering to rules or changing a procedure. According to Panagioti et al. (2019), the concept of preventable harm is when it results from a variable cause and may be prevented from happening again by adhering to rules or changing a procedure. According to Nabhan et al. (2012) and Leitch et al. (2017), there are a variety of ways that preventable patient damage can happen, including mistakes made by healthcare professionals, healthcare system failures, mistakes made by a combination of individuals and systems, and patient characteristics.

The World Health Organization (WHO, 2018) states that patients are at risk of harm at a rate of about 1:300, which is higher than the rate of aviation accidents, which is 1:1,000,000. Patient injury ranks as the 14th most common cause of mortality and morbidity worldwide, despite the growing global efforts made to advance patient safety programs (WHO, 2018). Patient safety is considered to be a severe concern because, for instance, the WHO (2018) highlighted the fact that 42.7 million adverse events are reported annually among hospitalized patients worldwide. Additionally, there are other factors connected to the complexity of evolving patterns of safety accidents, such as lengthening hospital stays, susceptibility to illnesses brought on by

healthcare, and rising expenses of medical services (WHO, 2018).

The direct medical cost of pharmaceutical errors is estimated to be US $17 billion annually in the USA and US $42 billion globally (WHO, 2018). Infections and pressure ulcers are two additional instances of patient damage and medical care errors that account for $6.5 billion of the country's annual costs (Schwendimann et al., 2018). It was found that adverse events such pressure ulcers, falls, medication errors, and hospital acquired infections led to longer hospital stays and greater treatment costs in a retrospective examination of 2,699 patient chart records in Canada (Tchouaket et al., 2017) . The hospital expenses of patients who had suffered falls were AUD $6,669 more than those of patients who had not, and their hospitalizations lasted eight days longer on average, according to a cohort study carried out in Australia between 2011 and 2013 by Morello et al. Additionally, it was acknowledged that the indirect effects of medical errors on human life, such as losing a job or being disabled, increased the financial strain on healthcare organizations and public budgets (Shreve et al., 2010).

Worldwide healthcare systems continue to face difficulties as a result of persistent patient safety, injury, and hazardous care issues (Wilson et al., 2012; Lunevicius and Haagsma, 2018). Medical errors were listed as one of the top three primary causes of mortality in the developed nation of the USA (Makary and Daniel, 2016). For around one in every thirty patients receiving medical care, preventable injury attributable to medication errors is documented; more than a quarter of this harm is deemed severe or life-threatening (Hodkinson et al., 2020). According to Roughead and Semple (2009), adverse events associated with medication errors are one of the second- and third-most frequent types of incidents in hospitals in Australia after falls. These incidents are thought to affect 2% to 3% of patients there. Roughead et al. (2016) conducted a systematic review that included 17 studies in Australia from 2008 to 2013 and found that errors

(excluding timing errors) occurred in about 9% of medication administrations in Australian hospitals. This study was part of a larger study that found that medication errors were increasing across all hospitals in Australia. Baker et al. (2004) examined the rate of adverse events among patients (n=4164) from hospital admissions in four Canadian hospitals and noted that the incident rate was 7.5% of annual hospital admissions, with the majority of these being categorized as potentially avoidable errors. This study was conducted earlier, but it drew on data from Canadian hospitals. In the United Kingdom (UK), there were 2,246,622 incidents reported to the National Reporting and Learning System (NRLS) (2020) by English NHS organizations between April 2019 and March 2020. The implementation of care and continuing monitoring/review, patient accidents, access, admission, transfer, discharge including missing patient, and prescription difficulties were the top four reported incident categories (National Reporting and Learning System, 2020). Thus, there is increasing evidence of safety issues in healthcare settings on a global scale, necessitating the creation of rules and recommendations that lessen the difficulties in maintaining patient safety and reduce the likelihood of safety events (Vincent, 2006; Vincent and Amalberti, 2015).

1.2 Statement of the problem

Every year, an unacceptably large number of patients are injured or killed as a result of unfavorable health care events, which pose serious challenges to the global health system (WHO, 2017, Jha et al., 2013). According to the WHO 2017 report, 42.7 million adverse events affect hospitalized patients as a result of hazardous care, harming about 1 in 10 patients. Half of those issues can result in shorter hospital stays, infections linked to healthcare, disability, and morbidity, but they can all be avoided. Medical mistakes not only have a negative impact on

patient outcomes but also significantly raise the expense of healthcare (WHO, 2017).

Nearly one-third of the patients in the Eastern Mediterranean and African studies who experienced an adverse occurrence died. Another 14% experienced lifelong disability, 16% experienced moderate disability, 30% had just minor impairments, and 8% of the patients experienced injury that was not quantifiable (WHO, 2011). Inadequate data in Palestine makes it difficult to comprehend the issues related to patient safety. Despite this, it's thought that patient safety is a major issue in the nation. An earlier study in the pediatric department found that there were 9.2 adverse events for every 100 admissions, of which one-third might have been avoided (Eshetie et al., 2015). Another study conducted in the nation's Black Lion specialized hospital discovered that 40.7% of prescriptions were made incorrectly (Hospital, Ababa, 2015). In Jimma University Medical Center, many medical errors including obstetric trauma and injury, hospital acquired infections, postoperative sepsis, complications from anesthesia and transfusion, and failure to rescue were thought to be frequent issues (Assefa et al., 2012).

Surgery, drug errors, and infections associated with healthcare are the three types of adverse events that occur most frequently worldwide (WHO, 2017,Jha et al., 2010). These issues in healthcare arise as a result of the complexity of the care, environmental conditions, communication breakdowns, and poor human-technology interactions. The most significant of them are communication breakdowns and cultural failures of non-technical systems (Gorini, Miglioretti, & Pravettoni, 2012). In general, a punitive culture resulted in perceptions of guilt and dread, underreporting of near-misses and negative events, and other effects that prevented the organization from taking preventive action (Solomon, 2014). Organizational restrictions and system enhancement have been suggested to improve the culture of patient safety in the

healthcare context (Sorra et al., 2008; Lohr, 2016).

Studies have revealed a link between the patient safety culture and safe care procedures like medication reconciliation mistakes and the behavior of reporting errors and risks. Additionally, it is related to patient outcomes such as a lower mortality rate, infections, surgical errors, a lower occurrence of unfavorable errors, and accident avoidance. Overall, higher quality, efficiency, and performance in patient safety are all favorably correlated with stronger patient safety cultures. Furthermore, it also relates to increased patient satisfaction (Sirriyeh et al., 2012; Stock, 2015; Martinez, 2016). By giving cues about the relative importance of patient safety compared to other goals and by forming their perceptions of "normal" behavior related to patient safety in their work area, patient safety culture also has an impact on the behavior, attitude, and cognition of healthcare providers while they are at work (Zohar et al., 2007).

The AHRQ Patient Safety Indicators and safety culture have been linked in several research. A 1 standard deviation rise in patient safety culture scores was linked to a 10% reduction in the composite patient safety incident risk, according to the findings of one study that used a composite of 12 AHRQ patient safety indicators. According to another research, culture can influence adverse occurrences by up to 6% and patient recommendations of hospitals to family and friends by up to 18% (Mardon et al., 2010; Weaver, 2011). Further research is required in the domain of patient safety culture due to the high prevalence of medical errors and unsafe care in low-income nations like Palestine and the paucity of available research results. Additionally, as far as we are aware, no prior research was done in the study area to evaluate the patient safety culture. The patient safety culture of healthcare facilities in Palestine must thus be investigated.

1.3 Patient involvement in patient safety culture

Internationally, patient participation in patient safety is acknowledged as one of the most critical elements for enhancing healthcare quality and safety (Longtin et al., 2010, Vaismoradi et al., 2015, O'Hara et al., 2018). Patients can actively contribute to safer care in a variety of ways, such as ensuring that medications are used safely, taking part in infection control initiatives, reporting safety incidents, observing and reviewing the care process, keeping track of the types of care provided, and offering feedback during the development of safer procedures (Rainey et al., 2015; Severinsson and Holm, 2015; Hernan et al., 2015).

All organizational levels, from frontline staff to management and patients, must enable and prioritize safety in order to improve it (Tan et al., 2019). According to Elmontsri et al. (2017), studies on patient safety cultures in Palestinian healthcare organizations, for instance, mostly consider the viewpoint of healthcare providers and employ commonly used survey instruments to discover how they view patient safety culture. Studies that look at patients' attitudes or perceptions of safety culture and important initiatives to encourage patient participation in safety in hospital settings are, however, scarce in Palestine. As a result, it's crucial to comprehend both the viewpoints of healthcare professionals and patients in relation to safety culture, as well as the connected aspects that affect its promotion. Due to this knowledge gap, the current study has been conducted to investigate the opinions of medical professionals and patients regarding the variables impacting the adoption of a patient safety culture.

There is a paucity of knowledge regarding the variables that affect the patient safety

culture in Palestinian hospitals, despite the fact that statistics exist to show the current state of patient safety in the Palestinian healthcare setting. Understanding the factors that contribute to patient safety from a broad viewpoint therefore depends on looking at this. A key element in enhancing patient safety is creating a culture of patient safety. Hospitals should evaluate their culture towards patient safety as a result. Furthermore, it is critical that the gaps in the available data addressing patient safety issues in Palestine be filled. A strong and effective adoption of safe practices during medical care will be made possible by understanding the safety culture in healthcare organizations.

1.4 Significance and potential impact of the study

According to research by DiCuccio (2015) and Lee et al. (2019), an organization's number of adverse events can be greatly decreased by having a strong and supportive patient safety culture. In a survey of 3,562 employees from 62 metropolitan emergency departments in 20 US states, Camargo Jr et al. (2012) emphasized the significance of enhancing the culture of patient safety and strengthening the commitment to report events. Accordingly, it is thought that in healthcare organizations, a strong patient safety culture is linked to excellent safety performance (Braithwaite et al., 2017, O'Donovan et al., 2019). Given the growing concerns about the patient safety culture in Palestinian healthcare settings, it is crucial that we have a comprehensive understanding of the obstacles to and enablers of the adoption of positive patient safety (Al Wahabi et al., 2017). The results of the current study give a description of the patient safety culture's current state in the Palestinian healthcare system and the ways in which it is viewed from various angles. By highlighting the obstacles to and enablers of the establishment of a favorable patient safety culture in the Palestinian healthcare system as well as the significance of patient and health professional views within this, the current study also fills in the

gaps in the body of existing evidence.

The current study's findings will therefore help to identify the factors that support and hinder the development of a strong patient safety culture, raise awareness of the goals of this culture, emphasize the value of incorporating patient and family perspectives on patient safety, and, based on these findings, offer suggestions for areas that can be improved in order to improve patient safety and the standard of care. The current study has implications for both healthcare practices and the contribution of research evidence because it offers insightful information on the elements influencing the development of a supportive culture of patient safety. The results of the current study may be immediately applied by healthcare organizations to enhance clinical practice conditions, by policymakers to support initiatives for reform, and by accreditation authorities to revise their rules and requirements.

Aim and objectives

Aim of the study

To gain knowledge about the state of Palestinian's patient safety culture, as well as the obstacles to and enablers of its adoption of a positive patient safety culture from the perspective of nurses.

Objectives

1. To assess nurses' perceptions of the current patient safety in Palestinian hospitals
2. To identify factors that influence nurses' perceptions of patient safety.
3. To compare nurses' perceptions of the current patient safety in Palestinian hospitals by demographic variables.

Research Questions

1. What are the nurses' perceptions of patient safety culture in Palestine?
2. What are the factors that influence nurses' perceptions of patient safety?

3. Are there any statistically significant differences in nurses' perceptions of the current patient safety in Palestinian hospitals by demographic variables?

Research Hypothesis

H0: There is no statistically significant differences in nurses' perceptions of the current patient safety in Palestinian hospitals by demographic variables.

Chapter Two:

Literature Review

2.1 Introduction

This quantitative, cross-sectional study's goal was to investigate how organizational culture affected the registered nurses' (RNs') day-to-day decisions and actions. The study's specific goal was to find out more about the driving forces behind advocating for patient safety issues. Health care administrators should take note of this research because it could help them better understand how employee resilience encourages lifelong learning and makes it possible to take deliberate steps to increase safety and stop patient harm.

2.2 Concept of safety

According to Vincent and Amalberti (2015), being safe refers to being free from accidents and harm. The word "safety" also refers to the management of all risks and conditions that might result in material, psychological, and physical harm that are present in a variety of contexts and locations (Dekker, 2016). Safety is described as "the condition of being protected from or unlikely to cause danger, risks, or injury" in the Oxford English Dictionary (OED) (2011). The idea of safety is connected to several levels in order to encompass all aspects of an accident, such as prevention, control, and mitigation (Dekker, 2016). In many organizations, including businesses, the chemical industry, and healthcare settings, safety is the main focus and has a significant impact (Beus et al., 2016, Aven, 2014). From a technical standpoint, safety is

described as the opposite of risk, demonstrating the close connection between the two concepts: lowering risks results in better levels of safety (Möller et al., 2006). According to Aven (2014), a risk is an unfavorable circumstance or incident that endangers people and has unpredictable consequences. Möller et al. (2006) underlined the need of assessing risk severity and probability as well as emphasizing unwanted outcomes in order to reduce potential harm and achieve a high standard of safety.

2.3 Safety culture

Patient injury or mortality results from medical errors (Cochrane et al., 2017). To Err is Human, a 1999 Institute of Medicine (IOM) report, came as a shock to the medical community and served as the catalyst for the patient safety movement in American healthcare systems (Bates & Singh, 2018). According to the IOM research (Cochrane et al., 2017), medical errors cause 100,000 deaths annually. Additionally, the IOM emphasized a number of eye-catching ideas about medical errors. The majority of errors are more frequent than rare, cost the health care system unnecessary money, are usually caused by issues with the entire system, and can be avoided (Bates & Singh, 2018). The need to prevent patient damage or death as a result of medical treatment is urgent.

According to recent studies, the issue of patient harm and death is far greater than what was originally predicted by the IOM report. Surprisingly, medical errors are the third leading cause of death in the US, trailing only heart disease and cancer (Cochrane et al., 2017; Hall et al., 2018; Makary & Daniel, 2016; Polonsky, 2019).

According to Makary and Daniel (2016), medical errors result in close to 400,000 fatalities annually. Additionally, studies have indicated that 10% to 25% (Adler et al., 2018) of patients

suffer some sort of injury while in the hospital (Adelman, 2019; Farokhzadian et al., 2018; Iflaifer et al., 2020). Unfortunately, throughout the past 50 years, the rate of patient damage during medical treatment has not decreased (Braithwaite et al., 2015).

Patient harm results in higher expenses, longer stays, and a higher chance of readmission or death. When compared to patients who do not experience harm, patients who experience more than transitory injury during their hospitalization result in an increase in hospital costs of at least $10,000. Patient harm was predicted to result in an increase in hospital stays of more than 90,000 days and an increase in costs to the healthcare system of more than $200 million when Adler et al. (2018) extended the study results to the entire U.S. population. According to Smith's (2015) estimate, preventable medical errors cost the U.S. health care system between $17 and $29 billion.

The history of case law also illustrates the need for patient safety in terms of money (Annas, 2006). When hospitals fail to safeguard the security of their hospitalized patients, they may be held legally liable. Sohn (2013) also pointed out that people can file lawsuits under the current legal framework regardless of whether they were harmed during medical care due to negligence. Therefore, even in cases where there is no evidence of wrongdoing, health care providers shell out around $126 billion annually to defend themselves in court. Only a small portion of this, however, actually benefits the patient who suffered harm (Sohn, 2013). Annas (2006) recommended that hospital administrators adopt the mentality that patient safety is a right in order to avoid punitive litigation.

According to Annas (2006) and Conway & Coyle (2017), health care executives' top priority is ensuring the safety of patients. While maintaining operations requires financial management, which is a fundamental skill for health care administrators, the main goal of the position is to

safeguard the health of the community members who entrust their care to the organization (Conway & Coyle, 2017). According to Annas (2006) and Conway & Coyle (2017), health care executives' top priority is ensuring the safety of patients. While maintaining operations requires financial management, which is a fundamental skill for health care administrators, the main goal of the position is to safeguard the health of the community members who entrust their care to the organization (Conway & Coyle, 2017). The importance of patient safety and quality has led CMS and other private payers to connect hospital reimbursement to quantifiable, value-based quality results (Conway & Coyle, 2017; Ulrich & Kear, 2014). However, there is still a lot of room for improvement in the current haphazard and uneven patient safety practices despite the numerous regulations, standards, financial incentives, and penalties put on the healthcare business.

2.4 Safety Culture Dimensions and Outcomes

A number of studies that looked at the relationship between safety culture, patient safety outcomes, and hospital performance discovered that a healthy safety culture is linked to numerous significant advantages. Patients and their families are significantly impacted by safety culture, in addition to its effects on personnel. An organization's safety culture eventually affects its standing, financial security, and capacity to enhance health outcomes. S. Singer et al. (2009) and Mardon et al. (2010) investigated the relationship between results from the patient safety culture survey and specific patient safety indicators (PSIs). The AHRQ established PSIs, which are quality indicators that can be discovered using administrative data often found in discharge records. After operations, procedures, and births, PSIs identify in-hospital difficulties

that could point to patient safety occurrences (Agency for Healthcare Research and Quality, n.d.). Both studies revealed that hospitals with higher climate scores had lower PSI rates, indicating a relationship between a more favorable patient safety culture and fewer untoward incidents in hospitals.

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Studies examining a particular work setting, such the intensive care unit (ICU), have discovered important connections between safety culture and patient outcomes. According to Huang et al. (2010), hospital mortality had an odds ratio (OR) of 1.24 (95% CI: 1.07-1.44; $p = 0.005$) for every 10% drop in positive ICU opinions of management. This finding shows a correlation between greater mortality in the ICU setting and a lower score in a specific cultural dimension. Dodek et al. (2012) found that there was a strong positive link between organizational safety culture and family satisfaction among ICU nonsurvivors who spent at least 14 days in the ICU. Even when the patient died in the ICU, family satisfaction increased as safety culture improved.

These studies underline how patient safety and quality results are influenced by employee perceptions of company culture. The studies demonstrate the need for hospital leadership to put

plans in place to enhance various aspects of culture. In summary, the studies found that a positive safety culture was associated with fewer adverse events (Mardon et al., 2010; S. Singer et al., 2009), decreased mortality (Huang et al., 2010), decreased readmissions (Hansen et al., 2011), improved patient satisfaction scores (J. Sorra et al., 2014), improved family satisfaction scores (Dodek et al., 2012), and higher CR scores (Smith et al., 2017).

The underlying causes or contributing variables of the beneficial correlation between safety culture and patient outcomes found in these research are yet unknown.

Confounding variables that might have affected the results weren't examined. Additionally, it is not known how or why culture may affect patient outcomes, and more testing and investigation are required to identify any potential causes. Additionally, these studies did not analyze certain work groups like staff groups or work units, with the exception of Huang et al.'s (2010) and Dodek et al.'s (2012). This study looked at a potential reporting element, the effect of culture, which has been suggested to improve patient safety. It also assessed these relationships in reference to particular staff and work area groups.

2.4.1 Reporting and Outcomes

It has been demonstrated that reporting, a crucial element of safety culture, dramatically lowers errors in high-reliability firms (Van Spall et al., 2015). System faults are brought to the attention of the appropriate improvement teams through reporting. As a result, this enables system modifications and other correctives to lessen the risk associated with the detected procedure or problem. The incidence of associated errors should drop in the future when the

proper adjustments are made to enhance the systems discovered by reporting (Rodziewicz & Hipskind, 2018).

In high-risk industries like aviation and nuclear power plants, reporting has become an essential component of the safety culture. The low accident rates in these high-risk industries have been attributed to frequent reporting and the efficient use of data from reporting systems to improve safety (Barach & Small, 2000). Due to a few obstacles, the healthcare industry has been hesitant to establish comparable effective reporting systems. Hospitals need to undertake a number of significant changes in order to create a highly successful safety culture, including shifting the emphasis from individual errors to systemic errors, fostering a just culture, increasing openness, and fostering interdependent, interprofessional teamwork (Leape, 2009). The effect reporting has had on other high-risk businesses shows how useful it may be in the healthcare industry.

It has been demonstrated that more accurate reporting of adverse occurrences leads to better healthcare results. It has been demonstrated that enhancing the safety culture at the hospital and unit levels enhances reporting and reduces patient harm (Abstoss et al., 2011). Increased reporting as a result of the better safety culture eventually leads to fewer adverse occurrences and injuries to patients. Increased reporting has been proven to reduce harmful pharmaceutical occurrences by 71% to 76.5% (Abstoss et al., 2011). Other hospital-related events, like pressure ulcers, have also been shown to reduce with improved reporting, in addition to adverse pharmaceutical events (X. Wang et al., 2014).

Reporting has important ramifications for healthcare companies beyond enabling improvements in quality and patient safety. According to Howell et al. (2015), hospitals with more recorded occurrences also had less litigation claims. The beneficial downstream effect of

fewer lawsuits is probably due to reporting and its inherent ability to enable learning from mistakes and system improvement to lower the likelihood of further harm. Reduced litigation benefits a company financially, but it also affects the reputation of the company and keeps patients and employees confident in the system. The significance of reporting in healthcare is established by these research examining the connection between reporting and different outcomes. The significant advantages of reporting highlight the need for study into strategies to raise reporting rates and an understanding of the underlying factors that encourage or discourage reporting among healthcare professionals.

2.4.2 Under-reporting

Underreporting continues to be a significant issue in healthcare despite studies indicating a correlation between safety culture and reporting on patient and organizational outcomes.

This undercuts healthcare organizations' efforts to become very reliable, as is the case in the aviation and nuclear power industries. According to several studies (Barach & Small, 2000; Cullen et al., 1995; Noble & Pronovost, 2010; Reilly et al., 2019; Sari et al., 2007), underreporting occurs frequently in the United States and is thought to vary from 50% to 96% annually. Underreporting of adverse events led to a delay in an orthopedic implant brand's product recall and an increase in revision procedures, which is an illustration of the consequences of underreporting (Tanner & Bradley, 2004). Due to the significant rate of underreporting, Reilly et al. (2019) suggested that companies create strategies to get over reporting obstacles and create additional performance evaluation techniques aside from relying entirely on voluntary reporting systems.

Underreporting poses several serious epidemiological issues that make it impossible to use reporting systems as a tool to track advancements in patient safety.

According to Noble and Pronovost (2010), systematic bias, lack of generalizability, and participation bias are the three main issues with underreporting and the data provided by the relatively limited number of reports. Overall underreporting, which is estimated at 50%-96% (Barach & Small, 2000; Cullen et al., 1995; Noble & Pronovost, 2010; Reilly et al., 2019; Sari et al., 2007), and an overall propensity to report certain types of events such as falls or medication events (Nuckols, Bell, Liu, Paddock, & Hilborne, 2007) lead to systematic bias as well as a lack of generalizability (Noble & Pronovost, 2010). According to estimates from 50% to 89% of reports being entered by nurses, compared to fewer than 2% being entered by physicians (Milch et al., 2006; Noble & Pronovost, 2010; Nuckols et al., 2007), the bulk of reports are also entered by nurses. Due to participation bias caused by low physician participation, the reporting systems do not adequately reflect the many and distinctive opinions of physicians (Noble & Pronovost, 2010).

2.4.3 The Evolution of Safety Practices

In the industrial setting, a variety of workplace safety procedures and practices are used. According to Braithwaite et al. (2015), these strategies are not suitable for extremely complicated and variable work contexts, such as the hospital setting. The environment of health care is full of complex, interacting systems. The intricacy of the healthcare industry makes mistakes easy to make (Kuziemsky, 2016). According to Braithwaite et al. (2015) and Hegde et al. (2014), safety in healthcare requires a paradigm change toward proactive and adaptive strategies that concentrate on what goes right in the daily complicated health care environment.

2.4.4 Safety I and Safety II

The early features of safety in healthcare were centered on control measures, which sought to automate or standardize procedures and behaviors because all humans make mistakes (Guttman et al., 2019; Makary & Daniel, 2016). Standardization, checklists, procedures, occurrence reporting, and root cause analysis are the main components of traditional safety techniques (Ghaferi et al., 2016; Anderson & Watt, 2020). These established methods are now known as Safety I practices (Anderson & Watt, 2020). According to Braithwaite et al. (2015) and Carthey et al. (2001), safety I refers to rule-based, policy-driven interventions that concentrate on restricting mechanisms to prevent mistake. Focusing on what went wrong, however, is frequently accompanied with retaliation, anger, and anxiety (Hegde et al., 2020; Smith & Plunkett, 2019). Additionally, it is common for responsive operations like error reviews to be skewed in retrospect.The experience of frontline physicians with various situational circumstances, such as distractions, concurrent emergencies, or communication errors, may also be overlooked by retrospective reviewers (Hegde et al., 2020).

Safety I methods have value since they have increased public awareness of the need for patient safety in healthcare (Braithwaite et al., 2015) and have helped to improve a number of healthcare processes (Ghaferi et al., 2016). However, according to Pederson (2016), safety measures that were primarily created for stable workplaces are not appropriate for use in the health care industry. The health care sector is distinct because it is intricate, dynamic, frequently fragmented, and founded on independent, individual practices. These factors make it challenging to maintain improvement (Polonsky, 2019). The inherent misalignments in the healthcare environment are often not addressed by linear assumptions under Safety I methods

(Anderson & Watt, 2020; Smith & Plunkett, 2019). For instance, policies or procedures that specify how the work was envisioned or created may not be consistent with the way work is carried out at the clinical frontline (ClayWilliams et al., 2015). Because of this, Safety I procedures like counting mistakes and talking about improper behaviors (Carson-Stevens et al., 2018; Iflaifel et al., 2020) are ineffective in addressing and maintaining improvements that stop patient harm (Anderson & Watt, 2020). Additionally, Safety I procedures and technological fixes haven't shown to significantly enhance patient outcomes (Ghaferi et al., 2016; Kuziemsky, 2016). According to Berg et al. (2018), Clay-Williams et al. (2015), and Kuziemsky (2016), the health care system is referred to as a Complex Adaptive System (CAS), which necessitates more extensive, non-linear approaches to problem-solving. To deal with the numerous, unpredictably occurring problems they see every day, a CAS necessitates the cooperation of numerous persons and teams (Ellis et al., 2019). Because of this, according to Kuziemsky (2016), improvement techniques like the Lean method have not led to significant systemic changes that will result in long-lasting advancements in the healthcare industry.

Pedersen (2016) focused on John Dewey's philosophical pragmatist stance while examining the concept of health care safety. According to Dewey's worldview, things are constantly changing and shifting from one stable state to another.

Dewey also claimed that people form habits in their environments to adjust to the shifting circumstances (Pedersen, 2016). The dynamic character of the complex healthcare environment in 2021 is applicable to this idea. Therefore, it makes sense why traditional Safety I techniques used in the healthcare industry are unable to achieve the objective of zero damage (Braithwaite et al., 2015). The traditional task- and rule-based approaches used in health care contexts must give way to more adaptive strategies and "intelligent habits" (Pedersen, 2016).

The traditional Safety I and technical procedures must be supplemented by these new and creative methods to increase safety and improve outcomes (Ghaferi et al., 2016). According to Braithwaite et al. (2015), the Safety II philosophy encourages frontline flexibility and adaptation to the environment's naturally fluctuating conditions and circumstances.

In order to provide their care, front-line doctors frequently devise workarounds within flawed processes or systems. These workarounds cover up underlying problems that may cause mistakes if not addressed (Hegde et al., 2014). Patient Safety II, on the other hand, gives the front-line personnel the ability to spot and report these hidden issues. Additionally, Safety II encourages teams and frontline workers to create workflows that bridge the gap between how tasks are described in policies or protocols and how they are carried out (ClayWilliams et al., 2015). According to Carson-Stevens et al. (2018), Hegde et al. (2014), Iflaifel et al. (2000), Smith & Plunkett (1999), the Safety II concept is about a collaborative, team-based approach that emphasizes learning to design workflows around the practices that go well and promote safe patient care.Frontline workers who participate in Safety II recognize and record what goes well in the continuously changing environment. This paradigm shift from a reactive to a proactive approach replaces the previous reactive strategy. investigating how work works successfully should have considerably greater impetus, according to Ellis et al. (2019), than investigating what has gone wrong in the past.

2.4.5 Organizational Culture

Given that the term "culture" has multiple connotations that change depending on the context, it is challenging to describe organizational culture in a way that has substantial meaning

(Mannion & Braithwaite, 2017). Organizational culture, in its most basic form, is concerned with how processes function in a certain setting. The mission, vision, and values of the company are demonstrated and communicated by organizational leaders and staff in ways that reflect the organization's culture. The culture is viewed favorably if the activities and statements are consistent with the organization's mission and vision. On the other hand, the culture is viewed negatively if the activities and statements are inconsistent and incongruent (Mannion & Braithwaite, 2017).

According to Vogus (2016), the organization's culture and climate are crucial components of patient safety. However, Nielsen (2014) pointed out that health care research is still in its infancy when it comes to determining how an organization's culture affects safety. The challenge of incorporating safety culture concepts into routine medical practice is the main cause of the paucity of research. Nielsen suggested incorporating the ideas of safety into the long-standing, established conceptions of corporate culture. In this way, the organizational principles and practices that are upheld throughout the organization combine with safety-conscious actions and attitudes to form the safety culture (Nielsen, 2014).

Periodic safety climate assessments are one technique to evaluate the organization's safety culture. Climate in this sense refers to a moment of time when employees' opinions of the culture, procedures, and leadership are captured (Vogus, 2016). The assessment offers a chance for a more detailed understanding of the aspects of the larger culture that call for targeted actions to increase safety in the healthcare environment (Nielsen, 2014). Vogus (2016) issued a warning that measurement systems might only give a partial picture of the safety climate if they are not used to evaluate the differences among subgroups. According to Vogus (2016), a closer look may uncover organizational divisions that require more focus for strength-building and

alignment with the organization's mission, values, and goals. The findings from the safety climate assessment can be used by health care administrators to (a) identify barriers, (b) support actions that help teams work effectively and efficiently, (c) empower people to recognize and speak up with opportunities to improve patient safety, and (d) improve organizational learning opportunities (Mannion & Braithwaite, 2017).

2.4.6 Culture Affects Patient Safety

Patient safety can be negatively impacted by organizational culture or positively impacted by it (Donaghy et al., 2018). Health care organizations are complex, multifaceted systems that are already vulnerable to medical errors, according to Singer and Vogus (2013). Error inclinations are further ripened by weak organizational cultures. Health administrators need to be aware of the typical obstacles to a safety culture as well as the supportive behaviors that can be used to advance a culture of patient safety inside their businesses (Singer & Vogus, 2013).

2.4.7 Barriers to Safety Culture

Several obstacles to establishing a safety culture were classified by Farokhzadian et al. (2018). These are (a) shortcomings in the infrastructure, (b) a lack of empowered staff, (c) ineffective or unsupportive leadership, (d) flaws in the quality and risk processes, including resistance and finger-pointing, and (e) misaligned visions and incentives. The numerous institutions, procedures, and individuals that might undermine a safety culture are represented in these extensive categories.

2.4.7.1 Infrastructure Weaknesses:

Organizational structures that are hierarchical and status-based are obstacles to a patient safety culture. With high levels of expert autonomy and different degrees of status within hierarchical organizational structures, health care organizations are extremely complicated (Edmondson et al., 2016; Okuyama et al., 2014). According to Appelbaum et al. (2016), Donaghy et al. (2018), Robbins & McAlearney (2018), and others, these hierarchical systems create power-distance, hinder communication, and diminish confidence in people who are considered to be in positions of lower power. Power distance, according to O'Leary (2016), makes many people of lesser status feel as though their opinions are not appreciated. As a result, lower-status employees feel irrelevant and are more inclined to stop working. According to Nembhard & Edmondson (2006), hierarchies undermine psychological safety, discriminate status, and deprive people of their power. People with less power may not feel motivated or psychologically secure enough to speak out (Appelbaum et al., 2016).

2.4.7.2 Lack of Empowered Staff:

safety (Nembhard & Edmondson, 2006). In order to speak up with confidence and without fear of rejection or humiliation, psychological safety is essential (O'Leary, 2016). When a health care professional is worried, they may feel ethically obligated to take action. However, because of the circumstances in their environment, people could feel psychologically unsafe or helpless to take action on their worries (Epstein & Delgado, 2010). Researchers Richard et al. (2017) and Schwappach et al. (2018) found that up to 42% of healthcare professionals keep their worries about patient safety incidents to themselves. Nacioglu (2016) noted that more than half of healthcare workers are reluctant to voice their worries about patient safety.

Fear and quiet are therefore encouraged by low psychological safety (Edmondson et al., 2016). Although front-line healthcare professionals are in the best position to spot mistakes and raise their concerns, many do so out of fear. They add the advantages and disadvantages of speaking out to see if the disadvantages of speaking up could surpass the advantages of error prevention (Okuyama et al., 2014; Schwappach & Gehring, 2014). In particular, Schwappach and Gehring (2014) noted that (a) others being present at the time of an occurrence, (b) hierarchical structures, (c) time constraints, (d) fear of retribution, and (e) the conviction that nothing would change even if they spoke up inhibited health care workers' voices.

2.4.7.3 Ineffective or Unsupportive Leadership:

Leaders that send contradictory verbal and nonverbal cues are acting unethically (Alingh et al., 2018; Leroy et al., 2012). Furthermore, individuals who operate in silos, tolerate threatening or disruptive behaviors, and have poor communication skills are unable to foster a trusting workplace culture (Babyar, 2020; Chassin & Loeb, 2013; O'Leary, 2016; Sayre et al., 2012). Additionally, these workplaces are known to support medical errors (Hall et al., 2018).

Austere situations that are not favorable to healthy, safe working environments are also produced by rigid, constrictive, and aggressive management styles (Morley et al., 2019). Compliance with rules-based procedures and strategies is a key component of the control-based management approach. A environment of blame and distrust may result from this managerial approach (Alingh et al., 2018). A culture of safety may be undermined by a meticulous leadership style as well. In a culture that values perfection, healthcare providers might mistake vulnerability for weakness. As a result, they could be reluctant or ashamed to voice their concerns about safety or report inaccuracies (Donaghy et al., 2018; Zabari & Southern, 2018).

2.5 Enablers of Safety Culture

The obstacles to establishing a culture of safety were described in the section before this one. Health leaders must adamantly state that safety is the organization's top priority in order to get through these barriers and foster a culture of patient safety. The patient safety message must be consistent and widespread throughout the company, and leaders must communicate this commitment and serve as role models (Adelman, 2019).

Empowering Staff:

The workers must feel empowered and psychologically safe to express their concerns in order to foster a culture of safety (Babyar, 2020). For cohesive and collaborative work cultures to be created, the frontline must be empowered (Braithwaite et al., 2015). According to Edmondson and Lei (2014), these circumstances foster the psychological safety required to (a) encourage an active voice, (b) foster a learning environment, and (c) sustain performance progress. Empowerment is made possible by psychological safety, and a high level of psychological safety encourages professional growth and the confidence to voice issues (Edmondson et al., 2016). Leaders must be open to their team members' ideas and show them that they are valued when they raise issues.

The acknowledgement encourages attitudes of respect and value. These feelings in turn encourage psychological safety, which encourages raising concerns (Nembhard & Edmondson, 2006).

2.5.1 Role-Modeling Leadership:

Health care CEOs, according to Jeffs (2018), have a moral duty to foster a work climate that supports and promotes employee wellbeing. The health care administrator is the key driver of organizational culture and sets the tone for the objective of zero patient harm (Salas & Rosen, 2013; Cochrane et al., 2017). In the rapidly evolving world of health care, effective leadership fosters continuous learning through building relationships of trust and respect, empowering individuals and groups, facilitating interdisciplinary cooperation, and fostering individual and team growth.

Adelman, 2019, Chisengantambu et al., 2018, Cochrane et al., 2017, and Nacioglu, 2016, all emphasize the importance of influential leaders serving as role models for safety practices. Their statements and deeds are consistent and show sincere concern for patient safety (Leroy et al., 2012). Transformative leadership abilities facilitate constant communication about safety procedures, support individuality, and promote lifelong learning. A culture that promotes patient safety needs each of the leadership attributes to be present (Jeffs, 2018; Ulrich & Kear, 2014). Furthermore, individuals who speak up when they have safety concerns will be commended and rewarded by leaders who place a high priority on safety (Robbins & McAlearney, 2018).

2.5.1.1 Creating a Just Culture

A proactive focus on how and why errors may happen at any time within the healthcare system leads to the emergence of a culture of patient safety. According to Farokhzadian et al. (2018), Hegde et al. (2020), O'Leary (2016), Zabari & Southern (2018), and other researchers, this proactive approach is in stark contrast to the retroactive, myopic examination of mistakes with

subsequent fault-finding, humiliation, and blame. By encouraging open reporting and fostering a climate where team members may voice safety concerns without fear of reprisal, leaders can foster a just culture (Polonsky, 2019). This degree of openness and transparency fosters trust, encourages learning from errors, and reveals systemic issues that may be fixed (Adelman, 2019; Polonsky, 2019). A just culture additionally encourages a higher standard of accountability that holds people accountable for careless actions that jeopardize the culture of safety (Adelman, 2019; Hall et al., 2018).

2.5.1.2 Creating Alignment:

To enable teams to deliver safe care, health administrators must frequently reinforce messages, engage in supportive interactions, and provide enough resources. As a result, the workforce sees patient safety as a fundamental value that affects the entire company (Salas & Rosen, 2013). Employee commitment is sparked by a shared set of values (Cochrane et al., 2017). The alignment and commitment to activities that increase safety are created by ongoing safety-focused training and safety-focused meetings (Nielsen, 2014). Administrators in the healthcare industry must foster a culture that sees obstacles as opportunities for growth and development. According to Barasa et al. (2018), these leaders foster the ownership and drive that result in alignment and engagement.

CHAPTER THREE

MATERIALS AND METHOD

3.1 Study setting and design

A quantitative cross-sectional technique was used in the investigation. Four hospitals in West Bank—two runs by the government and two by non-governmental organizations—was involved. Two governmental and two non-governmental organization hospitals was chosen at random from each of the governorates in West Bank. Data was collected from July to December 2023.

3.2 Population and Sample

The research's sample population consisted of licensed registered nurses working at the targeted hospitals at the time. Registered nurses employed by targeted hospitals was chosen using a convenience sample process. To ensure the inclusion of a diverse group of registered nurses across the hospitals, efforts was made to lessen the sampling method's limitations and to boost suitable representation. For instance, the questionnaires was sent out to various shifts and all of the patient care units throughout the hospitals.

It was attempted to gather information from at least 300 registered nurses. Based on a 0.05 margin of error and a 95% confidence interval, this sample size is determined. More than 1,000 staff nurses who work in inpatient wards was the analyses' target population.

3.2.1 Inclusion Criteria

- **Inclusion criteria include**
  - licensed registered nurses who work in the targeted hospitals during the period of data collection, whereas
- **exclusion criteria include**
  - licensed registered nurses who refused to participate or his work experience is less than 6 months.

3.3 Hospital Survey on Patient Safety Culture

The Agency for Healthcare Research and Quality (AHRQ) developed the HSOPSC, a self-administered tool. The HSOPSC is intended to evaluate a hospital's departments or the organization's overall patient safety culture. The 42 questions that make up the HSOPSC gauge 14 different dimensions. It was created by Westat under the direction of AHRQ. The poll is created following a thorough analysis of the literature on safety, incidents, medical errors and reporting, climate and culture around safety, and organizational climate and culture. The survey also incorporates data from other tools, such as the Medical Event Reporting System for Transfusion Medicine and the Veterans Health Administration Patient Safety Questionnaire, which were both created as safety culture tools for transfusion medicine. 1,437 healthcare staff members from 21 hospitals across the United States participated in a pilot study for HSOPSC.

The HSOPSC has been implemented in 24 nations, including Serbia, Saudi Arabia, Korea, Brazil, and Spain (Battles, Sorra, & Nieva, 2008).

To investigate the dimensionality of the survey data, an exploratory factor analysis was performed. The independence of the factors was increased by using varimax rotation and principal components analysis. 14 factors with 18 values greater than or equal to 1.0 were found through analysis. According to Sorra and Nieva (2004), the 14 factors explained 64.5% of the variance in total, with the majority of the components loading on just one factor. Two single-item outcome measures, 12 patient safety aspects, and items on a five-point Likert response scale were all included in the draft pilot survey. The proposed factor structure's adherence to the data was then assessed using a confirmatory factor analysis. The researchers arrived at a final confirmatory factor analysis model that offered a satisfactory fit with the data after analyzing a number of confirmatory factors.

Reliability

The device is measuring what it is supposed to measure, which is what reliability means. An instrument is trustworthy if it offers comparable measurements across participants and maintains its stability over time (Streiner & Norman, 2003). Furthermore, the coefficient of correlation is a common way to express reliability. A value of 1.00 indicates an instrument with flawless reliability. For achievement and aptitude tests, a coefficient of at least 0.90 is advised, although a coefficient of at least 0.80 is acceptable for personality tests.

The last 12 patient safety culture dimensions found by the confirmatory factor analysis had their internal consistency reliabilities assessed. Positive and negative worded items were both included in the survey; hence the negative items were reverse coded. According to Sorra and

Nieva (2004), all 12 of the patient safety parameters have satisfactory reliability, with a Cronbach alpha value of at least 0.60. Between 0.63 and 0.84 were the reliability coefficients. Overall perceptions of safety and frequency of reporting of events were the two outcome factors (multiple-item scores) that scored the highest overall (both at 0.74 and 0.84).

3.4 Data Collection

Since all nurses in the targeted hospitals read, write and speak English, the study will use the English version of the HSOPSC. Whereas it was previously used in West Bank in Arabic version, and it has been recognized as a valid and reliable tool for evaluating the safety culture in hospital settings where Arabic is spoken (Najjar et al. 2013). Hamdan and Saleem (2013) utilized the instrument in a prior study to evaluate the patient safety culture in West Bank hospitals.Using the Cronbach's coefficient Alpha (α), the instrument's internal consistency was evaluated, and the results revealed high overall reliability (0.85), in previous studies (Najjar et al. 2013; Hamdan and Saleem, 2013).

3.5 Data Management and Statistical Analysis

The 42 items that make up the HSOPSC assess 10 aspects of patient safety culture. The Likert scale has five possible scores for each item. For each question and the dimension, the percentage of positive responses was determined. Items with negative wording was reversed when calculating the domain mean scores. By adding together all of the dimension's items and dividing by the total number of those items, the dimension-level scores was calculated. 'Agree/strongly agree' or ‘most of the time/always' was used as affirmative responses to positively written items.

'Disagree/strongly disagree' or 'never/rarely' are the appropriate responses to negatively worded things. Therefore, those that obtained 75% favorable responses or when around 75% of participants disagreed with the negatively worded items are considered areas of strength.

The items that earned roughly 50% of the votes are those that were evaluated as having room for improvement. The survey also asked about the range of reported occurrences over the previous year and the patient safety grade, which ranged from "excellent" to "failing." In order to evaluate the data, SPSS version 20.0 is used. To list the characteristics of the individuals, descriptive statistics are used. To investigate variations in patient safety culture dimensions, t-test and one-way ANOVA (with Post Hoc-Scheffe test) was utilized. Therefore, those that obtained 75% favorable responses or when around 75% of participants disagreed with the negatively worded items are considered areas of strength.

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3.6 Ethical Safeguards

Participants in the study was informed about the objectives and methods of the study, including their rights in declining participation and signed an oral and written informed consent before responding to the questionnaires. Anonymity in data collection during the questionnaire phase was ensured by avoidance of collecting any information that may disclose participants' identity. Also, code number was included in questionnaires instead of participants names.

CHAPTER FOUR: RESULTS

4.1.Introduction

This chapter presents the study results of the questionnaire used to gather the required data to answer the research questions and objectives. One instrument, Hospital Survey of Patient Safety Culture (HSoPSC) using the positivist paradigm. It applies beliefs about the nature of knowing and reality based on a realist ontology, which assumes there are real world objects that are separate from the human knower. In other words, there is an objective reality that exists and can be tested by applying quantitative methods to discover and evaluate consistent phenomena in the world. Descriptive and inferential statistical techniques were applied to present and interpret the results. SPSS software was used to manage and analyze these data. Data analyses included descriptive statistics, Cronbach's alpha, univariate analysis of variance. The characteristics of the sample are described followed by the testing of the research hypotheses are presented.

4.2 Response Rate

In this study, 330 questionnaire was distributed to nurses working at the west bank hospitals in Palestine. A total number of 318 questionnaires were completed and returned, giving a response rate of 96.4% which is considered excellent.

4.3 Demographic characteristics of the Respondents

Frequency distribution was used to analyze the characteristics profile of the respondents. The relative frequency distribution of respondents according to various demographic variables can be seen in Table 4.1. Approximately half of the respondents are male (47.5%) and 52.5% are female. Majority (56.0%) were between the ages 20-29 years old, while 34.3% ages 30-39 years old and 9.7% ages more than 50. The vast majority of the nurses were bachelor holders (86.2%), 12.9% were of diploma holder, and only .9% were higher degree holders.

Table 4.1 Demographic characteristics of the Respondents

Characteristic	Numbers	Percentages (%)
Gender		
Male	151	47.5
Female	167	52.5
Age-group		
20-29 year	178	56.0
30-39 year	109	34.3
40-49 year	31	9.7
Education		
Diploma	41	12.9
Bachelor	274	86.2
Master	3	.9
Experience		
Less than 1 year	13	4.1
1-5 year	82	25.8
6-10 year	142	44.7
11-15 year	45	14.2
60-20 year	33	10.4
21 year and more	3	.9
Position		
Practical nurse	35	11.0
Staff nurse	247	77.7
Head nurse	23	7.2
Continuous education	4	1.3
Supervisor	9	2.8
Type of shift		

Day	110	34.6
Evening	74	23.3
Night	103	32.4
Others	31	9.7

Evaluating the level of agreement among respondents regarding safety culture domains is crucial for understanding the perceptions and attitudes toward safety within an organization or community. Combining the responses into table 4.2, as detailed in the specified section, provides a clear snapshot of the overall sentiment toward safety culture across different domains or areas of focus. This type of analysis can help identify strengths and weaknesses within the safety culture framework, allowing for targeted improvements or interventions where needed.

In table 4.2, positive responses (Strongly Agree/Agree) have been combined and categorized as 'Positive', while negative responses (Strongly Disagree/Disagree) have been categorized as 'Negative'. Responses falling in between have been categorized as 'Neither positive nor negative'. Therefore, for the purpose of this study, responses that scored 3.6 to 5 were categorized as positive, whilst responses scoring 2.5 to 3.5 were categorized as neither positive nor negative, and responses of 1 to 2.4 were categorized as negative. The color coding indicates the level of perception, with green indicating a positive perception, yellow indicating a perception that needs improvement, and red indicating a weak perception. The following results show the frequency of positive (Strongly Agree/Agree) and negative answers (Strongly Disagree/Disagree) of participants on each of the questionnaire items.

Table 4.2 Key Summary Responses of Nurses' Perception to Patient Safety Cultures Items

Good	Need improvement	Weak			
Item		**Strongly Disagree / Disagree**	**Neither**	**Strongly Agree / Agree**	**Mean (SD)**
Section A: Your work Area / Unit Organizational Learning / Continuous Improvemen					
A6	We are actively doing things to improve patient safety	51(16.1)	82(25.7)	185(58.2)	**3.51(.92)**
A9	Mistakes have led to positive changes here	71(22.3)	88(27.7)	159(50.0)	**3.30(.84)**
A13	After we make changes to improve patient safety, we evaluate their effectiveness	43(13.5)	100(31.4)	175(55.1)	**3.45(.84)**
Teamwork within Hospital Units					
A1	People support one another in this unit	25(7.9)	30(9.4)	263(**82.7**)	**3.82(.67)**
A3	When a lot of work needs to be done quickly, we work together as a team to get the work done	43(13.5)	60(18.9)	215(**67.6**)	**3.63(.83)**
A4	In this unit, people treat each other with respect	20(6.3)	87(27.4)	211(**66.4**)	**3.71(.74)**
A11	When one area in this unit gets really busy, others help out	59(18.5)	102(32.1)	157(**49.4**)	**3.42(.94)**
Non-Punitive Response to Error					
A8	Staff feel like their mistakes are held against them [R]	62(19.4)	102(32.1)	154(**48.5**)	**3.36(.89)**
A12	When an event is reported, it feels like the person is being written up, not the problem [R]	43(13.5)	100(31.4)	**175(55.1)**	**3.45(.84)**
A16	Staff worry that mistakes they make are kept in their personnel file [R]	66(20.7)	80(25.2)	172(54.1)	**3.49(.91)**
Staffing					
A2	We have enough staff to handle the workload	31(9.7)	57(17.9)	230(72.4)	**3.65(.93)**
A5	Staff in this unit work longer hours than is best for patient care [R]	33(10.4)	81(25.5)	204(64.1)	**3.62(.78)**
A7	We use more agency/temporary staff than is best for patient care [R]	48(15.1)	81(25.5)	189(59.4)	**3.51(.83)**
A14	We work in "crisis mode" trying to do too much, too quickly [R]	45(14.1)	77(24.2)	196(61.7)	**3.56(.85)**
Overall Perception of Safety					
A15	It is just by chance that more serious mistakes don't happen around here [R]	67(21.1)	102(32.1)	149(46.8)	**3.32(.94)**
A19	Patient safety is never sacrificed to get more work done	66(20.7)	80(25.2)	172(54.1)	**3.39(.89)**
A10	We have patient safety problems in this unit [R]	59(18.5)	85(26.8)	174(54.7)	**3.42(.87)**
A17	Our procedures and systems are good at preventing errors from happening	42(13.2)	88(27.7)	188(59.1)	**3.49(.81)**
***** R indicates reversible answers***					

Table 4.3 Key Summary Responses of Nurses' Perception to Patient Safety Cultures Items

Good		Need improvement		Weak	
Items		**Strongly Disagree / Disagree**	**Neither**	**Strongly Agree / Agree**	**Mean (SD)**
Section B: Your Supervisor/ Manager Expectations and Promoting Patient Safety					
B1	My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures	28(8.8)	44(13.8)	246(77.4)	**3.36(.84)**
B2	My supervisor/manager seriously considers staff suggestions for improving patient safety	10(4.9)	36(17.6)	158(77.5)	**3.82(.69)**
B3	Whenever pressure builds up, my supervisor/manager wants us to work faster, even if it means taking shortcut [R]	74(23.3)	44(13.8)	200(62.9)	**3.48(.88)**
B4	My supervisor/manager overlooks patient safety problems that happen over and over [R]	130(40.9)	34(10.7)	154(48.4)	**2.39(.91)**
Section C: Communications Communication Openness					
Items		**Never / Rarely**	**Sometimes**	**Most of the Time / Always**	**% Positive Response**
C2	Staff will freely speak up if they see something that may negatively affect patient care	33(10.3)	84(26.4)	201(63.3)	**3.54(.74)**
C4	Staff feel free to question the decisions or actions of those with more authority	47(14.8)	114(35.8)	157(49.3)	**3.44(.86)**
C6	Staff are afraid to ask questions when something does not seem right [R]	79(24.8)	78(24.5)	161(50.7)	**3.31(.94)**
Feedback and Communications about errors					
C1	We are given feedback about changes put into place based on event reports	30(9.4)	43(13.5)	245(77.1)	**3.74(.73)**
C3	We are informed about errors that happen in this unit	53(16.6)	101(31.8)	164(51.6)	**3.42(.87)**
C5	In this unit, we discuss ways to prevent errors from happening again	81(25.4)	83(26.1)	154(48.5)	**3.30(94)**
Section D: Frequency of Events Reported					
D1	When a mistake is made, but is caught and corrected before affecting the patient, how often is this reported?	41(12.8)	80(25.2)	197(52.0)	**3.56(.83)**
D2	When a mistake is made, but has no potential to harm the patient, how often is this reported?	38(12.0)	104(32.7)	176(55.3)	**3.46(.80)**
D3	When a mistake is made that could harm the patient, but does not, how often is this reported?	64(20.2)	76(23.9)	178(55.9)	**3.39(.90)**
***** R indicates reversible answers***					

Table 4.4 Key Summary Responses of Nurses' Perception to Patient Safety Cultures Items

Good	Need improvement	Weak			
Items		**Strongly Disagree / Disagree**	**Neither**	**Strongly Agree / Agree**	**Mean (SD)**
Section F: Your Hospital					
Hospital Management Support for Patient Safety					
F1	Hospital management provides a work climate that promotes patient safety	37(11.6)	32(10.1)	249(78.3)	**3.72(.77)**
F8	The actions of hospital management show that patient safety is a top priority	58(18.3)	82(25.8)	178(55.9)	**3.43(.97)**
F9	Hospital management seems interested in patient safety only after an adverse event happens	65(20.4)	68(21.4)	185(58.2)	**3.42(.94)**
Teamwork across Hospital Units					
F4	Hospital units do not coordinate well with each other [R]	37(11.7)	101(31.8)	180(56.6)	**3.47(.72)**
F10	There is good cooperation among hospital units that need to work together	33(10.3)	114(35.8)	171(53.7)	**3.46(.82)**
F2	It is often unpleasant to work with staff from other hospital units [R]	70(22.0)	101(31.8)	147(46.2)	**3.29(.94)**
F6	Hospital units work well together to provide the best care for patients	57(17.9)	84(26.4)	177(55.7)	**3.43(.93)**
Hospital Handover (Handoffs) and Transitions					
F3	Things "fall between the cracks" when transferring patients from one unit to another [R]	68(21.3)	73(23.0)	177(55.7)	**3.35(.87)**
F5	Important patient care information is often lost during shift changes [R]	57(17.9)	87(27.4)	174(54.7)	**3.47(.92)**
F7	Problems often occur in the exchange of information across hospital units [R]	76(23.9)	62(19.5)	180(56.6)	**3.42(.98)**
F11	Shift changes are problematic for patients in this hospital [R]	64(20.2)	78(24.5)	176(55.3)	**3.40(.91)**
***** R indicates reversible answers***					

Based on the guidelines provided by Sorra et al. (2014), here's how the Likert scale responses can be condensed into positive, neutral, and negative values:

Positive responses: Include agree and strongly agree for direct questions, and disagree and strongly disagree for reverse-worded questions.
Neutral responses: Neither agree nor disagree (this is neutral for all questions).
Negative responses: Include disagree and strongly disagree for direct questions, and agree and strongly agree for reverse-worded questions.

Here's how the responses might be categorized for each survey item:

Survey Item	Positive Responses	Neutral Responses	Negative Responses
Question	Agree, Strongly Agree	Neither Agree nor Disagree	Disagree, Strongly Disagree

This categorization allows for a clearer understanding of the responses, with positive, neutral, and negative values clearly identified for each survey item. Adjustments can be made as needed to fit the specific context or requirements of the study.

The percentages of the positive responses of each of the 12-patient safety culture dimensions of 318 participants were shown in (Table 4.5) which illustrates those dimensions as strengths or those that need improvement. Dimension scores exceeding 70% positive rating were considered an area of strength, whereas those scoring less than 70% were considered areas for improvement, as described by the HSOPSC user guide and used in previous study (Alswat et al., 2017). Table 4.5 below shows percentages of the composite positive responses of each of the 12 patients safety culture dimensions across all study sites which ranged from 52.7% to 66.6%.

The dimensions with the highest percentage of the positive scores were “Supervisor/ Manager Expectations and Promoting Patient Safety” (66.6%) followed by “Teamwork across Hospital Units” (66.5%) and “Staffing” (64.4%). Although, none of these three dimensions with the highest percentages reached the threshold of 70% positive score to be an area of strength. It suggests that most of the respondents agreed that they were actively doing things to improve patient safety culture, people support one another inside units and patient safety is a top priority of hospital management. All other composites scores of the dimensions were less than 60% as described in the (Table 4.5) which indicate that it is considered an area of potential improvement as well. Moreover, the two lowest percentages of the positive scores were “non-punitive response to error” (52.7%) followed by “Teamwork across Hospital Units” (53.1%). The “non-punitive response to error” findings

suggests that there is a blame culture as respondents feel that their mistakes are held against them and kept in them personal file. For the staffing dimension respondents indicated that there was high workload and staff work longer hours than what should be considered best for patient safety.

Interestingly, none of the 12 dimensions of the patient safety culture that were examined reached 70% to be considered an area of strength. Therefore, these results indicate that all participants across all study sites considered all the 12 dimensions of the patient safety culture as areas for potential improvement.

Table 4.5 The percentages of positive responses of n=318 nurses' perception towards patient safety culture

Patient safety culture domains	Number of items	Average % of positive responses
Organizational Learning / Continuous Improvement	3	54.4
Teamwork within Hospital Units	4	66.5
Non-Punitive Response to Error	3	52.7
Staffing	4	64.4
Overall Perception of Safety	4	53.7
Supervisor/ Manager Expectations and Promoting Patient Safety	4	66.6
Communications Communication Openness	3	54.4
Feedback and Communications about errors	3	59.1
Frequency of Events Reported	3	54.4
Hospital Management Support for Patient Safety	3	64.1
Teamwork across Hospital Units	4	53.1
Hospital Handover (Handoffs) and Transitions	4	55.6

4.4 Differences in nurses' perception of patient safety culture with respect to demographic characteristics

One-way ANOVA and independent samples t test were used to compare perceptions of patient safety culture with the employment and profession characteristics of individuals, including profession groups, experience, work unit, and work hours.

Perception of patient safety culture and gender

Independent samples t test result presented in Table 4.6, and shows that there are statistically significant differences between gender and eight patient safety culture dimensions, namely 'Organizational Learning / Continuous Improvement', 'Team Work within Units', 'Non-Punitive Response to Error, 'staffing', 'Overall Perception of Safety', "Feedback and Communications about errors", "Hospital Management Support for Patient Safety", and "Frequency of Events Reported". The other dimensions were not significantly different regarding gender.

Table 4.6 Nurses' Perception of patient safety culture and gender

Domain	gender	N	Mean (SD)	*t*-statistics (df)	*P-Value*
Organizational Learning / Continuous Improvement	male	151	3.32(.7)	-2.87(316)	.004
	female	167	3.53(.7)		
Team Work within Units	male	151	3.45(.6)	-2.87 (316)	.004
	female	167	3.63(.6)		
Non-Punitive Response to Error	male	151	3.34(.7)	-2.40(316)	.017
	female	167	3.52(.6)		
Staffing	male	151	3.53(.6)	-1.57(316)	.018
	female	167	3.63(.5)		
Overall Perception of Safety	male	151	3.27(.6)	-3.83(316)	<.001
	female	167	3.53(.6)		
Communications Openness	male	151	3.38(.6)	-1.35(316)	.178
	female	167	3.47(.7)		
Feedback and Communications about errors	male	151	3.32(.6)	-2.46(316)	.014
	female	167	3.49(.6)		
Hospital Handover (Handoffs) and Transitions	male	151	3.38(.6)	-.93)316)	.355
	female	167	3.45(.7)		
Hospital Management Support for Patient Safety	male	151	3.40(.7)	-3.13(316)	.002
	female	167	3.64(.7)		
Frequency of Events Reported	male	151	3.36(.7)	-2.73(316)	.007
	female	167	3.58(.7)		

One-way ANOVA result presented in Table 4.7, and shows that there are statistically significant differences between age-group and seven patient safety culture dimensions,

namely ‘Organizational Learning / Continuous Improvement’, ‘Team Work within Units’, ‘Non-Punitive Response to Error, ‘staffing’, ‘Hospital Handover (Handoffs) and Transitions’, “Hospital Management Support for Patient Safety”, and “Frequency of Events Reported”. The other dimensions were not significantly different regarding age-group.

Table 4.7 Nurses’ Perception of patient safety culture and age-group

Domains		N	Mean (SD)	f-statistics (df)	P-value
Organizational Learning / Continuous Improvement	20-29	178	3.40(.7)	7.15(2)	.001
	30-39	109	3.37(.6)		
	40-49	31	3.85(.5)		
Team Work within Units	20-29	178	3.54(.7)	4.98(2)	.007
	30-39	109	3.47(.6)		
	40-49	31	3.86(.6)		
Non-Punitive Response to Error	20-29	178	3.44(.7)	4.15(2)	.017
	30-39	109	3.34(.6)		
	40-49	31	3.72(.6)		
Staffing	20-29	178	3.59(.6)	5.03(2)	.007
	30-39	109	3.50(.6)		
	40-49	31	3.85(.3)		
Overall Perception of Safety	20-29	178	3.41(.6)	1.71(2)	.183
	30-39	109	3.34(.6)		
	40-49	31	3.57(.7)		
Communications Openness	20-29	178	3.47(.6)	1.01(2)	.365
	30-39	109	3.36(.6)		
	40-49	31	3.39(.7)		
Feedback and Communications about errors	20-29	178	3.44(.6)	1.13(2)	.324
	30-39	109	3.34(.6)		
	40-49	31	3.4839		
Hospital Handover (Handoffs) and Transitions	20-29	178	3.48(.7)	5.70(2)	.004
	30-39	109	3.25(.6)		
	40-49	31	3.62(.6)		
Hospital Management Support for Patient Safety	20-29	178	3.64(.7)	5.64(2)	.004
	30-39	109	3.37(.7)		
	40-49	31	3.39(.8)		
Frequency of Events Reported	20-29	178	3.5712	4.28(2)	.015
	30-39	109	3.3150		
	40-49	31	3.4516		

4.5 Nurses' Perception of patient safety culture and level of education

One-way ANOVA result presented in Table 4.8, and shows that there are statistically significant differences between level of education and five patient safety culture dimensions, namely 'Non-Punitive Response to Error, 'Communications Openness', 'Feedback and Communications about errors, "Hospital Management Support for Patient Safety", and "Frequency of Events Reported". The other dimensions were not significantly different regarding level of education.

Table 4.8 Nurses' Perception of patient safety culture and level of education

Domains		N	Mean	f-statistics (df)	P-value
Organizational Learning / Continuous Improvement	Practical	41	3.45(.7)	1.13(2)	.325
	bachelor	274	3.43(.7)		
	master	3	4.00(.9)		
Team Work within Units	Practical	41	3.38(.6)	2.31(2)	.101
	bachelor	274	3.56(.6)		
	master	3	4.00(.9)		
Non-Punitive Response to Error	Practical	41	3.30(.5)	3.81(2)	.023
	bachelor	274	3.45(.7)		
	master	3	4.33(.9)		
Staffing	Practical	41	3.70(.4)	1.98(2)	.139
	bachelor	274	3.56(.6)		
	master	3	4.00(.9)		
Overall Perception of Safety	Practical	41	3.32(.5)	.83(2)	.435
	bachelor	274	3.41(.6)		
	master	3	3.75(.9)		
Communications Openness	Practical	41	3.13(.5)	6.19(2)	.002
	bachelor	274	3.46(.7)		
	master	3	4.00(.9)		
Feedback and Communications about errors	Practical	41	3.15(.6)	5.63(2)	.004
	bachelor	274	3.45(.6)		
	master	3	4.00(.9)		
Hospital Handover (Handoffs) and Transitions	Practical	41	3.40(.6)	2.35(2)	.097
	bachelor	274	3.41(.7)		
	master	3	4.25(.9)		
Hospital Management Support for Patient Safety	Practical	41	3.09(.7)	10.05(2)	.000
	bachelor	274	3.58(.7)		

	master	3	4.00(.8)		
Frequency of Events Reported	Practical	41	3.24(.6)	3.04(2)	.049
	bachelor	274	3.50(.7)		
	master	3	4.00(.8)		

Perception of patient safety culture and years of experience

One-way ANOVA result presented in Table 4.9, and shows that there are statistically significant differences between years of experience and all patient safety culture dimensions.

Table 4.9 Nurses' Perception of patient safety culture and years of experience

Domain		N	Mean (SD)	F-statistics (df)	P-value
Organizational Learning / Continuous Improvement	less than 1 year	13	3.13(.8)	7.57(5)	<.001
	1-5	82	3.59(.6)		
	6-10	142	3.27(.7)		
	11-15	45	3.38(.6)		
	16-20	33	3.90(.5)		
	21 and above	3	4.00(.9)		
Team Work within Units	less than 1 year	13	3.42(.5)	6.81(5)	<.001
	1-5	82	3.73(.5)		
	6-10	142	3.43(.7)		
	11-15	45	3.31(.5)		
	16-20	33	3.93(.5)		
	21 and above	3	3.75(.9)		
Non-Punitive Response to Error	less than 1 year	13	3.18(.6)	4.51(5)	.001
	1-5	82	3.52(.7)		
	6-10	142	3.36(.7)		
	11-15	45	3.28(.5)		
	16-20	33	3.82(.6)		
	21 and above	3	4.00(.9)		
Staffing	less than 1 year	13	3.65(.6)	5.89(5)	<.001
	1-5	82	3.79(.4)		
	6-10	142	3.44(.6)		
	11-15	45	3.49(.5)		
	16-20	33	3.75(.6)		
	21 and above	3	4.00(.9)		
Overall Perception of Safety	less than 1 year	13	3.37(.6)	6.68(5)	<.001

	1-5	82	3.51(.6)		
	6-10	142	3.33(.7)		
	11-15	45	3.13(.4)		
	16-20	33	3.82(.6)		
	21 and above	3	4.00(.9)		
Communications Openness	less than 1 year	13	3.54(.5)	5.90(5)	<.001
	1-5	82	3.73(.6)		
	6-10	142	3.32(.6)		
	11-15	45	3.23(.5)		
	16-20	33	3.35(.8)		
	21 and above	3	3.67(.9)		
Feedback and Communications about errors	less than 1 year	13	3.23(.8)	4.00(5)	.002
	1-5	82	3.66(.5)		
	6-10	142	3.32(.6)		
	11-15	45	3.31(.6)		
	16-20	33	3.41(.9)		
	21 and above	3	3.75.8)		
Hospital Handover (Handoffs) and Transitions	less than 1 year	13	3.42(.7)	2.83(5)	.016
	1-5	82	3.58(.6)		
	6-10	142	3.34(.7)		
	11-15	45	3.26(.7)		
	16-20	33	3.46(.8)		
	21 and above	3	4.25(.9)		
Hospital Management Support for Patient Safety	less than 1 year	13	3.15(1.1)	7.29(5)	<.001
	1-5	82	3.84(.5)		
	6-10	142	3.49(.7)		
	11-15	45	3.41(.5)		
	16-20	33	3.14(.9)		
	21 and above	3	4.00.8)		
Frequency of Events Reported	less than 1 year	13	3.62(.7)	7.71(5)	<.001
	1-5	82	3.83(.6)		
	6-10	142	3.37(.8)		
	11-15	45	3.13(.5)		
	16-20	33	3.38(.8)		
	21 and above	3	4.00(.9)		

One-way ANOVA result presented in Table 4.10, and shows that there are statistically significant differences between type of shift and only one patient safety culture dimensions,

namely ‘Hospital Handover (Handoffs). The other dimensions were not significantly different regarding type of shift.

Table 4.10 Nurses’ Perception of patient safety culture and type of shift

Domain		N	Mean (SD)	F statistics (df)	P- value
Organizational Learning / Continuous Improvement	day	110	3.42(.7)	1.06(3)	.367
	evening	74	3.35(.6)		
	night	103	3.48(.6)		
	other	31	3.57(.7)		
Team Work within Units	day	110	3.62(.6)	1.86(3)	.136
	evening	74	3.40(.6)		
	night	103	3.58(.6)		
	other	31	3.54(.8)		
Non-Punitive Response to Error	day	110	3.37(.7)	1.25(3)	.293
	evening	74	3.40(.6)		
	night	103	3.53(.6)		
	other	31	3.46(.8)		
Staffing	day	110	3.51(.6)	1.48(3)	.221
	evening	74	3.65(.5)		
	night	103	3.64(.5)		
	other	31	3.54(.6)		
Overall Perception of Safety	day	110	3.39(.6)	2.60(3)	.052
	evening	74	3.26(.6)		
	night	103	3.52(.6)		
	other	31	3.44(.8)		
Communications Openness	day	110	3.33(.7)	2.06(3)	.106
	evening	74	3.41(.6)		
	night	103	3.55(.6)		
	other	31	3.42(.8)		
Feedback and Communications about errors	day	110	3.35(.6)	1.27(3)	.285
	evening	74	3.43(.6)		
	night	103	3.50(.6)		
	other	31	3.31(.7)		
Hospital Handover (Handoffs) and Transitions	day	110	3.23(.7)	7.68(3)	<.001
	evening	74	3.44(.6)		
	night	103	3.64(.5)		
	other	31	3.23(.8)		
Hospital Management Support for Patient Safety	day	110	3.54(.7)	.54(3)	.654
	evening	74	3.52(.6)		

	night	103	3.56(.6)		
	other	31	3.38(1.1)		
Frequency of Events Reported	day	110	3.43(.7)	.52(3)	.668
	evening	74	3.50(.7)		
	night	103	3.53(.6)		
	other	31	3.38(1.1)		

CHAPTER FIVE:

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The main conclusions from this study are presented and discussed in this chapter along with their relevance to the existing literature to provide a comprehensive picture of the major problems influencing Palestine's patient safety culture. In order to understand the current state of patient safety culture in Palestine and to develop an understanding of the obstacles to and facilitators of the implementation of a positive patient safety culture in Palestine, this master's thesis synthesizes the major findings from the three research studies that comprise it. This chapter also presents the study's strengths and weaknesses. In order to enhance patient safety, the study's practical implications are examined in regard to Palestine's healthcare system.

5.2 Main research findings

The present study's methodology, questions, and research purpose serve as the foundation for this part. The initial goal was to determine the elements influencing Palestine's patient safety culture. The second objective was to investigate the obstacles and facilitators of fostering a positive patient safety culture in Palestine from the viewpoints of nurses. It also looked at how these reported barriers and facilitators affect and mold the adoption of a positive patient safety culture from these nurses' points of view.

5.3 Using the HSOPSC$ tool for safety culture assessment

This study involved an assessment of the prevailing state of safety culture in public and private hospitals in Palestine using the HSOPSC survey data. The majority of survey respondents were from medical/surgical, ICU, CCU and orthopedic units (70.4%, n=225) and were females (52.5%, n=167). The sample was relatively young as the majority of participants (90.3%, n=287) were between 20-39 years of age.

Unfortunately, all the survey dimensions, namely "Organizational Learning / Continuous Improvement" (54.4%), "Teamwork within Hospital Units" (66.5%), "Non-Punitive Response to Error" (52.7%), "Staffing" (64.4%), "Overall Perception of Safety" (53.7%), "Supervisor/ Manager Expectations and Promoting Patient Safety" (66.6%), "Communications Communication Openness" (54.4%), "Feedback and Communications about errors "(59.1%), "Frequency of Events Reported" (54.4%), "Hospital Management Support for Patient Safety" (64.1%), "Teamwork across Hospital Units" (53.1) and "Hospital Handover (Handoffs) and Transitions" (55.6%) were identified as areas in need of improvement. These findings suggest that the reporting safety culture in Palestine hospitals is a major concern for healthcare workers. There is a pervasive culture of blame, retaliation fear, and a lack of transparency about patient safety, and several communication channels emphasize the need of reporting errors. The findings highlight the internal conflict hospital employees confront between their desire to report mistakes and the prevailing blame and shame culture. Another issue that was brought up was the absence of feedback following the reporting of occurrences. Unfavorable organizational and cultural characteristics hinder the development of an open reporting culture in healthcare settings, which may result in an underreporting of adverse occurrences. Palestinian healthcare organizations need to promote a culture of non-punitive learning while acknowledging the fostering of human beings. Workers need to be at ease enough to communicate honestly, disclose problems, and learn from them. Removing the punitive element from mistakes should be tempered with personal

responsibility. Negative outcomes are linked to safety measures that are strictly punitive or non-punitive (Petschonek et al., 2013). A growing consensus that adopting a fair culture is the proper course of action that reconciles the two approaches (Vogelsmeier et al., 2010). A just culture places a strong emphasis on shared accountability between managers and employees to encourage error reporting and organizational learning (Singer et al., 2009b). Present theories of just culture support the idea of a clear boundary separating acceptable and undesirable behavior, but Dekker (2009) points out that the real issue is not where the boundary should be drawn but rather who gets to define it.

Managers need to respond to problems professionally, provide prompt feedback, and make proper use of data to change procedures and policies. Feedback-giving and discussing mistakes and safety issues were positively correlated with the frequency of event reporting. A similar finding was reported in a number of international studies including Swedish (Nordin et al., 2013), Norway (Ballangrud et al., 2012), Scottish (Saraç, 2011), Lebanese (El-Jardali et al., 2011) and German (Pfeiffer and Manser, 2010) studies.

The dimensions of "Teamwork within units" and "Organizational learning-continuous improvement" yielded the highest positive response rates when compared to international studies. Conversely, the dimension of "non-punitive response to error" received the lowest rate of positive responses across six countries, including the United States of America (Famolaro et al., 2016), Oman (Al-Mandhari et al., 2014), Lebanon (Al-gahtani, 2015), Saudi Arabia (Alahmadi, 2010) and Palestine (Hamdan and Saleem, 2013). In comparison to US institutions, two other dimensions - "Communication openness" and "Frequency of events reported"- were lower in Palestinian hospitals. Similar outcomes were recorded by other hospitals (Al-Mandhari et al., 2014, El-Jardali et al., 2010, Hamdan and Saleem, 2013).

Despite the low positive response rate to all survey dimensions, the nurses still feel

supported by their managers and supervisors despite the presence of a punitive environment. It might also indicate that incident reporting is overlooked by top and middle managers in the targeted hospitals. An organization's management commitment to safety has a significant impact on how well its safety programs work. The Safety Multilevel Model Climate draws attention to the impact that leadership commitment at all organizational levels has on employees' perceptions of the importance placed on safety (Zohar, 2000, Zohar and Luria, 2005). This dedication may be shown by management's involvement in safety committees, the creation of codified safety rules and procedures, training initiatives, and a focus on safety in all facets of the workplace (Vredenburgh, 2002). Support from the leadership is also essential for an incident reporting system to be successful (Hwang et al., 2012), and leaders—clinical as well as managerial—need to set a good example, demonstrate that they are willing to use the system, provide a secure environment for reporting, and take the lead on actions and feedback modifications.

According to reports, the most important predictor of both "Overall perceptions of patient safety" and "Patient safety grade" was the hospital's management support. This result is in line with the body of literature (El-Jardali et al., 2011, Nordin et al., 2013). Additionally, it was discovered to be a strong predictor of the staff members' "Frequency of events reported." All in all, this supports the idea that hospital and unit staff members' opinions of patient safety are influenced by the degree of support they receive from their superiors.

5.4 Theoretical and Practical Implications

This study contributed in three ways—contribution to existing knowledge, implications for practice, and implications for policy—this study aids in the evaluation of the patient safety culture in Palestinian hospitals.

5.5 Contributions to current knowledge

Healthcare safety culture and climate assessment is still lacking when compared to other fields. Waterson et al. (2014) caution against making generalizations regarding safety culture and environment across healthcare organizations because of the differences in their features, methods of operation, and hierarchical structures. Therefore, caution must be used while interpreting safety climate data.

The findings make it abundantly evident that the original HSOPSC questionnaire should be used with caution. They also emphasize the significance of properly validating safety climate surveys before utilizing them in healthcare contexts and with populations that differ from those for which they were designed.

5.6 Implications for practice

The HSOPSC, in its tested and verified form, is recommended as a suitable instrument for evaluating the degree of safety climate in Palestinian hospitals. Therefore, hospitals was able to regularly evaluate the safety atmosphere and benchmark changes thanks to this. It may also be used to assess safety initiatives over time and point out areas that are effective and those that require improvement. Hospitals can utilize the tool as a component of their accreditation process. It may give management and employees feedback reports. Open conversations in both official and casual gatherings can be started by those reports. The tool can be used in conjunction with a qualitative component to provide more context for understanding how employees see safety culture. Creating or modifying resources to support team conversations around patient safety concerns may be beneficial as a self-evaluation, dialogue, and teaching activity. They may assist in increasing patient safety awareness, promoting debate about the advantages and disadvantages of the patient safety culture in their respective fields of expertise, exposing any discrepancies in team member perspectives, and tracking improvements over time. The design and execution of more

efficient and focused safety interventions, such as training and education, can be aided by a greater awareness of the variations in the safety environment across various work areas and specialties in hospitals.

5.7 Implications for policy

This study created a baseline because there isn't much information on the safety environment in Palestinian hospitals. There are several obstacles facing the Palestinian healthcare system that pertain to patient safety. The results of my master's thesis, especially in Palestine and other regional countries, can assist policy makers in making future decisions and organizing future plans. Policies and procedures that adopt a system-based approach and replace the old culture of shame and blame with a non-punitive, learning, and just culture where employees feel free to report mistakes and unfavorable events without fear of reprisal or blame are crucial for legislators and hospital managers to create. MOH and other health organization might collaborate to provide incident reporters with legal immunity. At the national level, policy makers can work to establish a reporting system that compels frontline personnel to report occurrences and hospital boards to take action. Italy established a new, comprehensive law on patient safety and the duties of healthcare workers in March 2017. It acknowledges that everyone obtaining healthcare services has a basic right to patient safety, which is the main objective of the national healthcare service. Since action against healthcare professionals is only allowed in circumstances of intent or egregious carelessness, it helps to shield them from prosecution even in the event of a negative outcome (Bellandi et al., 2017). Strategies that emphasize patient safety education and training as a system attribute are obviously needed. Patient safety has been emphasized as a top concern for healthcare workers' education (WHO, 2009). Research is currently ongoing to determine the best approach to include and educate patient safety within the present medical school curricula in order to enhance student results (Nie et al., 2011).

5.7 Directions for future research

Numerous topics for further investigation have surfaced as a result of my master's thesis study. Further studies are required to settle the disagreements over the definitions and characteristics of safety culture and climate. In healthcare, safety culture and climate theories are absent. Hence, concentrating on creating theoretical models and "studying the link between culture, behaviors, and patient outcomes" is a significant task for the future of safety research.

It's unclear how safety atmosphere affects worker and patient safety outcomes. Therefore, further study is required to comprehend the effects of safety culture or climate on results. Further research is required to examine the predictive validity of the instrument and the criterion validity of the HSOPSC because no study has been able to evaluate the predictive validity of the tool by connecting climate scores to outcome measures (Sarac et al., 2010). Using the validated version of the HSOPSC questionnaire created in my master's thesis, more research on patient safety climate evaluation in Palestine is needed. This will provide a more comprehensive comprehension of Palestinian’s safety environment.

Given the documented difficulties in acquiring precise data on adverse occurrences, future studies have to concentrate on devising research methodologies to get reliable and impartial safety outcome data within the healthcare industry. Future research should look at how cultural and environmental elements affect safety culture in order to advance worker and patient safety (Waterson et al., 2010). Furthermore, research is required to determine how national culture influences the concept of safety culture (Al-Mandhari et al., 2014). It is important to investigate how the cultural variety of the health care personnel affects patients' feelings of safety (Almutairi, 2012). According to Waterson (2014), the field of patient safety culture should incorporate other techniques for safety and culture (such as qualitative studies and observations) that can be used alone or in conjunction with other

methods. This will allow the field to expand beyond the narrow range of systems factors covered within climate surveys.

5.8 Conclusion

Recently, the significance of safety culture in raising patient safety and its effect on safety outcomes has gained more attention. As a result, there are more and more research trying to identify and evaluate the safety atmosphere in various healthcare settings. In Palestine, my master's thesis is the first validation study of a standardized safety climate measure. The study evaluated the HSOPSC questionnaire's psychometric qualities and created the best possible model for evaluating the patient safety environment in Palestinian hospitals. The study's findings emphasize the necessity of properly validating safety climate questionnaires before utilizing them in a wider range of healthcare environments. Furthermore, safety climate evaluations can point out areas that need to be improved, which should help organizations focus their efforts and use their resources more effectively.

As a result, this study added to our understanding of the safety climate's strength and weakness points in Palestinian hospitals. It will take a lot of work to make the existing safety situation better. In order to create an environment that encourages active questioning and sharing of safety insights, hospital leaders must clearly support and demonstrate their commitment to safety. They must also work to eradicate the pervasive culture of blame and shame and to promote the reporting of errors and adverse events. Employees will be empowered to assume greater responsibility and engage in safety-related activities more proactively as a result. It is crucial to have organizational support in the form of resources, policies, and reporting systems. In addition, it is important to supplement safety climate surveys with additional research techniques like focus groups or interviews in order to obtain a comprehensive understanding of safety procedures within a given context. The interviews facilitated a multilayered definition of safety culture and added insight into the

survey results.

The current healthcare industry is multifaceted, with a wide range of participants, including consumer groups, public and private healthcare providers, healthcare experts, and various healthcare locations. The current growth of regulatory bodies and initiatives has added to this complexity. In order to develop theoretically sound frameworks that direct safety culture research, more research on the contextual elements connected to various healthcare settings is advised. Hospital care providers should consider a number of aspects when selecting an appropriate instrument, such as the intended use, the target demographic and environment, the available resources, and documented psychometric properties. The study's conclusions are intended to help safety researchers, survey respondents, and policymakers choose the right safety culture instrument by giving them additional information.

Furthermore, my master's thesis contributes to the growing body of knowledge on safety climate measurement in healthcare settings and provides a solid framework for safety culture aspects in the field. In addition, my master's thesis established a framework for evaluating the patient safety climate in Palestinian hospitals with the ultimate goal of influencing Palestinian policy and constructing a safer atmosphere for patients and staff in Palestinian hospitals. Finally, other nations with comparable social and cultural situations can use this understanding.

5.8 Recommendations

It is evident that putting the following recommendations into practice will need time, money, and the cooperation of the Palestinian Ministry of Health, hospital administrators, and front-line employees.

- Patient safety should be a priority for policymakers in healthcare system in Palestine.
- Health policymakers and professional staff should attend short courses about the meaning of safety culture to bridge the gap in knowledge between managers and

clinicians.

- Patient safety laws should be established that include a clear definition of patient safety, descriptions of clinical errors, definitions of terms related to patient safety, and patient rights if errors occur.
- Hospital managers should support a blame-free culture.
- The hospital culture should include a structured education program for all managers and clinicians, particularly for new staff.
- It is the responsibility of frontline staff and senior management to establish rapport and close any communication gaps. Creating efficient communication networks that provide regular formal and informal interactions as well as electronic information sharing might help establish this network.
- With the establishment of organized communication for patient hand-off and transition between various units, standardized verbal and written communication rules are needed to promote communication and collaboration within and between hospital units.
- Social gatherings might be started in order to improve teamwork and communication at all levels.
- Hospital administrators should encourage staff members to submit errors using the incident reporting system by providing simple access, anonymity, and quick analysis and feedback.
- As an alternative to the present paper-based method, an electronic incident reporting system might be put into place and evaluated.
- Hospital managers and supervisors at the unit level should benefit from training programs designed to help them become more adept at identifying and rewarding safe conduct. To strengthen hospital managers' dedication to safety and lessen

variance in the use of safety procedures and actions, safety standards might be a component of their evaluation.

- Hospital care professionals should consider a number of variables when selecting an appropriate instrument to track the safety climate, such as the instrument's intended use, target demographic and environment, available resources, and documented psychometric qualities.

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Appendices

Hospital Survey on Patient Safety Culture

Instructions

This survey asks for your opinions about patient safety issues, healthcare errors**, and event reportingin your hospital and will take about 10 to 15 minutes to complete.**

If you do not wish to answer a question, or if a question does not apply to you, you may leave youranswer blank.

I consent to take part in this study by returning this questionnaire ☐

- *An **"event"** is defined as any type of error, mistake, incident, accident, or deviation, regardless of whether or not it results in patient harm.*
- ***"Patient safety"** is defined as the avoidance and prevention of patient injuries or adverse events resulting from the processes of health care delivery.*

SECTION A: Your Work Area/Unit

In this survey, consider your "unit" to be the work area, department, or clinical area of thehospital where you spend *most* of your work time or provide *most* of your clinical services.

What is your primary work area or unit in this hospital? Select ONE answer.

☐ a. Many different hospital units/No specific unit
☐ b. Medicine (non-surgical)
☐ c. Surgery
☐ d. Obstetrics
☐ e. Paediatrics
☐ f. Emergency department
☐ g. Intensive care unit (any type)
☐ h. Psychiatry/mental health
☐ i. Rehabilitation
☐ j. Pharmacy
☐ k. Laboratory
☐ l. Radiology
☐ m. Anaesthesiology
☐ n. Other, please specify: _____

Please indicate your agreement or disagreement with the following statements about yourwork area/unit.

Think about your hospital work area/unit…	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼
1. People support one another in this unit	☐1	☐2	☐3	☐4	☐5
2. We have enough staff to handle the workload.....	☐1	☐2	☐3	☐4	☐5
3. When a lot of work needs to be done quickly, we work together as a team to get the work done	☐1	☐2	☐3	☐4	☐5
4. In this unit, people treat each other with respect.....	☐1	☐2	☐3	☐4	☐5

5. Staff in this unit work longer hours than is best for patient care.....	☐1	☐2	☐3	☐4	☐5

SECTION A: Your Work Area/Unit (continued)

Think about your hospital work area/unit…	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	StronglyAgree ▼
6. We are actively doing things to improve patient safety.....	☐1	☐2	☐3	☐4	☐5
7. We use more agency/temporary staff than is best for patient care	☐1	☐2	☐3	☐4	☐5
8. Staff feel like their mistakes are held againstthem..	☐1	☐2	☐3	☐4	☐5
9. Mistakes have led to positive changes here..	☐1	☐2	☐3	☐4	☐5
10. It is just by chance that more serious mistakes don't happen around here	☐1	☐2	☐3	☐4	☐5
11. When one area in this unit gets really busy, others help out	☐1	☐2	☐3	☐4	☐5
12. When an event is reported, it feels like the person is being written up, not the problem...	☐1	☐2	☐3	☐4	☐5
13. After we make changes to improve patient safety, we evaluate their effectiveness.....	☐1	☐2	☐3	☐4	☐5
14. We work in "crisis mode" trying to do too much, too quickly	☐1	☐2	☐3	☐4	☐5
15. Patient safety is never sacrificed to get morework done.....	☐1	☐2	☐3	☐4	☐5
16. Staff worry that mistakes they make are keptin their personnel file.....	☐1	☐2	☐3	☐4	☐5
17. We have patient safety problems in this unit.	☐1	☐2	☐3	☐4	☐5
18. Our procedures and systems are good at preventing errors from happening.....	☐1	☐2	☐3	☐4	☐5

SECTION B: Your Supervisor/Manager

Please indicate your agreement or disagreement with the following statements about yourimmediate supervisor/manager or person to whom you directly report.

	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼

1. My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures	☐1	☐2	☐3	☐4	☐5
2. My supervisor/manager seriously considers staff suggestions for improving patient safety.	☐1	☐2	☐3	☐4	☐5
3. Whenever pressure builds up, my supervisor/manager wants us to work faster, even if it means taking shortcuts.....	☐1	☐2	☐3	☐4	☐5
4. My supervisor/manager overlooks patient safety problems that happen over and over ...	☐1	☐2	☐3	☐4	☐5

SECTION C: Communications

How often do the following things happen in your work area/unit?

Think about your hospital work area/unit…	**Never ▼**	**Rarely ▼**	**Sometimes ▼**	**Most of the time ▼**	**Always ▼**
1. We are given feedback about changes put into place based on event reports	☐1	☐2	☐3	☐4	☐5
2. Staff will freely speak up if they see something that may negatively affect patient care	☐1	☐2	☐3	☐4	☐5
3. We are informed about errors that happen in this unit	☐1	☐2	☐3	☐4	☐5
4. Staff feel free to question the decisions or actions of those with more authority.....	☐1	☐2	☐3	☐4	☐5
5. In this unit, we discuss ways to prevent errors from happening again	☐1	☐2	☐3	☐4	☐5
6. Staff are afraid to ask questions when something does not seem right	☐1	☐2	☐3	☐4	☐5

SECTION D: Frequency of Event Reported

In your hospital work area/unit, when the following mistakes happen, *how often are theyreported?*

	Never ▼	**Rarely ▼**	**Sometimes ▼**	**Most of the time ▼**	**Always ▼**
1. When a mistake is made, but is *caught and corrected before affecting the patient*, how often is this reported?...	☐1	☐2	☐3	☐4	☐5
2. When a mistake is made, but has *no potential to harm the patient*, how often is this reported?.....	☐1	☐2	☐3	☐4	☐5
3. When a mistake is made that *could harm the patient*, butdoes not, how often is this reported?.....	☐1	☐2	☐3	☐4	☐5

SECTION E: Patient Safety Grade

Please give your work area/unit in this hospital an overall grade on patient safety.

☐	☐	☐	☐	☐
A Excellent	**B** Very Good	**C** Acceptable	**D** Poor	**E** Failing

SECTION F: Your Hospital

Please indicate your agreement or disagreement with the following statements about yourhospital.

Think about your hospital…	**Strongly Disagree ▼**	**Disagree ▼**	**Neither ▼**	**Agree ▼**	**StronglyAgree ▼**
1. Hospital management provides a work climate that promotes patient safety	☐1	☐2	☐3	☐4	☐5
2. Hospital units do not coordinate well with each other	☐1	☐2	☐3	☐4	☐5

3. Things “fall between the cracks” when transferring patients from one unit to another.....	☐ 1	☐2	☐3	☐4	☐5
4. There is good cooperation among hospitalunits that need to work together	☐ 1	☐2	☐3	☐4	☐5

SECTION F: Your Hospital (continued)

Think about your hospital…	**Strongly Disagree ▼**	**Disagree ▼**	**Neither ▼**	**Agree ▼**	**StronglyAgree ▼**
5. Important patient care information is often lost during shift changes	☐ 1	☐2	☐3	☐4	☐5
6. It is often unpleasant to work with staff from other hospital units.....	☐ 1	☐2	☐3	☐4	☐5
7. Problems often occur in the exchange of information across hospital units.....	☐ 1	☐2	☐3	☐4	☐5
8. The actions of hospital management showthat patient safety is a top priority	☐ 1	☐2	☐3	☐4	☐5
9. Hospital management seems interested inpatient safety only after an adverse event happens	☐ 1	☐2	☐3	☐4	☐5
10. Hospital units work well together to provide the best care for patients	☐ 1	☐2	☐3	☐4	☐5
11. Shift changes are problematic for patients in this hospital	☐ 1	☐2	☐3	☐4	☐5

SECTION G: Number of Events Reported

In the past 12 months, how many event reports have you filled out and submitted?

- ☐ a. No event reports
- ☐ b. 1 to 2 event reports
- ☐ c. 3 to 5 event reports
- ☐ d. 6 to 10 event reports
- ☐ e. 11 to 20 event reports
- ☐ f. 21 event reports or more

SECTION H: Background Information

This information will help in the analysis of the survey results.

1. How long have you worked in this hospital?

- ☐ a. Less than 1 year
- ☐ b. 1 to 5 years
- ☐ c. 6 to 10 years
- ☐ d. 11 to 15 years
- ☐ e. 16 to 20 years
- ☐ f. 21 years or more

2. **How long have you worked in your current hospital work area/unit?**

☐ a. Less than 1 year	☐ d. 11 to 15 years
☐ b. 1 to 5 years	☐ e. 16 to 20 years
☐ c. 6 to 10 years	☐ f. 21 years or more

3. **Typically, how many hours per week do you work in this hospital?**

☐a. Less than 20 hours per week
☐ b. 20 to 39 hours per week
☐c. 40 to 59 hours per week
☐d. 60 to 79 hours per week
☐ e. 80 to 99 hours per week
☐ f. 100 hours per week or more

SECTION H: Background Information (continued)

4. What is your staff position in this hospital? Select ONE answer that best describesyour staff position.

☐ a. Registered Nurse
☐ b. Physician Assistant/Nurse Practitioner
☐ c. LVN/LPN
☐ d. Patient Care Asst/Hospital Aide/Care Partner
☐ e. Attending/Staff Physician
☐ f. Resident Physician/Physician in Training
☐ g. Pharmacist
☐ h. Dietician
☐ i. Unit Assistant/Clerk/Secretary
☐ j. Respiratory Therapist
☐ k. Physical, Occupational, or Speech Therapist
☐ l. Technician (e.g. EKG, Lab, Radiology)
☐ m. Administration/Management
☐ n. Other, please specify:

5. In your staff position, do you typically have direct interaction or contactwith patients?

☐ a. YES, I typically have direct interaction or contact with patients.
☐ b. NO, I typically do NOT have direct interaction or contact with patients.

6. How long have you worked in your current specialty or profession?

☐a. Less than 1 year
☐ b. 1 to 5 years
☐ c. 6 to 10 years
☐ d. 11 to 15 years
☐ e. 16 to 20 years
☐ f. 21 years or more

7. What is your current nursing grade?

☐a. Grade1
☐ b. Grade 2
☐ c. Grade 3
☐ d. Grade 4
☐ e. Grade 5
☐ f. Grade 6
☐ g. Grade 7
☐h. Grade 8
☐ i. Grade 9
☐ j. Grade 10

SECTION I: Your Comments

Please feel free to write any comments about patient safety, error, or eventreporting in your hospital.

THANK YOU FOR COMPLETING THIS SURVEY☺.

ثقافة سلامة المرضى: تقييم تصورات الممرضات في المستشفيات الفلسطينية

اعداد الطالبة: ضياء فرج محمود بني عودة

اشراف الدكتور: فريد اغريب

ملخص

خلفية الدراسة: لفتت سلامة المرضى في مؤسسات الرعاية الصحية الاهتمام الدولي بعد نشر الدراسة الأساسية التي أجراها معهد الطب بعنوان "الخطأ أمر إنساني: بناء نظام صحي أكثر أمانًا". حيث تشير التقديرات إلى أن الأخطاء الطبية تتسبب في وفاة ما بين 44.000 إلى 98.000 مريض في المستشفيات الأمريكية كل عام. لقد تم إظهار معدلات مماثلة من الأخطاء والإصابات التي يمكن الوقاية منها في العديد من التحقيقات البحثية التي أجريت في العديد من الأنظمة الصحية المعاصرة في جميع أنحاء العالم. لقد تم الاعتراف بـ "ثقافة السلامة" كعنصر حاسم في قدرة منظمات الرعاية الصحية على التعلم من الأخطاء وتقليل الإصابات التي يمكن تجنبها للمرضى نتيجة لتلقي الرعاية الطبية. هناك اهتمام متزايد بتقييم ثقافة السلامة في مؤسسات الرعاية الصحية بسبب الاعتقاد بأنها تعمل على تحسين سلامة المرضى ولها تأثير على نتائج المرضى. أحد الأساليب الأكثر استخدامًا لتقييم ثقافة السلامة هو استخدام مسوحات مناخ السلامة. تهدف هذه الاستطلاعات إلى المساعدة في قياس آراء المتخصصين في الرعاية الصحية حول ثقافة السلامة العامة، أو "مناخ السلامة"، في أماكن عملهم. تناولت هذه الأطروحة مناخ سلامة المرضى في المستشفيات الفلسطينية حيث لم يتم إجراء أي أدوات مسح صحيحة أو موثوقة أو مسوحات مناخية السلامة في المستشفيات العامة في الدولة.

هدف الدراسة: قياس المعرفة حول حالة ثقافة سلامة المرضى في فلسطين، فضلا عن العقبات والعوامل الممكنة لتبني ثقافة سلامة المرضى الإيجابية من وجهة نظر التمريض.

المنهجية: تم إجراء دراسة مقطعية لـ 318 ممرض وممرضة من مختلف المستشفيات الفلسطينية باستخدام طريقة أخذ العينات العشوائية لتحقيق أهداف الدراسة. من حيث سهولة الاستخدام والتطبيق وصفات الموثوقية، تم عمل دراسة تجريبية لفحص ثبات الأداة لتكون الأكثر ملاءمة لهذه الدراسة. لقد خضعت لقدر بسيط من التعديل خلال اختبارها التجريبي.

النتائج: من أصل 42 سؤالا، وجد أن 9 منها لها تأثير على آراء الممرضات بشأن السلامة؛ حصلت هذه العناصر على

ردود إيجابية بمتوسط ≥70%. ومن بين الأسئلة الاثنين والأربعين، كان متوسط إجابات 32 سؤالًا إيجابيًا > 50%، مما يشير إلى أن هناك مجالًا للتحسين فيها. وسجل العنصر المتبقي أقل من 50% أو أقل من المتوسط للاستجابات الإيجابية، وبالتالي تم اعتباره مجالات للتحسين. بشكل عام أظهرت نتائج الدراسة ان جميع المجالات التي شملها الاستبيان بحاجة للتحسين.

الخلاصة: من المستحسن أن تجمع الدراسات المستقبلية لثقافة سلامة المرضى والمناخ بين الأساليب الكمية والنوعية وكذلك اتباع نهج على مستوى المنظومة لتطبيق نظرية مناخ السلامة وتطوير الاستبيانات من أجل تعزيز الأطر التي توجه أبحاث وممارسات ثقافة السلامة.