An-Najah National University
Faculty of Graduate Studies

OPERATING ROOM PROFESSIONALS' ATTITUDES TOWARDS PATIENT SAFETY AND THE INFLUENCING FACTORS IN GOVERNMENTAL HOSPITALS IN NORTH OF THE WEST BANK, PALESTINE

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Declaration

I, the undersigned, declare that I submitted the thesis entitled:

OPERATING ROOM PROFESSIONALS' ATTITUDES TOWARDS PATIENT SAFETY AND THE INFLUENCING FACTORS IN GOVERNMENTAL HOSPITALS IN NORTH OF THE WEST BANK, PALESTINE

I declare that the work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

Student's Name: _____

Signature: _____

Date: ٢٠٢٢/١٠/١٤

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OPERATING ROOM PROFESSIONALS' ATTITUDES TOWARDS PATIENT SAFETY AND THE INFLUENCING FACTORS IN GOVERNMENTAL HOSPITALS IN NORTH OF THE WEST BANK, PALESTINE

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Abstract

Background: Patient safety has evolved to be the overriding focus in health care systems, prodded by milestone reports and frameworks calling for safety actions across the whole system. This study will investigate attitudes towards, and factors that influence attitudes to, patient safety among operating room professionals working in governmental hospitals in northern West Bank, Palestine.

Methodology: The study design was cross-sectional and involved targeting 150 operating room practitioners, both physicians and nurses, in six hospitals belonging to the northern West Bank governments. In the current study, attitude of participants was measured by using a Patient Safety Attitude Questionnaire referred to as PSAQ, based on attitude dimensions targeting team-work climate, safety climate, management perception, among others. Descriptive statistics using Cronbach's Alpha SPSS software was used for data analysis and reliability testing.

Results: A total of 117 questionnaires was successfully administered, bringing the response rate to 82%. Most of them were between 31 and 40 years of age, male, married, and bachelor's degree holders. The total mean attitude score was 114.26 out of 180. The highest positive response obtained in the subscale of "teamwork climate" was 54.4%. The other subscale scores showed that the subjects had intermediate levels of job satisfaction, safety climate perception, and management perception.

Conclusions: The results were revealing in a positive attitude toward the teamwork climate and at the same time identifying the weaknesses in the safety climate and management perception from the professionals working in the operating room. These findings must be useful to design focus intervention with the aim of instilling a safety culture among these hospitals, which shall benefit the patients in the region. More

research is needed to establish the root causes behind such an attitude and probable impacts of professional development activities.

Keywords: Operation Room, Attitude, Patient, Safety, Hospitals, Palestine.

Chapter One

Introduction and Review of Related Literature

This chapter specifically discusses the problem that this research looked at in details. which includes an introduction to the study. statement of the study problem, a discussion of the importance of this study, purpose and objectives. Tackles research questions and hypothesis of the study. And this chapter presented the problem the current study sought to examine. It also stated what other studies suspected to have a connection with the research problem had to report.

1.1 Introduction

Regarding patient safety; it is an important care quality element especially in O.Rs (operating rooms) with high risk settings. Attitudes and perceptions about patient safety from OR workers are vital in setting up safety culture while influencing client results. Knowing these attitudes and their influencers is essential for coming up with protocols that improve patients' safety as well as health care by (Sexton et al., 2006). It aims to determine the perspectives of OR professionals towards patient safety who work for governmental hospitals located North West Bank- Palestine, as well as outline its influencing factors.

In recent years, there has been growing recognition of the importance of safety culture in healthcare settings. It refers to shared values, beliefs and norms about safety within an organization. Strong safety culture is characterized by open communication where people are able to talk freely and honestly with each other; a sense of trust prevailing among all members of the team; along with understanding that together they are learning from errors and near misses. According to Sexton et al. (2006), tools like Safety Attitudes Questionnaire (SAQ) can help enhance awareness on healthcare teams' safety climate and determine areas that need improvement. This research examines OR professionals' attitude towards safety in an effort to contribute to the overall push for a safer healthcare.

There have been various key studies and initiatives highlighting patient safety's significance. The Institute of Medicine report "To Err is Human" disclosed huge numbers of medical errors happening every year accompanied by calls for systemic changes aimed

at improving patient safety in health care (St.Pierre et al., 2022). Several frameworks and guidelines including WHO Guidelines for Safe Surgery were subsequently developed as a way of improving on global surgical practices (World Health Organization, 2009).These global efforts highlight the universal relevance of patient safety and the need for localized research to address specific contextual challenges.

Variability of safety attitudes across various cultural and institutional settings has been highlighted by some studies. For instance, research conducted in Turkey and the Philippines has shown that different areas of local healthcare significantly determine perception and practice of safety (Bahar & Önler, 2020). This shows the importance of understanding what makes safety attitudes in certain areas unique. The role played by team communication and adherence to safe protocols as measures preventing adverse events are among the results reached out in Middle East based studies (Haugen et al., 2013; Ock et al., 2017).

Palestine's healthcare system is fraught with a number of challenges including tight budgets and high disease burden. Nonetheless, there is an emerging focus on improving healthcare quality and patient safety. Enhancing health service delivery as well as the overall outcome is being done through active participation of Palestinian Central Bureau of statistics (PCBS), (2017) and Ministry of Health (MoH) However, there lacks definite studies concerning OR professionals' attitudes towards patient safety. Consequently this study sets out to address this particular issue through comprehensive analysis so as to identify factors that influence these attitudes.

Also, it is essential to address this issue for enhancing patient safety in different local settings such as North of West Bank. Health delivery and protocols can be influenced by geopolitical and socio-economic conditions in Palestine in a way that may not be found anywhere else. These factors include limited resources, political instability and regional healthcare policies which can create unique challenges and opportunities for shaping the culture of safety within the operation rooms (St.Pierre et al., 2022). This scientific work will examine how these factors affect patient safety in Palestine not only in terms of the local health system but also contribute to global debates on patient safety.

Additionally, there is a need for involvement of OR professionals to advance patient safety initiatives. These professionals including surgeons, anesthologists (anesthesia practitioners) and surgical nurses have direct responsibilities for implementing safe practices and protocols. Their perception towards patient's security is very important since it affects adoption and compliance with necessary safe measures. Therefore knowing their perspectives makes it possible to develop targeted interventions that have a higher chance of being accepted by them and working effectively.

This will further help in making the safety interventions more tailored and context-specific by integrating feedback from professionals in ORs. In using tools such as the SAQ, this study will be in a position to outline areas where attitude shifts could be necessary or where additional training might prove useful. All of these findings will greatly contribute to the healthcare administrators and policy-decision makers in developing strategies that deal with specific problems of teams working in ORs within Palestinian hospitals (Ock et al., 2017).

Last but not least, the intention is to add some diversification to the already existing body of literature by lending finer nuances in safety attitudes, framed within a specific regional context. Global guidelines and frameworks are useful, but there is a dire need for localized research in order to engage healthcare systems in other regions with their particular challenges. This study will focus on the North of the West Bank in order to provide ideas that may help inform future research and interventions in similar contexts, contributing to the broader goal of improving patient safety globally.

The delivery of healthcare and the culture of safety not only influence but are also influenced by regional challenges, requiring a multidimensional approach to understand and enhance patient safety. In a region like the North of the West Bank, patient safety would have to address not only global best practices but also local realities of its unique socio-political and economic conditions (Ock et al., 2017). This work recognizes the need to integrate local knowledge into established safety frameworks in the design of strategies that are pragmatic and effective within the particular context of Palestinian hospitals.

This perspective is fundamental to an understanding of how cultural values and practices shape attitudes and behaviors towards safety. Cultural norms and the remnants of traditional practices are likely to impact healthcare delivery and safety attitudes in most regions of the world. These cultures need to be understood so that barriers to improvement in safety and developing a culture that sustains open communication and continuous learning can be recognized (St.Pierre et al., 2022). The study contributes to this budding repository of knowledge by uncovering how cultural factors shape the attitudes toward safety held by professionals working in the ORs of the North of the West Bank.

Most importantly, leadership can play the most crucial role in shaping safety culture. Organizations of healthcare in the societies in transition, therefore, are effectively led by those who espouse and foster a safety culture because the leaders set the tone concerning the practices and priorities for safety (St.Pierre et al., 2022). This research, therefore, seeks to investigate the impact that varying leadership styles and practices have on the attitude of OR professionals towards safety in Palestinian hospitals. The paper, therefore, seeks to identify the relationship between leadership and safety attitude to provide ways in which leadership could be harnessed to engender a much safer and more supportive environment not only for healthcare professionals but also for their patients.

Finally, training and education are also very important areas for enhancing safety attitude and practices. This study shall also determine if adequate and quality safety training programs are available to OR professionals working in the northern part of the West Bank. The availability of the programs will also be evaluated to establish if it addresses the needs of the OR staff and if there are any gaps (Sexton et al., 2006). Effective training programs may improve awareness of safety issues, enhance adherence to protocols, and in the long term, lead to improved patient outcomes (St.Pierre et al., 2022). The findings from this study will be channeled to the development of targeted training initiatives taking into account specific safety concerns in the region.

This will be further put to perspective with an analysis of the impact that technological advances have had on safety attitudes and practice. The new technologies introduced into the OR environment will affect safety, ranging from improving surgical precision to facilitating better team communication. Challenges related to the uptake of technology

include sufficient training and errors by the users of the technology. The study about perception and use of technology by OR professionals in Palestinian hospitals will be important in understanding how best to harness innovations in technology to improve patient safety.

Therefore, this study synthesizes these factors: cultural dimensions, leadership, training, and technology, through trying to provide as best as possible a full view of the attitudes of OR professionals toward patient safety (Sexton et al., 2006). In addition to inquiring about the prevailing attitudes and practices, the study attempts to come up with practical recommendations for the improvement of safety culture and practices in the North of the West Bank. These will hence be informed by the local context and international best practices so that the recommendations are relevant and feasible for the healthcare system in this region.

Building on the foundational work of Sexton et al., (2006) and the Institute of Medicine's "To Err is Human" report (St.Pierre et al., 2022), it becomes very important to note how the concept of safety culture in healthcare continues to evolve. Embedding concepts of patient safety into everyday practices means there is work to do and adaptation that must happen. Recent studies have shown how constant assessment and safety procedure improvement are a prerequisite for maintaining a sound safety culture (Sexton et al., 2006). The administration of an SAQ, or some other forms of these tools, to evaluate shortcomings in safety perceptions and practices has proven to be an invaluable approach. Such instruments are supposed to give vital guidelines to many possible action points, hence making it possible to effect subsequent safety change towards OR professionals in North of the West Bank.

Even regional studies from Turkey and the Philippines have pointed out that it is necessary to adopt guidelines relating to safety with regard to the local situation. In the Palestinian context, where geopolitical and socioeconomic factors are going to significantly—indeed, vastly—shape the delivery of health care, it will be very important to understand the local nuances. Variability of safety attitudes between cultures and institutions underlines that regional interventions are necessary. The current study will also explore how peculiar local challenges influence safety attitudes and practices, and

foster a way of developing tailored strategies that take into consideration these unique contextual factors.

That is why this effective leadership, as Haugen et al., (2013); Ock et al.,(2017), mentioned, in shaping the safety culture would be very interesting to be implemented in Palestinian hospitals. This is a safety culture paper that respects effective leadership to help create an environment in which safety is valued and improved all the time. The implication of this study is that actionable insight into ways in which leadership can drive positive change is going to be derived because of how different the leadership styles have an effect on the attitude of OR professionals towards safety. This means one has to practice good leadership and a culture where associates communicate freely and deeply trust one another.

1.2 Problem Statement

Safety for patients is an in-built dimension of health care quality, but at the same time, an operating room is certainly a very risky environment. Knowing the behaviors of health professionals' attitudes toward patient safety is very important in coming up with effective patient safety protocols and recording better patient outcomes as well (Haugen et al., 2013). Despite the much preaching on patient safety that has been done the world over, the literature notes that there exists a gap that has not been covered on the specific attitudes and behaviors that guide operations in the operating rooms in Palestine.

A health system is characterized by systemic analysis and proactive risk management, although little research is initiated regarding attitudes toward OR safety within Palestine. The Safety Attitudes Questionnaire is just one such tool that has seen wide success in measuring safety culture within healthcare teams, against benchmarking data from which improvements in patient safety may be led. However, little is is known about application and results of such tools within the Palestinian context.

To this regard, studies from other regions obviously prove that the cultural and institutional factors influence safety attitude. For instance, research conducted among the Turkish surgical nurses and the nurses of the Philippines stereotypes the importance of regional contexts in relation to the interposition design for regional contexts to better

patient safety (Ock et al., 2017). It also emphasizes, besides the research findings, that team communication, institutional support, and implementation of standardized protocols are effective in obtaining safety outcomes.

Very few studies have shown previous interest regarding the attitude of OR professionals toward the safety of patients in governmental hospitals in the northern West Bank of Palestine. This therefore is a gap in research that the current study anticipates filling by identification of some factors that influence the attitudes of professionals working in the sector. This study hopes to provide some input for developing targeted strategies for improvement of patient safety and outcomes in ORs through understanding these attitudes and factors that impact them.

1.3 Aim of the Study

This study is hence a fundamental step in understanding and improving patient safety within a specific and challenging context. In this way, the study of the different attitudes of OR professionals within Palestinian hospitals and the determinants of their attitudes will help to give a bigger contribution to advancing patient safety (Haugen et al., 2013). These insights are going to be of importance to healthcare providers and more especially to administrators and policymakers in general, but most importantly to those working in Palestine and places with similar characteristics toward creating a safe and effective healthcare environment for all their patients.

This is an attempt to project patient safety attitudes from the perspective of operating room health care professionals in governmental hospitals in the northern West Bank of Palestine. This, in a way, sets out how demographic variables, such as age, sex, marital status, and educational level, and working characteristics such as work experience, position, and departmental settings, have an influence on the perception of teamwork climate, safety climate, management, job satisfaction, working conditions, and stress recognition. Such conditions remain not well known; hence the research program aims to evaluate attitudes that can secure better safety of patients and a general culture of safety at large in all the health care settings within the region.

1.4 Objectives of Research

- Analyze how patient safety in the operating room is influenced by demographic factors of healthcare professionals, such as age and gender.
- Investigate variations in attitudes and behaviors among healthcare professionals toward patient safety in the operating room based on their training.
- Assess whether the level of education and experience as a nurse have a significant relationship with patient safety practices in the operating room.

These objectives aim to pinpoint the key factors affecting patient safety in the operating room, providing valuable insights for developing targeted actions and policies to enhance patient safety in governmental hospitals in the northern West Bank, Palestine.

1.5 Research hypothesis

Main Hypothesis

There is a significant relationship between many factors and the outcome of patient safety in the operating room among health professionals working in governmental hospitals in the North of West Bank.

Sub-Hypotheses

- Demographics Hypothesis: The demographic characteristics of health professionals, for example, age and gender, among others, will be relevant to the good association between health professionals and their perceptions of patient safety in the operating room.
- Safety Training Hypothesis: Encountering patient safety training has a significant positive effect on health professionals in the operating theater.
- Level of Education and Experience Hypothesis: The more educated and experienced health professionals are, particularly in nursing, the more positively their perceptions and practices will be regarding patient's safety in the operating room.

1.6 Conceptual Framework

1.6.1 Introduction

By this conceptual framework, operating room professionals' attitudes have been explored regarding a patient's safety and determining factors that affect these attitudes in governmental hospitals in the North of the West Bank.

Theoretical Definitions

Attitude: It is the evaluative judgment or feeling of OR professionals regarding patient safety. Beliefs, feelings, and intention regarding behavior are associated with safety practices in the OR.

Safety refers to measures, protocols, and best practices that can be said to incorporate error prevention, risk reduction, and ensuring patient safety in respect to procedures done in the operating room within the terms of this document.

Implementation To execute and apply the safety protocols and procedures by the OR professionals during their routine operating work.

1.6.2 Measure

For measuring safety attitudes of the professionals about the patient, practices, and other related factors, it can be done through administering the questionnaires.

Attitudes About Patient Safety

1. Subscales

- Teamwork Climate: Collaboration and coordination among the OR professionals
- Safety Climate: perception regarding safety and management of errors within the OR
- Perception of Management: management support and their communication.
- •Job Satisfaction: Overall satisfaction with work and the work conditions.
- •Stress Awareness: Awareness for what stress can do to performance.
- •Working Conditions: The physical and organizational work environment.

Variable Influences

2. Demographics

- Age
- Gender
- Marital Status
- Education
- Job-Specifics:
- Work Experience (overall, in the department)
- Job Title (i.e., resident, staff nurse)
- Job Department (i.e., open unit, ICU)

1.6.3 Bonds and assumptions

1. Demographics

- Gender: Male and female professionals may have diverse attitudes about a safety climate.
- Marital Status: A desirability bias in the perception of working conditions may be seen among singled and married professionals.
- Level of Education: A higher level of education may appear to influence one aspect over another; the likelihood of influence would be more towards safety attitudes or management.

2. Working attributes

- Work experience: More experienced professionals may have a more nuanced perception of safety and the terms of working conditions.
- Work position: Different positions in the OR may have an influence on the perceptions of teamwork and management support.
- Working Department: The attitudes will have the interdepartmental differences, say for instance open ward, and ICU

1.6.4 Summary of Framework

The research framework describes the relationships and influences of employees' attitudes toward patient safety_program. The influence reflected as demographic characteristics includes such factors as age, gender, marital status, education, working characteristics such as experience, and the position and the department where the nurses work. It determines the influence of such factors on the attitude towards different subscales of the safety of patients. It therefore provides a framework for the process through which these factors was examined with respect to how they influence attitudes and behaviors regarding patient safety in the perceptions of a working environment of an operating theatre.

This is a critical research based on the subject of patient safety in governmental hospitals' operating rooms (ORs) from the point of view of the attitudes and perceptions of the OR practitioners in the North of the West Bank, Palestine. Confrimedly, the assurance of the safety of patients is a great critical dimension of quality of care, and in setups such as operating rooms where a number of procedures may take place, great protocols need to be assured for the positive outcome of patients. The present research attempt has been made to unearth how variables such as demographic features, safety training, education, and experiential background of healthcare professionals support their attitudes and practices toward patient safety. Sexton et al., (2006) and the work of the IOM in To Err is Human by St.Pierre et al., (2022), Corrigan and Donaldson has been critical review and the need for further, more specific work that addresses the uniqueness of the features of the socio-political and economic context that is part and parcel of a Palestinian setting in order to contribute to world attention as concerns the safety culture.

1.7 Review of Related Literature

1.7.1 Global View

Interest in patient safety has developed over the last twenty years on works which, though seminal, have contributed to defining the understanding and practice of this significantly modern period. Ian et al., (2001) published a theoretical framework for analyzing risk and safety in clinical medicine, emphasizing a systemic analysis with proactive risk

management. In that regard, it was seminal work that underlay further research and, indeed, interventions in the cry for patient safety. It was a response to understand that errors are within the health system, and it was a response to the contexts within the health system, not the flaws of the practitioners, and it really rocked the boat on contemporary paradigms of patient safety.

The landmark Institute of Medicine report "To Err is Human" drew attention to the rates and consequences of medical errors in health care and current approaches to a "culture of safety" in health care. It is a report that acts as a trigger toward developing each and every effort that could be made from the side of the human being in developed efforts to improve patient safety and reduce errors through the world. According to the report, up to 98,000 deaths per annum in the United States alone had been due to error in the medical allopathic response. Such incidents have required a lot to demand the health care systems across the globe for the development of strong orientation toward safety and comprehensive strategies for threatening risks. Even today, this report had impact, where most of the current safety precautions and programs for enhancement of quality are based back on this seminal work.

In a high percentage of cases, the measure of safety culture within healthcare teams has been conducted using the Safety Attitudes Questionnaire developed by Sexton et al., (2006). The SAQ provides benchmarking data and psychometric validation among a vast range of settings that permit the identification of areas that need improvement in healthcare organizations by the implementation of focused interventions. The University of Texas at Austin's Center for Healthcare Quality and Safety is also available to assist individuals in the assessment of safety attitude and climate of those trialing the SAQ. This is in tandem with the fact that the SAQ measures many dimensions associated with safety culture. These include teamwork climate, safety climate, perceptions of management, job satisfaction, working conditions, and stress recognition. In essence, it is an all-rounded measure on the dimension of safety culture.

According to Wahr et al., (2013), teamwork and human factors are taken into consideration for ensuring safety in a cardiac operating room. The authors found that a high-risk setting, such as the operating room, in which mistakes are bound to threaten, if

not take, lives, cannot afford ineffective teamwork and communication. Their research proved in reality that indeed, multidisciplinary teamwork and curiosity into human factors can be helpful in improving safety and reducing events.

Risk factors for retained surgical items must be known with a risk-stratification system in place to mitigate risks, according to Moffatt-Bruce et al., (2014) A systematic way of identifying and managing such risk factors had been suggested in the meta-analysis they had carried out. Such risks vary from emergency surgeries to body mass index and surgical complexity. Moreover, it discussed pre-surgical briefs and their impact on the safety climate. In doing so, Allard et al., (2011) highlighted the importance of proper briefing and communication within the OR. This research highlights that pre-operative briefings, supplemented by this standardized format, help to communicate team-based information during surgery and provide clarity on who is responsible for what within this setting, ultimately boosting the safety of the place.

Likewise, The World Health Organization reiterates that there be a robust culture of safety; hence, it too campaigns for the availability of safety standards that are comprehensive that would guarantee safety of all surgical practices in the entire world. WHO Safe Surgery Saves Lives mandates for critical practices those that would make surgical fallacies visible and achieve optimal results on patients. These are universally practiced, and hence a sheer dedication to ensuring patient safety in the operation theatre.

Carney et al., (2010) has examined sex differences in patient safety attitudes. Perceptions of patient safety differed depending on the sex of the clinicians or of those on whose behalf they were made. In this regard, a pilot study by the Veterans Health Administration Medical Team Training Program concluded that female caregivers are likely to perceive more safety risks compared to their male counterparts. All this goes to indicate why an understanding of differences is very relevant to making inclusive strategies and paying attention to the needs of health professionals on an individual level.

Despite all that, interest in patient safety has only marked formative works that have helped in shaping the understanding and practice of this relatively modern era in the last two decades. However, the framing work for analyzing risk and safety in clinical

medicine, which will bring forward systemic analysis and proactive risks management, came only in 1998 with the efforts of (Ian et al., 2001). This classic piece thus set the stage for more works in this field as it made it possible to take up the challenge of the previous approach toward errors in healthcare systems than from an individual's account at a failure level of the system and shaped contemporary approaches toward patient safety.

Significantly, the high incidence of medical error and clear need to develop a "culture of safety" within healthcare environments were glimpsed in the 1999 Institute of Medicine report, popularly known as "To Err is Human". This urging document indicated that 98,000 people each year die because of medical error in the United States alone, which galvanized imperatives the world over to the restructuring arrangements whereby safety could be advanced and risk reduced. The legacy of this has continued to resonate in many aspects with modern-day practices of safety and quality improvement.

The questionnaire was developed by Sexton et al., (2006) and colleagues as a measure for quantifying safety culture within healthcare teams, thereby providing a dimension and a tool for monitoring safety practice towards its improvement and betterment. The seven other dimensions of the Safety Attitudes Questionnaire, namely teamwork climate, safety climate, perception of management, job satisfaction, working conditions, and stress recognition, are increasingly being put to use for detecting the shortcomings that can be rectified and giving room for remedial interventions.

This survey would be of paramount importance in the development of a generic assessment aspect in the context of analyzing the safety culture in a healthcare organization.

Equally, Wahr et al., (2013) also gave importance to the human factors and teamwork that must be built to achieve patient safety coming from within the cardiac operating room. Just the same, the human factors approach and the actual implementation of clinical teamwork have survived to provide importance in the reduction of adverse events and the promotion of safety results in the special context of the flying deck -.

Identification of the risk, henceforth surgical items remaining inside by Moffatt-Bruce et al., (2014), therefore the importance of systematic approach in dealing with risks. Their

premium was on thorough systematic approaches in identification of risks and finally the mitigation, which is seen in emergency procedures and surgical complexity. In addition, Allard et al., (2011) shed light on the problems of pre-surgical briefings and standardization of communications.

The declaration says that the World Health Organization initiative, Safe Surgery Saves Lives, urges strict standards and practice involving the safety of surgery in order to avoid surgical errors and such that better outcomes accumulate to patients. Most vividly brought out in this story is the strict standards and practice that is called for in the safety of surgery. The WHO guidelines have been applied in most places, showing a sense of commitment and responsibility to ensure security while improving surgical practices globally.

In considering the differences among carers, the perception of safety with female carers is more sensitive than that with male carers. This has been concurred with by (Carney et al., 2010). in respect of safety related to the patient side. This, therefore, calls for different and better gender-sensitive safety training and interventions that would respond to this difference in perspective.

Hull et al., (2011), in their research found that very high levels of stress affect the performance of the team and the safety of the patient; hence, very high stress diminishes the clarity of communication and quality of decision-making in an operating room. Their study concludes by calling for the incorporation of the now-required safety curricula in stress management and resilience training to help further support the psychological needs of the health workforce toward better care for patients.

The review by Hull et al., (2011) into stress and teamwork also resonates with the level of potency that stress exhibits over team performance and patient safety. In their study, it emerged that high-stress levels resulted in decreased communication and poor decision-making by members of the OR team, thus amplifying the chances of error. It is for similar reasons that stress and resilience training should make up part of the hospital patient safety curricula. The Psychological well being of the healthcare professionals is one of the factors concerning care delivery and should be addressed in order to ensure the high standard about safety and optimize the outcomes of patients.

1.7.2 Regional Perspective

Mostly this has been confronted on the level of regional research leading in issues around the healthcare professional's safety attitude representing diverse cultural and institutional settings. The study of Bahar & Önler, (2020)about the attitudes of Turkish surgical nurses toward patient safety. They reported critical research findings on unique difficulties and perceptions in the region. For their survey, stated a culture, very often, in which occupational boundaries within Turkish hospitals obstruct open communication by hierarchical lines; such culture means problems related to safety are poorly articulated. This therefore implicates that strategies targeted to create more egalitarian culture of communication among surgical teams should be implemented to improve the patient safety.

On the other hand, Ramos & Calidgid, (2018) surveyed the patient safety culture of nurses from a tertiary government hospital in the Philippines taking into account the role of institutional support and trainings in fostering positive safety culture. Their study found that nurses who receive continued training and support from their leadership would be likely to adopt the safety practices and report any occurrence to do with the danger of the safety of others. Resource limitation and high workload became significant hindrances to strong safety culture. These barriers will only be addressed if adequate staffing, resources, and continuous professional development are available. Their continued availability would also have to be ensured in order to enhance patient safety.

Other contributions to the knowledge came from the studies conducted in the Middle East. Haugen et al., (2013) conducted a wider swath of the subject by eliciting opinions from surgical team members in Norway regarding perceptions of near misses and attitudes toward time-out, thus succinctly advancing issues of communication within a team and adherence to a safety protocol—all to be designed to avoid an adverse event. The practice of the time-out process in a consistent way can therefore reduce the number of near misses. This proves that the role of the standardization of communication and safety checks is very important in a surgical environment. There is every need to improve standardized safety protocols for any surgical procedure in order to improve timely communication and coordination between members belonging to a surgical team.

Ock et al., (2017), suggested that a systematic review indicated various barriers and facilitators of importance to enhance transparency and increase accountability in healthcare with relevance to disclosure of safety incidences. Fear of litigation and other professional repercussions often hindered the disclosure of safety incidents. This current study has identified organizational support, clear guidance, and a non-punitive culture only as facilitators for the act of disclosure. Such findings would have been very relevant to strategies towards changing the patient safety culture of developing regions with equally challenging approaches.

Other studies have been done in the Middle East, including one by Bahar & Önler, (2020), that researched attitudes toward patient safety in Turkish surgical nurses. They defined "cultural factors such as attitudes to hierarchy, and norms about communication are strongly associated with safety attitudes". The suggestions that the authors have made pertain to the need for context-sensitive interventions, for example, in training for leadership or in the creation of open lines of communication in the realization of safety for patients.

Haugen et al., (2013) also researched impacts and perceptions of the Norwegian surgical team members. Consequently, the main findings drawn out are that, the time-out prevents error and ensures the team is in unison. It developed that time-outs will improve the safety performance through the practice of regular execution and following. Moreover, it showed that such practices need to be constantly trained and refreshed in order to be considered effective in maintaining effectiveness over many years.

They found the safety culture that ascertained the safety culture of the nurses in a government-owned hospital in the country. The related findings also revealed that hospitals which exhibited good safety culture should be characterized by strong training programs and supportive leadership. Other barriers are a high patient-to-nurse ratio at times, inadequate resources, or not being able to translate the practices of safety into action. Such barriers need to be done away with in order to better safety for the patient. This can only be done by changing policy and more investment in the infrastructure of healthcare.

The study by Ock et al., (2017) reported a comprehensive review of disclosure practices in incidents related to patient safety, where major factors were specified, such as fear of blame and the lack of top management support. Their review pointed out facilitators that would support transparency: provision of guidance, learning from practice in a supportive organizational culture. It simply comes down to the fact that there is a need to build an environment in which health professionals feel safe and learn from incidents so that errors can hopefully be avoided in the future.

This is captured in much more general regional work into health care professionals' attitude to patient safety, finding out that the cultural, institutional, and systemic factors all interact and enter very complexly into the interactions. Indeed, in all instances, there were shared challenges bound with issues of varying setting influence and those of more-bounded influence to shape safety attitudes and practices. For example, Bahar & Önler, (2020), in their study of surgical nurses in Turkey. It is an extremely explanatory and informative piece and elaborates well on how deeply hierarchical structures within Turkish hospitals hamper open communication that is needed for patient safety. Their findings are a study on the systemic need for changes toward egalitarianism and communicativeness with surgical teams. Articulation of safety concerns and the safety culture in a clinical setting are greatly increased through the implementation of strategies such as leadership training, which promotes communication and obviates all barriers caused by hierarchy.

On a different note, the study by Ramos & Calidgid, (2018) in the Philippines describes how safety culture for nurses is regulated with institutional support and continuously taught. Against this, however, are the quotes of key barriers to a supportive environment that involves effective leadership and continuous professional development—an area that significantly influences the adoption of safety practices and capacity to report safety threats. Resource constraint and high perceived workload are also key barriers, as identified, known to implement proactive safety strategies similarly. In fact, policy reforms that specifically seek to increase the levels of staffing and resources in the country, therefore, would call for investment in policies that aim at attaining a safety culture in the health system. These would be in trying to keep the standards high in terms of continuous training.

A cross-section of studies has, therefore, found that some standardized procedures and team communication enhance the safety in patients. For example, Haugen et al., (2013) evaluated how using protocols for time-out builds safety in the operation teams in Norway. The evidence shows that training and rigorous adherence to the protocols decrease the number of near misses and increase in coordination among team members. This paper indicates how the standard of a safety checklist and rehearsing is a method used to get the highest possible safety levels. It proved that adequate utilization of time-out when need and continuous education boosted the safety and communication performance during surgery among crew members.

Ock et al., (2017), also did evidence-based analysis on the advantages and barriers of reporting on incidents of patient safety. It noted that the major barrier that withholds the health workers reporting the incident regarding patients' safety or security is fear of getting captured in the process of provisioning and litigation. However, organizational support, clear guidance, and a non-punitive culture towards error disclose will facilitate the disclosure process. Such findings, therefore, would be of great importance to developing regions that will face more or less similar challenges. It is firms where employees feel safe to report, learn, and revise from incidents, rather than punished or blamed within a supportive surrounding, that will generate transparency and accountability for patient safety.

Other tests in Middle East also support the fact that cultural tuned measures are required to further improve the safety attitudes in the current environment and for the future. Another test recognized some other important determinants such as cultural norms and organizational setup, in terms of hierarchies; it was found to influence to some extent the safety attitudes. It is therefore necessary to have really context-based strategies, including the designing of free lines of communication along with leadership training based on regional culture. These practices will make better safety, not for just its sake but they shall make the tries for the establishment of the environment more supporting and open-ended work concerning patient safety.

Resighini was quoted that in general, there is the need to grapple with hierarchical barriers in order that there be a stronger institutional support for developing a culture wherein a

possibility of betterment rests continuously. Making use of contextually relevant interventions and investment resources in training, then, the systems of health in the region should become more safety culture and thereby reap improved patient outcomes. The overall general inference drawn from all studies in total promises very useful guidance in developing interventions that are effective towards the promotion of patient safety in varied settings.

1.7.3 Local Perspective

The establishment of the domain of patient safety research in Palestine is still developing, and few studies investigate the attitude of OR professionals. Data from the Palestinian Central Bureau of Statistics and the Ministry of Health give a background understanding of the healthcare landscape in the area under study. According to the Palestinian Central Bureau of statistics (PCBS), (2017) World Health Day report, while there are constant efforts put in to enhance health care quality and safety, very few records on precise OR safety attitudes exist. This report gives general health improvements and still-standing difficulties in the Palestinian healthcare system against which specific issues of patient safety in the OR can be examined.

Some studies have been made on stress and poor teamwork, as seen in the study by Hull et al., which has shed more light on some of the challenges that exist for the OR teams in their attempt to maintain safety in their environment. Hull et al. evaluated the considerable effect of stress and bad teamwork on the safety of patients. Effective communication and collaboration are integral parts of reducing medical errors and promoting patient safety in the high-pressure setting of the OR. This was a study to emphasize how interventions should focus on both psychological well-being in the OR and the team dynamics.

The Minnesota Department of Health, 2016, and the Joint Commission, 1995-2016, have documented past records of adverse health events and sentinel events, hence providing measures of safety performance to benchmark against local practice. These reports present important data about the types and frequency of adverse events in healthcare settings and therefore would serve as a benchmark for measuring and comparing the safety performance of Palestinian hospitals. These benchmarks can be compared with

local data for areas of improvement and identification of targeted interventions toward improving patient safety for Palestinian hospitals.

Furthermore, Carney et al., (2010) examined differences in sex regarding OR caregiver perceptions of patient safety, hence underlining issues of attitude diversity in different contexts. The results of Carney et al., (2010) suggest that there are different perceptions and concerns in relation to patient safety among female OR caregivers in comparison with their male counterparts. Recognizing these differences is important in the formulation of inclusive safety strategies so that the processes ensure such strategies answer the needs and views of all professionals in the OR chain to achieve an integrated and very effective safety culture.

Though limited, local studies show that stress, teamwork, and gender difference are the most significant factors that affect attitudes towards patient safety among OR professionals. This study helps in filling this gap by providing an in-depth analysis of the attitudes of the OR professionals towards patient safety in governmental hospitals in the North of the West Bank. This will be informed by pre-existing frameworks and tools, such as the SAQ. Informed by previous frameworks and tools, such as the SAQ, this study sets out to establish influential factors and recommends improvement strategies in this key environment.

Instruments like the Safety Attitudes Questionnaire will be applied to pinpoint areas for safety culture improvement (Sexton et al., 2006). In this study, the value of SAQ will be derived from its ability to offer detailed insight into a number of dimensions of safety attitudes: teamwork, communication, and management support. The present study shall, therefore, go ahead to explore the responses of the OR professionals working in hospitals in the North of the West Bank with regard to some of the underlying factors influencing safety attitudes, with an objective to further develop appropriately tailored interventions for such issues.

Though research into patient safety in Palestine is at its infancy, this study massively contributes to the understanding of attitudes towards patient safety among OR professionals. The research draws on global and regional studies but utilizes local data

and tools to come up with a package of locally appropriate actionable insights to help formulate policies and practices relevant to the enhancement of patient safety in the Palestinian governmental hospitals. The results of this study will not only fill a serious literature gap but also support the ongoing efforts to promote quality and safety in health care in Palestine.

The domain of patient safety research in Palestine is an area that has not yet been sufficiently addressed, particularly with regard to developing aspects related to attitudes toward patient safety among OR professionals. While there have been serious attempts at improving quality in healthcare, very few records exist with regard to attitudes toward OR safety in Palestinian hospitals from the PCBS or the Ministry of Health. The absence of data on these indicators only serves to underscore the need for in-depth studies geared toward facilitating better understanding and finding solutions to problems that are peculiarly relevant to OR teams serving in Palestinian hospitals. Indeed, such research is incumbent in light of calls for local practices to be aligned with global safety standards and the gaps revealed by the Palestinian Central Bureau of statistics (PCBS), (2017) World Health Day report, which indicates that despite health indicators' improvement over the years, numerous problems still beset the healthcare system.

Stress and ineffective teamwork are significant contributors to the safety of the OR and have been identified in world studies, like Hull et al., (2011). They had positively diagnosed the deadly results of such an outcome on patient safety about how effective communication and teamwork was vital in a challenging environment of the OR. This finding is particularly relevant to Palestinian hospitals, where high stress levels and suboptimal team dynamics could be further raising the currently prevalent safety challenges.

Targeted interventions to improve psychological well-being and team cohesiveness are efforts that can help ameliorate safety practices within the Palestinian OR context. Historical data from Minnesota Department of Health, 2016, and the Joint Commission, 1995-2016, provide important benchmark data for comparison of safety performance. Such records of adverse health events and sentinel events offer comparative backdrop upon which local safety practices can be measured. The application of such benchmarks

to Palestinian hospitals will help in knowing which areas need improvement and focus on improving patient safety with targeted strategies. Comparative analysis with this nature is very crucial in setting realistic goals on safety interventions and assessing their effectiveness within the local setting.

In this respect, Carney et al., (2010) examined sex-based differences of perception toward safety and the conclusion was that OR caregivers of the female gender usually have concerns about safety that are very different from the male caregivers. This indicates that inclusive strategies that are designed for safety should take into account the wide range of perspectives within the OR team. This necessitates a better understanding of these differences while developing overall safety interventions that are sensitive to the varying needs and views of all OR professionals, with the hope of fostering a more integrated and effective culture of safety in Palestinian hospitals.

While the available local studies are still fairly small in size, they situate stress, teamwork, and gender differences as the major factors affecting attitudes toward patient safety among OR professionals. This is where the current study comes in: the in-depth analysis of attitudes in a very important and crucial setting, that of governmental hospitals in the North of the West Bank. Among other frameworks, using the Safety Attitudes Questionnaire, the research attempts to unravel the underlying factors that affect safety attitudes and thus make recommendations for targeted interventions toward problems in this area. This will help to develop a localized approach for the strategies relevant to Palestinian hospitals. Therefore, this study aims to evaluate the attitudes of the professionals working in the operating rooms toward patient safety in governmental hospitals in the North of the West Bank, Palestine. This research avails the use of the Safety Attitudes Questionnaire in assessing critical determinants that affect safety attitudes by evaluating such things as stress and teamwork, looking at gender differences, and developing tailored interventions that will enhance patient safety practices to improve the quality of health care in the region.

1.8 Summary

This chapter reviews existing literature related to patient safety, focusing on global, regional, and local perspectives to contextualize the study on the attitudes of operating room (OR) professionals in the North of the West Bank, Palestine. The global perspective includes foundational frameworks by Kohn et al., (2000) and the landmark "To Err is Human" report by St.Pierre et al., (2022), which emphasized the need for systemic risk management and cultural shifts towards safety. Tools such as the Safety Attitudes Questionnaire (SAQ) by Sexton et al., (2006) and studies on human factors and teamwork Wahr et al., (2013) highlight the importance of structured safety protocols and effective communication. Regional studies reveal cultural and institutional challenges, with findings from Turkey and the Philippines illustrating the impact of hierarchical structures and institutional support on safety culture (Bahar & Önler, 2020; Ramos & Calidgid, 2018). Middle Eastern research further underscores the need for culturally sensitive interventions and effective leadership (Haugen et al., 2013; Ock et al., 2017). Locally, Palestinian research on stress, teamwork, and gender differences provides a backdrop for understanding the unique safety challenges in this context (Carney et al., 2010; Hull et al., 2011; Palestinian Central Bureau of statistics (PCBS), 2017). This study aims to address the gap in literature by evaluate the attitudes of OR professionals towards patient safety in Palestinian governmental hospitals, using established frameworks like the SAQ to identify key factors influencing safety attitudes and develop targeted interventions. By synthesizing global insights with local data, the research seeks to enhance patient safety practices in the North of the West Bank and contribute to broader efforts in improving healthcare quality and safety.

Chapter Two

Methodology

2.1 Introduction

In this section, we will deal with a description of the study method, as well as the study sample and population, the study tool. It also includes a description of the procedures that were done to codify the study tool and its application, describing the statistical procedures used in analyzing data and extracting results.

2.2 Study Design

This research was designed as a cross-sectional study to assess the attitudes of operating room professionals towards patient safety and identify the influencing factors in governmental hospitals.

2.3 Sample Size and Sampling

The Palestinian Central Bureau of statistics (PCBS), (2017) Palestinian Central Bureau of Statistics (PCBS) and the annual report of the Palestinian Ministry of Health in the West Bank reported a total of 10,004 nurses and 5,001 doctors working in healthcare settings (Palestinian Central Bureau of statistics (PCBS), 2017). Considering that approximately half of these professionals were either working in the central and southern regions of the West Bank or traveling outside Palestine, the study focused on the professionals working in the North of the West Bank. Using the sample size formula and assuming a 95% Confidence Level with a 5% Margin of Error, a total of 150 male and female OR professionals were convincingly recruited from governmental hospitals in the North of the West Bank (Nablus, Tulkarm, Jenin, Qalqilia, Salfit, and Tubas).

2.4 Pilot Study

A distributed the questionnaire to 10% of the total sample size from Thabet Thabet hospital to test its clarity and reliability. The individuals involved in this phase were excluded from the final sample to avoid any bias. then Statistical Package for Social Sciences (SPSS) was used to calculate Cronbach's Alpha for reliability analysis, with an

acceptable threshold set at 0.7 (70%). as established in the original study. This ensured that the questionnaire was reliable and ready for use in the main study.

2.5 Data Collection

In this study, a cross-sectional design will be applied. Data was collected using a self-administrated questionnaire from physicians and nurses working in governmental hospitals' operating rooms in the North of the West Bank. The sample size will be determined in order to achieve a 95% level of significance and at least 80% statistical power.

In the present research, the attitudes was measured using the Patient Safety Attitude, PSAQ has 46 items representing the following six sub-dimensions: job satisfaction with 11 items, teamwork climate with 12 items, safety climate with 5 items, perception of management with 7 items, stress recognition with 5 items, and work conditions with 6 items. Responses were recorded on a 5-point Likert scale, ranging from '5, strongly agree' to '1, strongly disagree'. Cronbach Alpha values for the subscales were: 0.85 job satisfaction; 0.86 teamwork climate; 0.83 safety climate; 0.77 perception of management; 0.74 stress recognition; and 0.72 work conditions, with an overall Cronbach Alpha of 0.915.

2.6 Research Process

The research process started by designing a comprehensive questionnaire, one that was supposed to measure healthcare professionals' attitudes toward patient safety. Particularly, the intent was to use the Sexton et al., (2006), Patient Safety Attitude Questionnaire, 2006, and then modify and tailor it according to the local healthcare context of the North of the West Bank. The questionnaire was then tested for its content validity with a panel of experts in healthcare and patient safety, with subsequent changes being done in order to better tailor it into the specific environment of operating room professionals within governmental hospitals. A pilot study of 10% of the intended sample size was conducted to test the reliability of the questionnaire using Cronbach's Alpha. Its participants were excluded from the final analysis to avert bias. Thereafter, ethical approval from the respective IRBs and hospital administrations concerned was sought to

guarantee the application of appropriate ethics on issues of consent by participants and data confidentiality.

Governmental hospitals in the north of the West Bank, such as those in Nablus, Tulkarm, Jenin, Qalqilia, Salfit, and Tubas, were coordinated after securing approvals. The visits to hospital administrators arranged meetings to ensure their cooperation and enable access to the operating room professionals. The study began by distributing self-administered questionnaires to working doctors and nurses in the selected hospitals, together with clear instructions and a guarantee of anonymity to participants in responding honestly and without bias. Collected data were systematically managed and entered into SPSS version 24.0 for analysis. Missing data was handled appropriately by the imputation method to retain the integrity of the dataset.

In the analysis, both descriptive and inferential statistics—like t-tests, ANOVA, and regression analysis—were applied to test for relationships between demographic variables, work experience, and attitudes toward patient safety. The results were interpreted within the context of existing literature and specific conditions of government hospitals in the North of the West Bank. The findings were documented in a structured report, with recommendations for improving patient safety attitudes and practices based on the study's insights. In doing so, this will represent a comprehensive study to the attitude towards PS among operating room professionals in the targeted region.

2.7 Statistical Analysis

Statistical analysis was performed using SPSS version 24.0. Both descriptive and inferential statistics were employed to analyze the data:

Descriptive Statistics

Frequency and Percentage Distributions: For demographic characteristics such as age, gender, marital status, educational level, and working experience, as well as working characteristics including job position and years of experience.

Measures of Central Tendency and Variability: Mean and standard deviation for continuous variables like PSAQ scores and subscale scores.

Inferential Statistics

Parametric Tests

Independent t-test: To compare mean PSAQ scores between two groups (e.g., male vs. female, married vs. single).

One-way ANOVA: To compare mean PSAQ scores across multiple groups (e.g., different age categories, educational levels, and job positions).

Post-hoc Analysis (Tukey's HSD): To identify specific group differences following significant ANOVA results.

Non-parametric Tests

Kruskal-Wallis H test: To compare PSAQ scores across multiple groups when normality assumptions were not met.

Correlation Analysis

Pearson correlation coefficients: To explore relationships between continuous variables such as age, years of experience, and PSAQ scores.

2.8 Reliability and Validity

- Reliability: The reliability of the questionnaire was assessed using Cronbach's Alpha, calculated from a small experimental sample of participants from Thabet-Thabet Governmental Hospital in Tulkarm. A Cronbach's Alpha coefficient of 0.70 or higher was considered acceptable.
- Validity: Content validity was ensured by having the questionnaire reviewed by a panel of experts. Their feedback was used to refine the questionnaire, ensuring it covered all relevant aspects of patient safety attitudes and was appropriate for the study context.

Handling Missing Data

Missing data were analyzed to determine whether it was random or systematic. Depending on the extent and nature of missing values, appropriate methods such as mean imputation or multiple imputations were used.

2.9 Inclusion Criterion

- All participants who were willing to participate and gave oral consent.
- All participants working in the operating room.
- All participants who were health professionals.

2.10 Exclusion Criterion

- All participants who refused to participate in the study.
- All participants not working in the operating room.
- All participants who were not health professionals.

This methodology ensured a comprehensive approach to examining the attitudes of OR professionals towards patient safety and identifying influencing factors in governmental hospitals in the North of the West Bank.

2.11 Summary

This section outlines the methodology for assessing operating room (OR) professionals' attitudes toward patient safety in the North of the West Bank. The cross-sectional study targeted 150 OR professionals, selected from a population of nurses and doctors in governmental hospitals, using a sample size formula with a 95% confidence level and 5% margin of error. A pilot study ensured the reliability of the Patient Safety Attitude Questionnaire (PSAQ), which was administered in a self-reported format. The PSAQ, translated into Turkish and comprising six subscales, demonstrated strong internal consistency with an overall Cronbach Alpha of 0.915. Data were collected and analyzed using SPSS version 24.0, employing both descriptive and inferential statistics, including t-tests, ANOVA, Kruskal-Wallis H tests, and correlation analysis. Reliability was assessed via Cronbach’s Alpha, and content validity was verified by expert review. Missing data were managed through appropriate imputation techniques. Inclusion and exclusion criteria ensured that participants were current OR professionals who consented to participate. This methodology aims to provide a robust analysis of patient safety attitudes and influencing factors within the specified context.

Chapter Three

Results

In this chapter, the study's outcomes are showcased through addressing its research inquiries and testing its hypotheses. The data underwent processing and coding, followed by the implementation of both simple and multiple linear regression analyses using SPSS software.

3.1 Introduction

The study revealed that 54.4% of healthcare professionals had a positive attitude towards teamwork climate, while 52.6% showed positive stress recognition. However, only 38% expressed favorable perceptions of management, highlighting potential areas for improvement in communication and leadership within the healthcare settings.

Demographic Characteristics

A total of 117 completed questionnaires were returned, which represented a response rate of 82%. About 41.9% aged between 31-40 years old, also 56.4% of the participants were males, 64.1% were married, and 45.3% holding bachelor’s degree (Table 1).

Table 1

Demographic Characteristics of the participants (n = 117).

Variable	Frequency	Percent
Age		
Less than 30 Years Old	45	38.5
31-40 Years Old	49	41.9
More than 41 Years Old	23	19.7
Gender		
Male	66	56.4
Female	51	43.6
Marital Status		
Married	75	64.1
Single	42	35.9
Education Level		
Diploma Degree	15	12.8
Bachelor's Degree	53	45.3
Master's Degree	31	26.5
Others	18	15.4

Working Characteristics

More than two-thirds of participants (40.2%) had more than ten years of working experience, about 37.6% were physician and 35.9% were registered nurses, few as 12% working in intensive care unit (ICU), nearly one-third (31.6%) had more than 11 years of working experience in the same department participants work. Further information is shown in table 2.

Table 2

Working Characteristics of the participants (n = 117).

Variable	Frequency	Percent
Work experience		
Less than 3 years	23	19.7
3-6 years	26	22.2
6-10 years	21	17.9
10 years or above	47	40.2
Work position		
Assistant Nurse	10	8.5
Registered Nurse	42	35.9
Head nurse	21	17.9
Physician	44	37.6
Working Department		
Open ward	30	25.6
Intensive care unit	14	12.0
Others	73	62.4
Work experience in the same department		
Less than 1 year	24	20.5
1-5 years	35	29.9
6-10 years	21	17.9
More than 11 years	37	31.6

Patient safety attitude

The scale has six subscales (Table 3). The mean score of the total score was 114.26 ± 22.81 out of 180. The teamwork climate subscale mean score was 19.91 ± 4.60, Safety climate mean score was 22.31 ± 7.69, the mean score for Perception of management was 30.35 ± 7.52. Job satisfaction mean score was 16.68 ± 4.77, working conditions mean score was 12.27 ± 3.82, and Stress recognition mean score was 13.44 ± 3.67.

Table 3

Patient safety subscales' mean score

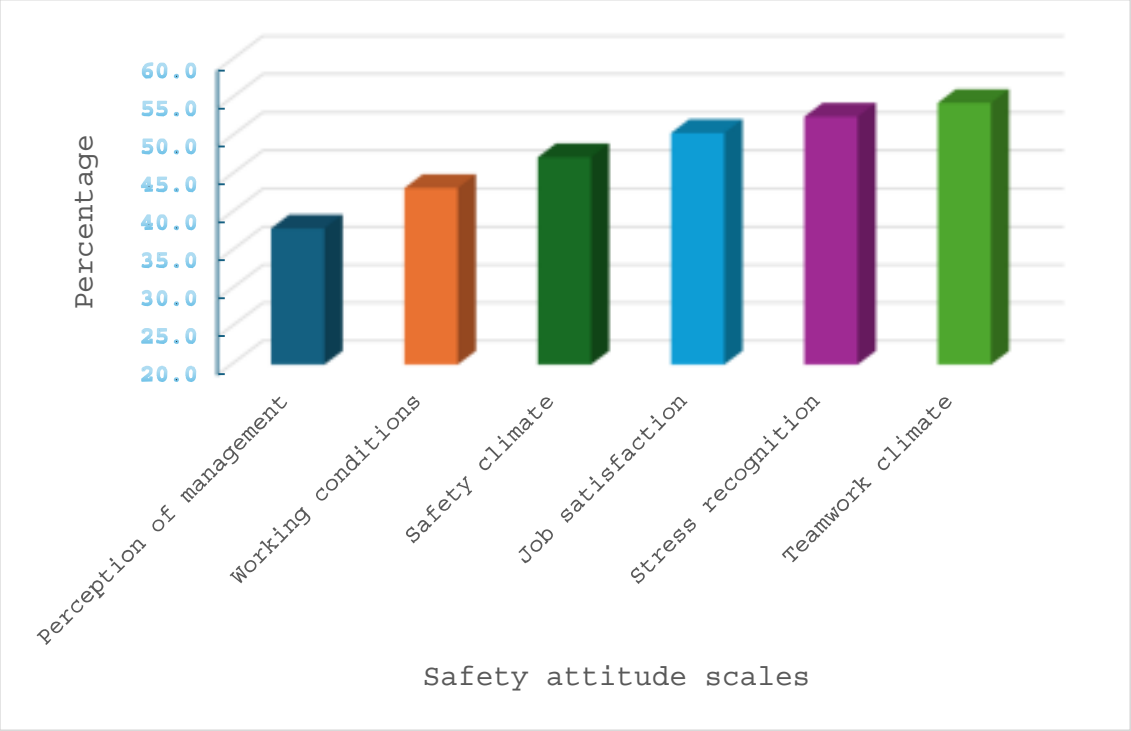
Subscale	Minimum	Maximum	Mean	SD
Teamwork Climate	10.00	28.00	19.91	4.60
Safety climate	11.00	79.00	22.31	7.69
Perception of management	10.00	75.00	30.35	7.52
Job Satisfaction	5.00	25.00	16.68	4.77
Working conditions	4.00	20.00	12.27	3.82
Stress recognition	4.00	20.00	13.44	3.67
Total	54.00	180.00	114.26	22.81

SD: Standard Deviation

The scale with the most positive responses was teamwork climate 54.4%, followed by stress recognition 52.6%, job satisfaction 50.4%, working conditions 43.3%, and perception of management 38%. The average percentage of positive responses is shown in Figure 1.

Figure 1

Average of percentage positive responses of patient safety scales'



In teamwork climate, the highest mean score (3.44 ± 1.18) was for “The physicians and nurses here work together as a well-coordinated team”, and the lowest mean score (3.21 ± 1.17) was for “Nurse input is well received in this clinical area”.

In safety climate, the highest mean score (3.50 ± 4.97) was for “I would feel safe being treated here as a patient”, and the lowest mean score (2.97 ± 1.19) was for “I receive appropriate feedback about my performance”.

For Job satisfaction, the highest mean score (3.55 ± 1.33) was for “I like my job”, and the lowest mean score (3.18 ± 1.16) was for “This is a good place to work”.

In stress recognition, the highest mean score (3.49 ± 1.14) was for “When my workload becomes excessive, my performance is impaired”, also, for “I am less effective at work when fatigued” with a mean score of 3.49 ± 1.10, and the lowest mean score (3.14 ± 1.14) was for “Fatigue impairs my performance during emergency situations (e.g. emergency resuscitation, seizure)”.

For Perception of management, the highest mean score (3.41 ± 3.85) was for “Unit Management supports my daily efforts”, and the lowest mean score (2.84 ± 1.09) was for “I get adequate, timely info about events that might affect my work, from Hospital Management”.

In working conditions, the highest mean score (3.22 ± 1.04) was for “Trainees in my discipline are adequately supervised”, and the lowest mean score (2.98 ± 1.18) was for “All the necessary information for diagnostic and therapeutic decisions is routinely available to me”.

Appendix A shows all mean scores related to patient’ safety attitude questions.

3.2 Test of Normality

To evaluate the normality, Shapiro-Wilk test was performed. The analysis showed that Shapiro-Wilk had p =.058, which indicates that the data are within normal distribution. Therefore, parametric tests were used in analyses.

3.3 Inferential statistics

SAQ Gender-related scores

An Independent t-test was used to assess the relationship between gender and patient safety subscales. The test was statistically significant between gender and safety climate t(115) = -2.124, p =.036, 95%CI = -5.80, -0.20. Females had higher mean of safety climate compared to males (24.76 ± 9.76, 21.00 ± 5.32, respectively). Similarly, patient safety total score did not show statistically significant relationship with gender t(114) = -1.531, p =.051. The effect of gender on [Teamwork climate, perception of management, job satisfaction, working conditions, and stress recognition] was not statistically significant different (p >.05).

SAQ Marital status-related scores

An Independent t-test was used to assess the relationship between marital status and patient safety subscales. The test was statistically significant between marital status and working conditions t(114) = -2.42, p =.017, 95%CI = -3.17, -0.31. Single participants had higher mean of working conditions compared to married participants (13.38 ± 3.22, 11.64 ± 4.00, respectively). Similarly, patient safety total score did not show statistically significant relationship with marital status t(114) = -1.257, p =.211. The effect of marital status conditions on [Teamwork Climate, Safety climate, Perception of management, Job Satisfaction, and Stress recognition] were not statistically significant different (p >.05).

SAQ Age-related scores

A one-way ANOVA was performed to compare the effect of different age categories on overall patient safety score and its six subscales. A one-way ANOVA revealed that there was not a statistically significant difference in mean patient safety score between at least two groups (F(2, 9) = 1.702, p =.187). However, there was a statistically significant difference in working conditions score between at least two groups (F(2, 113) = 3.459, p =.035).

Tukey's HSD Test for multiple comparisons found that the mean value of working conditions was significantly different between participants aged less than 30 years old

(13.31 ± 3.18) and those aged 31-40 years old (11.27 ± 3.95) (p =.026, 95% C.I. =.20, 3.88).

The effect of age on [Teamwork Climate, Safety climate, Perception of management, Job Satisfaction, and Stress recognition] was not statistically significant different (p >.05).

SAQ Education level-related scores

A one-way ANOVA was performed to compare the effect of different educational levels on overall patient safety score and its six subscales. A one-way ANOVA revealed that there was not a statistically significant difference in mean patient safety score between at least two groups (F(3, 112) =.081, p =.970). The effect of education level on [teamwork climate, safety climate, perception of management, job satisfaction, working conditions, and stress recognition] was not statistically significant different (p >.05).

SAQ Working experience-related scores

To compare the effect of working experience on overall patient safety score and its six subscales, a one-way ANOVA test was used. The results showed that there was not a statistically significant difference in mean patient safety score between at least two groups (F(3, 112) =.785, p =.505). The test was then used to compare the effect of working experience on [Teamwork Climate, Safety climate, Perception of management, Job Satisfaction, Working conditions, and Stress recognition]. The one-way ANOVA revealed that there was a statistically significant difference in working conditions score between at least two groups (F(2, 112) = 3.604, p =.016).

Tukey's HSD Test for multiple comparisons found that the mean value of working conditions was significantly different between participants experienced less than 3 years (13.48 ± 3.23) and those with 6-10 years' experience (10.52 ± 3.41) (p =.045, 95% C.I. =.05, 5.86). Additionally, between participants experienced 3-6 years (13.52 ± 3.28) and those with 6-10 years' experience (10.52 ± 3.41) (p =.036, 95% C.I. =.14, 5.85).

The effect of working experience on [Teamwork climate, safety climate, perception of management, job satisfaction, and stress recognition] was not statistically significant different (P >.05).

SAQ working position-related scores

A one-way ANOVA was performed to compare the effect of different working positions on overall patient safety score and its six subscales [Teamwork climate, safety climate, perception of management, job satisfaction, working conditions, and stress recognition].

The one-way ANOVA revealed that there was not a statistically significant difference in mean patient safety score between at least two groups ($F(3, 112) = .478$, $p = .698$). Other subscales [Teamwork climate, safety climate, perception of management, job satisfaction, working conditions, and stress recognition] were not statistically significant difference in working positions ($p > .05$).

SAQ Working department-related scores

A one-way ANOVA was performed to compare the effect of different working departments on overall patient safety score and its six subscales [Teamwork climate, safety climate, perception of management, job satisfaction, working conditions, and stress recognition]. The effect of working department on [overall patient safety score, teamwork climate, safety climate, perception of management, job satisfaction, working conditions, and stress recognition] was not statistically significant different ($p > .05$).

SAQ Work experience in the same department-related scores

A one-way ANOVA was performed to compare the effect of Work experience in the same department on overall patient safety score and its six subscales [Teamwork Climate, Safety climate, Perception of management, Job Satisfaction, Working conditions, and Stress recognition]. The one-way ANOVA revealed that there was a statistically significant difference in Teamwork Climate score between at least two groups ($F(3, 113) = 3.178$, $p = .027$). Tukey's HSD Test for multiple comparisons found that the mean value of Teamwork Climate was significantly different between participants experienced 6-10 years (17.81 ± 3.94) and those with more than 11 years' experience (21.11 ± 4.88) ($p = .040$, 95% C.I. = -6.49, -.11).

In addition, the one-way ANOVA revealed that there was a statistically significant difference in Safety climate score between at least two groups ($F(3, 113) = 3.383$, $p = .021$).

Tukey's HSD Test for multiple comparisons found that the mean value of Safety climate was significantly different between participants experienced 6-10 years (19.14 ± 5.01) and those with more than 11 years' experience (24.89 ± 10.73) (p =.029, 95% C.I. = -11.10, -.43).

The effect of Work experience in the same department on [Perception of management, job satisfaction, working conditions, stress recognition, and overall score] was not statistically significant different (P >.05).

3.4 Summary

A total of 117 questionnaires were completed, representing an 82% response rate. Most participants were males, 56.4% married, and 64.1% with a bachelor's degree. Again, most of the participants, 45.3%, held a bachelor's degree. About 41.9% of participants fell between the age bracket of 31-40 years. Over two-thirds of the respondents had more than ten years of experience, and 37.6% were physicians. The mean patient safety attitude total score was 114.26 with a maximum of 180, with the highest positive response rates to teamwork climate 54.4% and to stress recognition 52.6%, but perception of management was only 38%. There were noted differences by gender, the females scoring higher in safety climate, and by marital status, single scoring higher in working conditions. There were age-related differences: the younger participants reported better working conditions. Working experience differences showed less experienced participants rating working conditions as better. There were also important differences in teamwork and safety climate related to experience within the same department, the more experienced members rating these lower. Generally, individual response items to questions about teamwork and safety climate were quite positive, although demographic and working characteristics influence specific perceptions of different aspects of patient safety.

Chapter Four

Discussions and Conclusions and Recommendations

In this chapter, we discuss the result compared with other studies have been done globally and regionally alongside local if there is any, also we give recommendation with conclusion of the study.

4.1 Discussion

This study was intended to appraise the attitude of health professionals towards patients' safety while working in an operation theatre and identify factors that might affect it in governmental hospitals of Palestine. The results are of major importance in delineating demographic and working characteristics and an attitude of the surveyed population towards patients' safety.

4.1.1 Demographic and Working Characteristics

The demographic characteristics showed that relatively high percentages of respondents fell within the 31-40-year age group, mostly males, married, and with a bachelor's degree as the highest level of education achieved. On work characteristics, a substantive percentage had above ten years of experience in the profession; most study participants in this category were doctors and registered nurses.

These findings indicate that demographic variables, such as age, gender, and experience, might strongly influence the attitude toward patient safety. For instance, this survey found females receiving a higher mean value of safety climate; this is similar to the results of a few studies, indicating that gender may influence perception about patient safety. In fact, these demographic variables merit further regard while designing and implementing protocols for patient safety.

The great percentage of these with over ten years of experience attests to the experience factor whereby long-term experience contributes a lot to the exposure and commitment to issues of patient safety. This, therefore, renders such a high degree of experience ripe and expounds on the understanding and adherence to the laid-down safety protocols, hence making the experience important to the work environment. This is even supported

more by previous studies like Davis et al., (2007); Salih et al., (2021), where professional role and departmental experience proved a critical factor in the formulation of safety attitudes.

Accordingly, the involvement of experienced healthcare professionals in the patient safety practices may result in more standardized and consistent approaches to securing the safety of patients. The standardization of approach that grows out of departmental experience may also encourage more team effort and communication, two of the key elements for an effective safety culture, has been confirmed by Lee et al., (2022).

4.1.2 Attitude to Patient Safety

The Patient Safety Attitude Questionnaire had a mean score of 114.26 out of the maximum possible score of 180, and the subscales revealed different magnitudes to a positive response. The mean of the subscale scores ranged from a low of 52.6% for the stress recognition sub-scale to a high of 54.4% for the teamwork climate sub-scale, with job satisfaction having a percentage of 50.4%. Such findings often support those of Allard et al., (2011), who stressed that a collaborative work environment is very much needed in developing a positive safety climate.

A combined total mean score of 114.26 should serve to underscore the point that while attitudes are generally very positive, there may be quite a lot of room for improvement. In this regard, the high percentage of positive responses in the teamwork climate subscale further underscores the idea that effective teamwork is one critical factor in setting up robust patient safety culture. This agrees with work done by Biresaw et al., (2020), whereby, among elements, one that emerged to be an independent predictor of a strong patient safety culture was teamwork. The high average score in the subscale of teamwork climate indicates the efficiency of health professionals' collaboration in ensuring that patients are protected from harm.

The high prevalence of the positive reaction in the subscale of stress recognition, with a positive response rate of 90%, would show high effect stress management has on patient safety. It supports what Bhatti et al., (2021) established: that healthcare professionals are highly aware of the stress, undermining patient safety. One can recognize herein the

manner in which stress, under conditions of undue workload or fatigue, influences performance, which sharpens the need for the implementation of strategies aimed at reducing stress while keeping a high standard of care for patients.

The second important theme influencing attitudes towards patient safety was job satisfaction. The results of this subscale show that many of the respondents are very satisfied with their work, which is very important in the maintenance of motivation and adherence to protocols regarding the safety of patients. Specifically, this study agrees with the work of Park et al., (2023), revealing that operating room nurses who are highly satisfied with their job demonstrate a stronger compliance towards patient safety protocols as well as the perception for a strong culture of patient safety. A high mean score is also noted on the 'I like my job' item; hence, job satisfaction further underpins the nature of value in which it holds within the maintenance of a positive culture of safety.

Consequently, the findings add weight to the importance of teamwork, stress recognition, and job satisfaction in relation to attitudes toward patient safety. Strategies aimed at enhancing such dimensions could make a big difference in improving the safety climate in healthcare settings. Healthcare organizations could work toward a culture of patient safety and minimum possible risks by engendering a collaborative environment at work and managing stress with effective job satisfaction solutions.

Gender-Related Scores

A significant relationship between gender and the safety climate was found, with females having a higher score than males. Each female usually was related to higher scores for the perceptions regarding patient safety. This finding is consistent with the study by Carney et al., (2010) who found that females usually report higher perceptions of patient safety. In this study, the mean safety climate score was 24.76 for females and 21.00 for males, which means female healthcare professionals are more cautious or sensitive about safety matters or more likely to perceive and report about the concerns.

However, the researchers did not establish a significant relationship between gender and other subscales under the teamwork climate, perception of management, job satisfaction, and working conditions. This is in agreement with Bahar & Önler, (2020), which has

reported the effect of gender differences not significant on the perception towards the teamwork, management, or job satisfaction settings in the healthcare settings. The findings indicate that in patient safety perceptions, gender might influence only certain dimensions of the aspect being measured—for example, the safety climate—but this does not imply that it influences all dimensions of the attitude toward patient safety.

Furthermore, the gender differences are insignificant in subscales other than safety climate, which probably indicates that gender should not be a key variable in designing improvement interventions for patient safety culture; rather, these interventions should be broad-based and focus on organizational and operational factors. Indeed, this fact is corroborated by the recent findings of Lee et al., (2022), who emphasized the need for patient safety intervention programs with comprehensive training related to various patient safety culture factors instead of concentrating on demographic factors for specific groups, such as females.

4.1.3 Scores Harmonizing with Marital Status

This would suggest that working conditions were greatly influenced by marital status. Respondents who were single reported enjoying working conditions much more than those who were married. For instance, singles had an average working condition score of 13.38, whereas those people who were married averaged 11.64. This might be read to mean that those who were single perceived their working environment slightly differently, probably due to lessening extra responsibilities outside the working environment, which helps them focus a little bit more on the professional stance.

This specific field, concerning the impact of the marital status in working environmental conditions, has been less covered by the literature domain and, for this reason particularly, seems to leave an empty space that needs to be explored further. Even if the studies above recorded a number of points, targeted, and specific research is not available. For instance, Biresaw et al., (2020) reported that personal life stressors could have a severe impact on how healthcare workers experience the working environment and the case of their job satisfaction. Consequently, employees who are married or who have family-related matters to attend to other than their work engagements are more prone to highly stressful

situations that can influence their subjective views of work-related factors.

These dynamics can result in targeted intervention strategies specifically designed to harness better working conditions and, hence, improved patient safety. Since healthcare workers vary in their cultural backgrounds and have diverse personal lives, a supportive work environment catering to such individual variation is required. Addressing the impact of marital status on work attitudes could assist in affecting one such crucial strategy.

4.1.4 Age-Related Scores

Age also had a profound impact on the working conditions. The results were indicative of the fact that the younger blood, below 30 years, reported better working conditions as compared to their counterparts aged 31-40 years. In this case, the mean scores on the working conditions for the two age categories were 13.31 and 11.27 respectively for participants below 30 and those aged 31-40 respectively. Indeed, Hull et al., (2011), have also highlighted the factor of stress and teamwork with regard to different age categories in surgical teams. Younger professionals, who have fewer personal responsibilities and fresher training than their more-aged colleagues, will find these practices and protocols to be something that can be met with a little bit more flexibility.

Such differential perception underscores the need, in recognition of the need, that those in health care staff be age specific in order to be able to perform work to satisfaction and, at the same time, maintain levels of safe patient care. This goes to say that younger staff may well be oriented or integrated into teams with the most recent education or in-depth nature of training. The more senior staff may have the potential to experience work at higher levels of stress because of increased responsibility or more extended exposure to the challenges of the particular job.

Hull et al., (2011), found that apart from having variations with stress levels, groups also show significant variations across other aspects, in terms of perceptions of teamwork and different elements that potentially impact overall job performance and attitude toward safety. Consequently, through the understanding of these differences, health care organizations can design support arrangements and training programs while catering to the needs of different age groups. Thus, it would be very relevant to make sure that the

cultures will be created within which all the health care professionals can operate safely and in an environment of harmony.

4.1.5 Human Levels of Education and Safety Ratings

Surprisingly, such differences in safety scores did not appear corresponding to the level of education, unlike numerous predecessor works of literature. A study by Ongun & Intepeler, (2017) showed that safer attitudes regarding patient safety protocol are favored at higher levels of education. In their findings, health providers at a level of education had substantial comprehensiveness in patient safety protoco, so the favourable intention of implementing the top best in practice was therefore esteemed relative to safety attitudes.

This success factor may not have been strong in the current study because the variability of the sample was homogeneous in educational variation. The percentage distribution noted that 45.3% had a bachelor's degree, showing relatively low variability in education. Hence, the level of education may not have been a strong separating factor within this discourse. This implies that institutional culture and continuing professional education may be important determinants in shaping the right attitudes in patient safety, again with the addendum that the importance of formal education level may have to recede a bit from the forefront.

The results emphasize the role of institutional culture and ongoing training in shaping PS-positive attitudes. Accordingly, these differing safety attitudes may have their roots in quality and frequency differences in in-service training or in the emphasis an organization places on patient safety, and generally in the patient safety culture. Healthcare organizations, therefore, cannot rely only on the qualifications of their trained personnel. However, they should invest in continuous education and training in patient safety at all levels of experience and education so as to create a strong culture of safety.

4.1.6 Scores Related to Working Experience

Working experience was reported to have a major effect on working conditions. From the survey, individuals with 6-10 years of experience recorded poorer working conditions compared to those with less experience. In fact, this view is supported by a study undertaken by Moffatt-Bruce et al., (2014) in which they established that experience

levels are likely to modify perceptions of employee safety. Those healthcare professionals who have been in the profession for fewer years continue to view the work environment in a positive light, either due to increased enthusiasm or less exposure to the systemic problems that seem to creep in over time.

However, the exact details of this pattern might be particular to the setting under investigation. Organizational climate, workload dynamics, and institutional support are very different variables across health care settings. These represent strong determinants influencing general attitudes about working conditions and patient safety across levels of experience.

The inverse relationship between experience and working conditions also raises concerns about burnout and becoming disillusioned. Maybe healthcare professionals with more experience become more sensitive to organizational or systemic issues, which influence their perceptions about working conditions. This, therefore, calls for a more in-depth investigation into how attitudes about patient safety vary across the career span of healthcare professionals and how they differ with experience.

While subjects with less working experience evaluated working conditions as being better than those with more work experience, the relationship between these variables is complex and goes in both directions. This would permit more precisely targeted interventions for bringing improvement to the culture of patient safety within a health care organization.

The length of time the participants had worked in their current department differed significantly in relation to the teamwork climate and safety climate. Comparative analysis described higher levels of teamwork and safety climate of participants who worked more than 11 years in comparison to the 6-10 year participants. It therefore supports the previous findings by Ongun & Intepeler, (2017), that length of stay in any department or unit was found to have a positive correlation with coordination and safer perception.

Longer tenures are probably accompanied by familiarity with team dynamics, well-established ways of communication, and experience accumulated within a department. All these elements help to forge a stronger patient safety culture since it is only through

organizational stability and continuity within the teams that a good safety environment is realized.

While this serves to open up still more complexities in this relationship between experience levels and perceptions of patient safety, these findings reflect the dual nature of a long tenure: improved teamwork and safety climates are on one hand, while perceptions of those factors are influenced by a number of individual and organizational influences, such as leadership support, resource availability, and dynamic healthcare practices.

Future studies could examine the mechanisms by which tenure influences patient safety attitudes and investigate how particular interventions or organizational policies strengthen these mechanisms. Health service organizations could make use of this better understanding of these relationships in implementing goal-directed strategies for the betterment of patient safety culture and overall health outcomes.

4.2 Conclusion

The present study contributes some significant insights about the attitude of healthcare professionals towards patient safety, both in terms of its strengths and weaknesses within the investigated healthcare settings. Notably, factors related to teamwork climate, safety climate, and working conditions do impact the formation of perceptions related to patient safety among health professionals. While some demographic features—for example, gender or marital status—could be associated with high correlations to particular domains of patient safety, others, such as education level and working position, show no differences, drawing a very complex picture of the influence on attitude to patient safety.

It reiterates, on the part of findings, that research with enhanced emphasis needs to be placed on personalized intervention and further work in relation to teamwork-related skills, job satisfaction, and stress-recognizing factors for a healthcare worker. These focused intervention strategies through training programs, mentorship, and increased interdisciplinary collaboration would call for a supportive environment that makes sure of effectual care. Moreover, the culture of patient safety is also enhanced through its embedding in learning curricula for health professionals and development of robust

feedback mechanisms.

A continuous monitoring and evaluation of the attitude and practices towards patient safety into the future will be necessary to make further improvements and adapt them due to new emerging health care challenges. The other variables affecting the attitude toward patient safety and their effects within different healthcare settings and amongst various demographic groups need further studies. Further research findings could enable optimization of patient-safety outcomes. These recommendations, when put into practice in tandem with an enhanced knowledge base about the subject in question, would go on to optimize the results of patient safety and quality of care that are given to each and every patient.

4.3 Recommendation

The research findings associated with attitudes of healthcare professionals toward patient safety justify several recommendations to promote best patient safety practices and to improve quality of care in general. There is a growing need to develop training programs and eventually implement them for health professionals with a view to enhancing their skills in teamwork, identification of stress, and job satisfaction. This would be very beneficial as it contains modules providing simulations and real-case scenarios for more practice on patient safety. Mentorship programs and structured support systems can reduce some of the negative impacts of tough working conditions by making newly hired and relatively inexperienced staff feel better equipped and more supported. Finally, in order to instill patient safety earlier in professional careers, there will have to be collaboration with the education sector to see the principles of patient safety embedded in the core curricula of healthcare studies. The concerns related to the adequacy of feedback, as assessed by safety climate, may be improved by setting up regular feedback mechanisms in health professionals regarding timely performance feedback. Teamwork climate and perception of management may be improved by promoting interdisciplinary collaboration whereby all health professionals value their input to offer a cohesive patient care environment. The execution of sturdy monitoring systems to keep a constant check on attitude and practices of patient safety, encouragement of more research on demographic and organizational factors that play a role in attitudes towards patient safety,

would add much-needed depth and help in continuous improvement attempts in healthcare settings. All these recommendations are placed in regard to strengthening patient safety culture and staff satisfaction for quality improvement in care given to patients.

List of abbreviations

Abbreviation	Meaning
ME	Middle East
PH	Palestinian Hospitals
DS	Descriptive Statistics
PCBS	Palestinian Central Bureau of statistics
WB	West Bank
US	United States
MoH	Ministry of Health
WHO	World Health Organization
HP	Health Care Providers
O.Rs	Operating rooms
SPSS	Statistical Package for Social Sciences
PSAQ	Patient Safety Attitude Questionnaire
IS	Inferential Statistics
t-tests,	Independent t-test
ANOVA	Analysis of Variance
RA	Regression Analysis
CT	Central Tendency
Tukey's HSD	Post-hoc Analysis

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Appendices

Appendix A

Patient safety scales' mean score.

Scale	Mean	SD	% of positive responses
Teamwork climate			
Nurse input is well received in this clinical area	3.21	1.17	53.8
In this clinical area, it is difficult to speak up if I perceive a problem with patient care.	3.26	1.01	47
Disagreements in this clinical area are resolved appropriately (i.e., not who is right, but what is best for the patient)	3.30	1.23	53
I have the support I need from other personnel to care for patients.	3.38	1.19	58.1
Is it easy for personnel here to ask questions when there is something that they do not understand?	3.31	1.21	57.3
The physicians and nurses here work together as a well-coordinated team.	3.44	1.18	57.1
Safety climate			
I would feel safe being treated here as a patient.	3.50	4.97	49.6
Medical errors are handled appropriately in this clinical area.	3.10	1.26	44.4
I know the proper channels to direct questions regarding patient safety in this clinical area.	3.14	1.23	46.2
I receive appropriate feedback about my performance.	2.97	1.19	39.3
In this clinical area, it is difficult to discuss errors.	3.15	1.11	41.9
I'm encouraged by my colleagues to report any patient safety concerns I may have.	3.20	1.24	53.8
The culture in this clinical area makes it easy to learn from the errors of others.	3.26	1.07	55.6

Scale	Mean	SD	% of positive responses
Job satisfaction			
I like my job.	3.55	1.33	63.2
Working here is like being part of a large family.	3.44	1.09	57.3
This is a good place to work.	3.18	1.16	39.3
I am proud to work in this clinical area.	3.20	1.18	46.2
Morale in this clinical area is high.	3.31	1.14	46.2
Stress recognition			
When my workload becomes excessive, my performance is impaired.	3.49	1.14	59
I am less effective at work when fatigued.	3.49	1.10	57.3
I am more likely to make errors in tense or hostile situations	3.32	1.08	50.4
Fatigue impairs my performance during emergency situations (e.g. emergency resuscitation, seizure)	3.14	1.14	43.6
Perception of management			
Unit Management supports my daily efforts.	3.41	3.85	67.5
Hospital Management supports my daily efforts.	2.85	1.08	29.9
Unit Management doesn´t knowingly compromise pt safety.	3.02	.94	31.6
Hospital Management doesn´t knowingly compromise pt safety.	3.32	2.01	43.6
Unit Management is doing a good job.	3.22	1.02	42.7
Hospital Management is doing a good job.	3.36	2.95	35.9
Problem personnel are dealt with constructively by our Unit Management.	3.15	.98	38.5
Problem personnel are dealt with constructively by our Hospital Management.	2.96	1.05	29.1

Scale	Mean	SD	% of positive responses
I get adequate, timely info about events that might affect my work, from Unit Management.	3.23	2.78	32.5
I get adequate, timely info about events that might affect my work, from Hospital Management.	2.84	1.09	28.2
Working condition			
The levels of staffing in this clinical area are sufficient to handle the number of patients.	3.02	1.15	41
This hospital does a good job of training new personnel.	3.05	1.16	42.2
All the necessary information for diagnostic and therapeutic decisions is routinely available to me.	2.98	1.18	44.4
Trainees in my discipline are adequately supervised	3.22	1.04	45.3

SD: Standard Deviation, %: Percentage

Appendix B

IRB Approval

An-Najah National
University
Faculty of Medicine &
Health Sciences
Institutional Review Board

جامعة النجاح الوطنية
كلية الطب وعلوم الصحة
لجنة اخلاقيات البحث العلمي

Ref : Mas. Dec. 2023/13

IRB Approval Letter

Title of Research:

Operating room professionals' attitudes towards patient safety and the influencing factors in governmental hospitals in North of the West Bank, Palestine.

Submitted by:
Raed Alhashash

Supervisor:
Mohammad Hayek

Approved:
12th Dec. 2023

Your Study Title" **Operating room professionals'** attitudes **towards patient safety and the influencing factors in governmental hospitals** in North of **the West Bank, Palestine.**"..reviewed by An-Najah National University IRB committee and was approved on 12th Dec. 2023

Hasan Fitian, MD

IRB Committee Chairman

IRB

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جامعة النجاح الوطنية
كلية الدراسات العليا

سلوكيات المهنيين الصحيين في غرف العمليات تجاه سلامة المرضى والعوامل المؤثرة عليها في المستشفيات الحكومية في شمال الضفة الغربية، فلسطين

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إشراف
د. محمد حايك

قدمت هذه الرسالة استكمالا لمتطلبات الحصول على درجة الماجستير في إدارة الصحة العامة،
من كلية الدراسات العليا، في جامعة النجاح الوطنية، نابلس – فلسطين.

2024

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إعداد

رائد عبد حسن الحشاش

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الملخص

خلفية الدراسة: أصبحت سلامة المرضى محورًا حيويًا في الرعاية الصحية، معززة بتقارير وأطر أساسية توضح الحاجة إلى تدابير سلامة نظامية. تهدف هذه الدراسة إلى استكشاف مواقف مهنيي غرفة العمليات تجاه سلامة المرضى والعوامل المؤثرة في هذه المواقف في المستشفيات الحكومية في شمال الضفة الغربية، فلسطين.

منهجية الدراسة: أجريت دراسة مقطعية شملت 150 من مهنيي غرفة العمليات، بمن فيهم الأطباء والممرضين، من ستة مستشفيات حكومية في شمال الضفة الغربية. تم استخدام استبيان مواقف سلامة المرضى (PSAQ) لتقييم مواقف المشاركين، بما في ذلك عدة أبعاد مثل مناخ العمل الجماعي، مناخ السلامة، وإدراك الإدارة. شملت التحليلات اختبار الموثوقية باستخدام معامل ألفا كرونباخ والإحصاءات الوصفية باستخدام برنامج.SPSS

نتائج الدراسة: تم إكمال 117 استبيانًا، بمعدل استجابة بلغ 82%. أظهرت التحليلات الديموغرافية أن غالبية المشـــاركين تتراوح أعمارهم بين 31–40 عامًا، وكان معظمهم من الذكور والمتزوجين، مع عدد كبير من الحاصـــلين على درجات البكالوريوس. أظهرت النتائج متوســـط إجمالي للمواقف بلغ 114.26 من 180، مع تسجيل أعلى نسبة استجابات إيجابية في مقياس مناخ العمل الجماعي (54.4%). أما باقي المقاييس الفرعية فقد عكست مستويات معتدلة من الرضا الوظيفي، وإدراك مناخ السلامة، وإدراك الإدارة بين المشاركين.

الاســـتنتاج الرئيســـي: تؤكد النتائج على وجود موقف إيجابي عام تجاه مناخ العمل الجماعي بين مهنيي غرفة العمليات، مع الإشارة إلى وجود مجالات تحتاج إلى تحسين في مناخ السلامة وإدراك الإدارة. يمكن أن تسهم هذه الرؤى في تطوير تدخلات مستهدفة لتعزيز ثقافة سلامة المرضى داخل هذه المستشفيات، مما يؤدي في

النهاية إلى تحسين نتائج المرضى في المنطقة. تستدعي الحاجة إلى المزيد من الأبحاث لاستكشاف الأسباب الأساسية للمواقف المرصودة وتأثير المبادرات المهنية.

الكلمات المفتاحية: غرفة العمليات، المواقف، المرضى، السلامة، المستشفيات، فلسطين.