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Healthcare Providers and beneficiaries' perspectives about Patient Safety at UNRWA Health Centers in Gaza

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Thesis Approval

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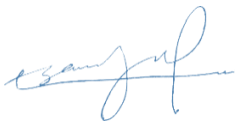
Dedication

I would like to dedicate my MSc work to every healthcare provider who makes patient safety part of their daily business.

Declaration

I certify that this thesis submitted for the degree of the master is the result of my research, except where otherwise acknowledged, and that this thesis or any of its parts has not been submitted for a higher degree to any other university or institution.

Signature: Samy Soliman Ali Abu Shawish



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With respect,

Samy Soliman Ali Abu Shawish

Abstract

Background and objectives

Patient safety is of utmost importance in the modern medical landscape. The attitudes of healthcare providers toward patient safety can have a significant impact on patient outcomes. When a shared working culture is in place, which recognizes and establishes systems to reduce risks and learn from errors, it can lead to better patient outcomes. Conversely, negative attitudes, such as a lack of recognition of potential risks and an attitude that patient safety is an individual responsibility, can have a detrimental effect on patient outcomes. As well as patients are integral to guaranteeing their safety during medical treatment. By being cognizant of their rights and obligations, and the potential risks associated with medical procedures, patients can ensure that their care is of the highest quality and safety. So, patient safety culture has been identified as a critical element of healthcare quality in health care. This study explores healthcare providers' and beneficiaries' perceptions of patient safety at UNRWA health centers in Gaza as a step towards improving health services' safety by identifying and addressing safety-related gaps.

Methodology

This study is a mixed method one, in which data has been triangulated (quantitative and qualitative), targeting healthcare providers and beneficiaries at UNRWA primary health centers in Gaza Strip. The quantitative part of the study was carried out for the healthcare providers (senior medical officers, specialist physicians, medical officers, dentists, nurses (including senior, staff and practical nurses), midwives, lab technicians, X-ray technicians, physiotherapists, and pharmacists) In total, 259 participants from randomly selected 6 UNRWA health centers filled the study survey that was developed based on the Safety Attitudes Questionnaire (SAQ); with a response rate of 95%. The survey was self-administered and the data was collected in the period between May 2022 to June 2022. Data was entered and analyzed using the SPSS IBM Statistics Program version 25.

Meanwhile, the qualitative part was performed through nine focus group discussions. They were conducted in three health centers and were selected using stratified random sampling. And the data was collected in August 2022. The researcher used open-end questions in the focus groups, and the researcher obtained the main findings from the transcripts of the focus groups. Then, the categorization of related ideas, and analysis of the qualitative findings.

Findings

The quantitative study's result shows that most participants were female 63%. The results revealed that 6.6% of healthcare providers believe that patient safety at their health centers is acceptable, 46.3% very good, and 47.1% excellent.

The study evaluated six dimensions that form the basis of the patient safety culture in healthcare institutions. The job satisfaction domain garnered an impressive 79.2% positive response, the highest of all scores. Additionally, the teamwork climate domain received an overwhelming 77.5% positive response, surpassing the results of studies conducted in Egypt, Tunisia, and governmental primary healthcare centers in Gaza.

While the working conditions domain was the weakest safety climate domain and received 61.9% of participants' positive responses. Findings revealed that the total score for all domains was 73.1% almost higher than the findings reported previously in hospitals in Gaza; safety culture dimensions ranged from 60% to 70% of positive responses.

The results revealed a low level of event reporting, approximately 79.9% of the participants did not record any adverse events in the past 12 months, 13.9% of them reported between 1 to 2 adverse events, and only 6.2% reported three or more events.

The qualitative study results demonstrate that the majority of participants had a sound understanding of the factors that influence patient safety, and highlighted the need to bolster the management and supply of resources to UNRWA health centers, equipping them with human resources and modern, adequate medical equipment. Additionally, they emphasized the importance of enhancing the quality of communication with healthcare providers.

Conclusions and recommendations:

Healthcare providers' perceptions of the safety culture are within the accepted level, and certain safety domains have been identified for potential improvement. To enhance the situation in UNRWA health centers, it is essential to focus on promoting the reporting of adverse events. Providing training on patient safety to healthcare providers as part of educational programs at UNRWA health centers is also necessary. Furthermore, it is important to strengthen and improve communication skills between healthcare providers and beneficiaries, based on respect, credibility, and confidentiality.

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List of abbreviations

AHRQ	Agency for Healthcare Research and Quality
FHT	Family Health Team
GS	Gaza Strip
GDP	Gross Domestic Product
GTT	Global Trigger Tool
HC	Health Centre
HSC	Health and Safety Commission
HR	Human Resources
ICRC	International Committee of the Red Cross
MCH	Mother and Child Health
MoH	Ministry of Health
MSF	Médecins Sans Frontières
NCDs	Non- Communicable Diseases
NGOs	Non-Governmental Organizations
OECP	Organizational for Economic Co-operation and Development
oPt	Occupied Palestinian Territory
PCBS	Palestinian Central Bureau of Statistic
PHC	Primary Health Care
RMNCH	Reproductive, Maternal, Neonatal, and Child Health
SAQ	Safety Attitude Questionnaire
SPSS	Statistical Package of Social Science
UNFPA	United Nations Population Fund
UNRWA	United National Relief and Works Agency for Refugees of Palestine in the Near East
UNDP	United National Development Programme
UK	United Kingdom
USA	United States of America
WB	West Bank
WHO	World Health Organization

Chapter One

Introduction

1.1 Background and Research Problem

In recent years, the concept of patient safety has been a growing concern for the world, as evidenced by the (WHO) 2008 report. Unfortunately, an unacceptable number of patients each year suffer from injuries or even death due to inadequate, unsafe, and substandard health care. The burden of this unsafe care serves to highlight the magnitude and scale of the problem, as reported by the WHO in 2017, which emphasizes the magnitude and extent of the problem of unsafe care.

According to the WHO, patient safety is a serious global public health issue. The chance is 1 in 1,000,000 travelers being harmed while in an aircraft. In comparison, the chance is 1 in 300 of patient's being harmed during health care. (WHO, 2018) It has been estimated that 4 out of 10 patients were injured while receiving a primary healthcare service, and up to 80% of harm was preventable. (Slawomirski, 2017).

Jha AK. (2018) highlighted the importance of ensuring that hospitals are providing safe and effective care to their patients to reduce the number of preventable deaths and disabilities. Unfortunately, the information is insufficient about the harm caused in the primary care setting, while the information is limited about how healthcare providers perceive the patient safety culture.

Despite the increasing focus on patient safety in the healthcare industry, there is still a significant gap in research that takes into account the views and experiences of the individuals receiving care. The beneficiaries' perspective is an important issue to address, as the patients' feedback can provide valuable insights into the quality of care they are receiving and how it can be improved. By including the perspectives of the beneficiaries in patient safety research, healthcare providers can better understand the needs of their patients and develop more effective strategies for providing quality care.

Not only the evidence which proposes that patients are good observers of their care is increasing, but also their perceptions and experiences can raise awareness of previously undetected problems in health care (Donaldson LJ. 2015). Such recent research data from

the Palestinian context gives a significant indication of the risk for patients in the healthcare institutions, and the importance of reviewing patient safety status in the Palestinian healthcare system. However, little empirical research is being made in terms of the safety aspects of healthcare in Gaza. There is a gap in the evidence about patient safety culture in UNRWA health centers.

Therefore, it is essential to explore the views and opinions of both the beneficiaries and healthcare providers who work in the different UNRWA health centers in Gaza to comprehend the perception of patient safety in health centers and recognize factors that contribute to any problems. Assessing the perception of patient safety culture in the UNRWA health centers is essential, as it would be beneficial for healthcare professionals, managers, and UNRWA health policymakers. This would provide a comprehensive image of the situation and aid in its improvement.

Exploring the current state of UNRWA health centers in the Gaza Strip is a new field of study that could directly benefit UNRWA beneficiaries and help ensure healthcare is safe for them. The researcher believes that exploring patient safety in UNRWA health centers, could lead to successive improvement and provide a better experience for refugees who use UNRWA health centers' services.

1.2 Significance of the Study:

Safety is a global concept that contains efficiency, security of care, the reactivity of caregivers, as well as the satisfaction of patients and relatives. (Orgeas. 2012). Thus, effective safety culture within the healthcare center reinforces good communication among healthcare team members, beneficiaries, and family members, which builds respect, and trust and reflects collaboration and coordination amongst healthcare team members and the public.

Comprehending the perception of patient safety culture among the UNRWA beneficiaries and healthcare providers will help the organization identify the barriers and challenges to patient safety. Furthermore, it will create a safety culture, improving the care provided to Palestinian refugees. Eventually, Patient safety is a major concern in the healthcare industry. Research has shown that the attitudes of healthcare providers have a significant impact on patient safety. A study conducted by Abu-El-Noor et al. (2019) found that healthcare

providers with more positive attitudes achieve higher levels of patient safety. Ultimately, providing safe care can help reduce mortality, morbidity, length of hospital stays, and cost. Therefore, healthcare providers need to maintain positive attitudes to ensure the highest level of patient safety.

Over the last few decades, healthcare interventions have been implemented in an attempt to reduce medical errors and improve patient safety. However, the major obstacle has been the organizational culture of healthcare environments (Sexton, 2000). In Palestine, which consists of two geographically separate parts, the West Bank and Gaza, the patient friend initiative has been implemented in the West Bank to improve patient safety in the local hospitals. This initiative has been supported by partners such as the World Health Organization (WHO).

Despite a large amount of effort and the significant investment of resources put into improving patient safety attitudes, the impact has been limited. The most significant improvement that has been seen is only 9.4%, which was seen in the area of incidence reporting (Hamdan, 2018). As it suggests that there is still more work to be done to improve patient safety attitudes and behaviors.

It has been established by Carpenter and colleagues (2010) and the World Health Organization (WHO, 2005) that developing countries have a greater likelihood of experiencing adverse events due to a lack of resources, outdated information and technology, and an unorganized healthcare system. The statistics have further shown that the hospital infection rate in some developing countries is as much as 20 times higher than in developed countries (Pittet, et al., 2008). This is a clear indication that the healthcare system in developing countries needs improvement to ensure the safety and well-being of its citizens.

Moreover, numerous factors have had a detrimental effect on mortality and disability rates, such as incompetence, inadequate training, and inadequate skills of healthcare workers (WHO, 2005b). As a result, WHO (2005a) has urged health authorities in developing countries to establish and develop patient safety systems that encompass a positive culture of safety and organizational support for safety processes. Which is essential to ensure that these countries can provide their citizens with the highest quality of healthcare.

In light of the given interests, the research study is a unique and novel endeavor, as it is the first to combine quantitative and qualitative tools to explore the safety culture in the UNRWA health centers of Gaza. The findings of this research will provide a valuable theoretical and practical knowledge base for both academics and practitioners alike. The research will be beneficial in furthering our understanding of patient safety culture in the UNRWA health centers of Gaza and turn, improving the quality of healthcare provided.

1.3 Purpose of the Study:

The study aims at assessing the beneficiaries' and healthcare providers' perceptions and determinants of patient safety culture in the UNRWA health centers in Gaza.

1.4 Specific Objectives:

1. To assess employees' perceptions towards safety culture in the UNRWA health centers in Gaza.
2. To explore the beneficiaries' perceptions and experiences of patient safety in the UNRWA health centers in Gaza.
3. To explore the determinants of safety culture in the UNRWA health centers in Gaza through beneficiaries' experiences.
4. To determine possible measures to improve practices of patient safety in UNRWA health centers in Gaza.
5. To investigate the variation of perceptions about patient safety in relation to beneficiaries' and healthcare providers' characteristics in UNRWA health centers.

1.5 Context of the Study

The context part provides background information about the current political system, demographic, economic, and socio-cultural details in Palestine, giving an overview of the health care system in Gaza, and the UNRWA health department in Gaza in terms of its facilities, HR, and overall structure. It describes the challenges and problems encountered by the healthcare system.

- The Geographical and Political Context:

Geographically, Palestine is a small country of approximately 27,000 square kilometers. The Gaza Strip is a region that is partially governed by the Palestinians following the Oslo

Agreement, which granted them partial control of the West Bank and Gaza. It is a narrow strip of land that measures 45 kilometers in length and 6-12 kilometers in width, with a total area of 365 square kilometers (PCBs, 2015). Gaza is bordered by the Mediterranean Sea to the west, Egypt to the south, and the Palestinian-occupied territories in 1948 to the other side.

Currently, Palestine is bounded by two geographically separated areas, Gaza, and the West Bank with land space of square kilometers which form 22% of historical Palestine territories. After the Oslo Agreement of 1994, the citizens in Gaza started to have self-autonomy and feel some improvements in their economic status until the outbreak of the Second Intifada in 2000, during which the conditions started to deteriorate again.

The Palestinian political coup took place in 2007, which affected the lives of Gazans, and the coup was accompanied by a strict blockade on the movement of people and goods. This was accompanied by many Israeli attacks on Gaza, which resulted in thousands of deaths, injuries, disabilities, and demolished homes and factories. All the cruel conditions made Palestinian citizens depend mainly on humanitarian aid and free services provided by the UNRWA. Difficult conditions mostly affected the quality of life and health, especially safety, as healthcare providers focused more on emergency conditions than on the quality of services.

- **Demographic Context:**

The total population of Palestinians worldwide has been estimated to be approximately 14 million as of the end of 2021, with 5.3 million living in the State of Palestine, representing 37.8% of the total number of Palestinians in the world (PCBs, 2021). The same source has indicated that within the State of Palestine, 3.2 million Palestinians reside in the West Bank (59.6%), and 2.1 million Palestinians live in Gaza (40.4%) as of the end of 2021. The population density in Palestine by the end of 2020 was 857 inhabitants per square kilometer, with 545 inhabitants per km2 in the West Bank and 5,693 inhabitants per square kilometer in Gaza. It is noteworthy that 66% of the total population of the Gaza Strip are refugees.

The same source has reported that by the end of 2020, the increasing rate of population growth has transformed the Gaza Strip into one of the highest population densities in the world, with an average household size of 5.5, and a total declined fertility rate of 3.9 births during 2017– 2019 compared to 4.6 births in 1999 in Gaza.

Despite its small size, the Israeli occupation has established a buffer zone along the eastern borders of the Gaza Strip, with an area of more than 1.5 kilometers, thus controlling 24% of the total area of the Gaza Strip. The ongoing blockade of the Gaza Strip has had a devastating effect on the economy of the Gaza Strip, with unemployment rates reaching 47%, and 72% of young people aged 15-24 being unemployed by the end of 2020. Which has caused more than half of the population of the Gaza Strip to fall into poverty.

However, the average life expectancy at birth in Gaza has increased to 73.8 years, due to the decrease in the death rate in the State of Palestine, according to the Palestinian Central Bureau of Statistics (PCBs, 2021).

The rise in life expectancy at birth is largely attributed to improvements in healthcare and the decrease in infant and child mortality rates. The aforementioned percentage constitutes a burden on the UNRWA health department, taking into account the financial crises experienced by the UNRWA and the residents of Gaza. Therefore, the health administration must ensure the continuity of healthcare services and improve the quality of care to secure the safety of patients.

- **Socioeconomic Context:**

Over 15 years of the blockade have had a serious effect on the health sector and on identifying the determinants of health In Gaza. The restrictions on the movement of people and goods in and out of Gaza have overstrained Gaza’s economy and worsened the situation of aid dependency. It is hard for the Palestinian economy to operate properly under the burden of such determinants; such as high fertility rates, rapid population growth, and the young population with less productivity and unemployment.

Moreover, 60% of the land and 80% of the water remain under Israeli control, leaving the Palestinians with no authority over the borders and resources. In addition to the limited

control over taxation, not to mention the absence of a national currency (Courbage, et al., 2016).

The current situation in Gaza is dire, with most refugees relying on the free services and humanitarian aid provided by the UNRWA. Unfortunately, it does not offer a permanent solution to the problem, the blockade of Gaza has caused a deterioration of the socioeconomic situation, making economic recovery difficult. It has hurt the health status of the refugees, making it even more difficult for them to improve their situation. A permanent solution is needed to address this crisis and improve the lives of the Gazan refugees.

- **Cultural Context:**

The family is seen as the most influential social institution in Palestinian culture. Through it, individuals inherit their religious, class, and cultural affiliations. The family is seen as a source of security and support in times of personal and communal difficulty. Many parents choose to have more children, as they view it as a way to increase their family's power and prestige, as well as an additional source of labor (Arab Encyclopedia Britannica, 2000). Thus, the family is a pillar of Palestinian society, providing emotional and practical support to its members.

Gender and age are both significant factors in the Palestinian family, with the cultural influence tending to be masculine. The father is typically the head of the family and the breadwinner, while the mother is responsible for raising the children and taking care of the home.

In recent times, both parents are actively involved in providing for the family and making decisions together. Sons and daughters are assigned duties that are appropriate for their age and gender. Additionally, Islam is the predominant religion in the region and it has a profound effect on governmental, political, and social matters.

Extended families are one of the Palestinian dominant characteristics because of many reasons. The consequences of continuous occupation have contributed to the increase in the number of refugees. On one hand, the Palestinians have adopted a political attitude that encourages fertility, and on the other hand, the absence of an effective social protection

system has increased the dependency on male siblings to secure the family's needs, which resulted in larger families.

- **Health Context and Healthcare System:**

The Palestinian healthcare system is one of the most important elements of the Palestinian population's social and economic well-being. It is a complex system that has been shaped by a variety of factors, including political, economic, cultural, and social conditions. Also, it is characterized by several challenges. The most significant of these is the lack of access to quality health care. As well as it's largely underfunded and understaffed and is unable to meet the needs of the population. In addition, the Palestinian healthcare system is highly fragmented and lacks coordination between different providers. This fragmentation has resulted in disparities in access to healthcare between different regions and populations.

Moreover, the Palestinian healthcare system is characterized by a lack of adequate infrastructure. Many healthcare facilities lack basic equipment and supplies, and there is a shortage of trained healthcare personnel. In addition, the Palestinian healthcare system is highly dependent on international donor assistance, and this assistance is often inadequate to meet the needs of the population.

There are four main providers of healthcare services in the Palestinian healthcare system, including the Ministry of Health (MOH), the United Nations Relief and Works Agency (UNRWA), non-governmental organizations (NGOs), and the private sector.

The MOH is the primary provider of healthcare services, offering primary, secondary, and tertiary services. It also facilitates referrals to neighboring countries and other private and NGO healthcare facilities for advanced medical services. Furthermore, the MOH plays an important role in providing and controlling immunization, public health activities, licensing and registration of health facilities, and the insurance program (MOH, 2014b).

According to (PCBS, 2018), Health insurance is mostly available to approximately 95% of Gaza's population. However, the coverage does not meet the needs and expectations of the people. There is limited availability of medications and specialist services, along with lengthy waiting lists for surgical procedures.

The UNRWA is the second provider of healthcare services, UNRWA plays an important role in providing PHC services through its centers and financially supporting secondary and tertiary services for registered Palestinian refugees (UNRWA, 2021). UNRWA has a large network of health centers that helps to provide essential health care services to the people of Gaza.

The NGOs are the third provider of healthcare services, and NGOs play a critical role in the healthcare system of Gaza. As well as operate in Gaza to provide humanitarian services and advocacy for the population. As of 2017, 543 registered NGOs were operating in the Gaza Strip, including human rights organizations, women's associations, children's rights organizations, and health support organizations.

As noted by the UNFPA (2016) NGOs provide primary healthcare services, assist with specialized medical expertise, and help deliver medical supplies to those who lack the necessary resources. In addition, NGOs provide psychosocial support, awareness campaigns, education and training, and other vital services that ultimately lead to improved healthcare outcomes. For example, MSF operates several medical clinics, mobile clinics, and health care centers in Gaza. And provide vital medical assistance including general medical care, psychosocial support, and treatment for public health issues as well as medical evacuations and medical referrals to other parts of the region.

Additionally, MSF provides educational materials, clean water access, and sanitation, and hosts local health promotion campaigns. The ICRC also provides healthcare assistance in Gaza, supporting hospitals and clinics in Gaza with medical equipment, supplies, food, and other valuable resources. The ICRC also works with the Palestinian MOH and local authorities to improve facilities and access to healthcare. The work done by both MSF and ICRC allows for the delivery of much-needed medical care to the residents of Gaza and has the potential to save countless lives.

The private sector is the fourth provider of healthcare services, Private clinics, and medical centers provide more specialized services, such as radiology, laboratory, and ultrasound services. Private healthcare providers often charge higher fees than public health services, making them inaccessible to many people. Additionally, private healthcare providers may

not be subject to the same regulatory standards as public health services, leading to a lack of accountability and quality assurance.

The MOH has taken steps to address these challenges, such as introducing regulations and laws to ensure that private healthcare providers adhere to standards of quality and safety. Additionally, the UNRWA has established a system of financial compensation that covers some of the costs associated with private healthcare services. Furthermore, UNRWA purchases advanced healthcare services from the private sector within quality and safety standards set by the department of health.

Despite the complexity of the system, the coverage and accessibility to healthcare services are generally satisfactory, except in times of emergency. Furthermore, the political commitment to health is evident, as evidenced by the high spending on health, which is estimated to be between 9-12% of the gross domestic product and is even projected to increase further, reaching more than 15% (MOH, 2011)

- **The UNRWA:**

The UNRWA is an agency of the United Nations established by the General Assembly in 1949. It is mandated to provide assistance and protection to the approximately 5.7 million Palestine refugees registered with the UNRWA across its five fields of operation. The mission of the UNRWA is to help Palestine refugees in Jordan, Lebanon, Syria, and the West Bank, including East Jerusalem and Gaza, to achieve their full human development while awaiting a just and lasting solution to their dilemma.

The UNRWA provides a variety of services, including education, healthcare, relief, social services, camp infrastructure, improvement, protection, and microfinance. In particular, the UNRWA operates 141 PHC centers and provides comprehensive PHC, both curative and preventative, to Palestine refugees in Gaza, Jordan, Lebanon, Syria, and the West Bank.

Approximately 2.97 million Palestine refugees are registered users of the UNRWA health centers and rely heavily on the UNRWA for their basic health needs. In 2011, the UNRWA developed a Health Reform Strategy to improve the quality of healthcare services provided. The reform process included the introduction of the FHT and electronic medical records (e-

Health). The FHT approach was designed to provide a person-centered approach to healthcare provision and to ensure a higher quality of care (Blight, et al., 2021)

Blight, et al., (2021) pointed out that The UNRWA provides a comprehensive PHC to Palestine refugees, with both preventive and curative services. The PHC deals with geographically distributed rights holders, who face a multiplied health burden due to the remaining need for RMNCH, as is the case with the increased incidence of NCDs, and a high burden of mental and psychological health problems from the other side, not to mention that the high burden of conflict-related injuries and rehabilitation.

An electronic health information system was applied in 2009, along with the FHT Approach to improve needs-based decision-making and planning, as well as the efficiency and quality of care. In 2020, the electronic health system has been put into effect in 139 out of 140 Health Centers (Blight, et al., 2021)

The UNRWA is a vital provider of healthcare services to Palestine refugees in Gaza. Through its 22 primary health centers, distributed into three geographical areas, the UNRWA offers a wide range of services, including maternal and child health, general curative services, NCD management, physiotherapy, dental services, laboratory and radiologic services, and school health.

As indicated by UNRWA (2016), to ensure the smooth functioning of services, the UNRWA health department in Gaza has employed around 1,000 staff. The health care services provided by UNRWA are essential to the health and well-being of Palestine refugees in Gaza.

According to the annual report (UNRWA, 2021), the number of medical consultations in the Agency health centers in Gaza is 3,352,955 for the year 2021, and the total number of patients registered in the UNRWA healthcare centers, who suffer from diabetes mellitus or hypertension and/or both is 101,009, while 94,847 women have benefited from the UNRWA family planning services in 2021, and 38,219 pregnancies have been newly registered in the UNRWA healthcare centers in Gaza in 2021 (UNRWA, 2021).

The same source revealed that the UNRWA financial crisis has had a significant impact on the FHT. Since 2018, the UNRWA has been unable to fill positions left vacant by frontline health staff who have either left the organization or gone on sick or maternity leave. This has made it difficult for the Field Offices to make temporary hires to fill the vacancies. Even when temporary hires are made, it is often not possible for the UNRWA to provide adequate training and orientation to ensure the staff is familiar with the FHT approach, which differs from the other health systems in UNRWA's fields of operations.

1.6 Conceptual Definition and Definition of Terms:

Patient Safety: The avoidance and prevention of patient injuries or adverse events resulting from the processes of healthcare delivery (Sugnadam, 2020). Patient safety is defined as the prevention of unintended or unexpected harm to patients or the potential for such harm. It is a broad concept that includes the prevention of medical errors, adverse events, and other risks that can lead to patient harm. It also includes efforts to ensure patient safety through the use of evidence-based practices, quality improvement initiatives, and risk management strategies.

Safety Culture: Several different definitions of safety culture exist. The United Kingdom Health and Safety Commission defines it as the result of individual and group values, attitudes, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, organization management of safety. Organizations with a positive safety culture are characterized by communications founded upon mutual trust, shared perceptions of the importance of safety, and confidence in the efficacy of preventive measures. (Yule, 2003).

Adverse Event: Refer to an injury to a patient caused by medical management rather than the underlying disease, which prolongs the hospitalization and/or produces disability at the time of discharge (Saberi, et al., 2014). An adverse event describes a medical event that results in harm to a patient. It is used to define an event that is unexpected, serious, and related to the patient's care that may occur during or after medical care.

Management Commitment to Safety: The extent to which the managers clearly understand and invest serious time and money into effective safety management by developing programs, policies, written plans, and procedures. They will also display leadership through effective accountability and recognition of behaviors and results. (OHS Academy, 2013)

Perception of Management: Refers to how employees view the actions and decisions of their managers. Unfortunately, it is often the case that employees have a negative perception of management due to unfair or ineffective practices.

Good Communication: The process by which information is systemically, clearly, and accurately exchanged among team members, also, it should be as relevant, local, and timely as possible (Armstrong, 2009). Good communication is the ability to effectively exchange information, ideas, and feelings between two or more people in a manner that is understandable and respectful.

Job Satisfaction: This is a term that is used to describe an individual's overall contentment with their job. It is a measure of how much an individual enjoys their job and the tasks associated with it. It is based on a combination of factors, such as the job itself, the working environment, the relationship with colleagues, and the recognition and rewards received.

Teamwork: Refer to the collaborative effort of a group of individuals working together to achieve a common goal. It involves working together, sharing ideas, and developing strategies to accomplish tasks efficiently. Teamwork is essential in any organization, as it allows for the completion of tasks promptly, while also fostering a sense of camaraderie and cooperation among the members of the team.

Safety Climate: Workforces' attitudes and perceptions at a given place and time. It is a snapshot of the state of safety providing an indicator of the underlying safety culture of an organization (Mearns, et al., 1997, p.28). Safety climate is the shared perception of safety within an organization, which is determined by the attitudes, beliefs, and values of its members. It is the overall perception of safety within an organization, which includes the level of risk acceptance, the level of safety management, and the safety culture.

Working Conditions: Refer to the environment in which employees are required to work, including factors such as safety, temperature, and hours. Unfortunately, in many cases, these conditions are far from ideal and can have a significant negative impact on the health and well-being of those employed.

Stress Recognition: Refer to the process of identifying and understanding the signs and symptoms of stress in oneself and others. Unfortunately, this is not always an easy task, as stress can manifest in different ways and be difficult to recognize.

Beneficiary: Refer to an individual who is eligible to receive healthcare services from the health center.

Large Health Center: Refer to health centers that serve large numbers of beneficiaries. These health centers are typically located in densely populated areas.

Small Health Center: Refer to health centers that serve a limited number of beneficiaries. These health centers are often located in rural, remote, or sparsely populated areas.

1.7 Summary:

An introduction of the study sites has been given, within the context; the researcher has provided background on his interest in the field of study. Justifications have been described for the importance of the study. With the growing apprehension about patient safety worldwide, particularly in poor and developing countries like Palestine. Finally, the operational definitions and definitions of terms have been elucidated.

Chapter Two

Conceptual Framework and Literature Review

The chapter summarizes the arguments, studies, and claims about the main study concept, which is the perception of patient safety as presented in the reviewed research, reports, and local studies. As well, it explains in detail the key aspects and dimensions that have been used in previous studies to assess patient safety culture. Moreover, it includes the current patient safety research and considers whether a gap exists in the literature, and presents the rationale for conducting a study on the patient safety themes in Gaza.

The description will come after presenting the study's conceptual framework, which shows the essence of the study, added to the other domains, in which the researcher has examined their effects on the previous main concept.

2.1 Conceptual Framework

The study conceptual framework was built according to the literature review (Fig 2.1). The framework has logically helped to connect potential factors that could affect the culture of patient safety. The researcher has divided the perception of patient safety into two main parts, which are the healthcare provider's perception and the beneficiary's perception as shown in Figure 2.1.

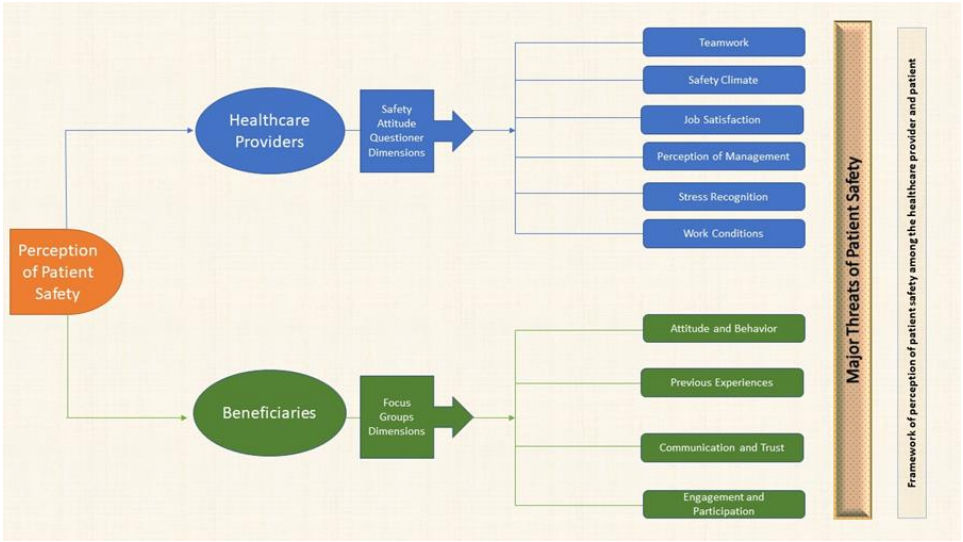

Figure (2.1): Framework of perception of patient safety among the healthcare providers and beneficiaries

Based on the literature search of patient safety culture studies, the study has taken out several basic themes, which have been extensively used for the exploration of patient safety culture. The themes were mostly related to the topics of Safety Climate, Perception of Management, Reporting Adverse Events, Communication, and trust between the healthcare providers and beneficiaries, Patient Attitude and Behavior, Stress Recognition, Engagement and Participation, Communication, Working Conditions, Teamwork, and Job Satisfaction.

2.2 The Concept of Patient Safety and Safety Culture

Patient safety is defined by the WHO as 'the prevention of errors and adverse effects to patients associated with healthcare' and 'to not harm patients (WHO. 2009). Unsafe healthcare practices lead to injury, disabilities, or death of millions of people in the world yearly, and may lead to needless use of limited resources.

So, patient safety has been given prime importance and recognition. Patient safety approaches have been integrated into the strategic plans of various healthcare organizations worldwide. Patient safety in primary healthcare settings has not been studied in the same depth as in hospital settings; nevertheless, more research has focused on PHC.

Halligan and Zecevic (2011) conducted a review of safety culture literature from 1980 to 2009. They found that there was a disagreement among researchers regarding the definition of safety culture and if it was distinct from the concept of safety climate. The most widely accepted definition of safety culture was provided by the Advisory Committee for Safety in Nuclear Installations and was adopted by the UK HSC. According to the HSC, safety culture is "the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization’s health and safety management" (HSC, 1993, p. 23).

Table (2.1) Comparison between the Concepts of Safety Climate and Safety Culture.

Safety Culture	Safety Climate
It gives a broader understanding of the state of safety.	It gives a narrow understanding of the state of safety.
It measures the state of safety for a long period.	It measures the state of safety at a certain time.
It can be assessed through examination of the behavior and practice of employees regarding safety (How people do things in the workplace).	Climate can be assessed through the exploration of employee's psychological states, such as attitudes, values, and perceptions of safety (How people feel about safety).
It needs to be fully understood by deploying qualitative methods (e.g., interviews).	It can be measured by using quantitative methods (e.g., questionnaires).
It reflects the whole safety culture practice in an organization.	It is an indicator of a patient safety culture.

Cooper (2000) proposed a useful framework to further clarify the terms 'safety climate' and 'safety culture', which identified three aspects of safety culture: psychological (often known as 'safety climate'), behavioral (or 'organizational') and situational (or 'corporate').

The current study uses the term safety culture as it is a much broader concept that covers the assessment of both the thoughts and the attitudes of staff about patient safety, as well as the effect of staff behavior and practice on patient safety (Zhang, et al., 2002). As such, the broader concept is useful for a study to assess patient safety culture in healthcare centers in developing countries, particularly in the Palestinian context, where major financial, political, and social obstacles exist.

The complexity and sensitivity of the patient safety practice issue in such demanding developing country circumstances require a more comprehensive assessment of the determinants of patient safety. Safety culture is defined simply by the Confederation of British Industry (CBI, 1991, p.67) as "the way we do things around here". (Lee, 1998) believes that safety culture is not only a reflection of behavior; it also considers the attitude that controls such behavior.

Westrum (1993, 2004) provided further elaboration on the concepts of safety culture. On the other hand, Kirk, et al. (2007) have described Westrum's theory of levels of organizational maturity as based on case studies and provides a key way of understanding organizational cultures. These levels, namely pathological, bureaucratic, and generative, are classifications of how well-developed safety culture is within an organization, and how safety-related information and issues are handled. Pathological cultures are the most immature, where information is hidden, failures are covered up, and new ideas are actively discouraged. In a bureaucratic culture, information may be collected and then ignored, with new ideas seen as the source of problems. Generative cultures, on the other hand, are mature organizations, where systems have been developed for the handling of the flow of information and learning from others is actively encouraged.

Additionally, Westrum's work has been extended to a model with five levels and modified by Hudson (2001) and Parker (2009). The model has been applied to safety culture assessment and has been used to develop a safety culture assessment tool, which is now widely used in the oil and gas industry.

The model outlines five levels of organizational safety culture, beginning with the Pathological level, where no time is spent on risk management and safety. The Reactive level follows, where the organization takes risks seriously and reacts to incidents as they occur. The Calculative level is where an organization has a system in place to manage risks, while the Proactive level is where an organization is always on the alert for potential risks. Finally, the Generative level is where risk management is an integral part of everything the organization does.

irk, et al. (2006) were the first to use the safety culture framework of Parker and Hudson in healthcare organizations. The framework was adopted as it was based on extensive empirical research, and it was thought that the same approach and methodology which had been successful in a high-risk industry could be beneficial for assessing safety culture in healthcare organizations.

Subsequently, Barker (2009) also used the same framework to assess the safety culture in NHS organizations. The framework has been extremely useful in helping healthcare providers to understand the concept of safety culture within PHC organizations.

Guldenmund (2000, p.243) proposed a conceptual framework for understanding safety culture, defining it as "the aspects of the organizational culture which affect attitudes and behavior related to increasing or decreasing risk".

Guldenmund also proposed a model to explain safety culture in which three levels of safety culture were analogous to onion layers. The core consists of the “fundamental assumptions” that are implicit, unconscious, taken for granted, and shared throughout the entire organization.

Guldenmund assumptions are general, rather than specific to safety. The next layer is labeled as ‘espoused values’ which are, in practice, the attitudes of the members of an organization; these attitudes are specific to safety rather than general organizational factors.

Guldenmund has proposed four broad groupings of attitudes that can be used to assess safety culture, which includes hardware (e.g., plant design), management systems (e.g., safety systems), people (e.g., senior management), and behavior (e.g., risk-taking).

Additionally, the outer layer includes artifacts and outward expressions such as equipment (e.g., personal protective equipment), physical signs (e.g., publicly posting the number of days since the occurrence of the last accident), behaviors (e.g., the utilizing of appropriate safety equipment or the conducting of safety tours by managers), and safety performance (the number of incidents) can also be used to assess safety culture.

The frameworks proposed by Parker (2009) and Hudson (2001) are both useful for understanding safety culture assessment and can provide a snapshot of how safety issues are prioritized and dealt with.

Safety culture is a complex concept that is affected by many issues. Guldenmund (2000) has suggested that safety culture is subjective and his framework has highlighted the importance of gaining a deeper, qualitative understanding of the issues at hand, and the need for qualitative work to gain such understanding.

To further understanding, the conceptual framework of the current study has incorporated several safety culture aspects and dimensions from the literature that have been used to assess the perception of patient safety culture among healthcare providers and beneficiaries of healthcare services (Singer et al., 2003; Nieva and Sorra, 2004; Colla et al., 2005; Pronovost et al., 2006a; Ricci-Cabello et al., 2016)

2.3 Patient Safety Background

Patient safety in PHC settings is an important and growing field of research in developed and developing countries. However, it has not been comprehensively studied in Palestine, particularly in Gaza. While it is easy to talk about safety culture, it can be more difficult to understand the characteristics that define it and its implications for healthcare organizations.

Additionally, patient safety is a major concern for healthcare providers in the Palestinian PHC system. especially true in light of the ongoing conflict in the region and the resulting lack of access to quality health care. The Palestinian MoH has made patient safety a priority in recent years and has developed several initiatives to improve safety in PHC.

The current state of patient safety in Palestinian PHC is concerning. According to Ayesh, in a study conducted in 2022, the majority of healthcare providers in the West Bank and Gaza reported inadequate resources, including inadequate staffing, inadequate supplies, and inadequate training. These issues can lead to medical errors and patient harm. In addition, the study found that the majority of healthcare providers reported inadequate safety protocols, such as the lack of a formal system for reporting medical errors and patient safety incidents.

For example, a retrospective review of hospital medical records conducted by Wilson et al. (1995) in 28 hospitals in Australia revealed that 16.6% of admissions were connected with adverse events, resulting in 13.7% of patients suffering permanent disability and 4.9% of deaths. Furthermore, 51% of these events were found to be preventable. The results emphasize that patient safety is a critical issue that needs to be addressed.

Although their research contained a large sample size and was in agreement with the findings of Pronovost, et al. (2006b) which suggested that a more positive patient safety culture was associated with fewer adverse events in hospitals, the research did not directly measure the effect on patient safety outcomes. Nonetheless, the findings of this research still provide valuable insight into the relationship between patient safety culture and patient safety outcomes.

A more recent study conducted in Israel by Kagan and Barnoy (2013) used a questionnaire with a convenience sample of 247 registered nurses to examine the relationship between patient safety culture and the incidence of medical errors, as well as the rate that has been reported by the nurses.

The questionnaire has provided insight into the incidence of mistakes with medication within clinical practice and the rate at which the errors were reported, in addition to the nurses' perceptions and views of the safety culture workplace.

Although the study has only focused on the perceptions of nurses, the findings have provided useful and strong behavioral evidence that the safety culture within the hospital influences the readiness and willingness of nurses to report their errors.

According to Jha (2008), several factors can lead to poor patient safety outcomes in a medical context. Firstly, there is a tendency for managers and healthcare workers to focus on individual accountability rather than taking a systems-based approach to patient safety, which could address underlying issues that could be preventing errors. Secondly, clinicians may become desensitized to errors due to the frequency of their occurrence. Thirdly, the hierarchical structure of medical care may lead to errors being seen as a personal attack rather than an opportunity for improvement. Lastly, there is a lack of emphasis on creating a learning environment for frontline workers.

Similarly, Leape (2009) has taken a holistic view of healthcare systems, proposing that several factors are responsible for most medical errors, which must be addressed. And suggested that the organizational environment should be shifted from one of secrecy to transparency and that punishment should not be used to address medical errors.

Moreover, Leape proposed that the management of organizations should focus on inter-professional teamwork, rather than on personal performance. Also advocated for a new perspective to be taken when analyzing the causes of medical errors, one that emphasizes system failure and the center phase, rather than individual errors.

In the meantime, the opinion of Reason (1995) has focused on the potential threat of staff failure in a complex and hazardous system such as the healthcare system. Reason supposed that staff could pose a greater threat to patient safety than technical malfunctions.

Reason argued that the management of human risk can never be 100% effective, though it can be moderated with the assistance of technology. Moreover, Reason argued that human risk can be moderated with the help of technology, but it can never be eliminated. The view has been echoed by Jha (2008) and Leape (2009), whom both emphasize the importance of a positive management approach to safety culture, which places patient safety at the forefront of the agenda.

In addition, Neiva and Sorra (2003) further suggest that this approach should prioritize patient safety and guide healthcare workers toward providing safer levels of care.

Further studies, the study conducted by Alqahtani & Evley (2020) in Saudi Arabia revealed an unsatisfactory level of safety culture among healthcare staff in the ICUs.

This study was conducted to establish a baseline for the safety climate in hospitals and ICUs, to identify weaknesses, and develop strategies to improve patient care. Additionally, research has suggested that decreasing the workload and job stress can have a positive effect on job performance. Further studies should be conducted to continue to build upon these findings and to ensure the highest levels of patient safety and care.

Another Arabic study in Egypt, conducted by Abdou and Saber (2011) titled "A Baseline Assessment of Patient Safety Culture among Nurses at Student University Hospital" aimed to assess the patient safety culture among nurses at the Student University Hospital in Egypt. The study was applied to a convenience sample of 165 nurses who met the inclusion criteria and were available during the data collection period.

The Safety Attitudes Questionnaire (SAQ) was used to collect data. The results of the bivariate and multivariate analyses showed that the nurses had generally positive responses to the safety culture dimensions and were satisfied with their job and the teamwork atmosphere.

While the lowest ratings were reported regarding the perceptions of management. Technical nurses employed in the ICU had a significantly higher perception of the overall safety culture dimensions compared to professional nurses who worked in the CCU and general units.

Furthermore, a correlation between socio-demographic characteristics and all dimensions of safety culture was identified. It is suggested that by gaining an understanding of nurses' safety attitudes, organizations can use this as a starting point to increase safety awareness and identify areas that need improvement.

Making an in-depth look into the Palestinian healthcare system (Abu-El Noor, et al., 2019) has made a descriptive study that used the safety attitude questionnaire, to assess the patient safety attitudes of 424 nurses working in four governmental hospitals, The research indicated that nurses exhibited a slightly favorable attitude toward patient safety, however, only 41.9% reported having received prior patient safety training.

In another study in the context of Palestine, Hamdan, and Saleem (2013) conducted a study to assess the patient safety culture in Palestinian public hospitals. The study, which was an Arabic-translated version of the Hospital Survey on Patient Safety Culture, highlighted the presence of a punitive and blame culture, under-reporting of events, lack of communication openness, and inadequate management support. The issues were identified as basic challenges for providing safe healthcare.

After a short period and within the same year, Hamdan (2013) conducted another study to assess safety culture in Palestinian neonatal intensive care units (NICUs) using the Safety Attitudes Questionnaire (SAQ). The results of Hamdan's study showed considerable differences in safety culture among a wide range of Palestinian NICUs. This research suggested the need for a personalized strategy that builds on existing strengths and targets areas for improvement to deliver the best healthcare possible to the most fragile patients and newborns in NICUs.

Based on the arguments of Najjar, et al. (2013), a retrospective review of 640 hospitalized patient records using the GTT in Palestinian hospitals revealed that 14.2% of the patients suffered from harm. Of these events, 59.3% were preventable and 70.4% resulted in temporary harm and required prolonged hospitalization.

The GTT results reveal that adverse events in Palestinian hospitals likely occur at a rate 20 times higher than previously reported. The argument is that patient safety is of utmost importance and that direct interventions should be taken to improve safety in these hospitals. It is suggested that direct action should be taken right away to enhance safety. Moreover, the

costs of dealing with negative outcomes as combating adverse events should be taken into account, particularly in resource-poor countries like Palestine.

Additionally, the cost of not investing in safety measures can be even higher, as the consequences of preventable accidents and injuries can be catastrophic. Therefore, it is important to weigh the costs and benefits of direct interventions and make an informed decision that is best for the community.

Bottcher and colleagues (2019) have highlighted the moderately positive attitudes toward patient safety among both doctors and nurses. They suggested that future patient safety training should focus on increasing understanding of medical errors and should be motivating and relevant to clinicians so that it can be incorporated into continuous professional education. It is important that such training is conducted respectfully, to ensure that it is taken seriously and that it is beneficial to all parties involved.

A modern study conducted by Alfaqawi et al. (2020) has revealed that physicians in Gaza possess relatively positive attitudes towards patient safety in the domains of team functioning and working hours as a cause for the error. However, they have a neutral attitude toward understanding medical errors or patient safety training within the curriculum. The authors suggest that informal learning opportunities on the job can help physicians acquire concepts of patient safety and that the inclusion of such concepts into formal postgraduate curricula can help to improve patient safety attitudes among younger and less experienced doctors, thus leading to behavior changes ultimately resulting in improved patient outcomes.

Rashed and Hamdan (2019) investigated the underreporting of incidents in 11 public hospitals in the West Bank and found that only 40.3% of participants reported incidents in the past year. Physicians were 2.1 times more likely to report than nurses. The main barriers to reporting, as perceived by the clinicians, were a lack of proper structure for reporting, a prevalence of blame, and a punitive environment. Additionally, the clinicians expressed fear of administrative responsibility, social and legal liability, and being questioned about their competence. which has the potential to be detrimental to patient safety in Palestinian hospitals.

Najjar and colleagues (2018) conducted an observational, cross-sectional study to investigate the relationship between patient safety culture dimensions and patient safety culture self-reported outcomes across different cultures. The study was conducted in 13 Palestinian and 90 Belgian hospitals and revealed insights into the cultural differences regarding patient safety culture.

The summary of the study has been put together to promote patient safety in Palestine and Belgium, and it is suggested that staffing and communication regarding errors should be improved in both countries to further enhance patient safety.

Future research should focus on the association between safety culture and hard patient safety measures such as patient outcomes, and strategies to improve the quality of healthcare services in primary care settings, such as UNRWA health centers, to improve patient safety in Palestine.

Sarkar (2009) has discussed the various elements that affect safety in primary care, such as the behaviors of patients and healthcare providers, the interaction between providers and patients, and the involvement of the community and health systems. Consequently, the study will therefore be focused on both healthcare providers and beneficiaries, to explore more about the patient safety culture in UNRWA health centers in Gaza.

2.4 Assessment of the Patient Safety Culture

To improve healthcare quality, it is important to assess the patient safety culture in the healthcare organization (Kohn et al., 2000). This assessment should include a data-based evaluation of the current safety culture, as well as surveys of staff and managers to gain insight into their perceptions of the commitment to safety issues (Clarke, 1999). By taking these steps, healthcare organizations can gain a better understanding of the current safety culture and identify potential areas for improvement.

Cooper (2002), Nieva & Sorra (2004), and Colla et al. (2005) all agree that assessing safety culture in organizations is an important step in reducing accidents and injury rates, and ensuring that safety issues are given attention and commitment they deserve. Furthermore, assessment can increase healthcare providers' awareness of safety issues, and help identify areas of strength and weakness, allowing managers to take action to improve safety, evaluate

interventions, and use practice as a benchmark within a health institution or in comparison with other institutions. Assessing safety culture is an essential practice for any healthcare organization.

Questionnaires are an effective tool for assessing patient safety culture in healthcare organizations. Furthermore, the questionnaires measure key aspects of the safety culture, such as error reporting systems, leadership and management support for patient safety, non-punitive response to errors, organizational learning, feedback to errors, quality of communication, and teamwork climate. These dimensions are essential in understanding the safety culture of a health organization.

Safety questionnaires, such as the Safety Attitude Questionnaire (SAQ), are used to measure and monitor safety culture to meet healthcare quality regulations from the Joint Commission for the Accreditation of Healthcare Organizations, the Agency for Healthcare Research and Quality, and the U.S. National Quality. (Gabrani, et al. 2015; Smits et al. 2017; Sexton, et al. 2006).

The SAQ was highly regarded for its many strengths. It was popular among researchers and investigators and was shorter than other questionnaires such as the Job Descriptive Index. Additionally, it had been tested and validated in different cultures worldwide, was available in multiple language translations, and could measure and monitor trend data over time. Furthermore, it could be benchmarked and used in any unit of the hospital, such as the ICU, as noted by Smits et al. (2017). These strengths made the SAQ a valuable tool for many researchers.

The Safety Attitudes Questionnaire (SAQ) of the ICU Arabic version has been the most widely used validated tool in the Arabic culture. Hamdan (2013) translated and validated the SAQ, testing for internal consistency, as well, Abu-El-Noor, et al. (2017) confirmed the translation, testing the psychometric properties (validity and reliability) and finding good validation. The SAQ is used as a tool to evaluate the safety culture in which healthcare is provided and investigate the relationship between the safety culture in healthcare and patient outcomes.

2.5 Factors Affecting the Patient Safety Culture

This section will explore the various dimensions that had a significant impact on the patient safety culture in the PHC center, as outlined in the framework.

- **Job Satisfaction**

Patient safety and patient satisfaction go hand-in-hand (Weingart, et al., 2006).

Job satisfaction, as defined by Schermerhorn (2000), is the degree to which individuals feel positive or negative about their jobs, and is an attitude or emotional response to one's tasks and the physical and social conditions of the workplace. It is a key motivator that can lead to positive employment relationships and high levels of individual job performance. There are two main reasons why job satisfaction should be considered important. Firstly, it is a reflection of good treatment and respect for individuals. Secondly, it can lead to behaviors that positively impact organizational functioning.

Moreover, Landy and colleagues (1989) suggested that Job satisfaction can be a reflection of how an organization is operating. Variations in job satisfaction between organizational units could be a sign of potentially problematic issues.

- **Safety Climate**

The safety climate is an important concept in healthcare, as it is associated with patient and healthcare worker safety, healthcare worker injuries, experiences, and compliance with safe work practices (DeJoy, et al., 2004).

The safety climate is defined as the shared perceptions of employees about the importance of safety within their organization. To measure safety climate, safety climate questionnaires can be used to assess the attitudes and perceptions of the workforce. Thus, a safety climate can provide valuable insights into the values, attitudes, and beliefs of people within a workplace.

- **Teamwork**

Many studies have highlighted the importance of teamwork in healthcare settings, and its increasing emphasis in healthcare practice (Barrett, et al., 2001; Clements, et al., 2007).

The adoption of a teamwork approach in health organizations can bring a range of potential benefits, such as improved patient care quality and reduced errors (McCulloch, et al., 2009; Manser, 2009). On the other hand, a lack of teamwork among staff can increase the risk of complications and even lead to patient mortality (Mazzocco, et al., 2009).

An Arabic study by AbuAlRub, et al. (2012) examined the correlation between safety climate and teamwork, using a questionnaire with a convenience sample of 381 nurses in a Jordanian hospital. The results revealed a positive correlation between safety climate and teamwork, as well as between teamwork and the nurses' intention to remain committed to providing good quality healthcare for patients.

In conclusion, the study has addressed an important aspect of teamwork and safety climate in healthcare settings. However, the results could have been more beneficial if qualitative research methods were used and other healthcare professional groups had been included. Such an approach would have provided a more comprehensive understanding of the relationship between teamwork and safety climate and would have been more useful for designing interventions to improve patient safety.

- **Perception of Management**

According to the National Quality Forum (NQF, 2006), effective leadership is essential for improving the patient safety culture within health organizations. Yates et al. (2005) emphasize that senior leaders must be engaged to design strategies and build a structure that guides processes and outcomes for safety.

Additionally, effective leaders can set a good example by following safety protocols and stressing the importance of safety in the workplace. Finally, leaders could ensure that safety processes are in place and that employees are given the necessary training and resources to ensure that safety is a priority.

Shipton and colleagues (2008) conducted a UK study that showed that when employees had a positive view of senior management leadership, this was associated with better ratings of clinical governance and fewer patient complaints.

- **Stress Recognition**

A general agreement has been reached that work-related stress can hurt health and well-being (Semmer et al., 2005a). Evidence suggests that excessive workload can lead to occupational accidents and medical errors (Frone, 1998; Zohar, 2000; Jones et al., 1988).

Sveinsdóttir (2006) added that stress could have detrimental effects so, if the severity of the stressors exceeds acceptability thresholds, it can lead to work-related issues, such as increased absenteeism, decreased job satisfaction, drop in productivity, and decreased organizational commitment, as well as poor quality of patient care.

If the stresses continue, they will lead to burnout. Though the worst consequence would be having a poor quality of care provided, as the patients were deprived of adequate care and human rights.

- **Working Conditions**

Working conditions are an integral part of an individual's performance. They encompass both physical and psychological aspects, as well as the circumstances of one's work. These conditions can have a significant impact on an individual's productivity, morale, and overall well-being. Employers need to take into account all of the factors that can affect an individual's performance when creating working conditions. By doing so, employers can create a workplace that is safe, comfortable, and supportive for employees. According to Manyisa (2015), it is important to consider all of the factors that can affect an individual's performance when creating working conditions. By doing so, employers can create a workplace that is conducive to success and productivity.

Improving the working conditions will most likely promote patient safety (Stone et al., 2007).

- **Patient Attitude and Behavior**

In contrast to the growing evidence of patients as acute observers of their healthcare, as pointed out by Donaldson (2015). There is a scarcity of research that has explored the impact of patient involvement on healthcare quality.

- **Patient's Previous Experience**

The Agency of Healthcare Research and Quality (AHRQ) defines the patient experience as the comprehensive range of interactions between patients and the healthcare system. This encompasses care from health plans, doctors, nurses, and staff in hospitals, physician practices, and other healthcare facilities.

Understanding the patient experience is a fundamental step in delivering patient-centered care. Patient experience is an essential element of healthcare quality, and patients prioritize several aspects of care, such as timely appointments, easy access to information, and effective communication with healthcare providers. Consequently, understanding the patient experience is essential to delivering high-quality care.

It is important to consider the patient experience when assessing the quality of healthcare. Evaluating the patient experience in addition to other components such as effectiveness and safety of care provides a comprehensive overview of healthcare quality (AHRQ, 2016).

Research has suggested that a positive experience may lead to a greater preference for involvement in the treatment of their illness (Mansell, et al., 2000). Additionally, a patient safety incident may also influence their preference for safety-related behaviors.

- **Communication and Trust between the Healthcare Providers and the Beneficiaries**

Organizations with strong communication policies could enrich their beneficiaries' health, while the ones, which do not have effective procedures in place, could negatively influence the beneficiaries' well-being. Healthcare professionals and institutions are requested to realize the significance of communication in healthcare to succeed.

Despite the remarkable advances in healthcare, medical errors remain a major issue. Poor communication is often the root cause of many mistakes, leading to malpractice litigation. According to a 2015 report by CRICO, a division of The Risk Management Foundation of Harvard Medical Institutions, Inc., communication failures were associated with 1,744 deaths in five years and were a factor in 30% of 23,658 cases filed from 2009-2013.

- **Engagement and Participation**

Patient engagement is seen as a key factor in healthcare redesign and improvement (Abelson, et al., 2018). Moreover, active communication and information exchange between patients and healthcare professionals are essential for successful patient involvement in their care (Krist, et al., 2017).

Engaging the patients effectively in their care is crucial to improve health outcomes, increasing satisfaction levels with the care experience, reducing costs, and even upgrading the clinicians' experiences.

Chapter Three

Methodology

The methodology chosen for a research project is an important decision that should be carefully considered. It is determined by several factors, such as the scope and aim of the research, the questions being asked, any constraints that may be present, the data needed, practical matters, and the research philosophy being used (Denscombe, 2007; Bryman, 2012). Taking all of these factors into account will ensure that the best methodology is chosen for the research project.

3.1 Study Design

Recently, many researchers have come to believe that the investigation of complex issues, such as patient safety, requires the use of mixed-methods research. This type of research combines elements of qualitative and quantitative research approaches to gain a comprehensive understanding of the research phenomenon (Zhang et al., 2002; Nieva & Sorra, 2003; Flin et al., 2006; Guldenmund, 2007).

Mixed methods research allows researchers to gain a breadth and depth of understanding and verification through the use of qualitative and quantitative viewpoints, data collection, analysis, and inference techniques (Johnson et al., 2007, p. 13).

The design of the study is a mixed method one, in which the data has been complementary quantitative and qualitative. The study is a descriptive, analytic, and cross-sectional study, to produce reliable and valid findings about the situation of patient safety in the UNRWA health centers.

The quantitative part of the study has been carried out for the healthcare providers by the (SAQ), while the qualitative part was performed via nine focus group discussions. Together, these two approaches will provide a comprehensive understanding of the situation of patient safety in the UNRWA health centers.

3.2 Study Setting

The study has been conducted in the UNRWA health centers distributed across Gaza (22 health centers at the time of the study). For the quantitative study, five health centers were

chosen using stratified random sampling in the five governorates: Rafah, Khan-Younis, Central, Gaza, and North Gaza.

The healthcare providers list includes senior medical officers, specialist physicians, medical officers, dentists, nurses (senior, staff, and practical nurses), midwives, (lab and X-ray technicians), physiotherapists, and pharmacists.

For the qualitative part: Nine focus groups were conducted in three health centers. The health centers were selected in stratified random sampling.

3.3 Study Population

The study population contained two groups:

The first group has been for the quantitative tool, which consisted of healthcare providers with a total of (683) healthcare providers who work in the UNRWA health centers in Gaza.

The second group has been for the qualitative tool, it consisted of all beneficiaries attending the UNRWA primary healthcare services within the health centers in Gaza. According to the UNRWA health department annual report (2021), the number of face-to-face medical consultations in Gaza was 2,560,141, and the specialist's consultation number was 24,910, while the number of Telemedicine calls to UNRWA HCs was 844,518.

3.4 Eligibility Criteria

- **Inclusion Criteria**

In the quantitative part, the eligible participants were all fixed-term contracted healthcare providers such as; senior medical officers, specialist physicians, medical officers, dentists, nurses (senior, staff, and practical nurses), midwives, (lab and X-ray technicians), and physiotherapists. As well as pharmacists, who were employed for at least 12 months before the study, to be familiar with the UNRWA health services.

In the qualitative part, eligible participants include adult males and/or females (18 years or over) with previous experience using primary healthcare services provided by UNRWA health centers.

So, the eligibility criteria ensured that people with different disabilities were represented by not less than 15% of the sample size, which is the WHO estimation of disability prevalence in any given population.

- **Exclusion Criteria**

In the quantitative part, the researcher excluded all healthcare providers with a contract other than a fixed-term contract, as well as newly employed fixed-term providers (less than 12 months). For the qualitative part, the researcher excluded all beneficiaries under the age of 18.

3.5 Sample Size Calculation

The first sample in the study was healthcare providers. According to the 2021 annual report of the UNRWA health department, 683 healthcare providers were the total number of selected healthcare providers in Gaza. The maximum acceptable percentage of error was set at 5%, with a hypothesized percentage of the dependent variable in the population of 50%. Epi info application was used to calculate the sample size, resulting in 246 healthcare providers with a required confidence level of 95% and a probability of occurrence of 50%. To compensate for potential non-responders and increase the study's statistical power, the sample was increased to 270. (**Annex 1**).

The second sample in the study was the beneficiaries. Nine focus groups were conducted with a total of 71 participants, with each group consisting of (7-10) beneficiaries.

3.6 Sampling Process

3.6.1 Sampling

For the quantitative study sample, a multi-stage sampling technique has been used to select 9 health centers of the total 22 health centers in Gaza. Gaza was divided into three areas, 3 health centers were randomly selected from each area, one small center, and two large ones, while in the middle area; 3 health centers were randomly selected. Then all the eligible healthcare providers from the randomly selected health centers were invited to participate in the research study.

Table (3.1): List of the Randomly Selected Health Centers

Area	Large Centers		Small Centers
South	Rafah HC	Khan-Younis HC	Shaboura HC
Middle	Central Nuseirat HC	Buriej HC	Deir-El-Balah HC
North	Remal HC	Jabalia HC	Sheik-Radwan HC

For the qualitative study sample, a multi-stage sampling technique was used to select 3 UNRWA health centers of the total 22 health centers in Gaza. Gaza was divided into three areas, and one health center was randomly selected from each area. Then, an opportunistic sample technique was used to select participants from the randomly selected health center to participate in the research study.

3.7 Ethical and Administrative Considerations

To begin the study, the following measures have been carried out:

- The proposal was submitted to Al-Quds University-School of Public Health for discussion and academic approval by the research review committee.
- Administrative approval was obtained from the UNRWA RRB (Research Review Board) to conduct the study.
- The 1975 Modified International Code of Ethics Principles, commonly referred to as the Declaration of Helsinki, which is adopted by the World Medical Assembly was applied and an official letter of approval to conduct the research was granted by the Helsinki Committee in Gaza (Annex 2).
- Each healthcare provider and beneficiary in the study were given a thorough explanation and clarification regarding the research goals and confidentiality.
- Each participant in the study realized that participation in the research is optional. In addition, verbal consent was obtained from the employees, who participated in the study.
- Formal written consent for taking notes and audio recording the focus group discussions was obtained.
- To increase credibility, the researcher adhered to the Ethical Code Principles, ensuring anonymity and confidentiality were maintained.
- The researcher assumed that other ethical rights were safeguarded by adhering to principles of integrity, honesty, and respect for truth.

3.8 Study Tool

The Quantitative Tool

To collect the quantitative data, the researcher has used the (SAQ) as a mechanism to assess the perception of healthcare providers toward patient safety culture. The questionnaire consisted of 30 questions **(Annex 3).** The questionnaire contained three parts that cover the research questions. The parts are: The first part, is a guiding introduction to the questionnaire, and the second part is the questionnaire, which covers 6 domains of 30 questions measured on a five-point Likert's type scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The domains are Job satisfaction (1-5), safety climate questions' (6-12), teamwork climate questions' (13-18), stress recognition questions' (19-22), perceptions of management questions' (23-26), and working conditions questions' (27-30).

The third part is the demographic and work-related characteristics. The participants were asked to provide information about their age, gender, profession, level of education, total years of working experience, years of working experience in the UNRWA health centers, marital status, patient safety grade in the health center, number of reported medical errors in the past year, and finally, a measure describing the quality of communication and cooperation with all healthcare provider groups.

The Qualitative Tool

For the qualitative data, the researcher has used open-ended questions (Annex 4), the questions were translated without modifications from a previous British study, which were developed by Ricci-Cabello et al. (2014) based on the findings from a meta-synthesis of qualitative studies examining the patients' perspectives and experiences of patient safety in the primary care in the UK.

To explore the patient's perceptions and experiences of patient safety in primary healthcare at UNRWA health centers in Gaza, the questions were asked by the researcher in focus group discussions of three categories of beneficiaries.

3.9 Pilot Study

Before beginning the quantitative study, a pilot study was conducted to ensure the survey was suitable for use in Gaza. 25 healthcare providers were surveyed to assess the appropriateness of the study's mechanisms, provide training to the researcher in data collection, and test the clarity of meanings, scales, and the time it took to fill out the questionnaire. The responses obtained in the pilot study were excluded from the main study.

The results of the pilot study were excluded to avoid any potential bias, as the researcher had previously conducted multiple awareness activities regarding the culture of reporting adverse events at the health center where the pilot study was conducted.

3.10 Scientific Rigor

The Quantitative Part (Questionnaire)

3.10.1 Validity:

Face validity was defined by Johnson (2013) as a measure of how well a test appears to measure what it is intended to measure, while content validity, was defined by Burns & Grove (2007) as the extent to which the mechanism includes all major elements relevant to the construct being measured.

A pilot study was conducted before the actual data collection to assess the healthcare providers' responses to the questionnaire and their understanding of it. The action was done to ensure the validity of the questionnaire after making the necessary modifications to make it easier to comprehend. Furthermore, the 2017 study conducted by Abu-El-Noor, et al. confirmed the Hamdan translation, which was tested for its psychometric properties (validity and reliability) and was found to be valid. Consequently, it was determined that it could be used as a tool to evaluate the safety attitudes in the Arabic-speaking hospital culture.

3.10.2 Reliability:

The term ‘reliability’ refers to whether or not the research results can be repeated, as stated by Oppenheim (2001) and Bryman (2012). To measure the internal consistency (or homogeneity) of the research, the Kuder-Richardson or the split-half reliability index, or the

coefficient alpha index can be used. In the current study, Cronbach's alpha was used to measure the reliability of the questionnaire.

Cronbach's alpha is a measure of the average of all questionnaire items and their correlation with their scales (Bowling, 2002). To ensure the accuracy of the data entry, the data was entered on the same day as the data collection, and 5% of the data was re-entered after the completion of the entry. This allowed for possible interventions to check the data quality or to reenter the questionnaire if necessary. Furthermore, the reliability of the questions was tested using the reliability coefficient (Cronbach's alpha test). The result of Cronbach's alpha is presented in Table 3.1.

Table (3.2): Cronbach's Alpha Test

Domain	Number of Questions	Cronbach's Alpha
Job satisfaction	5	0.824
Safety climate	7	0.799
Teamwork climate	6	0.766
Stress recognition	4	0.82
Perceptions of management	4	0.53
Working conditions	4	0.795
Total scale reliability	30	0.885

Qualitative Part (Focus Group)

To ensure the trustworthiness of the qualitative portion of the study, a peer review was conducted to review the focus group questions and guarantee that all the necessary dimensions were covered. Furthermore, recording the focus group discussions allowed for the tracking of facts and the verification of the transcripts' accuracy. Finally, all the transcripts and recordings were kept to be able to track the information if the need arises.

3.11 Data Collection:

To ensure the success of the quantitative part of the study, coordination with the top management of the health program was done. Moreover, meetings with study participants were organized to ensure minimal disruption to their daily work and to provide an environment that would foster realistic responses. The researcher thoroughly explained the

ethical and administrative considerations of the study to the participants. Additionally, the questionnaires were reviewed to make sure that all questions had been answered. The data collection process took approximately 3 weeks between May 2022 to June 2022.

For the qualitative part of the study, the eligible beneficiaries were invited to the meeting room of each health center. The researcher was mindful of the need to maintain a polite tone throughout the process. The data collection process took approximately 4 weeks on August 2022.

3.12 Response Rate:

For the healthcare provider survey, out of the (270) questionnaires that were forwarded to the participants, 259 were completed and returned successfully (the response rate was 95%). Besides, all the beneficiaries who have been invited to participate in the study positively responded.

3.13 Data Entry and Analysis:

- **Quantitative Part:**

To confirm the accuracy of the data collected, first, a data check and verification were conducted by overviewing the questionnaire. Second, an entry model was designed using SPSS version 25 for data entry and analysis. Third, the data were entered into the model on the same day of data collection to allow for any potential interventions to check the data quality or refill the questionnaire.

Fourth and finally, a data cleaning process was conducted by randomly selecting questionnaires and ensuring the accuracy of the data entered. Descriptive statistical testing was applied to analyze numerical data, which helped to describe and summarize the data in a meaningful manner.

Additionally, frequency tables were made to show sample characteristics and plot differences between various healthcare providers' characteristics and variables.

- **Qualitative Part:**

Immediately following the conclusion of each focus group, the debriefing report was completed. In addition, non-prompted intimations and non-verbal cues were carefully noted and documented.

The Open Coding Thematic Analysis Method was applied to analyze the transcripts of the beneficiaries. The Researcher under supervision then extracted the main findings from the transcripts, categorized related ideas, and analyzed the qualitative findings, producing valuable items for discussion and representation. Confirmability was achieved through researcher-supervisor collaboration and participation in data interpretation.

3.14 Data Management and Security:

The data has been collected by the researcher himself, and it was stored on a personal laptop, which is password-protected. A backup copy was kept on the Google cloud, and access to the information was only allowed to the researcher himself.

The researcher has collected, stored, and processed the data following the UNRWA information security practices and policies; afterward, he has taken the appropriate technical measures, to ensure a proper level of security like coding of the personal data. The researcher processed the data and safely stored it. The data will be stored for approximately 12 months, in case any future in-depth study is required under the supervision of the UNRWA health department**.**

3.15 Study Limitations:

The first limitation has used the SAQ to evaluate safety culture: Despite the tool could play a vital role in drawing the road map of the organization’s safety culture assessment, it was not enough for examining all the aspects of safety culture. The SAQ measures staff belief in safety culture rather than their actual safety behavior (Gadd and Collins 2002).

The second limitation was little prior research on assessing and exploring a patient's perception of safety culture, using a focus group in the Palestinian context. The mentioned measure could also be considered as a good opportunity, to identify the knowledge gaps, and to express the need for further development in the field of study context.

Chapter Four

Results and Discussion:

The chapter presents the study findings. The first part covers the quantitative responses of the participants in the study, while the second part takes care of the qualitative responses of the study participants.

The first part displays the descriptive analysis of the study variables, including the participant characteristics (which are gender, age, educational qualification, job title, years of professional experience in the field, years of work at the UNRWA health centers), the degree of patient safety, and the reported medical events.

4.1 Participants' Characteristics:

The detailed characteristics of the study participants are listed in Table 4.1.

Table (4.1): Characteristics of the Study Participants

Study Variable	Category	Frequency	Percentage %
The Health Center	Al-Shaboura	19	7.3
	Central Rafah	37	14.3
	Khan Younis	30	11.6
	Total of South Area	86	33.2
	Central Nuseirat	32	12.4
	Al-Bureij	21	8.1
	Deir al-Balah	25	9.7
	Total of Middle Area	78	30.1
	Sweedi Remal	36	13.9
	Al-Shatea	25	9.7
	Jabalia	34	13.1
	Total of North Area	95	36.6
	Total	259	100.0
Gender	Male	96	37.1
	Female	163	62.9
	Total	259	100.0
Age	Less than 40 years	125	48.3
	From 41 to 50	71	27.4
	51-60	63	24.3
	Total	259	100.0
	Mean = 42.5907 Std. Deviation =9.68668		
Qualifications	Two Years Diploma	67	25.9
	Bachelor Degree	143	55.2
	Diploma (Master, Ph.D., etc.)	49	18.9
	Total	259	100.0

Study Variable	Category	Frequency	Percentage %
Job Title	Senior Medical Officers	6	2.3
	Medical Officers	62	23.9
	Senior Staff Nurses	24	9.3
	Practical Nurses (Diploma)	62	23.9
	X-Ray Technicians	3	1.2
	Physiotherapists	14	5.4
	Specialist Doctors	3	1.2
	Dentists	9	3.5
	Midwives	32	12.4
	Laboratory Technicians	25	9.7
	Pharmacists	19	7.3
	Total	259	100.0
Years of experience in the field	Less than 10 years	114	44.0
	From 10-20	78	30.1
	More than 20	67	25.9
	Total	259	100.0
Years of work in the UNRWA	Less than 10	143	55.2
	From 10-20	69	26.6
	More than 20	47	18.1
	Total	259	100.0
Safety Grade	Acceptable	17	6.6
	Very Good	120	46.3
	Excellent	122	47.1
	Total	259	100.0
No. of Adverse Events last 12 months	I did not inform	207	79.9
	From 1-2	36	13.9
	3 and more	16	6.2
	Total	259	100.0

As indicated in Figure (4.1), the participants varied according to the locations of their health centers. Based on the findings, it might be concluded that an equitable distribution of healthcare professionals existed across the three regions of Gaza.

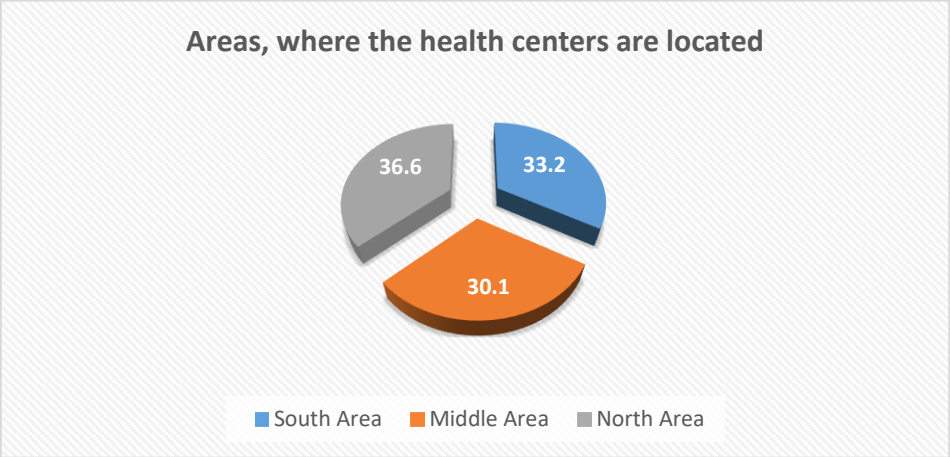

Figure (4.1): Distribution of the study participants according to the health center area.

The survey included 259 healthcare professionals in total; the majority of (62.9%) were females (Figure 4.2). The fact that the female was more than male participants was due to the type of services of the UNRWA health centers, where mother and child health (MCH) services were provided by female nurses and midwives.

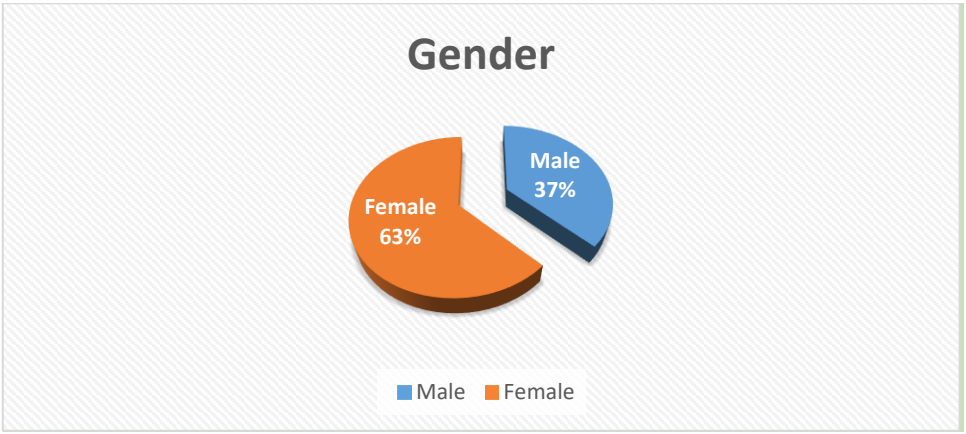

Figure (4.2): Distribution of the study participants by gender

According to the study findings, 48.3% of the participants were under the age of 40, 27.4% were between the ages of 41 and 50, and 24.3% were older than 51 (Figure 4.3). The findings have indicated that the age distribution of the UNRWA medical staff was equal, with the perception of some seniority between the two groups.

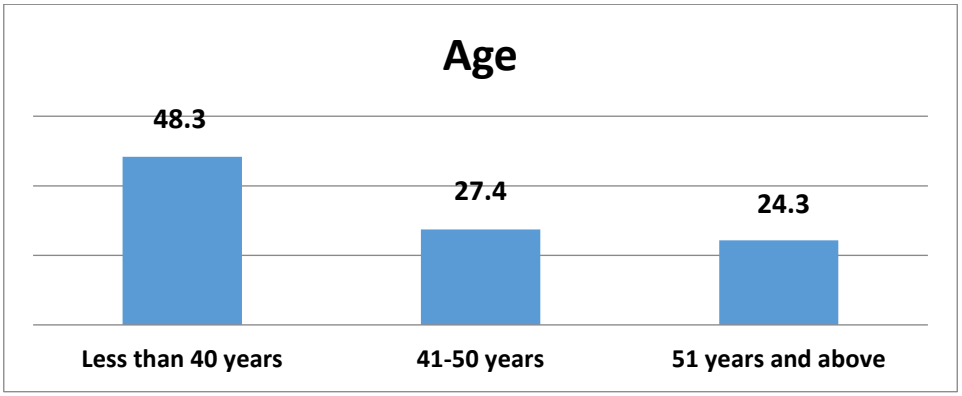

Figure (4.3): Distribution of the study participants by age

It was evident that about a quarter of the sample (23.9%) were practical nurses and approximately the same percentage for medical officers (24%). More than half of the participants in the study (55.2%) held a Bachelor's degree, while 25.9% held a diploma degree, and 18.2% have completed postgraduate studies. Besides, more than half (56%) of

the study participants have been working for 10 years and more, which indicates that the majority of the study participants have had long years of experience in their specialty fields.

The results have also confirmed that more than half of the sample (55.2%) worked in health centers for less than ten years, about (26.6%) worked for 10 to 20 years, and about (18%) worked for more than 20 years (Tables 4.1).

The results have disclosed that (6.6%) of healthcare providers believe that patient safety was acceptable at their health centers, 46.3% was very good, and 47.1% was excellent (Figure 4.4).

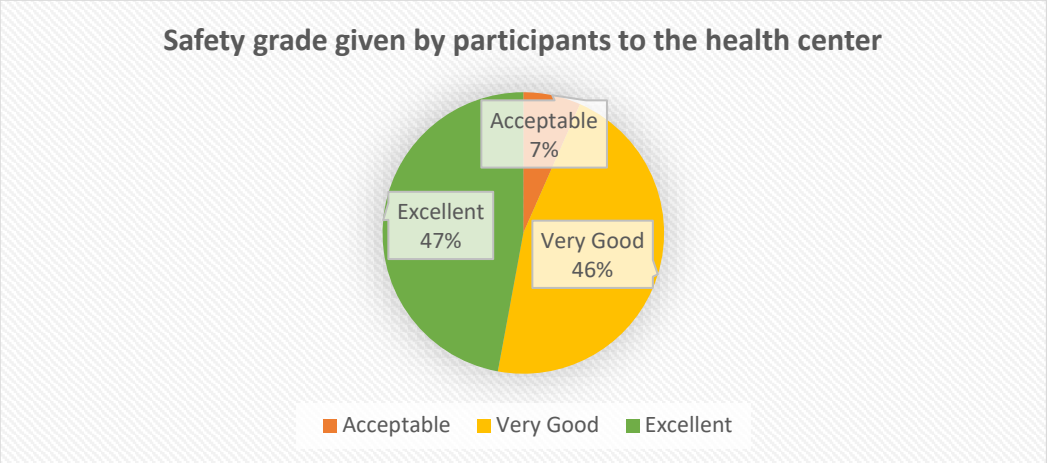

Figure (4.4): Distribution of safety grade given by the participants to the health center

Approximately (79.9%) of the participants have not recorded any adverse events, (13.9%) reported between (1 to 2) events, and only (6.2%) reported three or more events (Figure 4.5). Consequently, the researcher has hypothesized that the results could be influenced by the majority of the healthcare providers' reluctance to disclose the incidents and errors, and their tendency to address the problems informally without formally reporting incidents. Therefore, the management of clinics should focus on the improvement of adverse events, and medical error reporting culture.

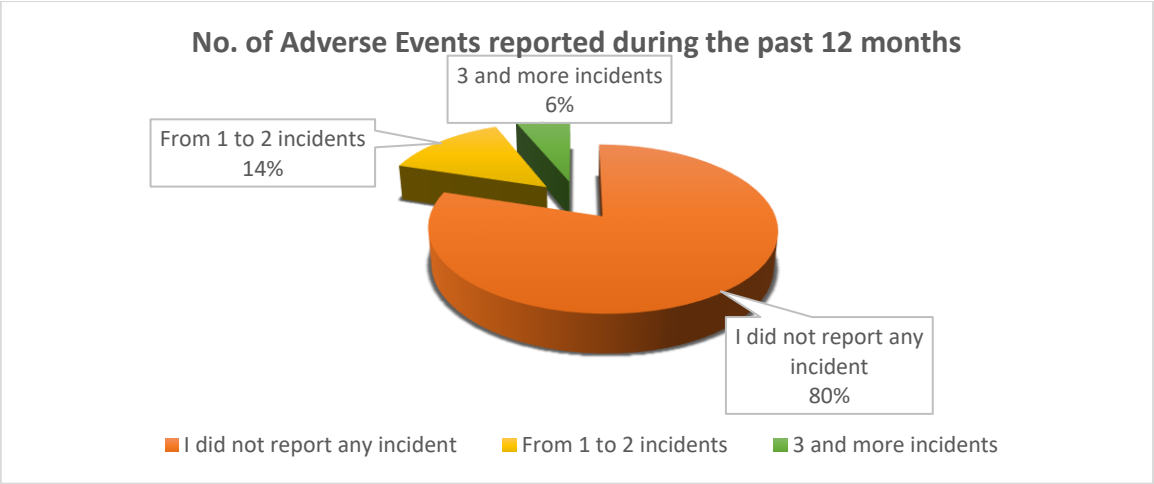

Figure (4.5): Distribution of Adverse Events Reported by the Participants

4.1.1 Perception of Patient Safety

Table (4.2) shows the participants' ratings on the SAQ items and scales, as well as the percentages of positive responses. The Job Satisfaction Domain has received an overwhelmingly positive response (79.2%) which was the highest positive score, with (58.2%) of participants approving that morale was high in their Health Centers. Most of the participants expressed their satisfaction with their job and their Health Centers as a workplace. This is significantly higher than the (73%) satisfaction rate reported by Hamdan in 2013.

The teamwork climate domain has received an overwhelming majority of positive responses (77.5%), surpassing the studies conducted in Egypt, Tunisia, and Governmental Primary Healthcare Centers in Gaza (Mohamed et al., 2015; Tlili et al., 2020; Abu Hamad, 2022) which reported (80%, 70.6%, and 81%) respectively. These percentages demonstrate the healthcare providers' understanding of the importance of working together to ensure the quality of services provided to refugees and to guarantee safety. It can be concluded that the implementation of the FHT approach has been a major factor in achieving quality excellence, particularly in UNRWA Primary Healthcare Centers in Gaza.

The stress recognition domain garnered an impressive (74.8%) of positive responses, with (78.7%) of participants believing that new employees are adequately supervised. Additionally, (68.8%) of participants approved of their health center's constructive approach to addressing the issues faced by its employees.

The safety climate is strongly correlated with the safety of healthcare provided in the health centers, with (74.3%) of respondents expressing a positive opinion. (68.8%) of participants reported feeling encouraged to report medical errors, and (81.5%) believed that the system dealt with such events appropriately. (60.6%) of participants found it possible to discuss errors in the health centers.

Furthermore, the study revealed a slightly lower perception of management than other domains, with an overall positive response of (66.1%). For instance, (89.1%) of participants reported that their leadership does not jeopardize patient safety. Additionally, (74.1%) agreed that the health center administration supports their daily efforts. However, (31.7%) agreed that the number of healthcare providers in their health center was sufficient to meet the demands of the increasing population, which is likely due to the financial difficulties experienced by the UNRWA, which has hindered the recruitment process.

The working condition domain was the weakest in terms of Safety Climate, receiving (61.9%) positive responses from participants. (60.1%) of respondents agreed that an excessive workload impairs their performance, and (56.8%) agreed that hostile or tense situations make them more prone to errors. Previous studies have revealed that poor Working Conditions, workload, and hostile or tense situations are closely linked to adverse events (Cavalheiro, et al., 2008).

In addition to rating the SAQ items, the participants were asked to indicate the number of events they reported in the past 12 months, and to assign a grade for patient safety in their health centers. The results revealed a low level of event reporting in the health centers; approximately (80.0%) of the participants did not report any event in the past 12 months, (14.0%) reported 1 to 2 events, and (6.0%) reported 3 or more events.

Regarding the Patient Safety Grade, the majority of respondents (93%) had a positive outlook, rating the safety of their health centers as either Excellent or Very Good. A small percentage (7%) rated safety as Acceptable.

Table (4.2) Safety Attitude Questionnaire items and scales mean scores of positive responses

Domains of Patient Safety	Mean	SD	%	%Positive Responses
I love my job.	4.61	0.66	92.35	88.72
Working in this health center is like being part of a large family.	4.49	0.72	89.96	85.55
This health center is a good place to work.	4.33	0.87	86.79	79.07
I am proud to work at this health center.	4.52	0.76	90.50	84.78
The morale of the workers in this health center is high.	3.79	1.00	75.98	58.22
Job Satisfaction) Cronbach α = .82)	**4.35**	**0.62**	**87.11**	**79.27**
I will feel safe if my child is treated as a patient in this health center.	4.41	0.77	88.26	82.39
Medical errors are handled appropriately in this health center.	4.39	0.77	87.87	81.54
I receive appropriate feedback and feedback on my performance in this health center.	4.22	0.87	84.40	76.37
It is difficult to discuss the faults in this health center. ®	3.82	1.08	76.44	60.69
My colleagues encourage me to report any reservations /concerns I have about patient safety in this health center.	4.05	0.88	81.08	68.88
The culture prevailing in this health center makes it easier for us to learn from the mistakes of others.	4.16	0.79	83.39	75.21
I know the right channels to ask direct questions about patient safety in this health center.	4.18	0.87	83.78	75.67
Safety Climate (Cronbach α = .79)	**4.18**	**0.58**	**83.6**	**74.39**
The interventions of the staff in this health center related to patient care are well received.	4.14	0.83	82.93	74.59
In this health center, it is difficult to speak if you realize there is a problem with patient care. ®	4.06	1.06	81.38	69.72
Disagreements are appropriately resolved in this health center (it is important, not who is right, but what is best for the patient)	4.17	0.90	83.55	75.36
The support I need is available from other staff to provide patient care at this health center.	4.23	0.81	84.63	76.98
It is easy for the staff to ask questions when there is something, they do not understand in this health center.	4.43	0.74	88.72	83.47
Healthcare providers in this health center work together as a team and in a coordinated manner.	4.50	0.70	90.11	85.09
Teamwork Climate (Cronbach α = .76)	**4.26**	**0.57**	**85.22**	**77.54**
This health center provides good job training for new employees.	4.20	0.94	84.09	75.36
All the information needed to make practical decisions is routinely available to me at this health center.	4.22	0.81	84.47	76.37
This health center deals constructively with the problems faced by its employees.	4.04	0.922	80.92	68.80
New employees in this health center are appropriately supervised.	4.28	0.82	85.63	78.76
Stress Recognition (Cronbach α = .82)	**4.18**	**0.70**	**83.78**	**74.82**
The management of this health center supports my daily efforts.	4.15	0.97	83.01	74.13
The management of this health center does not intentionally put patient safety at risk.	4.64	0.66	92.81	89.18
The number of workers in this health center is proportional enough to deal with the number of patients.	2.87	1.27	57.52	31.73
I shall be provided with adequate and timely information on current events in this health center, which may affect my work.	4.02	0.98	80.46	69.66
Perceptions of Management (Cronbach α = .53)	**3.92**	**0.64**	**78.45**	**66.17**
Extra workload impairs my performance in this health center.	3.69	1.18	73.97	60.15
When I am exhausted, I feel less effective working in this health center.	3.96	1.09	79.38	69.11
Hostile or tense situations make me more prone to errors in this wellness center.	3.63	1.32	72.74	56.83
Fatigue impairs my performance during peak hours in this health center.	3.73	1.23	74.67	61.54
Working Conditions (Cronbach α = .79)	**3.75**	**0.95**	**75.19**	**61.91**
Overall Patient Safety Score (Cronbach α = .88)	**4.13**	**0.44**	**82.73**	**73.13**

® Items reverse scored.

4.1.2 Factors Influencing Patient Safety

The (4.3) table has shown no differences in the total score of the scale and domains: (Stress Recognition, Perceptions of Management, and Working Conditions), as ($p > 0.05$), while the results show the differences in the total score of the domains: (Safety Climate, Job Satisfaction, Teamwork Climate, and Total), according to the age of the participants ($P<0.05$). Therefore, Scheffe's test was used to detect the direction of the differences as shown in table (4.4).

Table (4.3): Differences in the Perception of Patient Safety Scale According to the Age of the Participants

Age		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Job Satisfaction	Between Groups	4.7	2	2.35	6.28	0.00
	Within Groups	95.79	256	0.37		
	Total	100.49	258			
Safety Climate	Between Groups	3.21	2	1.6	4.78	0.00
	Within Groups	85.97	256	0.33		
	Total	89.18	258			
Teamwork Climate	Between Groups	2.07	2	1.03	3.16	0.04
	Within Groups	83.91	256	0.32		
	Total	85.98	258			
Stress Recognition	Between Groups	2.36	2	1.18	2.38	0.09
	Within Groups	126.74	256	0.49		
	Total	129.10	258			
Perceptions of Management	Between Groups	1.92	2	0.95	2.34	0.09
	Within Groups	104.41	256	0.40		
	Total	106.33	258			
Working Conditions	Between Groups	0.78	2	0.39	0.43	0.65
	Within Groups	234.07	256	0.91		
	Total	234.85	258			
Total	Between Groups	1.63	2	0.81	4.17	0.01
	Within Groups	49.82	256	0.19		
	Total	51.45	258			

The (4.4) table has displayed the differences in the domain (Job Satisfaction) were between (less than 40) and (from 51-60) in favor of (from 51-60), and between (41-50) and (from 51-60) in favor of (from 51-60). In addition, in the domain (Safety Climate) were between (41-50) and (from 51-60) in favor of (from 51-60). while in the total score between (41-50) and (from 51-60) in favor of (from 51-60), which indicates a direct relationship between high chronological age and patient safety. This suggests that providers with more experience are

more likely to prioritize patient safety, as evidenced by higher scores. This is an important finding, as it emphasizes the importance of having experienced healthcare providers to ensure that patient safety is a top priority.

Table (4.4): The direction of the differences according to the age of the participants

Job Satisfaction		Less than 40	41 - 50	51 - 60
		4.28	4.27	4.59
Less than 40	4.28	0		
41 - 50	4.27	0.00	0	
51 - 60	4.59	0.31*	0.31*	0
Safety Climate		Less than 40	41 - 50	51 - 60
		4.0971	4.15	4.37
Less than 40	4.09	0		
41 - 50	4.15	0.05	0	
51 - 60	4.37	0.27*	0.21	0
Total		Less than 40	41 - 50	51 - 60
		3.98	3.94	4.1280
Less than 40	3.98	0		
41 - 50	3.94	0.043	0	
51 - 60	4.12	-0.13	0.18*	0

Table (4.5) has shown no differences in the total score of all domains (p> 0.05), which indicates that there is no relationship between gender and patient safety.

Table (4.5): The differences in the perception of the patient safety scale according to the gender of the participants

Gender		**N**	**Mean**	**Std. Deviation**	**df**	**t**	**Sig.**
Job Satisfaction	Male	96	4.26	0.57	257	-1.81	**0.18**
	Female	163	4.40	0.59	202.87		
Safety Climate	Male	96	4.1	0.62	257	-1.67	**0.95**
	Female	163	4.22	0.54	178.96		
Teamwork Climate	Male	96	4.19	0.47	257	-1.5	**0.05**
	Female	163	4.3	0.40	176.64		
Stress Recognition	Male	96	4.08	0.79	257	-1.9	**0.13**
	Female	163	4.25	0.64	168.74		
Perceptions of Management	Male	96	3.89	0.63	257	-0.56	**0.97**
	Female	163	3.94	0.64	201.88		
Working Conditions	Male	96	3.82	0.98	257	0.85	**0.95**
	Female	163	3.72	0.93	192.52		
Total	Male	96	4.07	0.45	257	-1.59	**0.4**
	Female	163	4.17	0.43	193.48		

Table (4.6) indicates no differences in the total score of the scale and domains (Job Satisfaction, Safety Climate, Teamwork Climate, Stress Recognition, and Perceptions of Management) (P>0.05). The results also show significant differences in the scores of

(Working Conditions) according to the job category of the participants (P<0.05). While no differences were noted when using Scheffe's test. Results indicated that there is no evidence to suggest that job category affects patient safety and is likely not to be a concern when considering the quality of care provided.

Table (4.6): The differences in the perception of patient safety scale according to the job Title of the participants

Job		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Job Satisfaction	Between Groups	2.74	10	0.27	0.69	0.72
	Within Groups	97.75	248	0.39		
	Total	100.49	258			
Safety Climate	Between Groups	4.31	10	0.43	1.26	0.25
	Within Groups	84.87	248	0.34		
	Total	89.18	258			
Teamwork Climate	Between Groups	2.43	10	0.24	0.72	0.7
	Within Groups	83.55	248	0.33		
	Total	85.98	258			
Stress Recognition	Between Groups	8.86	10	0.88	1.82	0.05
	Within Groups	120.24	248	0.48		
	Total	129.10	258			
Perceptions of Management	Between Groups	4.47	10	0.44	1.08	0.37
	Within Groups	101.86	248	0.41		
	Total	106.33	258			
Working Conditions	Between Groups	24.99	10	2.50	2.95	0.00
	Within Groups	209.86	248	0.84		
	Total	234.85	258			
Total	Between Groups	1.60	10	0.16	0.8	0.62
	Within Groups	49.85	248	0.20		
	Total	51.45	258			

Table (4.7) shows no differences in the total score of the scale and domains: (Safety Climate, Teamwork Climate, Stress Recognition, Perceptions of Management, and Working Conditions), (p> 0.05)., while the results show significant differences in the scores of (Job Satisfaction), according to the educational qualification category of the participants (P<0.05). Scheffe's test was used to detect the course of differences, see table (4.8)

Table (4.7): The differences in the perception of patient safety scale according to the educational qualifications of the participants

Educational Qualification		Sum of Squares	df	Mean Square	F	Sig.
Job Satisfaction	Between Groups	3.38	2	1.69	4.46	0.01
	Within Groups	97.11	256	0.37		
	Total	100.49	258			
Safety Climate	Between Groups	1.29	2	0.64	1.88	0.15
	Within Groups	87.89	256	0.343		
	Total	89.18	258			
Teamwork Climate	Between Groups	0.83	2	0.41	1.26	0.28
	Within Groups	85.15	256	0.33		
	Total	85.98	258			
Stress Recognition	Between Groups	1.58	2	0.79	1.58	0.20
	Within Groups	127.52	256	0.49		
	Total	129.10	258			
Perceptions of Management	Between Groups	0.55	2	0.27	.66	0.51
	Within Groups	105.78	256	0.41		
	Total	106.33	258			
Working Conditions	Between Groups	4.66	2	2.33	2.59	0.07
	Within Groups	230.19	256	0.89		
	Total	234.85	258			
Total	Between Groups	0.87	2	0.43	2.22	0.11
	Within Groups	50.58	256	0.19		
	Total	51.45	258			

Table (4.8): The Direction of the Differences according to the educational qualification of the participants

Job Satisfaction		Two Years Postgraduate	Bachelor Degree	Diploma (Master, Ph.D., etc.)
		4.04	3.93	3.85
Diploma (Two Years)	4.04	0		
Bachelor Degree	3.93	0.25*	0	
Postgraduate (Master, Ph.D., etc.)	3.85	0.27	01476	0

The previous table shows the course differences between (Diploma Two Years) and (Bachelor Degrees), which was in favor of (Diploma Two Years). The results suggested that those with a Diploma for Two Years may experience greater job satisfaction than those with a Bachelor's Degree. Which was reflected in the score of patient safety in favor of a two-year diploma.

Table (4.9) shows no differences in the total score of the scale and domain: (Working Conditions), as ($p > 0.05$), while the results show differences in the total score of the domains: (Job Satisfaction, Safety Climate, Teamwork Climate, Stress Recognition, Perceptions of Management and Total), according to the years of experience in the field of the participants ($P<0.05$). Therefore, Scheffe's test was used to detect the direction of the differences as shown in table (4.10).

Table (4.9): The differences in the perception of patient safety scale according to the years of experience in the field of the participants

Experience		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Job Satisfaction	Between Groups	2.71	2	1.35	3.55	0.03
	Within Groups	97.78	256	0.38		
	Total	100.49	258			
Safety Climate	Between Groups	2.61	2	1.30	3.86	0.02
	Within Groups	86.57	256	0.33		
	Total	89.18	258			
Teamwork Climate	Between Groups	2.30	2	1.15	3.51	0.03
	Within Groups	83.68	256	0.32		
	Total	85.98	258			
Stress Recognition	Between Groups	4.54	2	2.27	4.66	.01
	Within Groups	124.57	256	0.48		
	Total	129.1	258			
Perceptions of Management	Between Groups	3.42	2	1.70	4.25	0.01
	Within Groups	102.91	256	0.40		
	Total	106.33	258			
Working Conditions	Between Groups	2.15	2	1.07	1.18	0.3
	Within Groups	232.70	256	0.90		
	Total	234.85	258			
Total	Between Groups	1.48	2	0.73	3.77	0.02
	Within Groups	49.97	256	0.19		
	Total	51.45	258			

Table (4.10) shows differences in the total score of the domains: (Teamwork Climate, Stress Recognition, Perceptions of Management, and Total) between (From 10 to 20) and (More than 20 years), in favor of (more than 20 years) While no other differences were noted.

The results revealed that the perception of patient safety is significantly impacted by the years of experience of healthcare providers. As healthcare providers accumulate more years of experience in the field, they are better equipped to collaborate more effectively in health teams and create a more positive work environment, where more experienced healthcare providers can feel more supported and comfortable in their roles. Additionally, healthcare providers with more experience exhibit higher levels of satisfaction and accord with their management concerning patient safety.

Table (4.10): The direction of the differences according to the years of experience in the field of participants

Teamwork Climate		Less than 10 years	From 10 to 20	More than 20
		3.84	3.85	4.00
Less than 10 years	3.84	0		
From 10 to 20	3.85	0.00	0	
More than 20	4.00	0.15	0.15*	0
Stress Recognition		Less than 10 years	From 10 to 20	More than 20
		4.21	4.03	4.33
Less than 10 years	4.21	0		
From 10 to 20	4.03	0.18	0	
More than 20	4.33	0.12	0.30*	0
Perceptions of Management		Less than 10 years	From 10 to 20	More than 20
		4.02	3.78	4.01
Less than 10 years	4.02	0		
From 10 to 20	3.78	0.24	0	
More than 20	4.01	0.01	0.22*	0
Total		Less than 10 years	From 10 to 20	More than 20
		4.00	3.94	4.09
Less than 10 years	4.00	0		
From 10 to 20	3.94	0.06	0	
More than 20	4.09	0.09	0.15*	0

Table (4.11) shows no differences in the total score of the scale and domain: (Stress Recognition and Perceptions of Management) as (p> 0.05), while the results express differences in the total score of the domains: (Job Satisfaction, Safety Climate, Teamwork Climate, and Total), according to the years of working in the UNRWA health center of participants, (P<0.05). Thus, Scheffe's test was used to detect the direction of the differences as displayed in table (4.12).

Table (4.11): The differences in the patient safety scale according to the years of working in the UNRWA health center of participants

Years of Working in the UNRWA		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Job Satisfaction	Between Groups	3.52	2	1.76	4.64	0.01
	Within Groups	96.97	256	0.37		
	Total	100.49	258			
Safety Climate	Between Groups	3.26	2	1.63	4.87	0.00
	Within Groups	85.91	256	0.33		
	Total	89.18	258			
Teamwork Climate	Between Groups	2.80	2	1.40	4.32	0.01
	Within Groups	83.18	256	0.32		
	Total	85.98	258			
Stress Recognition	Between Groups	2.59	2	1.295	2.62	0.07
	Within Groups	126.51	256	0.49		
	Total	129.10	258			
Perceptions of Management	Between Groups	0.74	2	0.36	0.89	0.41
	Within Groups	105.59	256	0.41		
	Total	106.33	258			
Working Conditions	Between Groups	6.57	2	3.28	3.68	0.02
	Within Groups	228.28	256	0.89		
	Total	234.85	258			
Total	Between Groups	1.46	2	0.73	3.74	0.02
	Within Groups	49.99	256	0.19		
	Total	51.45	258			

Table (4.12) points to differences in the total score of the domains: (Job Satisfaction, Safety Climate, and Teamwork Climate) between (less than 10 years), and (more than 20 years) in favor of (more than 20 years). While pointing to differences in the total score of the domains (Working Conditions) between (less than 10 years), and (From 10 to 20) in favor of (less than 10 years).

The results indicated that the perception of patient safety is greatly influenced by the years of working in the UNRWA health center of healthcare providers. As healthcare providers gain more years of experience in the UNRWA health center have a greater understanding of the complexities of the job and the importance of their role in ensuring the safety of patients. This understanding leads to increased job satisfaction, as they are more confident in their ability to make a positive impact on patient safety. Additionally, experienced professionals have a greater ability to recognize and address potential risks and hazards, leading to a greater sense of accomplishment and satisfaction in their work.

Furthermore, the findings indicated that the safety climate and teamwork climate in UNRWA health centers could be enhanced if experienced healthcare providers were present, as they are better equipped to communicate the significance of patient safety to their peers. This would also lead to improved communication, increased trust, and enhanced collaboration among team members, resulting in a more positive teamwork climate in patient safety.

Additionally, the results indicated that healthcare providers with (less than ten years) of working in UNRWA health centers had a more positive outlook on working conditions than those with (10-20 years) of working. The result could be attributed to their youth and their drive to prove themselves in a challenging environment.

Table (4.12): The direction of the differences according to the years of working in the UNRWA health center of participants

Job Satisfaction		Less than 10 years	From 10 to 20	More than 20 years
		4.22	4.35	4.52
Less than 10 years	4.22	0		
From 10 to 20	4.35	0.13	0	
More than 20 years	4.52	0.30*	0.17	0
Safety Climate		Less than 10 years	From 10 to 20	More than 20 years
		4.06	4.16	4.35
Less than 10 years	4.06	0		
From 10 to 20	4.16	0.10	0	
More than 20 years	4.35	0.29*	0.18	0
Teamwork Climate		Less than 10 years	From 10 to 20	More than 20 years
		4.15	4.23	4.42
Less than 10 years	4.15	0		
From 10 to 20	4.23	0.07	0	
More than 20 years	4.42	0.26*	0.18	0
Working Conditions		Less than 10 years	From 10 to 20	More than 20 years
		3.98	3.62	3.68
Less than 10 years	3.98	0		
From 10 to 20	3.62	0.357*	0	
More than 20 years	3.68	0.301	0.056	0

Table (4.13) expresses no differences in the total score of the scale and domain: (Working Conditions) as ($p > 0.05$), while the results show differences in the total score of the domains: (Job Satisfaction Teamwork Climate, Stress Recognition, Perceptions of Management Safety Climate and Total), according to the given safety grade by the participants, ($P<0.05$). Therefore, Scheffe's test was used to detect the direction of the differences as displayed in table (4.14).

Table (4.13): The differences in the patient safety scale according to the given safety grade by the participants

Given Safety Grade by the Participants		Sum of Squares	df	Mean Square	F	Sig.
Job Satisfaction	Between Groups	13.86	2	6.93	20.48	.00
	Within Groups	86.63	256	0.33		
	Total	100.49	258			
Safety Climate	Between Groups	26.76	2	13.38	54.88	.00
	Within Groups	62.42	256	0.24		
	Total	89.18	258			
Teamwork Climate	Between Groups	26.71	2	13.35	57.69	.00
	Within Groups	59.27	256	0.23		
	Total	85.98	258			
Stress Recognition	Between Groups	38.86	2	19.42	55.11	.00
	Within Groups	90.24	256	0.35		
	Total	129.10	258			
Perceptions of Management	Between Groups	26.20	2	13.10	41.85	.00
	Within Groups	80.13	256	0.31		
	Total	106.33	258			
Working Conditions	Between Groups	3.68	2	1.84	2.042	.13
	Within Groups	231.17	256	0.90		
	Total	234.85	258			
Total	Between Groups	17.32	2	8.66	64.69	.00
	Within Groups	34.13	256	0.13		
	Total	51.45	258			

Table (4.14) shows differences in all the domains between the (acceptable degree) and (the very good degree), in favor of the (very good degree), and between the (very good) and the (excellent) degree, in favor of the excellent degree. The domains scores increased with the increase in the safety grade given to the health center.

Table (4.14): The direction of the differences according to the given safety grade by the participants

Job Satisfaction		**Acceptable**	**Very Good**	**Excellent**
		3.6471	4.26	4.54
Acceptable	3.64	0		
Very Good	4.26	0.61*	0	
Excellent	4.544	0.89*	-.279-*	0
Safety Climate		Acceptable	Very Good	Excellent
		3.35	3.83	4.13
Acceptable	3.35	0		
Very Good	3.83	0.48*	0	
Excellent	4.13	0.77*	-0.29-*	0
Teamwork Climate		Acceptable	Very Good	Excellent
		3.35	3.81	4.06
Acceptable	3.35	0		
Very Good	3.81	0.46-*	0	
Excellent	4.06	0.71*	0.25*	0
Stress Recognition		Acceptable	Very Good	Excellent
		3.01	4.03	4.50
Acceptable	3.01	0		
Very Good	4.03	1.01*	0	
Excellent	4.50	1.49*	.47*	0
Perceptions of Management		Acceptable	Very Good	Excellent
		3.11	3.73	4.22
Acceptable	3.11	0		
Very Good	3.73	0.61*	0	
Excellent	4.22	1.1*	0.48*	0
Total		Acceptable	Very Good	Excellent
		3.39	3.92	4.18
Acceptable	3.39	0		
Very Good	3.92	0.52-*	0	
Excellent	4.18	0.78*	0.26*	0

Table (4.15) shows no differences in the total score of the scale and domains: (Teamwork Climate, Stress Recognition, Perceptions of Management, Safety Climate, and Total) as ($p > 0.05$), while the results point to differences in the total score of the domains: (Job Satisfaction and Working Conditions) according to the reported adverse events by the participants, ($P<0.05$). Therefore, Scheffe's test was used to detect the direction of the differences, with no differences noted.

Table (4.15): The differences in the patient safety scale according to the reported adverse events by the participants

The Reported Adverse Events by the Participants		Sum of Squares	df	Mean Square	F	Sig.
Job Satisfaction	Between Groups	4.86	2	2.43	6.51	0.00
	Within Groups	95.63	256	0.37		
	Total	100.49	258			
Safety Climate	Between Groups	0.94	2	0.47	1.36	0.75
	Within Groups	88.24	256	0.34		
	Total	89.18	258			
Teamwork Climate	Between Groups	1.54	2	0.77	2.34	0.39
	Within Groups	84.44	256	0.33		
	Total	85.98	258			
Stress Recognition	Between Groups	1.94	2	0.97	1.95	0.14
	Within Groups	127.16	256	0.49		
	Total	129.10	258			
Perceptions of Management	Between Groups	2.40	2	1.20	2.96	0.05
	Within Groups	103.93	256	0.40		
	Total	106.33	258			
Working Conditions	Between Groups	6.01	2	3.00	3.36	0.03
	Within Groups	228.84	256	0.89		
	Total	234.85	258			
Total	Between Groups	0.92	2	0.46	2.33	0.09
	Within Groups	50.53	256	0.19		
	Total	51.45	258			

Table (4.16) shows that the highest level of communication and cooperation with workers at the health centers has been (71%), and the highest percentage of communication and cooperation was of the (radiology technician) (77%), followed by the physiotherapists with (76%), while the lowest level was the (specialized doctors) with (61%), followed by (lab technician) with (67%).

Table (4.16): The level of communication and cooperation:

Job title	Std. Deviation	Mean	Percent %
Senior Medical Officers	0.80	4.45	74.19
Specialized Doctors	1.09	3.71	61.96
Medical Officers	0.69	4.44	74.00
Dentists	1.06	4.05	67.56
Senior Staff Nurses	0.78	4.48	74.71
Midwives	1.00	4.30	71.75
Practical Nurses	0.84	4.37	72.97
Lab Technicians	1.02	4.05	67.56
Radiology Technicians	1.42	4.62	77.09
Pharmacists	0.94	4.22	70.33
Physiotherapists	1.45	4.59	76.51
Total	0.65	4.30	71.69

Table (4.17) shows no differences in the total score of the scale and gender (p> 0.05).

Table (4.17): The differences in the level of communication and cooperation by gender

Communication with Doctors		N	Mean	Std. Deviation	df	t	Sig.
Gender	Male	96	4.31	0.625	257	0.274	**0.45**
	Female	163	4.29	0.666	209.44		

Table (4.18) shows no differences in all of the demographic variables, except for the (health center, and safety grade) variables. So, Scheffe's test was used to detect the course of differences in table (4.19), the table shows the course of differences between (Rafah health center) and (Shaborah health center) was in favor of the Shaboura health center, and between (Jabalia health center) and (Shaborah health center) was in favor of the Shaboura health center, while the table did not show any other statistically significant differences.

Table (4.18): The differences in the level of communication and cooperation according to the demographic variables

Communication		Sum of Squares	df	Mean Square	F	Sig.
Health Center	Between Groups	14.60	8	1.82	4.83	0.00
	Within Groups	94.51	250	0.37		
	Total	109.11	258			
Age	Between Groups	0.51	2	0.25	0.6	0.54
	Within Groups	108.59	256	0.42		
	Total	109.11	258			
Job title	Between Groups	6.22	10	0.62	1.49	0.14
	Within Groups	102.89	248	0.41		
	Total	109.11	258			
Qualifications	Between Groups	0.52	2	0.26	0.62	0.53
	Within Groups	108.58	256	0.42		
	Total	109.11	258			
Experiences of Working in the Field	Between Groups	.90	2	0.45	1.07	0.34
	Within Groups	108.20	256	0.42		
	Total	109.11	258			
Years of Working in the UNRWA	Between Groups	0.98	2	0.49	1.17	0.31
	Within Groups	108.12	256	0.42		
	Total	109.11	258			
Given Safety Grade by the Participants	Between Groups	15.88	2	7.94	21.8	0.00
	Within Groups	93.22	256	0.36		
	Total	109.11	258			
Reported Adverse Events	Between Groups	1.14	2	0.57	1.36	0.25
	Within Groups	107.96	256	0.42		
	Total	109.11	258			

Table (4.19) shows that there might be a relationship between the level of communication and cooperation and the number of healthcare providers in health centers. The smaller the health center, the more likely it is that staff will be able to communicate and collaborate effectively, which improves the quality of care, as smaller staff size allows for better communication and collaboration between staff. By fostering an open communication and

collaboration climate, health centers can ensure that their patients receive the safest care possible.

Table (4.19): The course of differences in the level of communication and cooperation according to the health center variable

Health Center		Rafah Clinic	Jabalia Clinic	Khan Younis Clinic	Remal clinic	Nuseirat Clinic	Deir Al-Balah Clinic	Beach clinic	Al Bureij Clinic	Shaborah Clinic
		4.01	4.06	4.09	4.23	4.34	4.49	4.54	4.58	4.77
Rafah HC	4.01	0								
Jabalia HC	4.06	-0.04	0							
Khan Younis HC	4.09	-0.07	-0.02	0						
Remal HC	4.23	-0.21	0.30	-0.14	0					
Nuseirat HC	4.3409	-0.32	-0.27	-0.24	-0.10	0				
Deir Al-Balah HC	4.4909	-0.47	-0.4	-0.39	-0.25	-.15	0			
Beach HC	4.5418	-0.52	-0.4	-0.44	-0.30	-.20	-.05	0		
Al Bureij HC	4.5887	-0.39	-0.51	-0.49	-0.3	-.24	-.09	-.04	0	
Shaborah HC	4.7751	0.75*	-0.70-*	-0.68	-0.54	-0.43	-0.28	-0.23	-0.18	0

Table (4.20) shows the differences between (an acceptable grade) and (a very good grade), the differences were in favor of (a very good grade), and between a grade (very good) and a grade (excellent), the differences were in favor of the excellent grade. The results indicated a positive correlation between the level of communication and cooperation and the safety grade given by the participant. when communication and collaboration are increased, the safety grade assigned by the participant also increases.

Table (4.20): The differences in the level of communication and cooperation according to the given safety grade by the participants

Safety		Acceptable	Very good	Excellent
		3.61	4.17	4.52
Acceptable	3.61	0		
Very good	4.17	-0.56-*	0	
Excellent	4.52	-0.9-*	-0.34-*	0

4.2 Findings Derived from the Focus Groups

The section presents the focus group data analysis, and the main qualitative findings of the research study's second phase, which are based on the results of the focus group interviews carried out with 71 beneficiaries from the UNRWA various health centers.

4.2.1 Focus Group Data Analysis

The qualitative data analysis of this phase of the research took an Interpretive Phenomenological Analysis (IPA) approach, which involved a systematic and staged process. This approach was chosen to gain a better understanding of the central meaning of the content and complexity of the interview data, rather than simply measuring frequency. Smith (2008) explains that this method is effective in uncovering the deeper meaning behind the data, allowing for a more comprehensive analysis.

The researcher conducted an interpretive process with the focus group transcripts by reading them multiple times to gain familiarity with the texts. All the data from the focus groups were accurately recorded and transcribed, and treated as one data set to enable further analysis. The process was essential for gaining a better understanding of the information obtained from the focus groups.

The researcher read and reread the focus group's text multiple times until became familiar with the data. A double hermeneutic process of interpretation was employed during the data analysis, whereby the researcher engaged with the experience of the participants and attempted to comprehend their worlds. The double hermeneutic process of interpretation entailed highlighting pertinent information from the transcripts and making preliminary notes in the left-hand margin. Upon reading all the transcripts, the researcher returned to these notes and converted them into themes, encapsulating the participants' perceptions and the researcher's interpretation of those perceptions. This approach ensured that the performance was comprehensive and precise.

Summaries in the form of Word and Excel documents have been prepared for each focus group. The findings are organized into categories and subcategories of themes that emerged from the focus groups. To ensure accuracy, a code system was applied to each focus group, assigning each participant a unique reference code for each transcript, and coloring sentences according to the topic they belong to. Additionally, all emerging issues extracted from the textual data of the focus group were listed on a sheet, allowing them to be combined and

linked. The supervisory team and the researcher then reviewed these connections and attempted to make sense of the data by clustering all the themes related to effects on patient safety culture in the UNRWA health centers in Gaza and assigning them appropriate labels. Interesting information and preliminary observations were highlighted as a preliminary interpretation. (Annex 7, 8, and 9)

The next step was to present the fold hierarchy in a table using a coding system, with a unique code to identify each participant and line numbers of the quotations from the focus group transcripts to help the researcher relocate the extracted quote.

To ensure accuracy, the stages of the qualitative analysis undertaken were audited by the supervisory team to confirm that each statement was indeed relevant to patient safety. Additionally, each health center and participant were assigned a code throughout the research process to guarantee anonymity; this code was maintained during data analysis. See table 4.21 below.

Table (4.21) Displays each focus group, participant, and their code in the data analysis

Focus Group	Code	Participant 1	Participant 2	Participant 3	Participant (n)
MCH Group 1	P n, G n	P 1, G 1	P 2, G 1	P 3, G 1	P n, G 1
NCD Group 2	P n, G n	P 1, G 2	P 2, G 2	P 3, G 2	P n, G 2
Out-Patient Group 3	P n, G n	P 1, G 3	P 2, G 3	P 3, G 3	P n, G 3
MCH Group 4	P n, G n	P 1, G 4	P 2, G 4	P 3, G 4	P n, G 4
NCD Group 5	P n, G n	P 1, G 5	P 2, G 5	P 3, G 5	P n, G 5
Out-Patient Group 6	P n, G n	P 1, G 6	P 2, G 6	P 3, G 6	P n, G 6
MCH Group 7	P n, G n	P 1, G 7	P 2, G 7	P 3, G 7	P n, G 7
NCD Group 8	P n, G n	P 1, G 8	P 2, G 8	P 3, G 8	P n, G 8
Out-Patient Group 9	P n, G n	P 1, G 9	P 2, G 9	P 3, G 9	P n, G 9

(n) = Serial number of the participant.

4.2.2 The Participants' Characteristics

The 71 participants who participated in the nine focus groups were diverse in terms of educational level, monthly income, and gender. Specifically, 37% of the participants were male, while 63% were female. In addition, approximately 0.80% of participants' monthly family income is less than 2000 shekels. Detailed characteristics of the study participants are presented in Table 4.22.

Table (4.22): The Characteristics of the 71 Beneficiaries who Participated in the Nine Focus Group Interviews:

Group	Total Participants	Gender	Marital status	Age	Number of family members	Educational level	Total monthly income of the family (in shekels)	Having disabilities	Having special needs or a chronic illness in the family
1. South MCH	8	F: 8 M: 0	Unmarried: 1 Married: 6 Divorced: 1 Widow/Widower: 0	(18-25): 2 (26-40): 4 (> 40): 2	(1-5): 0 (6-10): 7 (> 10): 1	Illiterate: 0 Primary: 1 Secondary: 7 Graduated: 0 Postgraduate: 0	(< 600NIS): 4 (600-999): 2 (1000-1999): 2 (>2000): 0	Yes: 2 No: 6	Yes: 5 No: 3
2. South NCDs	8	F: 4 M: 4	Unmarried: 0 Married: 6 Divorced: 1 Widow/Widower: 1	(18-25): 0 (26-40): 4 (> 40): 4	(1-5): 6 (6-10): 3 (> 10): 0	Illiterate: 2 Primary: 1 Secondary: 2 Graduated: 3 Postgraduate: 0	(< 600NIS): 4 (600-999): 4 (1000-1999): 0 (>2000): 0	Yes: 2 No: 6	Yes: 6 No: 2
3. South Out-patient	8	F: 0 M: 8	Unmarried: 1 Married: 7 Divorced: 0 Widow/Widower: 0	(18-25): 1 (26-40): 1 (> 40): 6	(1-5): 2 (6-10): 2 (> 10): 3	Illiterate: 0 Primary: 0 Secondary: 6 Graduated: 2 Postgraduate: 0	(< 600NIS): 5 (600-999): 2 (1000-1999): 1 (>2000): 0	Yes: 2 No: 6	Yes: 5 No: 3
4. Middle MCH	7	F: 7 M: 0	Unmarried: 0 Married: 6 Divorced: 1 Widow/Widower: 0	(18-25): 1 (26-40): 5 (> 40): 1	(1-5): 0 (6-10): 7 (> 10): 1	Illiterate: 0 Primary: 1 Secondary: 6 Graduated: 0 Postgraduate: 0	(< 600NIS): 2 (600-999): 5 (1000-1999): 0 (>2000): 0	Yes: 1 No: 6	Yes: 3 No: 5
5. Middle NCDs	7	F: 3 M: 4	Unmarried: 2 Married: 4 Divorced: 0 Widow/Widower: 1	(18-25): 1 (26-40): 1 (> 40): 5	(1-5): 2 (6-10): 2 (> 10): 3	Illiterate: 1 Primary: 0 Secondary: 4 Graduated: 2 Postgraduate: 0	(< 600NIS): 0 (600-999): 4 (1000-1999): 1 (>2000): 2	Yes: 1 No: 6	Yes: 5 No: 2

Group	Total Participants	Gender	Marital status	Age	Number of family members	Educational level	Total monthly income of the family (in shekels)	Having disabilities	Having special needs or a chronic illness in the family
6. Middle Out-patient	7	F: 4 M: 3	Unmarried: 1 Married: 6 Divorced: 0 Widow/Widower: 0	(18-25): 0 (26-40): 3 (> 40): 4	(1-5): 0 (6-10): 6 (> 10): 1	Illiterate: 0 Primary: 1 Secondary: 4 Graduated: 2 Postgraduate: 0	(< 600NIS): 2 (600-999): 2 (1000-1999): 1 (>2000): 2	Yes: 1 No: 6	Yes: 4 No: 3
7. North MCH	8	F: 8 M: 0	Unmarried: 1 Married: 6 Divorced: 1 Widow/Widower: 0	(18-25): 1 (26-40): 4 (> 40): 3	(1-5): 2 (6-10): 6 (> 10): 0	Illiterate: 0 Primary: 0 Secondary: 5 Graduated: 3 Postgraduate: 0	(< 600NIS): 3 (600-999): 3 (1000-1999): 0 (>2000): 2	Yes: 1 No: 7	Yes: 6 No: 2
8. North NCDs	10	F: 9 M: 1	Unmarried: 0 Married: 9 Divorced: 0 Widow/Widower: 1	(18-25): 0 (26-40): 0 (> 40): 10	(1-5): 5 (6-10): 5 (> 10): 0	Illiterate: 0 Primary: 1 Secondary: 6 Graduated: 2 Postgraduate: 1	(< 600NIS): 2 (600-999): 2 (1000-1999): 3 (>2000): 3	Yes: 2 No: 8	Yes: 9 No: 1
9. North Out-patient	8	F: 2 M: 6	Unmarried: 5 Married: 2 Divorced: 1 Widow/Widower: 0	(18-25): 5 (26-40): 2 (> 40): 1	(1-5): 5 (6-10): 3 (> 10): 0	Illiterate: 0 Primary: 0 Secondary: 0 Graduated: 8 Postgraduate: 0	(< 600NIS): 1 (600-999): 0 (1000-1999): 2 (>2000): 5	Yes: 1 No: 7	Yes: 5 No: 3
Total	71	F: 45 M: 26	Unmarried: 11 Married: 52 Divorced: 5 Widow/Widower: 3	(18-25): 11 (26-40): 24 (> 40): 36	(1-5): 22 (6-10): 41 (> 10): 8	Illiterate: 3 Primary: 5 Secondary: 40 Graduated: 22 Postgraduate: 1	(< 600NIS): 23 (600-999): 24 (1000-1999): 10 (>2000): 14	Yes: 13 No: 58	Yes: 47 No: 24

4.2.3 The Perception of Patient Safety:

The participants of this study provided valuable insight into the conceptualization of patient safety, key factors that influence patient safety, and major threats to patient safety. Their perspectives have been instrumental in furthering our understanding of these three major areas, and in helping to identify potential solutions to improve patient safety. We are grateful for their contributions and the knowledge they have shared.

4.2.3.1 The Conceptualization of Patient Safety:

The study participants have provided a clear definition of patient safety, based on their understanding of the term. Some of the beneficiaries of the UNRWA health centers who participated in the study identified patient safety as providing appropriate treatment to the patient through proper diagnosis of the disease condition. Additionally, some participants have added to the definition of patient safety the idea of dispensing the basic drug and not the alternative, as well as the quality and adequacy of the medicine for all sick cases.

Most of the beneficiaries indicated that the definition of patient safety is effective communication and attention by the service provider, especially the doctor, through which psychological comfort is achieved in dealing with the service provider, and other groups have agreed on the definition of patient safety as it provides the necessary medical laboratory tests to diagnose the disease condition and the accuracy of the laboratory tests.

The South Governorate had a unique definition of patient safety among the participants in the study. This definition included the avoidance of exposure to infection due to mixed communication in UNRWA health centers, ensuring the cleanliness of the premises, as well as preventing disease progression. Furthermore, patient safety was defined as encompassing confidentiality between the patient and doctor, as well as preparedness in the event of an emergency.

• (Participant: 3, Group: 1): It is not being exposed to infection due to mixed communication in the UNRWA clinics, and the cleanliness of the place.

• (Participant: 4, Group: 4): Patient safety means, if we diagnose the patient correctly and give him/her the right medicines and the right tests, then we contribute to the correct treatment.

• (Participant: 4, Group: 5): Follow the methods that lead to safety, such as; adhering to the instructions of the doctor, or the ones responsible for the chronic disease, and that the doctor is confident that the diagnosis has been accurate.

• (Participant: 1, Group: 8): To give the patient the medicine that does not harm him/her.

The participants provided various examples of potential patient safety issues, covering a wide range of topics:

One of the participants regretfully explained “Regarding the laboratory” the staff who took blood samples were trainees, or new employees, the last time they invaded me with a needle four times to take a blood sample, even though it was venous and clear. I am a cancer patient, and the external doctor asked me for monthly tests, while in the agency’s clinic, they refused to do it because it was an annual and unscheduled examination. • Of course, the cost of the tests was high and I cannot afford it”. (Participant 3, group 8)

The researcher has noted that the definitions of most of the participants were related to personal events that took place with them, and the healthcare provider in the UNRWA health centers, through which they have taken out the concept of patient safety.

4.2.3.2 The Factors Influencing Patient Safety in the UNRWA Health Centers:

The participants agreed that patient safety could potentially be compromised at any stage of the healthcare delivery process. Factors such as the relationship between patients and health professionals, the relevant factors concerning patients, healthcare providers, and the healthcare system itself were all identified as areas of risk. Also, they agreed that it is important to take steps to reduce the potential for a similar situation to occur in the future.

- **The Patient Related Factor:**

The participants consider that the patient's behavior, awareness, and educational level are among the most important factors that may endanger the patient's safety. One of the participants said, “The educated patient will be aware, and will take care of himself/herself well”. (Participant 1, group 3).

Some participants believe the patient's monthly income or his/her economic and financial situation, in general, is an influential factor in maintaining his safety, as some of the services, which the UNRWA does not provide in its health centers, might be expensive.

• One of the participants sadly said “The difficult economic situation in the country forces us to make specific choices”. (Participant 5, group 8).

Other participants realize that patient compliance with doctor, pharmacist, and nurse instructions is an important and influential reason for patient safety. Adherence to the appointments when receiving services, not only helps avoid the crowd of patients but also reduces the chances of infection transmission in the waiting areas.

• One of the participants briefly said “Failure to comply with a doctor's orders and/or neglecting himself/herself”. (Participant 5, group 8).

• One of the participants explained, “Failure of the patient to adhere to his/her appointments leads to overcrowding”. (Participant 4, group 4).

• One participant added, “Follow instructions, appointments, and maintain order”. (Participant 4, group 5)”.

• One of the participants said, “It is necessary for the patient to adhere to the appointments and to follow up on his/her illness continuously”. (Participant 3, group 3).

A considerable volume of participants expressed that social and cultural factor have a considerable influence on patient safety. They identified a variety of patient safety issues resulting from social and cultural traditions. These participants asserted that these traditions have a direct impact on patient safety and must be addressed to ensure safe care.

Some of the issues highlighted by the participants were the practice of old medical habits or alternative medicine, as well as the transfer of personal experiences among patients without referring to the doctor. Moreover, it might even reach the point that some patients may prescribe medicines to others according to their own beliefs obtained from their past experiences, which could endanger the safety of others, and put their lives at risk.

• “Using folk medicine and/or alternative local recipes without consulting a doctor. One of the popular recipes: For example, “when my eyes hurt”, the recipe would be “put some bitter tea in your eyes”. (Participant 2, group 6).

• “When someone suffers from symptoms; another person might tell him/her that he went through the same symptoms, and he/she recognizes both the disease and treatment, he/she may prescribe medicine and tell him/her to ask an experienced and not a doctor”. (Participant 8, group 9).

- **The Healthcare Provider Related Factor:**

The participants of the study have consistently emphasized the significance of the healthcare provider's attitudes and behaviors. They anticipate their healthcare service providers to be well-informed about the latest knowledge and techniques, as well as having a positive attitude and dedication towards ongoing professional growth. The participants prioritize the healthcare provider's attitude and behavior as a major factor in their overall satisfaction with the services they receive.

The participants have also focused on the significance of providing new employees and temporary contracts with good and adequate training under the supervision of expert employees. On the other hand, the participants have shown that poor communication between different healthcare providers hurts patient safety.

• The male participant has expressed his dissatisfaction and said “The way the doctor deals with the patient, his/her style and body language gives a positive or negative impression to the patient, for example, if he was smiling, the patient is relaxed”. (Participant 6, group 7).

• Another female participant has spoken up saying: “The dialogue and communication with the doctor are sometimes bad. He is always in a hurry due to the crowd of cases at his door”. (Participant 6, group 6).

The Participants were in unanimous agreement that accurate diagnosis is a fundamental aspect of primary care. Some even went so far as to suggest that the correct diagnosis is the cornerstone of successful treatment. It was evident that the Participants had a profound appreciation for the significance of precise diagnosis in primary care.

The study participants have identified a correlation between errors in diagnosis and health providers who have not devoted sufficient time to examining the various facets of a patient with multiple and complex medical conditions. This finding suggests that a more thorough assessment of such cases is necessary to ensure accurate diagnosis and optimal patient care.

The healthcare providers have not given the patient enough time to express in detail his/her suffering and complaint. The participants have also related the inaccurate diagnosis to a large number of patients, overcrowding, the lack of specialized doctors, and inexperienced new doctors and temporary contract employees.

• One of the participants explained, “Wrong diagnosis and improper treatment, I have been given a medicine for high blood pressure, which caused me to cough, then the drug hung for me, I was given another medicine, which made my kidneys enlarge”. (Participant 6, group 8).

• One of the participants said “Failure to diagnose correctly makes the woman subject to the greatest danger in her life. (Participant 1, group 4).

• A variety of responses have identified the effect of healthcare providers’ competency on patient safety, as one of the participants explained “Some temporary doctors were incompetent, with no experience, which might affect the patient's safety, and give the patient an unsuitable medicine. (Participant 5, group 1).

The participants have also stressed the significance of the attention of healthcare providers during working hours, and they mentioned many mistakes caused by the lack of concentration and preoccupation with the computer, phone, and/or with one of the staff members.

• While shaking his head, one of the participants said “The pharmacist's lack of concentration, either by speaking on a mobile phone or talking with his/her colleagues, could make it possible to confuse, and give the wrong medicine. (Participant 5, group 8).

Some participants have pointed out how crucial the commitment of healthcare providers, especially the laboratory technician, is to the basics of infection control, such as; washing hands and wearing gloves.

• One of the participants surprisingly said “I have noticed that the laboratory technician, while taking blood samples, does not change the gloves from one patient to another, and does not even wash his hands, disregarding that he might transmit infection (Participant 7, group 1).

A consensus was noted among some participants on the importance of the role of cleaners in the health centers, and the supervisory role on them, as the cleanliness of the health center and its facilities, especially bathrooms, is an influential factor in fighting the transmission of infection, which affects the safety of patients.

• One of the participants said in disgust “Hygiene is crucial in the agency's clinic; I would prefer to die rather than use the bathroom in the clinic, because of the negligence of the cleaners. (Participant 3, group 1).

Some participants, from the chronic disease groups, have emphasized that the lack of a physician specializing in chronic diseases could threaten the patient’s safety.

• One of the participants said specialists in diabetes and blood pressure should be available, not any doctor in the clinic could treat such cases, which makes a negative psychological impact. (Participant 1, group 5).

- **The Relationship between the Patients and Healthcare Providers:**

The participants have expressed the key role of the healthcare providers in ensuring an appropriate relationship with the patients. The participants in the study regarding patient-provider communication expressed a feeling of being unheard. They noted a lack of empathy and interest from the healthcare provider, as well as limited eye contact. Additionally, they expressed fear of asking questions. It was observed that the greatest focus was placed on computer data entry and using the mobile phone during the consultation. The strong belief was that all the aspects mentioned negatively affect the professional relationship between the patient and health provider, which also undermine patient safety.

Likewise, the participants in the study have also highlighted the importance of good communication skills in UNRWA health centers. It was suggested that a democratic relationship should be established with the patient, in which sympathy is shown without any

consideration for the personal relationship. Furthermore, the participants have emphasized that a relationship based on respect, trust, and confidentiality is essential for improving patient safety. Thus, it is clear that communication skills and the establishment of a positive relationship between the provider and the patient are both essential for providing quality healthcare.

• One of the participants has explained “The impression you get about the doctor is that you find him/her busy, not paying attention to you, either he/she look at his/her phone or computer screen. The doctor does not even give you a chance to express what you wanted or what your complaint was. (Participant 1, group 9).

• One of the participants commented. “My relationship as a patient with the healthcare provider has not been perfect, sometimes I could not explain the details of my suffering and pain. I do not feel the doctor’s concern or sympathy. (Participant 3, group 1).

• One of the participants angrily said “If the doctor knows the patient personally, he stays with him for at least half an hour, but in case of another patient he does not know, he stays with him for a shorter period, no equality is applied. (Participant 6, group 5).

- **The Healthcare System Related Factors:**

The participants have stressed the importance of the UNRWA's international support and funding, to ensure the continuous provision of the services in general and health services in particular, because of its direct impact on the lives and safety of refugees. The participants have also linked the patients’ overcrowding and excessive workload with the negative impact on safety. It was also noted that a shortage of HR like the reduced number of staff threatens patient safety. Moreover, the availability and quality of medicines make another burden.

Patient safety is of paramount importance and requires a delicate balance between care and costs. To ensure that patient safety is maintained, procedures must be regularly updated, medical equipment is maintained, and resources are fairly and appropriately distributed. These measures are essential to ensure that patient safety is not compromised.

• One of the participants said “The shortage of medicines leads to the use of alternative medicines, which are less efficient and effective. No way but to bear the illness for a week or two, and tolerate the pain, because it is no way to afford external treatment. Why treatment is unavailable for marginalized groups? (Participant 1, group 1).

• One of the participants strictly said “The place should be equipped with sufficient machinery, nurses, and doctors, to accommodate the number of patients. (Participant 1, group 4).

Most of the participants have expressed feelings of bitterness regarding the lack of certain services, which meet their needs, especially in the dental clinic, where they repeatedly complained about the lack of dental canal fillings. Therefore, they were forced to decide to remove the teeth, as they were unable to purchase the service from a private provider. Moreover, most of the participants have highlighted the importance of the availability of specialized doctors, since it is a basic requirement to enhance patient safety. Some participants from the small health centers have assumed that their safety was at risk, due to the lack of radiology and physical therapy services, besides, the process of transferring them to other healthcare centers cost them what they could not afford, because of poor financial conditions.

• One of the participants explained, “No specialized doctors are available; all of them were general practitioners, for example, specialists in ophthalmology, dermatology, respiratory diseases, and chronic diseases were lacking”. (Participant 5, group 8).

• One of the participants pointed out with wonder, while he was shaking his hands “I constantly suffer from my teeth. I went to the UNRWA clinic. The doctor diagnosed that I needed to fill the root canal of my mill, but unfortunately, the service was not available and I have to get it in a private clinic”. (Participant 7, group 1).

• Commenting on others, one of the participants said “The misuse and wrong distribution of resources, for example, they have installed decorations, while the ambulance, radiology, and/ or physiotherapy department are not available in the health center”. (Participant 4, group 6).

In addition, one of the participants has expressed the importance of coordination and information exchange between the UNRWA Health Department, and the MoH, as he believed it affects the safety of patients.

• One of the participants said, “The lack of coordination and information exchange between the UNRWA and the MoH directly affects patient safety”. (Participant 6, group 3).

The responses to the issue of accountability in UNRWA health centers have been identified and a consensus has been reached amongst the participants. It has been determined that many of the patient safety issues that occurred in the health centers were due to the absence of accountability and the lack of policies related to the accountability of healthcare providers. This consensus highlights the importance of ensuring that healthcare providers are held accountable for their actions and that policies are in place to ensure that patient safety is a priority.

In terms of "accountability", the participants have stressed the crucial role of supervisors following up the employee performance. Others have also referred to the follow-up of complaints files in the health centers, to ensure the development of health services, to learn from past mistakes, and make sure they are not repeated.

• While shaking his head, one of the participants firmly said “No strict control is applied to the employees, and the weak supervisory role was one of the reasons that endanger the patient safety”. (Participant 6, group 7).

Some participants believed that the weak and unstable internet and electricity lines in the UNRWA health centers slow down the provision of services to the refugees, which causes overcrowding, and may put the safety of patients at risk.

• One of the participants said, “Unstable internet and electricity disrupt the workflow and lead to overcrowding of the patients”. (Participant 4, group 3).

On the other hand, other participants have shown complete satisfaction with the health services provided by the UNRWA, to help the Palestinian refugees, with an emphasis on the need for continuous improvement of the quality of services provided.

• While raising her hands, one of the participants said “Thank God to have people who are interested to give us the treatment required to prevent the complications of diseases”. (Participant 7, group 8).

• One of the participants kindly said “I have attended several sessions in the meeting room of the clinic, where the staff asked us more than once about the services that need improvement, and the kind of problems encountered?” (Participant 3, group 3).

4.2.4 Discussion:

In the discussion part of the study, the beneficiaries' perceptions of safety in the UNRWA health centers were explored. The beneficiaries have identified several factors that could affect patient safety in their health centers. Most factors were related to communication with the healthcare providers, and the processes of care, as well as to the specific features of the healthcare system, and the patient’s attitudes and behaviors toward safety.

The data gathered in the study has been valuable and detailed. It included novel aspects such as; the patients’ conceptualization and determinants of primary care patient safety. Most of the previous conceptual models of patient safety in primary care in Palestine and neighboring countries have been based on the healthcare providers’ perspectives.

Due to the absence of previous local studies that have taken into account the beneficiaries' perspectives on patient safety; the researcher compared the results with the available international studies.

The factors identified as safety problems were mainly related to communication with health care providers, the processes of care, the health care system, and the patient's attitudes and behaviors towards safety. This is in line with previous research studies, which have indicated that most errors reported by patients were due to inadequate communication and interpersonal skills. There may be a correlation between interpersonal skills and communication problems and errors, as the broader concepts of quality of care and patient safety are closely intertwined (Burgess, et al., 2012).

Most previous poor experiences reported by the participants have indicated that disruptions in access to and relationships with the healthcare providers might be more evident than the technical errors in the services provided, which was consistent with Virginia and Ohio

studies. The incidents were linked to 170 reported harms, 70% of which were psychological, including anger, frustration, depreciation, and loss of relationship and trust in one clinician (Kuzel, et al., 2004).

The problems with access and transition between the levels of care have been previously identified as safety-related issues in an Australian study. Which identified five unique primary care factors that have an impact on safety incidents. These factors range from local working conditions to the upstream organizational level, and the external policy context. Furthermore, the study identified thirteen factors that influence safety incidents, including communication, access, patient factors, external policy context, dignity and respect, primary-secondary interface, continuity of care, task performance, task characteristics, time of the consultation, safety culture, team factors, and the physical environment. Many factors must be taken into account to ensure patient safety. As such, healthcare providers must take a holistic approach to patient care to ensure the highest levels of safety and quality of care. ((Hernan, et al., 2015).

The drug-related harm has been also a cause of concern for most participants, and inadequate communication with the healthcare providers was considered an important contributor, which was consistent with the results of a previous British study. (Britten, et al., 2000).

Chapter Five

The Conclusion. and Recommendations.

5.1 Conclusion.

The survey results demonstrated variations in safety culture within and between a comprehensive sample of UNRWA healthcare providers in Gaza. These findings suggest that a tailored approach should be taken to build on existing strengths and address areas that need improvement to provide the best care to vulnerable patients.

The UNRWA health centers need well-designed patient safety initiatives in the PHC services, based on systematic interventions to integrate with the organizational policies, particularly the urgent need to address and report the ethical component of medical errors.

The study has been the first one to explore the patient safety culture in the UNRWA health centers in Gaza since it has become a significant issue. Therefore, the study was conducted in the health centers of three areas in Gaza, to reflect the reality of the safety culture in all the health centers of Gaza as a whole. Hence, a cross-sectional study design was performed using an international self-administered questionnaire and sampling techniques to achieve the objective.

The results indicated that the domain of perception of management was relatively low in comparison to the other domains in the study, with 66.1% of participants providing positive responses. For example, 31.7% of participants agreed that the staffing levels in their health center were adequate to manage the patient load, which reflected their responses to the working conditions which was the weakest safety climate domain, and received 61.9% of positive responses.

Rashed and Hamdan’s study (2019) found that only 40.3% of participants reported any events in the past year. Furthermore, a study conducted by Rayan et al. (2007) and Ahmadi (2010) in Saudi Arabia revealed that a very low level of incident reporting was recorded, as it could lead to them losing their jobs or facing disciplinary action. It was in line with the results of the current study as 80.0% of the participants reported no events in the past 12 months, 14.0% reported 1 or 2 events, and 6.0% reported 3 or more events. The reason for

this low level of reporting was due to staff being afraid to report their mistakes, in addition, they prefer to manage adverse events by themselves.

Leape (2009) proposed several actions for healthcare organizations to help change the mistaken culture of errors in the medical context. He suggested shifting the regulatory environment from confidentiality to transparency, and that no organization should use punishment as a means of resolving their medical errors. He also proposed shifting from a focus on personal performance to greater facilitation of teamwork among professionals. Finally, Leape argued that healthcare organizations should adopt a new vision of analyzing the original causes of medical errors, by considering them as a part of system failure rather than individual errors.

Furthermore, the qualitative data has shown that the participants extracted their definition of patient safety from the reality of their personal experiences, and the experiences of their relatives in the UNRWA health centers. Most of the participants expressed a good awareness of the factors affecting patient safety, which were related to four determinants: the patient, the healthcare provider, the quality of communication between the patient and the healthcare provider, as well as the health system. The participants have also presented many solutions and suggestions, to enhance patient safety, and prevent and/or reduce their chances of risk exposure.

5.2 Recommendations

1. The quantitative study explored the perceptions of healthcare providers regarding the dimensions of patient safety in UNRWA health centers. The findings of the study identified the dimensions that could be improved. Policy-makers, managers, and healthcare providers can use these dimensions as a framework for assessing and improving patient safety in UNRWA health centers. This framework can be an effective tool for ensuring the safety and well-being of patients in these health centers.
2. The qualitative portion of the study underscores the significance of concentrating on the desires and ambitions of the recipients (patient-centered care). This involves focusing on the interests and aspirations of the beneficiaries, as well as taking into account their individual needs and preferences.

3. Investing in a successful teamwork approach, which has been featured and scored highly in response to the teamwork dimension, has been confirmed as a success of the FHT approach.
4. There is a need to enhance the clinical abilities and performance of healthcare staff, as well as to raise the level of awareness of healthcare providers regarding the patient safety culture, through organizing various training and educational programs such as workshops, seminars, and conferences on patient safety. It is important to ensure that healthcare providers are well-equipped to provide the best care and safety to their patients.
5. The study results unequivocally demonstrated the necessity of enhancing the working environment of healthcare providers in health centers through regular maintenance of the center's facilities and medical devices, thereby guaranteeing that services remain accessible to patients and reducing the exposure of employees to stress and exhaustion
6. Increase the number of healthcare providers to go in line with the number of beneficiaries, to reduce workloads, decrease overcrowding, and enable the healthcare providers to carry out their work effectively.
7. The results showed a very low level of incident reporting, about 80.0% of the participants did not report any events in the past 12 months, thus, further efforts are required to strengthen the reporting practices in the UNRWA health centers, and to encourage timely reporting of incidents while learning from errors.
8. Strengthening and improving the communication skills between the health service providers and the beneficiaries, based on respect, credibility, and confidentiality.
9. Strengthening the management and provision of resources to the UNRWA health centers, equipping them with HR, and modern sufficient medical equipment.
10. Use the rewards policies to incentivize healthcare workers to adopt patient safety practices and demonstrate the UNRWA Health Department's commitment to patient safety in the work environment.

5.3 Research Recommendations:

1. In-depth research on the working condition and their relation to the healthcare providers' performance, and its impact on patient safety.
2. Further research is needed to explore the connection and interplay between the various patient safety elements.
3. Further studies are needed to assess the factors that influence the effectiveness of the communication pattern between the healthcare providers and the beneficiaries.

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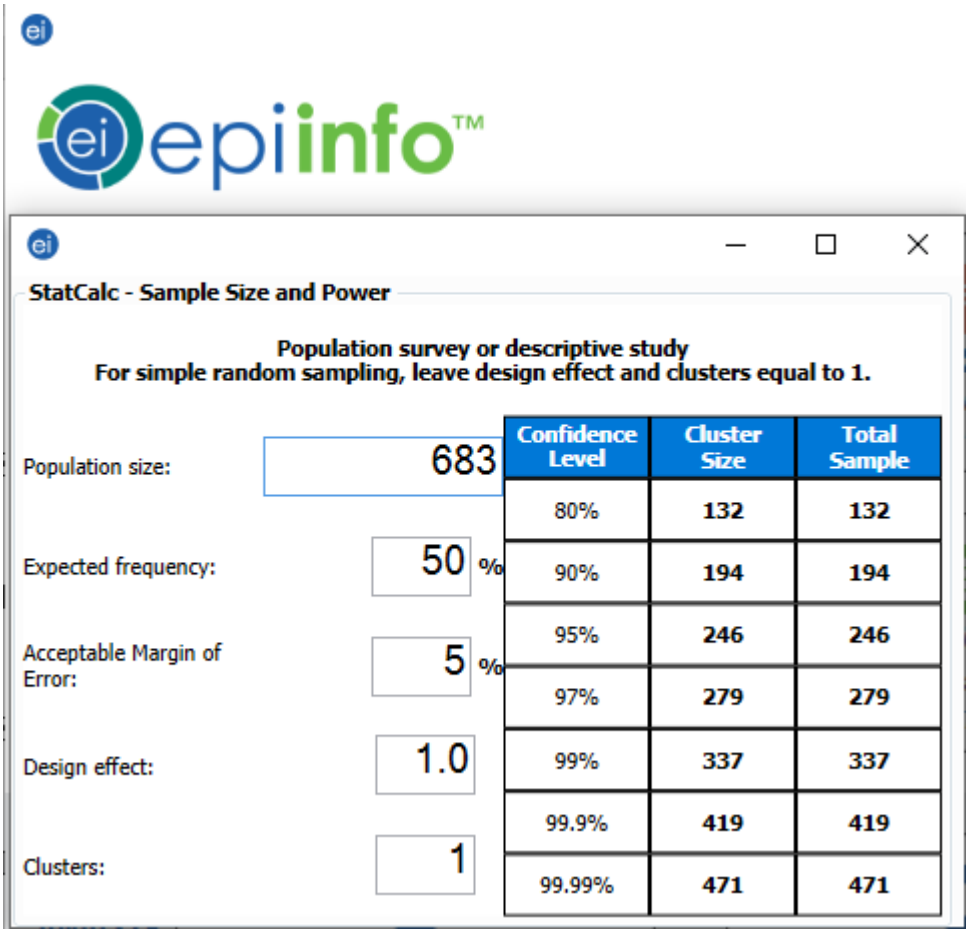
Annexes

Annex (1): Sample size calculation



Annex (2): Helsinki Committee

المجلس الفلسطيني للبحث الصحي

Palestinian Health Research Council

تعزيز النظام الصحي الفلسطيني من خلال مأسسة استخدام المعلومات البحثية في صنع القرار

Developing the Palestinian health system through institutionalizing the use of information in decision making

Helsinki Committee

For Ethical Approval

Date: 07/02/2022 **Number:** PHRC/HC/1038/22

Name: Samy Soliman Ali Abu Shawish الاسم:

We would like to inform you that the committee had discussed the proposal of your study about: نفيدكم علماً بأن اللجنة قد ناقشت مقترح دراستكم حول:

Healthcare Providers and Beneficiaries' Perspectives about Patient Safety at UNRWA Health Centers in Gaza

The committee has decided to approve the above mentioned research. Approval number PHRC/HC/1038/22 in its meeting on 07/02/2022 و قد قررت الموافقة على البحث المذكور عاليه بالرقم والتاريخ المذكوران عاليه

Signature

Member **Member**

Chairman

Genral Conditions:-

1. Valid for 2 years from the date of approval.
2. It is necessary to notify the committee of any change in the approved study protocol.
3. The committee appreciates receiving a copy of your final research when completed.

Specific Conditions:-

E-Mail:pal.phrc@gmail.com

Gaza - Palestine غزة - فلسطين

شارع النصر - مفترق العيون

Annex (3): Safety Attitude Questionnaire (SAQ): Arabic Version

عزيزي المشارك في هذه الدراسة

تحية طيبة وبعد،

أنا الباحث/ سامي سليمان أبو شاويش أقوم بإجراء دراسة بعنوان: **دراسة توجهات العاملين حول سلامة المريض- نسخة الرعاية الأولية**، وذلك كمتطلب للحصول على رسالة الماجستير في تخصص السياسات والإدارة الصحية مسار جودة وسلامة المريض، كلية الصحة العامة من جامعة القدس أبو ديس.

هذا البحث يهدف الى التعرف على آرائكم ووجهات نظركم حول قضايا سلامة المريض في المراكز الصحية التابعة للأونروا في قطاع غزة. إن هذه الدراسة في الأهمية بمكان للتعرف على مستوى ثقافة سلامة المرضى في المراكز الصحية وبالتالي التركيز على الإجراءات الخاصة لتحسين الوضع القائم.

تتكون الاستبانة من بعض المحاور ذات العلاقة بسلامة المرضى. لكل محور عدة جمل، يوجد خمسة أجوبة ممكنة لكل جملة، الرجاء اختيار الإجابة التي تتوافق مع رأيك الخاص بتظليل المربع المناسب. تستغرق إجابة هذه الاستبانة من 15 – 20 دقيقة. لتعبئة هذه الاستبانة نرجو إعطاء وجهة نظرك الخاصة حول المركز الصحي والتي قمت بلمسها او تجربتها خلال عملك في المركز.

واخيرا، نود ان ننوه الى ان المشاركة في الدراسة طوعية وان السرية التامة حول هوية الشخص الذي قام بتعبئة الاستبانة مضمونة في هذا البحث. كذلك نود اعلامكم بانه لن يكون بمقدور إدارة المركز الصحي أو الباحث معرفة هوية المشاركين في البحث، حيث سيتم معالجة المعلومات بشكل عام وليس بشكل خاص.

الرجاء اتمام الاستبانة واعادتها لجامع البيانات، ونود ان ننتهز الفرصة لنشكر لكم حسن تعاونكم ومساهمتكم في تحسين مستوى وسلامة الخدمات في المراكز الصحية التابعة للأونروا.

هاتف: 0592777385 ايميل S.abushawish@unrwa.org

د. معتصم حمدان، جامعة القدس، كلية الصحة العامة.

تعاريف

- ❖ الخطأ الطبي: ما لم يتم تنفيذه بشكل صحيح، أو الانحراف عن الوضع السليم، بغض النظر إذا تسببت بإيذاء المريض أم لا.
- ❖ سلامة المرضى: هو ما يعرف بحماية المريض من الأذى ومنع وقوع أي أذى له بما في ذلك أي نتائج سلبية قد تحدث جراء تقديم الرعاية الصحية له.
- ❖ ثقافة سلامة المريض: هي نمط متكامل من السلوك الفردي والمؤسسي المبني على نظام من المعتقدات والقيم المشتركة والتي تسعى باستمرار لتقليل الضرر اللاحق بالمريض والذي قد ينتج من عملية تقديم الرعاية.

اسم المركز الصحي الذي تعمل به: .....

الرجاء ان تختار مدى موافقتك او رفضك للجمل التالية فيما يتعلق بالعمل في هذا المركز الصحي.

		أوافق بشدة	أوافق قليلاً	محايد	معارض قليلاً	معارض بشدة
Q1	أحب عملي	5	4	3	2	1
Q2	العمل في هذا المركز الصحي يماثل أن يكون الموظف جزءا من عائلة كبيرة.	5	4	3	2	1
Q3	هذا المركز الصحي مكان جيد للعمل فيه.	5	4	3	2	1
Q4	أنا فخور للعمل في هذا المركز الصحي.	5	4	3	2	1
Q5	معنويات العاملين في هذا المركز الصحي مرتفعة.	5	4	3	2	1
Q6	سأشعر بالأمان في حال معالجة طفلي كمريض في هذا المركز الصحي.	5	4	3	2	1
Q7	يتم التعامل مع الأخطاء الطبية بشكل مناسب في هذا المركز الصحي.	5	4	3	2	1
Q8	أتلقى ملاحظات مناسبة وتغذية راجعة حول أدائي في هذا المركز الصحي.	5	4	3	2	1
Q9	من الصعب مناقشة الأخطاء في هذا المركز الصحي.	5	4	3	2	1
Q10	يشجعني زملائي للإبلاغ عن أي تحفظ/قلق لدي حول سلامة المرضى في هذا المركز الصحي.	5	4	3	2	1
Q11	الثقافة السائدة في هذا المركز الصحي تسهل علينا أن نتعلم من أخطاء الآخرين.	5	4	3	2	1
Q12	أعرف القنوات المناسبة لطرح أسئلة مباشرة حول سلامة المرضى في هذا المركز الصحي.	5	4	3	2	1
Q13	يتم تقبل مداخلات العاملين في هذا المركز الصحي والمتعلقة برعاية المرضى بشكل حسن.	5	4	3	2	1
Q14	في هذا المركز الصحي من الصعب التحدث إذا أدركت وجود مشكلة في رعاية المرضى.	5	4	3	2	1
Q15	يتم حل الخلافات بشكل مناسب في هذا المركز الصحي (المهم ليس من هو على حق، ولكن ما هو أفضل بالنسبة للمريض).	5	4	3	2	1
Q16	يتوفر الدعم الذي أحتاج إليه من الموظفين الآخرين لتقديم الرعاية للمرضى في هذا المركز الصحي.	5	4	3	2	1
Q17	يسهل طرح الأسئلة من قبل العاملين عندما يكون هناك شيء لا يفهمونه في هذا المركز الصحي.	5	4	3	2	1

Q18	مقدمو الرعاية الصحية في هذا المركز الصحي يعملون معا كفريق واحد وبشكل منسق.	5	4	3	2	1
Q19	يقوم هذا المركز الصحي بعمل تدريب جيد للموظفين الجدد.	5	4	3	2	1
Q20	جميع المعلومات اللازمة لاتخاذ القرارات العملية متوفرة بشكل روتيني بالنسبة لي في هذا المركز الصحي.	5	4	3	2	1
Q21	هذا المركز الصحي يتعامل بطريقة بناءة مع المشاكل التي يتعرض لها العاملين فيه.	5	4	3	2	1
Q22	يتم الإشراف على الموظفين الجدد في هذا المركز الصحي بشكل مناسب.	5	4	3	2	1
Q23	تدعم إدارة هذا المركز الصحي الجهود اليومية التي أبذلها.	5	4	3	2	1
Q24	إدارة هذا المركز الصحي لا تعرض سلامة المرضى للخطر عن قصد.	5	4	3	2	1
Q25	يتناسب عدد العاملين في هذا المركز الصحي بشكل كافي للتعامل مع عدد المرضى.	5	4	3	2	1
Q26	يتم تزويدي بالمعلومات الكافية وفي الوقت المناسب عن الأحداث الجارية في هذا المركز الصحي والتي قد تؤثر على عملي.	5	4	3	2	1
Q27	عبء العمل الزائد يضعف من أدائي في هذا المركز الصحي.	5	4	3	2	1
Q28	عندما أكون منهكاً أشعر بأني أقل فعالية في العمل في هذا المركز الصحي.	5	4	3	2	1
Q29	المواقف العدائية أو المتوترة تجعلني أكثر عرضة للخطأ في هذا المركز الصحي.	5	4	3	2	1
Q30	الإرهاق يضعف أدائي خلال ساعات الذروة في هذا المركز الصحي.	5	4	3	2	1

الرجاء اختيار إجابة واحدة فقط لكل من الاسئلة التالية:

1. **الجنس** ☐ ذكر ☐ أنثى

2. **العمر** _____

3. **ما هو مسماك الوظيفي (ما هو عملك)؟ اختر إجابة واحدة فقط تمثل أفضل مسمى وظيفي لك.**

☐ طبيب اخصائي
☐ طبيب عام
☐ كبير الممرضين (بكالوريوس وأعلى)
☐ فني أشعة
☐ قابلة
☐ ممرض / ممرضة عملي (دبلوم)
☐ مسؤولة/ مشرفة تمريض
☐ صيدلي

☐ فني مختبر
☐ أخصائيو العلاج الطبيعي

4. يرجى تحديد مستوى التحصيل العلمي؟

☐ دبلوم سنتين ☐ دراسات عليا (ماجستير، دكتوراه، الخ)
☐ بكالوريوس ☐ أخر، حدد.....

5. كم عدد سنوات الخبرة المجال (المدة التي أمضيتها في هذه المهنة)؟ .....

6. كم المدة (السنوات)التي أمضيتها في العمل في المراكز الصحية التابعة للأونروا؟ .....

7. **يرجى اعطاء المركز الصحي درجة لسلامة المرضى؟**

☐ ممتازة ☐ جيدة جداً ☐ مقبولة ☐ ضعيفة ☐ متدنية

8. ما عدد الأحداث (الاخطاء الطبية) التي أبلغت عنها أو كتبت بها تقارير وقدمتها للمسؤول خلال 12 شهر الماضية بغض النظر عما إذا كان هذا الحادث قد تسبب بضرر للمريض أو لا؟ حدد إجابة واحدة

☐ لم ابلغ عن اي حدث ☐ 3-5 أحداث ☐ 11 حادثة وأكثر ابلغ عنها
☐ 1-2 بلاغ بحادثة ☐ 6-10 أحداث

9. الرجاء استخدام السؤال التالي لوصف جودة التواصل والتعاون مع الاشخاص التالين من خلال تجربة تعاملك معهم في المركز الصحي:

		متدني جدا	متدني	متوسط	مرتفع	مرتفع جدا	لا ينطبق
1	مدير المركز الصحي	1	2	3	4	5	6
2	الاطباء الاخصائيين	1	2	3	4	5	6
3	الاطباء العامون	1	2	3	4	5	6
4	الممرضين والممرضات المؤهلين	1	2	3	4	5	6
5	مسؤول تمريض المركز الصحي	1	2	3	4	5	6
6	فني مختبر	1	2	3	4	5	6
7	فني أشعة	1	2	3	4	5	6
8	صيدلي	1	2	3	4	5	6
9	أخصائيو العلاج الطبيعي	1	2	3	4	5	6

يرجى اضافة اي ملاحظات او توصيات من أجل تحسين سلامة المرضى في هذا المركز الصحي.

_____

شكرا لحسن تعاونكم.

Annex (4): Safety Attitude Questionnaire (SAQ): English Version

Healthcare Providers Perception Study on Patient Safety - Primary Care Edition

Dear participant in this study,

This research aims to identify your views and opinions on patient safety issues in UNRWA health centers in the Gaza Strip. This study is of great importance to identify the level of patient safety culture in health centers and thus focus on special measures to improve the existing situation.

The questionnaire consists of some dimensions related to patient safety. For each axis of several sentences, there are five possible answers for each sentence, please choose the answer that matches your opinion by highlighting the appropriate box. It takes 10-15 minutes to answer this questionnaire. To fill out this questionnaire, please give your opinion about the health center, which you touched or experienced during your work in the center.

Finally, we would like to note that participation in the study is voluntary and that complete confidentiality about the identity of the person who filled out the questionnaire is guaranteed in this research. We would also like to inform you that neither the health center management nor the researcher will be able to know the identity of the participants in the research, as the information will be treated in general and not in private.

Please complete the questionnaire and return it to the data collector. We would like to take the opportunity to thank you for your kind cooperation and contribution to improving the level and safety of services in UNRWA health centers.

Researcher: Samy Soliman Abu Shawish. Tel: 0592777385 Email: S.abushawish@unrwa.org

Dr. Mutassim Hamdan, Al-Quds University, College of Public Health.

Definitions

- Medical error: What is not done correctly, or deviation from the proper condition, regardless of whether it harmed the patient or not.
- Patient safety: It is what is known as protecting the patient from harm and preventing any harm to him, including any negative consequences that may occur as a result of providing health care to him.
- Patient safety culture: It is an integrated pattern of individual and institutional behavior based on a system of shared beliefs and values that constantly seeks to reduce the harm to the patient that may result from the process of providing care.
-

The health center you work in: _____

Please choose the extent to which you agree or disagree with the following statements regarding work in this health center.

		I totally oppose	A little opposing	Neutral	I agree a little	I totally agree
Q1	I love my job.	1	2	3	4	5
Q2	Working in this health center is like being part of a large family.	1	2	3	4	5
Q3	This health center is a good place to work.	1	2	3	4	5
Q4	I am proud to work at this health center.	1	2	3	4	5
Q5	The morale of the workers in this health center is high.	1	2	3	4	5
Q6	I will feel safe if my child is treated as a patient in this health center.	1	2	3	4	5
Q7	Medical errors are handled appropriately in this health center.	1	2	3	4	5
Q8	I receive appropriate feedback and feedback on my performance in this health center.	1	2	3	4	5
Q9	It is difficult to discuss the faults in this health center.	1	2	3	4	5
Q10	My colleagues encourage me to report any reservation /concerns I have about patient safety in this health center.	1	2	3	4	5
Q11	The culture prevailing in this health center makes it easier for us to learn from the mistakes of others.	1	2	3	4	5
Q12	I know the right channels to ask direct questions about patient safety in this health center.	1	2	3	4	5
Q13	The interventions of the staff in this health center related to patient care are well received.	1	2	3	4	5
Q14	In this health center, it is difficult to speak if you realize there is a problem with patient care.	1	2	3	4	5
Q15	Disagreements are appropriately resolved in this health center (it is important not who is right, but what is best for the patient)	1	2	3	4	5
Q16	The support I need is available from other staff to provide patient care at this health center.	1	2	3	4	5
Q17	It is easy for the staff to ask questions when there is something they do not understand in this health center.	1	2	3	4	5
Q18	Healthcare providers in this health center work together as a team and in a coordinated manner.	1	2	3	4	5

		I totally oppose	A little opposing	Neutral	I agree a little	I totally agree
Q19	This health center does a good job training for new employees.	1	2	3	4	5
Q20	All the information needed to make practical decisions is routinely available to me at this health center.	1	2	3	4	5
Q21	This health center deals constructively with the problems faced by its employees.	1	2	3	4	5
Q22	New employees in this health center are appropriately supervised.	1	2	3	4	5
Q23	The management of this health center supports my daily efforts.	1	2	3	4	5
Q24	The management of this health center does not intentionally jeopardize patient safety.	1	2	3	4	5
Q25	The number of workers in this health center is proportional enough to deal with the number of patients.	1	2	3	4	5
Q26	I shall be provided with adequate and timely information on current events in this health center which may affect my work.	1	2	3	4	5
Q27	Excess workload impairs my performance in this health center.	1	2	3	4	5
Q28	When I'm exhausted, I feel less effective at working in this health center.	1	2	3	4	5
Q29	Hostile or tense situations make me more prone to error in this wellness center.	1	2	3	4	5
Q30	Fatigue impairs my performance during peak hours in this health center.	1	2	3	4	5

Please choose only one answer for each of the following questions:

1. Gender: ☐ Male ☐ Female

2. Age _____

3. What is your title (what is your job)? Choose only one answer that represents your best job title.

☐ Specialist Physician
☐ Medical Officer
☐ Senior Staff Nurse / Staff Nurse
☐ Pharmacist
☐ laboratory Technician
☐ Midwife
☐ Practical Nurse (Diploma)
☐ Physiotherapist
☐ Radiology Technician

4. Please specify the level of educational attainment.

☐ Diploma (Two years)
☐ Bachelor's degree
☐ Postgraduate (Master, Ph.D., etc.)
☐ Other, select .....

5. How many years of experience in the field (how long have you been in this profession)?
……

6. How long (years) have you worked in UNRWA health centers?
……

7. Please give the health center a score for patient safety.

☐ Excellent ☐ Very good ☐ Acceptable ☐ Poor

8. How many incidents (medical errors) have you reported or reported and submitted to the administrator during the past 12 months regardless of whether this incident caused harm to the patient or not? Select one answer

☐ I did not report any event
☐ 1-2 incident report
☐ 3-5 incidents
☐ 6-10 incidents
☐ 11 incidents and more reported

9. Please use the following question to describe the quality of communication and cooperation with the following people through your experience of dealing with them in the health center:

		Very low	**Low**	**intermediate**	**High**	**Very High**	**Not Applicable**
1	Senior Medical Officer	1	2	3	4	5	6
2	Specialists Medical Officer	1	2	3	4	5	6
3	Medical Officer	1	2	3	4	5	6
4	Practical Nurses	1	2	3	4	5	6
5	Staff Nurses	1	2	3	4	5	6
6	laboratory Technician	1	2	3	4	5	6
7	Radiology Technician	1	2	3	4	5	6
8	Pharmacists	1	2	3	4	5	6
9	Physiotherapists	1	2	3	4	5	6

Please add any comments or recommendations in order to improve patient safety in this health center.

_____
_____
_____
_____

Thank you for your cooperation

Annex (5): Topic guide used in the nine focus group interviews: Arabic Version

Focus Group Questions: Arabic Version

دليل الموضوع المستخدم في مقابلات المجموعات التسعة

ما هي خبراتك أو آرائك حول سلامة المرضى في ممارستك للرعاية الأولية؟
الموجهات (لاستخدامها عند الضروره فقط)

ماذا يعني مصطلح "سلامة المرضى" بالنسبة لك؟
ما هو نوع (أنواع) مشكلة (مشاكل) السلامة التي يمكن أن تحدث؟
هل واجه أي شخص مشكلة تتعلق بالسلامة أثناء ممارسته؟
لماذا تحدث مشاكل السلامة؟

ما هي الجوانب الرئيسية التي تعتبرها ذات صلة بسلامة المرضى في الرعاية الأولية؟
الموجهات (لاستخدامها عند الضروره فقط)

متى / أين يمكن أن يتضرر المرضى عند تلقي الرعاية؟
تواصل؟
ثقافة الممارسة؟

ما الذي يمكن فعله لمنع تعرض المرضى للأذى في الرعاية الأولية؟
الموجهات (لاستخدامها عند الضروره فقط)

تحسين الاتصال عند خروج المريض من المستشفى؟
ضمان مراجعة النتائج؟
تجنب الأخطاء حول تكرار الوصفات؟

Annex (6): Topic guide used in the nine focus group interviews: English Version

Focus Group Questions: English Version

Topic guide used in the nine focus group interviews

What are your experiences or opinions of patient safety in your practice in primary care?

Prompts (to be used only if necessary):

- What does the term 'Patient Safety' mean to you?
- What type(s) of safety problem(s) can occur?
- Has anyone ever experienced a safety problem in their practice?
- Why does safety problem occur?

What are the key aspects that you consider relevant to patient safety in primary care?

Prompts (to be used only if necessary):

- When/where can patients be harmed when receiving care?
- Communication?
- Practice culture?

What can be done to prevent patients from being harmed in primary care?

Prompts (to be used only if necessary):

- Improve communication when a patient is discharged from hospital?
- Ensure results get reviewed?
- Avoid errors around repeat prescriptions?

Annex (7): Focus Group Question 1 Sample

Out-Patient Group 9

السؤال الاول:

حاب اسمع من الجميع، واحد واحد ان أمكن، حسب مفهومك للمصطلح أيش يعني سلامة المريض، ماذا تعني لك سلامة المرضى

P1 G9

سلامة المريض المقصود المخاطر اللي بتعرض لها المريض في المستشفيات وفي عيادات الوكالة من قبل المرضى اللي بجواره أو من قبل المكان نفسه ونظافته في تعقيمه وأن يقبل يأخذ عدوى غير المرض اللي هو فيه وبأعتقد أنه الأكثر نظافة المكان الأساسي واختلاط المرضى مع بعضهم، ثالث شيء كيف اتجنب اختلط في أي حد مريض فممكن أخذ عدوى زيادة للعدوى اللي معاي يعني بدال ما أصير بخطر اصير بخطرين، اعتقد لازم يكون في أماكن واسعة وكافية للتعامل الناس مع بعض.

P2 G9

هو الحفاظ على سلامة المريض من تطور المرض عنده يعني التشخيص جزء مهم والحفاظ على سلامة المريض، بخصوص نظافة المكان جزء مهم في العيادة تكون نظيفة حتى ما يتطور المرض عند المريض لأشي ثاني، ويكون التمريض جيد والمختبرات والأطباء يكونوا أصحاب خبرة كافية يعني إحنا بنعاني في الوكالة هان دائماً بييجي دكتور جديد معندوش الدارية الكاملة في التشخيص فيكتب الدواء العام زي الأكامول، بطل في تشخيص في عيادة الوكالة زي ما كنا متعودين دايماً إحنا اليوم بنفتقد التشخيص.

P3 G9

المخاطر التي يواجهها المريض لما ييجي يتعالج في عيادات الوكالة وفي التشخيص بعض الدكاترة ما بيشخصوا الحالة صح، يعني بييجي المريض قحة أو هيك خذ مضاد حيوي وروح بدون ما يفحص المريض وهاي كثير مخاطر بيواجهها المرضى.

P4 G9

سلامة المرضى هي أي شي بيهدد صحتنا زي افتقار الوكالة لأجهزة الفحص والعلاج غير كامل وهو أكثر حاجة بيأثر على صحة الأطفال والحوامل والكبار، في نقص اشياء كثيرة ومش متوفرة (قاطعه/ا الباحث وطالب بالتركيز على معنى المصطلح)، عادي/ت: يعني أي شي بيهدد سلامة المريض سواء نقص في الخدمات او العلاجات او الفحوصات.

P5 G9

(أشار/ت باصبعه/ها) المحافظة على المريض من أي أذى جانبي ومن انتقال العدوى والحفاظ على سلامته وتشخيص الحالات بدقة.

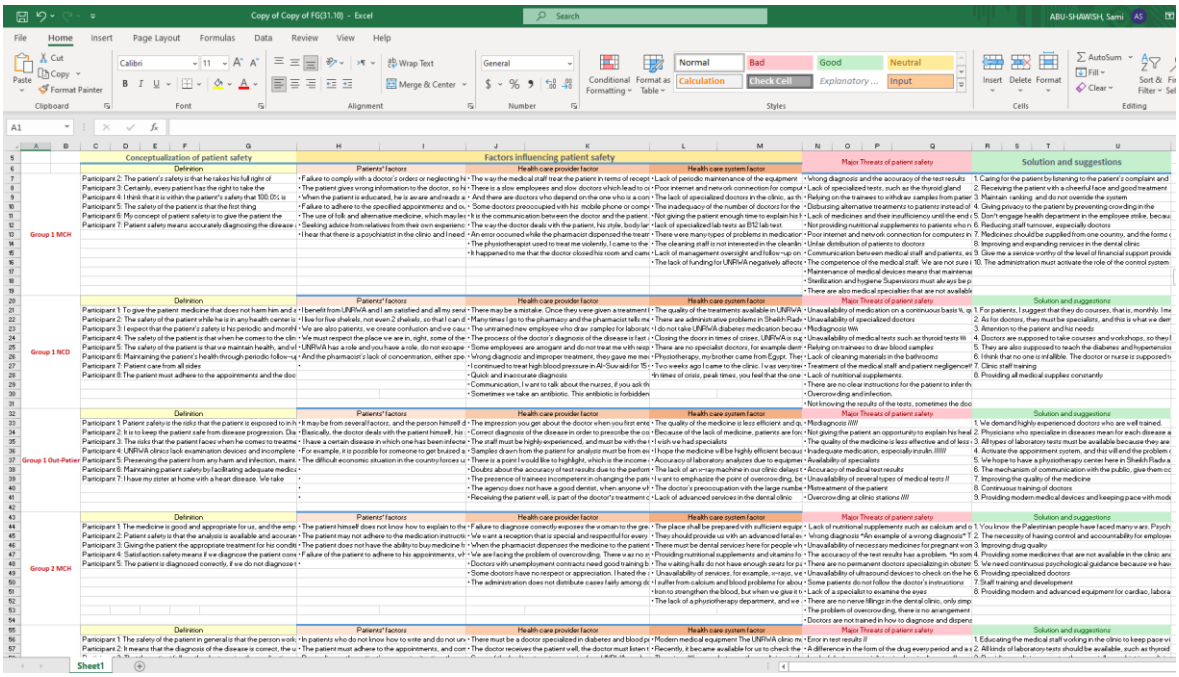
P6 G9

الحفاظ على سلامة المريض من خلال تيسير الأدوية الكافية وعدم الاحتياج لشراءه من الخارج، يعني أنا أمي ست كبيرة في السن ومش قادرة تيجي وهان ما برضوا يعطوني العلاج الها الا بحضورها.

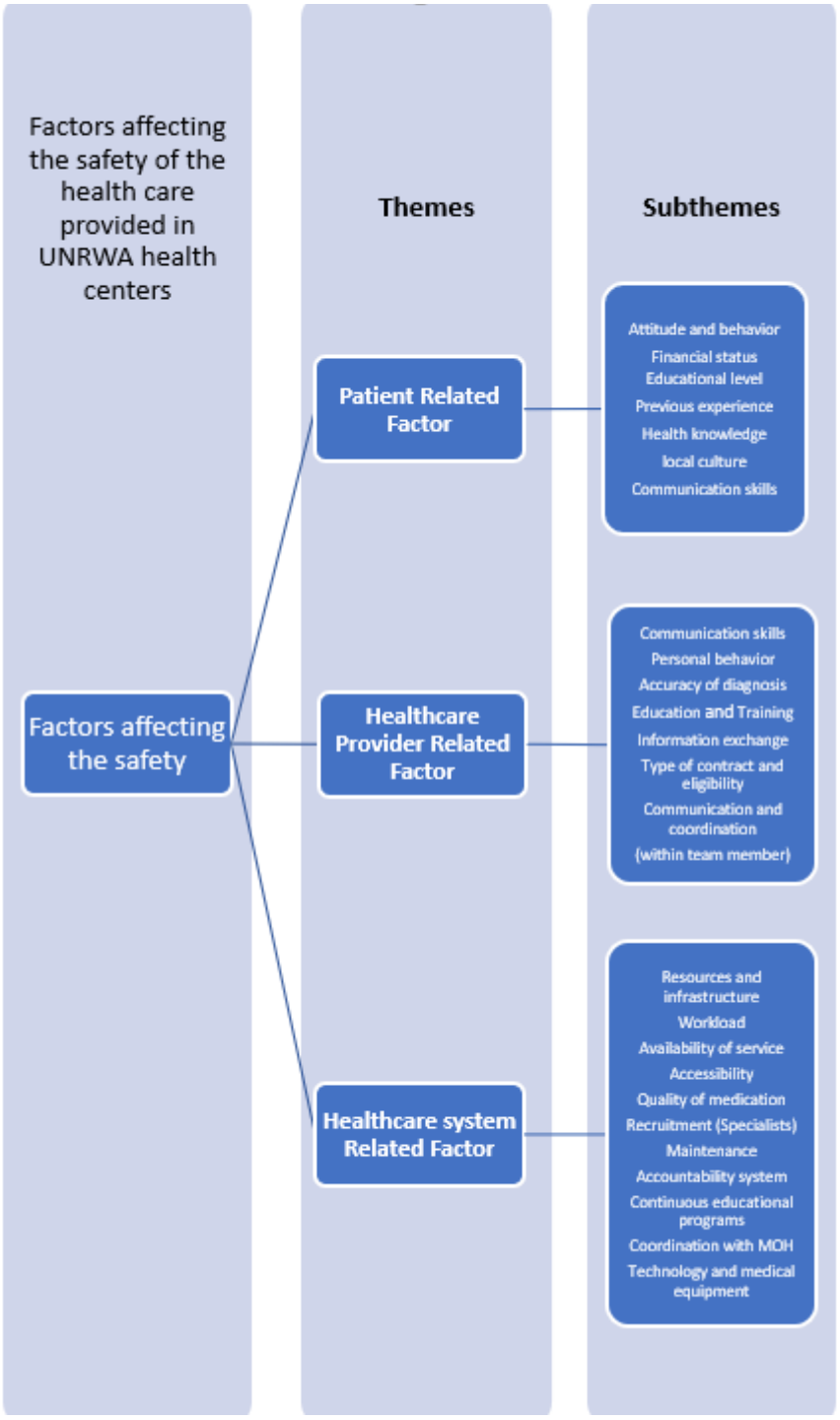
P7 G9

(هز/ت رأسه/ا وقال/ت بحزن) هو حصول المريض على كافة مستلزماته بالكامل وبشكل مجاني يعني في عندي في البيت أختي مريضة قلب بنصرف الدواء من بره مش موجود في الوكالة طيب أنا كلاجئة لازم يكون في الوكالة ولو نسيت حبة وما أخذت الدواء ممكن تروح فيها عشان هيك أحنا بنشرتيه بالعافية وبمساعدة أولاد الحلال ولأنه الدوا مش متوفر مجانا هذا بيهدد صحتها. (لفعل/ت المشارك/ة)

Annex (8): Focus Group Theme Sample



Annex (9): Factors influencing the safety of the healthcare provided in the UNRWA health centers in Gaza practices as perceived by the 71 beneficiaries participating in the nine focus group interviews that took place in three areas of Gaza between July and November 2022.



Annex (10): Estimated budget

Item	**Unit**	**Expected USD**	**What has been spent in USD**
Transportation	4 months	500	400
Photocopy papers		300	300
Lunch for focus group participants	Box	400	600
Technical support for analysis		500	600
Proofreading		300	300
Miscellaneous expenses		100	300
Copy of final report	20 copy x 15 USD	300	300
Total		**2400 USD**	**2800 USD**

Annex (11): Arabic abstract

عنوان الدراسة: وجهات نظر مقدمي الرعاية الصحية والمستفيدين حول سلامة المرضى في غزة

إعداد: سامي سليمان علي أبو شاويش

إشراف: د. معتصم حمدان

الملخص:

مقدمة:

تعتبر سلامة المرضى ذات أهمية قصوى في المشهد الطبي الحديث. يمكن أن يكون لمواقف مقدمي الرعاية الصحية تجاه سلامة المرضى تأثير كبير على نتائج المرضى. عندما توجد ثقافة عمل مشتركة، والتي تعترف وتؤسس أنظمة للحد من المخاطر، وكذلك التعلم من الأخطاء، يمكن أن تؤدي إلى نتائج أفضل للمرضى. على العكس من ذلك، عند وجود مواقف سلبية، مثل عدم الاعتراف بالمخاطر المحتملة والموقف القائل بأن سلامة المريض هي مسؤولية فردية، يمكن أن يكون لذلك تأثير ضار على نتائج المرضى. وكذلك المرضى جزء لا يتجزأ من ضمان سلامتهم أثناء العلاج الطبي. من خلال إدراك حقوقهم ومسؤولياتهم، فضلاً عن المخاطر المحتملة المرتبطة بالإجراءات الطبية، يمكن للمرضى التأكد من أن رعايتهم على أعلى مستوى من الجودة والسلامة. لذلك، تم تحديد ثقافة سلامة المرضى كعنصر حاسم في جودة الرعاية الصحية في الرعاية الصحية.

أهداف الدراسة:

تستكشف هذه الدراسة تصورات مقدمي الرعاية الصحية والمستفيدين لسلامة المرضى في مراكز الأونروا الصحية في غزة كخطوة نحو تحسين سلامة الخدمات الصحية من خلال تحديد ومعالجة الثغرات المتعلقة بالسلامة.

1. لتقييم تصورات الموظفين تجاه ثقافة السلامة في مراكز الأونروا الصحية في غزة.
2. لاستكشاف تصورات وتجارب المستفيدين حول سلامة المرضى في مراكز الأونروا الصحية في غزة.
3. لاستكشاف محددات ثقافة السلامة في مراكز الأونروا الصحية في غزة من خلال تجارب المستفيدين.
4. تحديد الإجراءات الممكنة لتحسين الممارسة الخاصة بسلامة المرضى في مراكز الأونروا الصحية في غزة.

المنهجية:

تم في هذه الدراسة استخدام نهج مختلط، حيث تم تثليث البيانات (الكمية والنوعية)، وتستهدف مقدمي الرعاية الصحية والمستفيدين في مراكز الصحة الأولية التابعة للأونروا في قطاع غزة. تم إجراء الجزء الكمي من الدراسة لمقدمي الرعاية الصحية (مدراء المراكز الصحية والأطباء المتخصصين والأطباء العامين وأطباء الأسنان والحكماء والممرضين العمليين والقابلات وفنيي المختبرات وفنيي الأشعة السينية وأخصائيين العلاج الطبيعي والصيادلة) إجمالاً، قام 259 مشاركاً من 6 مراكز صحية تابعة للأونروا تم اختيارها عشوائياً بملء استبيان الدراسة الذي تم تطويره بناءً على استبيان مواقف السلامة(SAQ) ؛ بمعدل استجابة 95٪. تم إجراء الاستطلاع ذاتيًا وتم جمع البيانات في الفترة ما بين مايو 2022 إلى يونيو 2022. تم إدخال البيانات وتحليلها باستخدام الإصدار 25 من برنامج الإحصاء SPSS.

وفي الجزء النوعي من الدراسة، تم تنفيذه من خلال إجراء تسع مناقشات جماعية مركزة. تم إجراؤها في ثلاثة مراكز صحية وتم اختيارها باستخدام العينات العشوائية الطبقية. تم جمع البيانات النوعية في أغسطس 2022. استخدم الباحث أسئلة مفتوحة في مجموعات التركيز، وحصل الباحث على النتائج الرئيسية من نصوص مجموعات التركيز. ثم تصنيف الأفكار ذات الصلة وتحليل النتائج النوعية.

أهم النتائج:

تظهر نتيجة الدراسة الكمية أن معظم المشاركين كانوا من الإناث بنسبة 63٪. فيما يتعلق بالعمل في مراكز الأونروا الصحية، 55.2٪ من المستجوبين عملوا حتى 10 سنوات. 26.6٪ لديهم خبرة عملية من 10 إلى 20 سنة، وحوالي 18٪ عملوا لأكثر من 20 سنة. وكشفت النتائج أن 6.6٪ من مقدمي الرعاية الصحية يعتقدون أن سلامة المرضى في مراكزهم الصحية مقبولة، و46.3٪ جيدة جدا، و47.1٪ ممتازة.

قيمت الدراسة ستة أبعاد تشكل أساس ثقافة سلامة المرضى في مؤسسات الرعاية الصحية. حصل مجال الرضا الوظيفي على استجابة إيجابية مذهلة بلغت 79.2٪، وهي أعلى نسبة من جميع الدرجات. بالإضافة إلى ذلك، تلقى مجال مناخ العمل الجماعي استجابة إيجابية ساحقة بلغت 77.5٪، متجاوزة نتائج الدراسات التي أجريت في مصر وتونس ومراكز الرعاية الصحية الأولية الحكومية في غزة.

بينما كان مجال ظروف العمل هو أضعف مجال مناخي آمن وحصل على 61.9٪ من ردود المشاركين الإيجابية. أظهرت النتائج أن النتيجة الإجمالية لجميع المجالات كانت 73.1٪ أعلى تقريبًا من النتائج التي تم الإبلاغ عنها سابقًا في مستشفيات غزة. تراوحت أبعاد ثقافة السلامة من 60٪ إلى 70٪ من الردود الإيجابية.

كشفت النتائج عن مستوى منخفض من الإبلاغ عن الأحداث، ما يقرب من 79.9 ٪ من المشاركين لم يسجلوا أي أحداث سلبية، وأفاد 13.9 ٪ منهم ما بين 1 إلى 2 من الأحداث السلبية، و6.2 ٪ فقط أبلغوا عن ثلاثة أحداث أو أكثر.

كما أظهرت نتائج الدراسة النوعية أن معظم المشاركين أظهروا وعياً جيداً بمفهوم السلامة من خلال تجارهم الشخصية، وكذلك بالعوامل التي تؤثر على سلامة المريض والتي كانت مرتبطة بأربعة محددات حسب تصورات المشاركين: المريض، مقدم الرعاية الصحية، جودة الاتصال بين المريض. ومقدم الرعاية الصحية والنظام الصحي.

الخلاصة والتوصيات:

تقع تصورات مقدمي الرعاية الصحية لثقافة السلامة ضمن المستوى المقبول، وقد تم تحديد مجالات سلامة معينة للتحسين المحتمل. لتحسين الوضع في مراكز الأونروا الصحية، كما أظهرت النتائج ضرورة التركيز على تعزيز الإبلاغ عن الأحداث السلبية. أيضًا أهمية توفير التدريب على سلامة المرضى لمقدمي الرعاية الصحية كجزء من البرامج التعليمية في مراكز الأونروا الصحية. علاوة على ذلك، أهمية تعزيز وتحسين مهارات الاتصال بين مقدمي الرعاية الصحية والمستفيدين، على أساس الاحترام والمصداقية والسرية لضمان رعاية صحية متكاملة وآمنة وذات جودة عالية.