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Safety Measures and Risk Management in the Ophthalmic Governmental Hospitals of the Gaza Strip

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Safety Measures and Risk Management in the Ophthalmic Governmental Hospitals of the Gaza Strip,

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Thesis Approval

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Dedication

I would like to give praise and endless thanks to Almighty Allah for guiding me and giving me the strength, knowledge, ability and opportunity always thought my life.

I would like to dedicate this master dissertation to my family, especially to My father and mother, who have been totally devoted their lives for us and for their endless love, support and encouragement; the secret of my success is their du'aa.

Special appreciation to my beloved husband who supported and encouraged me at all stages of my study

To my children's (Abdallah, Karim, Luna)

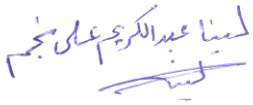
To my brother and sister and who gave me support and strength to continue my journey to the end.

To my friends, colleagues to all who helped me in completing this study with love and respect.

To the health staff who spend their times in serving patients and alleviation of their suffering.

Declaration

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

Signed: 

Leena Abedalkareem Ali Nijim

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May the Almighty Allah richly bless all of you

Leena Abdelkarim Ali Nijim

Abstract:

Background: Safety measures and risk management are essential in ophthalmic hospitals to ensure that patients receive the highest quality of care. Proper risk management helps to reduce the chances of medical errors and accidents, which can lead to serious injury or death. It also helps to protect the hospital from potential liability. Risk management in ophthalmic hospitals involves identifying, assessing, and managing risks that could potentially impact the safety and quality of care provided.

Aim: To evaluate the Safety Measures and Risk Management in the Ophthalmic Governmental Hospitals in the Gaza Strip

Methods*:* descriptive-analytical, cross-sectional designs were used. The study population included all healthcare workers in governmental ophthalmic hospitals including specialists, residents, nurses, anesthesiologists, anesthesia technicians, and administrators. Approximately 86% (160/185) of surveyed correctly completed the questionnaire.

The validity and reliability of the questionnaire were ensured; Cronbach's alpha equals 0.954 for the entire questionnaire. Data analysis was done with the help of (SPSS) program version 25

Result: The total score of safety measures levels was low (44.2%). The mean for the training domain was low (39.0%) while the mean for the hospital safety arrangements domain was moderate 66.0%. A total score of risk management levels was high (81.40%) and domain risk management was ranked as following management biological hazards (84.30%), management personnel risks (80%), and management physical hazards (79.40%). The results showed that there is a positive significant correlation between safety measures and risk management ($P < 0.05$). Finally, the results showed no statistical difference in the average of safety measures and risk management levels regarding the socio-demographic data ($P>0.05$). The results showed that there is no statistical difference in the average of safety measures and risk management levels regarding the socio-demographic data ($P>0.05$)و positive significant correlation between the safety measures and risk management ($P < 0.05$). Based on the findings from the interviews with key informants Gaza's governmental ophthalmic faces safety and risk management problems due to incomplete policies and procedures, lacking transparency, and incomplete medical event reporting. The Ministry of Health is preparing a safety manual and specialized committees to investigate medical events to enhance risk management.

Conclusion*:* The findings indicate that the overall level of safety measures was low, particularly in the training domain, but moderate in the hospital safety arrangements domain. On the other hand, the level of risk management was high, with the management of biological hazards ranking the highest. The study also found a positive correlation between safety measures and risk management, and socio-demographic data did not affect these levels significantly. Based on these results, the study suggests that hospitals should focus on improving safety measures training and emphasizing the management of physical hazards to ensure the safety of staff and patients. The study highlights the importance of effective risk management in ophthalmic hospitals. Gaza's governmental ophthalmic faces safety and risk management problems that require the development of policies, transparency, and complete medical event reporting. The Ministry of Health is taking steps to address these issues.

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List of Abbreviation

EGH	European Gaza Hospital
GG	Gaza Governorate
GS	Gaza Strip
MOH	Ministry Of Health
NGO	Non-Governmental Organizations
NOH	El Nasser Ophthalmic Hospital
PCBS	Palestinian Central Bureau of Statistics
UNRWA	United Nations Relief and Works Agency for Palestinian refugee

Chapter One

Introduction

The healthcare field is rapidly evolving due to technological advancements and the globalization of healthcare, which will have a significant impact on the quality of health services at local and global levels, including governmental and private institutions (Kaya, 2019). Implementing safety practices in healthcare can save lives and improve the quality of care. A culture of safety and consideration of human factors should be established from the beginning of medical studies and professional practice. All specialties should have a basic understanding of risk control and containment. Clinical risk management should focus on preventing sentinel events and reducing complications to improve patient safety and protect employees (Donaldson, 2021).

Risk management is critical for protecting healthcare providers and adhering to the law. It aids in focusing on the most important risks in the workplace - those that have the potential to cause serious harm. In many cases, simple measures can effectively control dangers (McGowan, 2022). The backbone of global health is healthcare practitioners, including physicians and nurses. Every day, healthcare workers around the world face a number of health and safety dangers. A healthy work environment is multifaceted and multidimensional, with many different components and interconnections. Therefore, in managing ophthalmic government hospitals and health institutions, it is necessary to be well-prepared to deal with risks, and there must be effective leaders in hospitals. Effective leaders can manage risks, respond well to any surrounding crisis, and draw lessons from previous crises (Aljamal, 2018; Abu Safia, 2020).

Healthcare quality, safety, and clinical governance are also crucial for ophthalmic care. While modern ophthalmic surgery has reached very high safety standards, medical errors are still common in eye care due to the large number of procedures (Lippera, 2021). Ensuring patient safety involves providing medications as prescribed and demonstrating safe administration of eye drops, as well as addressing potential dangers such as falls or infections.

Therefore, employing scientific methods in risk management is the safest way to benefit society as a whole, while discretionary or enthusiastic methods alone may not be sufficient to address risks.

1.1 Significance of the study

This research is unique in the Gaza Strip, as it covers the gap between developing safety and risk management procedures in ophthalmic government hospitals in the Gaza Strip. This is always carried out through the real application of these standards and guidelines of governmental Ophthalmic Hospitals in Gaza. However, the present researcher believes that although, the concept of risk management as a "health management concept" is a good policy, it is not practical and suffers from weaknesses in terms of effective application. In addition, this concept is not familiar to society and does not take into account cultural differences and real societal needs to advance the health sector. Hence, the researcher sees the importance of developing safety measures and risk management in ophthalmic government hospitals in the Gaza Strip by applying the outcomes and implementing suggestions of scientific research conducted for the Palestinian Ministry of Health. Such research could develop a methodology for coping with crises and confronting every risk and perpetuating the Palestinian health work as a hero in the field (Al-Otaibi, 2012, Madas, 2021, Hamerlain, 2017; and MOH, 2020).

1.2 General Objective:

This study aims at assessing safety measures and risk management in ophthalmic governmental hospitals in the Gaza strip.

1.2.1 Specific Objectives:

1. To evaluate safety measures applied in Gaza Strip Governmental hospitals
2. To assess variables regarding safety and risk in ophthalmic in Gaza governmental hospitals
3. To assess the relation between sociodemographic dada and both safety measures and risk management in ophthalmic governmental hospitals
4. To propose recommendations that could help in improving safety culture and reduce risk in ophthalmic governmental hospitals

1.3 Research questions:

This study is going to answer the following main question:

Is there a safety management and health risk management role that the governmental Ophthalmic provides?

In addition to the previous main question, the study is going to answer the following sub-questions:

1. Are there effective safety measures applied in Gaza Strip Governmental hospitals?
2. Are there effective risk management techniques used by health workers in Gaza governmental hospitals?
3. Are there effective environmental variables regarding safety in ophthalmic in Gaza governmental hospitals?
4. Do the actions of hospital management show that patient safety is a top priority?
5. Is there is coordination among hospital units?
6. Is feedback about changes given into placed based on event reports?
7. How do supervisors/managers deal with suggestions to improve safety and reduce risk?

1.4 Context of the study

1.4.1 Demographic features of Gaza Governorate

The West Bank and Gaza Strip (GS), together with East Jerusalem, make up the occupied Palestinian territory. There are 5.1 million people living there, with 3.05 million residing in the West Bank and 2.05 million in the Gaza Strip. (PCBS, 2019). People aged 65 and older made up 3% of the total population in 2019 while those aged 0 to 30 made up roughly 70% of the total population. However, that number is predicted to increase to 8% by 2050. (UNFPA, 2016). According to PCBS, 2019 the average size of a household in Gaza is 5.6 people; 11% of HHs are headed by women, and 6% have some form of difficulty or disability. Since the Nakba (or Catastrophe), also known as the Palestine War of 1947–1949, in which more than 750,000 Palestinians were forcibly uprooted from their original villages and cities and fled to the West Bank, the Gaza Strip, and neighboring Arab

nations, the Palestinian people have been subject to a variety of threats. 64% of people in the Gaza Strip are refugees. (PCBS, 2019).

According to the PCBS Labor Force Survey 2020 findings, 41% of all available laborers (those who are 15 years of age or older) are in the labor force in 2020, with 44% of them being in the WB and 35% in the GS (PCBS, 2021). With significant differences between the WB and the GS, the Gross Domestic Product (GDP) per capita in oPt in 2019 was $3378 (PCBS, 2021a, 2021d). It's important to note that the GDP of the GS has decreased by 50% since 2004. The GDP of this country should be four times larger than it is, according to the World Bank (World Bank, 2019). Gaza has one of the highest unemployment rates in the world and more than half of its people live below the poverty line as a result of the ongoing conflict, Israel's anti-development policies, slow economic growth, and rising population. According to the United Nations Conference on Trade and Development (UNCTD), the regional Palestinian economy in Gaza grew by less than 5% between 2007 and 2018, and its percentage of the overall Palestinian economy fell from 31% to 18%.The result was a 27% decrease in GDP per capita, a 49% increase in unemployment, a 56% increase in Gaza's poverty rate in 2017 and a 14% increase in the poverty gap, as well as a quadrupling of the annual minimum cost of rescuing people from poverty from $209 million to $838 million (ibid). Additionally, due to Israel's anti-development policies, unemployment and poverty The number of HHs in GS who are not food secure has increased significantly during the Covid-19 pandemic (Abu Hamad, et al. 2021a) and other crises, falling to less than half (PCBS, 2018). In 2017, over 96.4% of Palestinians aged 15 and older were literate, and men had a slightly higher literacy rate (98.4%) than women (94.4%) (PCBS, 2018). Although the United Nations Development Programme (UNDP) classifies oPt as having a high level of human development (0.708, ranking 114 on the Human Development Index), (UNDP, 2020) The Palestinian people are still extremely vulnerable. After 12 years of being enslaved by Israel, the GS has suffered from a prolonged occupation marked by ongoing violence and severe restrictions on the movement of both people and goods. This has led to highly fragmented and distorted local economies that are heavily reliant on foreign aid (Jones and Abu Hamad, 2016).

It also caused social networks to crumble, a rise in psychological and emotional problems, and high rates of poverty (Samuels, Jones, and Abu Hamad, 2017). Palestinian society has become even more stressed as a result of internal fighting between Fateh and Hamas. Sectors like health, education, social services, business, agriculture, and construction,

which were already struggling before these events, have been severely hampered by the subsequent blockade imposed on GS from 2007 to the present (Abu Hamad, 2021).

1.4.2 Health context

In comparison to the rest of the world, the Palestinian population's overall health status is rather decent (MOH, 2014). Healthcare services are beneficial, especially when they are delivered in a timely manner.

When comparing health results in the GGs to those in the region, it is clear that many health outcomes have improved significantly (World Bank, 2011). According to the Ministry of Health, life expectancy at birth in the West Bank and Gaza was 73 years**,** compared to 71 years for the Middle East and North Africa as a whole and 81.1 years for OEDC countries (MOH. 2014a; World Bank, 2012; OEDC, 2013). The GGs are said to be in a state of "epidemiological transition," in which mortalities are changing from communicable to non-communicable diseases (MOH, 2014a).

According to statistics, the top causes of mortality include heart disease, cancer, prenatal problems, and cerebrovascular illness are examples of chronic ailments. vascular disorders, with infectious diseases accounting for 4.7 percent of the primary causes of death. demise (MOH, 2020). Nonetheless, diseases and disorders linked to poverty, such as Malnutrition, anemia, and other mental diseases are also present. In terms of mental health, Chronic violence, economic hardship, and social and cultural divides had resulted.

Palestinians are under psychological duress. People frequently express feelings of hopelessness and helplessness aggravated (World Bank, 2010). The persistent mental anguish has resulted in a Jack of all trades. Hope that has resulted in emotional anguish, interpersonal violence, and a high rate of suicide

In addition to increased anxiety, emotional numbness, and psychosomatic symptoms, divorce leads to increased levels of anxiety, emotional numbness, and psychosomatic symptoms. a response (MOH, 2020).

1.4.3 Health care system

The Ministry of Health (MOH), the United Nations Relief and Works Agency (UNRWA), non-governmental organizations (NGO), and private for-profit service providers all share in the provision of health services at different levels, despite the availability of four health providers: the Ministry of Health (MOH), the United Nations Relief and Works Agency (UNRWA), non-governmental organizations (NGO), and private for-profit service providers (MOH, 2021). The Ministry of Health (MOH) is the primary health-care provider and regulatory organization for the governorates' healthcare system; it provides primary, secondary, and tertiary services to the entire population. MOH is the governorates' major health care provider and functions as a regulating organization for the healthcare system; it offers primary, secondary, and tertiary care. It also buys advanced medical services and provides tertiary services to the entire population.by bringing in patients from neighboring nations and other private and non-profit health-care establishments patients who are referred

1.4.4 Hospitals in Gaza Strip

In 2016, the number of operating hospitals in Palestine reached 81, 51 of which operate in the West Bank, including East Jerusalem, and constitute 63% of all operating hospitals in Palestine. The total number of hospital beds (including psychiatric and neurological hospitals) is 6,146 beds, with a rate of 784 persons per bed, including East, Jerusalem hospital beds, 784 persons per bed in the Gaza Strip, and 783 persons per bed in the West Bank, maternity beds, and all mental and neurological beds (Rabbaa, F. (2022). As for the family of rehabilitation and physiotherapy centers in Palestine, they are all owned and operated by non-governmental organizations. The number of Ministry of Health hospitals is27, with a bed capacity of 3,325 beds, or 54.1% of the total number of beds in Palestine. There are 14 Ministry of Health hospitals in the West Bank, with a bed capacity of 1,661 beds; This is equivalent to 50% of the total hospital beds of the Ministry of Health, while there are 13 hospitals of the Ministry of Health in the Gaza Strip; The number of Ministry of Health hospital beds in the Gaza Strip are 1,664, which is 50% of the total number of Ministry of Health hospital beds in Palestine(MOH,2021).

1.4.5 Ocular care services:

Eye services grew gradually in the Ministry of Health; until 1972, they were offered in a small section at Al Shifaa Hospital, and then El Nasser Ophthalmic Hospital (NOH) was built to supply them. folks from all around the GGs with ocular services (NOH annual report, 2019). Ocular care is given in a more extensive manner in MOH hospitals. There are primarily two hospitals: Elnasser ophthalmic Gaza Hospital (NOH) and the European Gaza Hospital (EGH) (MOH, 2020). NOH is Gaza's main eye hospital, offering both surgical and clinical services. Many ophthalmology subspecialties provide services in addition to emergency and primary care.

EGH eye services are supplied through a variety of specializations and departments, whereas NOH eye services are provided through a variety of specialties and departments (MOH,2021),The hospital's ophthalmic department was created in 1999 to serve the Gaza Strip's south.,Both hospitals provide services through ophthalmologists, general practitioners, and other specialists, optometrists in addition to supporting nurse staff, anesthetists, and pharmacists.

El-Nasser Ophthalmic Hospital in Gaza:

Established in 1965 in an area of 3600 m2, El-Naser Ophthalmic Hospital is a government hospital specializing in providing ophthalmology services in the Gaza Strip. It is located in the al-Nasr neighborhood west of the intersection of Al-Ayoun Street with Al Nasr Street. Its total clinical capacity is about 40 beds. El-Nasser Ophthalmic Hospital is the only reference hospital for ophthalmology and surgery in the Gaza Strip and serves all areas extending from Beit Hanoun to Rafah city. The present study will focus on this hospital's experience with crises (E-portal Info, 2022).

European Gaza Hospital (EGH):

At the end of the first Intifada, in 1989, the European Union decided to establish a hospital for the Palestinian people as a gift. Because there was no legal authority at that time, UNRWA was tasked to establishing this hospital using European funding. Thus, the efforts culminated in the signing of a memorandum of understanding between the European Union in October1997 ,UNRWA and the Palestinian Authority to operate the hospital to be its administrations Its legal personality is distinct and different. The actual implementation of the agreement began in early July 1999 with the arrival of the international team Which

began then and continuously to prepare administrative plans for the hospital and staff recruitment and Preparing tenders for importing medical devices. All of this work was done with local counterparts to each member of the ten international team members, and this situation continued until 10/15/2000Management has moved entirely to the local team and the international team has shifted to consultants (EGH portals,2020)

1.5 Operational definitions

Risk Management:

It is the systematic application of management policies, procedures and practices to the tasks of analyzing, evaluating and controlling risk. Risk management attempts to assess hazards (as experienced by various target groups, like experts, decision makers, employers and employees), forecasting its occurrence, magnitude and injury, and to reduce or control potential consequences.

Risk:

It is the chance or probability of a loss or adverse event that could cause injury to patients or medical practitioners. This will prompt us to consider some of the methods used in risk management in El-Naser Ophthalmic Hospital. Thus, risk management in the field of ophthalmology is fundamental in protecting patients, hospital doctors, and medical regulation in terms of capital and expanding the medical reputation of the organization with patients (BinSulaiteen, 2018).

Safety measures:

Safety measures refer to the set of protocols, policies, procedures, and actions taken to prevent or reduce the occurrence of accidents, injuries, or harm to individuals or property. In a hospital or healthcare setting, safety measures involve ensuring that the environment is safe for patients, staff, and visitors. This includes measures such as proper cleaning and disinfection procedures, appropriate use and disposal of hazardous materials, adequate ventilation, proper storage of equipment and supplies, and effective communication and training to prevent errors and accidents. The implementation of safety measures is critical in promoting patient safety and minimizing the risk of adverse events. Effective safety measures also contribute to the overall quality of care provided in healthcare settings.

Chapter Two

Conceptual Frame Work and Literature Review

2.1 Conceptual frame work

The researcher based on the review of the available literature designed the conceptual framework. The conceptual framework is the map that guides the design and the implementation of the study and its effect mechanism for illustrating and summarizing the study variables. Study variables

The first domain is concerned with systematic safety measures in which includes a variety of variables such as the reporting, communication, feedback, Team working and another item.

And other variables physical hazard and includes factors such as floor, signs on damp ground, lack of preventive measures, lack of measures to mitigate hazards at workplace entrances, stairwells, ramps, outlets, electrical equipment, and other objects.

The third domain is personal risk, which includes a number of variables such as needle stick, hospital handoff transition. Number of weekly hours, years of experience and other the fourth domain is biological risks which examine the infection prevention, vaccination, hand wash and medical waste.

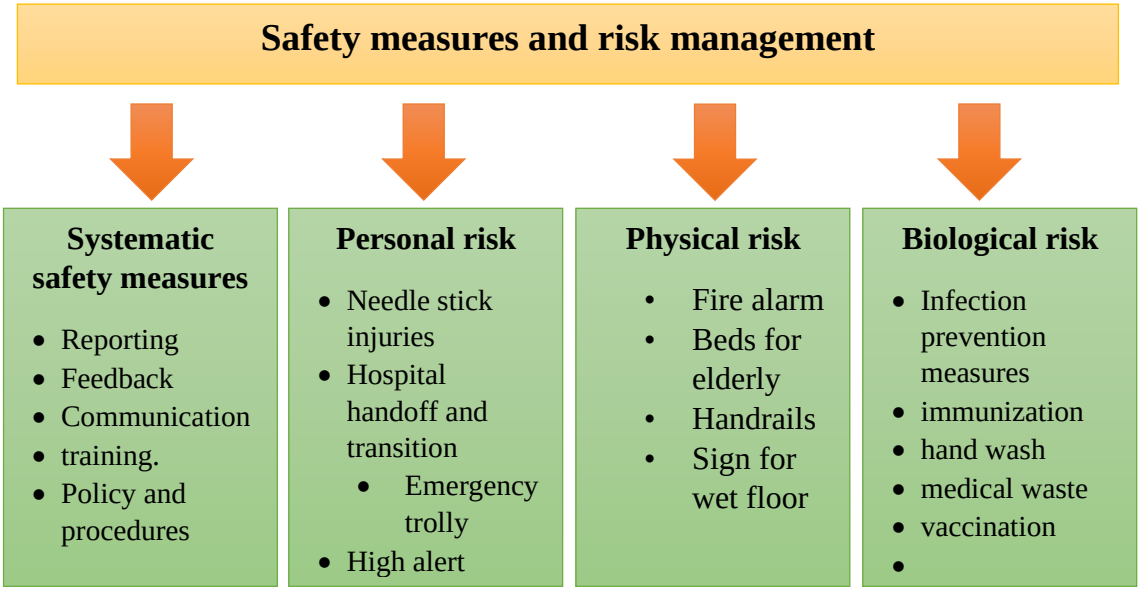

Figure (2.1): Conceptual frame work

2.2 Literature review:

2.2.1 Introduction

The safety of patients and staff is a critical concern in any healthcare facility, including ophthalmic governmental hospitals. In recent years, there has been growing attention to the need for effective safety measures and risk management strategies in healthcare settings around the world. However, healthcare facilities in certain regions, such as the Gaza Strip, may face unique challenges when it comes to ensuring safety due to factors such as political instability and limited resources (Sengupta et al., 2020).

The purpose of this literature review is to examine the state of safety measures and risk management in the ophthalmic governmental hospitals in the Gaza Strip. This review will explore the specific safety hazards and risks that are present in these hospitals, as well as the current risk management strategies that are in place. By identifying areas for improvement and making recommendations for future practice, this review aims to improve the safety of patients and staff in these hospitals, and ultimately improve the overall quality of care provided.

2.2.2 Safety hazards and risks in ophthalmic governmental hospitals

Ophthalmic governmental hospitals face a variety of safety hazards and risks that can pose a significant threat to the health and safety of patients and staff. One major risk is inadequate training, which can result in errors in diagnosis, treatment, or surgery. Another risk is the lack of protective equipment, such as eye protection, which can lead to eye injuries or infections. In addition, poor infection control practices can lead to the spread of infectious diseases, such as conjunctivitis, keratitis, or endophthalmitis (Kutija, 2023). Other risks include the use of expired or contaminated drugs, equipment malfunctions, and inadequate security measures. The risks and hazards in ophthalmic governmental hospitals can be exacerbated by factors such as political instability, resource limitations, and a lack of funding. It is crucial that these hospitals develop and implement effective safety measures and risk management strategies to address these hazards and risks, in order to ensure the safety and well-being of patients and staff (Bizrah et al., 2019)

2.2.2.1 Physical hazards and risks in ophthalmic governmental hospitals

Physical hazards and risks are a significant concern in ophthalmic governmental hospitals. These hazards can lead to serious injuries, illnesses, and even fatalities among healthcare workers, patients, and visitors. The most common physical hazards and risks in these hospitals include: Slips, Trips, and Falls: These are the most common accidents in hospitals and can be caused by wet floors, cluttered areas, uneven surfaces, and improper footwear. In ophthalmic hospitals, spilled liquids or ointments can create slippery surfaces, especially in areas where patients are treated. also, Sharp Objects and Biohazardous Materials: Ophthalmic hospitals use various sharp objects such as needles, scalpels, and scissors during procedures, which can pose a risk of injury or infection if not disposed of properly. These objects must be disposed of in designated sharps containers. Additionally, biohazardous materials such as blood, tissues, and fluids can also be a source of infection if not handled and disposed of properly (Ropponen et al., 2023 & Ely et al., 2023).

However, Radiation Exposure: Ophthalmic hospitals use various imaging technologies such as X-rays, CT scans, and MRIs, which expose patients and healthcare workers to ionizing radiation. If not properly controlled, radiation exposure can lead to radiation sickness, cancer, and genetic damage. Also, Ergonomic Hazards: Healthcare workers in ophthalmic hospitals are required to perform various physical tasks such as lifting, transferring patients, and standing for long periods. Repetitive motions and awkward postures can lead to musculoskeletal disorders such as back pain, neck pain, and carpal tunnel syndrome (Nankongnab et al., 2021 & Che et al., 2020).

To prevent these hazards and risks, ophthalmic governmental hospitals must implement proper safety measures and risk management strategies. These include regular training and education for healthcare workers, proper equipment maintenance and disposal, and the use of personal protective equipment (PPE) such as gloves, goggles, and masks. Additionally, hospitals should have policies and procedures in place to address potential hazards and risks and ensure that they are followed by all staff members. By taking these steps, ophthalmic hospitals can create a safe and healthy environment for healthcare workers, patients, and visitors (Cohen et al., 2020).

The Workplace stress was the most common source of occupational health and safety risk, followed by insufficient staff, bad medical devices, and excessive working hours. Conclusion of the study found that health care providers at governmental institutions in the Northern Gaza Governorate receive insufficient training on occupational health and safety risks in operating rooms Naim (2020).

conducted a study into the state of occupational safety and health policies in Uganda, as well as the obstacles associated with their implementation. The findings revealed that current workplace safety and health policies were mainly outdated in comparison to contemporary workplace needs. The findings also indicated the existence of legal voids. framework, and a lack of understanding of occupational safety and health policies. In Furthermore, the findings revealed poor planning, human capacity limitations, openness, and accountability Atusingwize et al., (2019)

Between Rafah and Khan Younis PHC clinics, there are substantial changes in the chance of biological risks, but no significant differences in the likelihood of physical, workplace, or chemical dangers. Furthermore, the level of severity of physical and biological dangers differs significantly between Rafah and Khan Younis. On the other side, the survey found that 77.0 percent of s Health Care Providers in Primary Healthcare centers have a good understanding of health and safety risks. Despite the low level of health and safety risks experienced by HCPs at PHC centers, the findings of this study concluded that HCPs nevertheless face various hazards in their daily work. Workplaces. doing additional research studies on workplace health and safety to give additional information about hidden occupational risks at PHC facilities strongly suggested (Younis, 2018)

2.2.2.2 Biological hazards and risks in ophthalmic governmental hospitals

Biological hazards and risks are another important aspect to consider in ophthalmic governmental hospitals. This includes exposure to infectious agents such as viruses, bacteria, fungi, and parasites that can be transmitted through the air, blood, bodily fluids, or contaminated surfaces. The ophthalmic hospitals may have patients with various infectious diseases that could be transmitted to healthcare workers, patients, and visitors. In addition, some ophthalmic procedures may increase the risk of exposure to infectious agents, such as surgeries that involve contact with the conjunctiva or cornea (Artik et al., 2022)

Some common biological hazards in ophthalmic governmental hospitals include infections caused by Staphylococcus aureus, Mycobacterium tuberculosis, Hepatitis B virus, and HIV. The transmission of these infectious agents can occur through contact with contaminated surfaces, respiratory droplets, or blood and body fluids. To prevent the transmission of infectious agents, it is important to implement appropriate infection control measures, such as hand hygiene, proper use of personal protective equipment, appropriate handling and disposal of infectious waste, and proper sterilization and disinfection of instruments and equipment. Healthcare workers should also receive appropriate training on infection control measures and be encouraged to report any exposure incidents to their supervisors (Li et al., 2020).

In addition, it is important to have policies and procedures in place for the management of infectious diseases in patients, including isolation precautions, appropriate treatment, and follow-up care. Regular monitoring and surveillance of infectious diseases in the hospital can also help to identify potential outbreaks and allow for timely intervention. Overall, implementing appropriate measures to prevent the transmission of biological hazards in ophthalmic governmental hospitals is crucial for protecting the health and safety of healthcare workers, patients, and visitors (Calò et al., 2020).

2.2.2.3 Occupational hazards and risks in ophthalmic governmental hospitals

Ophthalmic governmental hospitals pose various occupational hazards and risks that can affect the health and safety of healthcare workers. It is important to understand these hazards and risks to ensure that appropriate measures are taken to prevent them. One example of an occupational hazard in ophthalmic hospitals is musculoskeletal injuries. Healthcare workers in ophthalmic hospitals may be required to perform physically demanding tasks, such as lifting heavy equipment or patients, which can lead to musculoskeletal injuries. These injuries can be prevented through proper training and the use of ergonomic equipment and techniques (Nankongnab et al., 2021).

Another occupational hazard in ophthalmic hospitals is exposure to infectious diseases. Healthcare workers in ophthalmic hospitals may be exposed to infectious diseases through contact with patients' bodily fluids, particularly during procedures such as eye surgery. To prevent exposure, healthcare workers must follow strict infection control protocols, including wearing personal protective equipment and practicing good hygiene. Exposure to

hazardous chemicals and drugs is another occupational risk in ophthalmic hospitals. Workers may be exposed to toxic chemicals and drugs during the preparation and administration of medications and during cleaning and sterilization procedures. Appropriate precautions, such as wearing protective equipment and ensuring proper ventilation, should be taken to minimize the risk of exposure (Erber et al., 2022)

Lastly, workplace violence is an emerging occupational hazard in healthcare settings, including ophthalmic hospitals. Healthcare workers may be at risk of physical and verbal abuse from patients or their families, which can lead to physical and psychological injuries. Adequate training, security measures, and reporting procedures can help prevent workplace violence and protect healthcare workers. Ophthalmic governmental hospitals have various occupational hazards and risks that must be addressed to ensure the health and safety of healthcare workers. Proper training, protective equipment, and infection control measures are essential to prevent these hazards and risks (Murray et al., 2020).

According to the findings Umar and Aisha (2017). the overall prevalence of occupational health hazards was 56.8%. Needlestick injuries (40.7%) and hepatitis B and C virus infections (13.9%) were the most common occupational health hazards among clinical health care employees, whereas stress (32.8%) and back discomfort were the most common among non-clinical health care workers (10.3 percent). The majority of health-care workers who experienced occupational health dangers reported

"Assessment of Health and Safety Risk among Health Care Providers at Al Shifaa Medical Complex." was the title of a cross-sectional study undertaken to analyze health and safety hazards among health care providers working at Al Shifaa Medical Complex. Physicians and nurses face the greatest physical danger, according to the findings. 46.3 percent of entrances, stairs, ramps, interior floors, and exits are in safe condition, posing a high risk. Sharp boxes are present in the workplace, according to 71.4 percent of health care providers, and they constitute an excessive level biological risk. Long standing during work is a major ergonomic risk, according to 22.3 percent of health care providers. Furthermore, they demonstrated that there is no substantial. At Al Shifaa, there is no significant relationship between physical and biological risks and (working site, gender, age group, and qualification), however there is a substantial relationship between physical risks and healthcare provider experience (Younis et al., 2018).

Conducted a cross-sectional study titled "Occupational Safety Precautions among Nurses at Four Hospitals in the Nablus District of Palestine," with the goal of determining the prevalence and determinants of occupational hazards exposure among nurses, as well as their knowledge of occupational safety precautions. The study found that 51.7 percent of people had ever been exposed to blood or body fluids, which was linked to working in private and charitable hospitals, having 4-6 family members, and having "nursing" as a top university career option. Working in charitable and private hospitals, as well as "nursing" as one's top profession choice, were connected with a high risk of blood and body fluids exposure of 62.2 percent. Most respondents said it was vital to implement laws and regulations addressing knowledge. Legislation concerning workplace safety precautions, reported sharps container use, quick disinfection after an accident, accident reporting, and the use of personal protective equipment Nurses were well-informed about the dangers of their hospital jobs Al-Khatib et al. (2015).

2.2.3 Team working

Explored the variability in safety culture dimensions within and between Swiss and US clinical areas. A Cross-sectional design was applied. The 30-item (SAQ) was distributed in 2009 to clinicians involved in direct patient care in medical and surgical units of two Swiss and 10 US hospitals. At the unit level, results were calculated as the percentage of respondents within a unit who reported positive perceptions. Furthermore, Multivariate analysis of Variance (MANOVA) and analysis of Variance (ANOVA) were used to test for differences between and within US and Swiss hospital units. Findings: The authors found differences in SAQ dimensions at the country, hospital and unit levels. The general emphasis is placed upon teamwork and the quality of the safety climate. Safety efforts appear to be highlighting dimensions that vary more at the unit than hospital level.

The researchers suggest that patient safety improvement interventions target unit level changes, and they support the emphasis being placed on teamwork and safety climate, as these vary significantly at the unit level across countries Schwendimann, et al. (2012). Also demonstrating the relationship between employee engagement and workplace safety for predicting patient safety culture. The Gallup Q12 survey and an approved, abbreviated, and validated subset of questions from the Hospital Survey on Patient Safety Culture were administered to staff at a large tertiary academic medical center in 2007 and 2009. After controlling for demographic variables, researchers conducted a longitudinal, hierarchical linear regression analysis to study the unique contributions of employee engagement,

changes in employee engagement and employee safety in predicting patient safety culture. The result of the study showed that teams with a higher baseline engagement, more positive change in engagement, fewer workers‟ compensation claims, and fewer part-time associates in previous years had stronger patient safety cultures in 2009. In addition to this, baseline engagement and change in engagement were the strongest independent predictors of patient safety culture in 2009. Conclusions: A synergistic effect exists between employee engagement and decreased levels of workers‟ compensation claims for improving patient safety culture. Organizations can improve engagement and implement safety policies, procedures, and devices for employees with the ultimate effect of improving patient safety culture Thorp (2012)

2.2.4 Safe culture

The presence of a corrective and blame-prone culture which is saddled by underreporting of occasions, a need of openness in respects to communication and lacking administration bolster: these are all the vital key challenges that must be tended to for healing center care to be secure for the patients. The pattern study comes about are profitable for planning and actualizing the quiet security program and for measuring future advance. Hamdan and Saleem (2012)

In expansion, specialized medical caretakers who were employed within the ICU reflected a essentially higher recognition of by and large security culture dimensions as compared to those proficient nurses who were working within the CCU and general units. Noteworthy relationship was watched between socio statistic characteristics and all measurements of security culture. The finding concluded that giving knowledge into nurses‟ security demeanors can be utilized as a pattern for raising security mindfulness all through the organization and recognizing the areas that require advancement Abdou and Saber (2011):

"Assessment of patient safety culture in Saudi Arabian Hospitals The reason of this study was to assess the degree to which the culture underpins patients' security at Saudi healing centers. Information was collected through overview. A survey was distributed hospital-wide to13 common healing centers in Riyadh, Saudi Arabia to 223 wellbeing professionals counting medical attendants, professionals, supervisors and therapeutic staff.

The HSOPSC was utilized to recognize measurements of quiet security culture. The reactions to the surveys brought about in an in general Understanding Security Review of amazing or exceptionally good by 60% of respondents, worthy by 33% and coming up short or destitute by 7%. More than half of respondents thought that directors neglected security issues that happened over and over. Ranges of quality, for most clinics, were organizational learning/continuous change, collaboration inside units, input and communication about blunders. Ranges with potential for advancement for most clinics were under reporting of occasions, non-punitive reaction to blunder, staffing and cooperation over hospital units. In conclusion, authority could be a basic component to the adequacy of patient security activities. Reaction to mistakes is an vital determinant of security culture in healthcare organizations. In arrange for healthcare organizations to form a culture of security and enhancement, they must dispense with the fear of fault a and make a climate of open communication and nonstop learning. Alahmadi (2010

Investigated the relationship between ergonomics and occupational health among nursing staff. Juibari et al. type, the study concluded that providing a healthier work environment for nurses and optimizing human resource efficiency can be achieved by training staff to do their jobs in the best possible way, taking breaks between long work hours, using appropriate tools and facilities, and paying attention to ergonomics Juibari et al. (2010).

2.2.4.1 Lack of protective equipment

Lack of protective equipment is a major occupational hazard in ophthalmic governmental hospitals. Healthcare workers, including ophthalmic technicians and nurses, are at high risk of exposure to infectious agents such as blood-borne pathogens, aerosols, and other biological hazards, particularly during surgical procedures or when handling contaminated equipment. Without proper protective equipment, such as gloves, masks, goggles, and gowns, healthcare workers are vulnerable to infections and other health problems. In addition to the risk of infection, lack of protective equipment can also increase the risk of physical injuries. Ophthalmic surgeries involve the use of lasers, scalpels, and other sharp instruments, which can pose a risk of injury if not handled properly. Protective eyewear is essential to prevent eye injuries from flying debris, while gloves protect against cuts and puncture wounds (Innocent et al., 2022)

Furthermore, lack of protective equipment can result in psychological hazards for healthcare workers. Fear and anxiety over the risk of infection can lead to stress and mental health problems, affecting the overall wellbeing of the healthcare workers. To minimize the hazards and risks associated with the lack of protective equipment, it is essential to provide healthcare workers with the necessary protective gear and training on proper use and disposal. Regular inspections and maintenance of the equipment should also be conducted to ensure its effectiveness in protecting the healthcare workers. The implementation of safety protocols and guidelines can further reduce the risk of exposure to hazards and promote a safe working environment for all healthcare workers. (Romeu-Labayen rt al., 2022)

2.2.5 Risk management in ophthalmic governmental hospitals

Risk management in ophthalmic governmental hospitals involves identifying potential hazards and risks, assessing the likelihood and severity of those risks, and implementing measures to mitigate or control those risks. This includes implementing policies and procedures for infection control, handling of hazardous materials, safe use of equipment, and emergency preparedness. Effective risk management also involves providing ongoing training and education to staff members to ensure they are aware of the risks and know how to properly manage them. It is important for ophthalmic governmental hospitals to have a dedicated risk management team and to regularly review and update their risk management plans to ensure the safety of patients and staff (Topal, & Atasoylu, 2022).

2.2.5.1 Risk Management

Risk management in ophthalmic governmental hospitals involves identifying potential risks and hazards, analyzing their likelihood and potential impact, and implementing appropriate measures to mitigate or control them. This includes assessing physical hazards, such as slips, trips, and falls, as well as biological hazards, such as infectious diseases. It also involves identifying occupational hazards, including exposure to hazardous chemicals or radiation, and implementing proper safety protocols to prevent accidents and injuries. Additionally, risk assessment involves evaluating the effectiveness of existing safety measures and identifying areas for improvement. This includes providing adequate training and resources to employees, ensuring the availability and proper use of personal protective equipment, and implementing protocols for emergency response and crisis management.

By implementing a risk assessment and management plan, ophthalmic governmental hospitals can ensure the safety and well-being of their patients and staff, as well as minimize the risk of legal and financial liabilities (Alani, 2022).

2.2.5.2 Safety policies and procedures

Safety policies and procedures in ophthalmic governmental hospitals are essential for promoting a safe work environment and reducing risks for both patients and healthcare workers. These policies and procedures typically address a range of topics such as infection control, hazardous materials handling, fire safety, equipment maintenance, and patient handling and transport. One important aspect of safety policies and procedures is infection control. In ophthalmic hospitals, strict protocols are followed to prevent the spread of infectious diseases. This includes hand hygiene practices, personal protective equipment (PPE), isolation precautions, and proper cleaning and disinfection of equipment and surfaces (Palmer et al., 2022).

Another important area is hazardous materials handling, which involves the proper storage, handling, and disposal of hazardous chemicals and other materials used in ophthalmic procedures. Fire safety policies and procedures are also critical, including regular fire drills, fire prevention measures, and proper handling of flammable materials. Equipment maintenance policies and procedures ensure that ophthalmic equipment is regularly inspected, calibrated, and maintained to ensure safe and accurate use. Patient handling and transport policies and procedures focus on reducing the risk of injury to patients during transfer and transportation between hospital departments or facilities (Jha et al., 2022).

Overall, safety policies and procedures in ophthalmic governmental hospitals help to promote a culture of safety and reduce the risk of accidents and injuries to patients and healthcare workers. It is essential that these policies and procedures are regularly reviewed, updated, and followed by all hospital staff to ensure the highest level of safety and quality of care (Tawiah et al., 2022).

When we talk about safety measures and risk management, we talk about physical, biological and working environment as well as safety processes like procedures and

protocols that aimed to protect employee and patients in a way of guiding behavior; and system in a set of values.

So according to literature safety measures and risk management is a very important issue at hospitals to reduce medical errors, physical hazards related to employee and adverse events, it should be assessed at our hospitals in Gaza Governorates by measuring its' main dimensions to sustain the strength dimensions and enhance the weakness tips in the way to ensure the safety care delivery.

The following are the main dimensions together constitute the safety measures and risk management at ophthalmic governmental hospitals.

Learning culture

The organization learns from accumulated experience by systematically gathering and analyzing near misses, and medical errors and encouraging the reporting of incidents (Health and Safety Laboratory, 2011); how procedures are implemented during normal working practices can help identify any gaps between how supervisors needed the procedures to be applied and how they are done by staff. A culture of learning exists within a PHC center when it seeks to analyze root causes of medical errors and near misses and learns from that to implement a performance improvement process into the healthcare delivery system. So, when PHC centers on safety culture matures, learning culture will become more proactive in identifying and modifying unsafe acts or procedures to prevent errors or any type of harm. PHC centers that are “data-driven” have the opportunity to learn not only from failures but also from successes. Learning also can begin when leaders demonstrate a willingness to learn, not only from internal sources but from sources outside health care that have developed and exhibited successful safety cultures (Hodgen & Bierbaum, 2017). However, the learning culture creates safety awareness among PHC centers staff and promotes an atmosphere of learning through educational initiatives and programs that should include understanding of the value of safety culture assessment and how to construct it, when to start and who is responsible for. According to a study was conducted in Kuwait PHC centers, the learning culture obtained 75% (Ghobashi et., 2014), according to a study was conducted in Alexandria PHC centers, the learning culture obtained 73.3% (Mohamed et al., 2015), according to study conducted in Tunisia PHCs,

learning culture obtained 48.7% (Tlili et al., 2020), and according to Al-Saqqa study that conducted in Gaza hospital, the learning culture obtained 72% (Saqqa, 2015)

Team manager and supervisor

The team leader is the person who is appointed, elected, or informally chosen to direct and coordinate the work of others in a group (Taylor & Pandian, 2016). Team leaders also called supervisors or front-line managers, are typically responsible for a group of people working together to achieve a common task. In healthcare, there are leaders of established groups, such as ward charge nurses, or leaders of temporary groups, such as operating theatre teams (WHO, 2009). A lot of studies have measured this domain in different countries, and the results appeared the follows; according to the study was conducted in Oman, the supervisor and team manager obtained 60% (Mandhari et al., 2014) this domain needs a lot of effort to improve safety at PHCs, according to the study was conducted in Tunisia PHCs, the supervisor and team manager obtained 53.4% (Tlili et al., 2020) also its very week and it needs hard work, according to the study was conducted in Kuwait PHCs, the supervisor and team manager obtained 53% (Ghobashi et al., 2014). And according to the Al-Saqqa study that was conducted in Gaza hospitals, the supervisor and team manager obtained 62% (Saqqa, 2015).

The supervisor generally has responsibilities for task completion by communication and monitoring of the team members. Only few studies have investigated leadership safety behaviors in healthcare, but supervisory safety practices have been found to decrease the number of minor injuries and positively influence staff safety culture (WHO, 2009). For supervisors, most leadership theories indicate that the leader has to concentrate on both the task and on the social needs of the team members (Zwart et al., 2011). Another popular leadership theory for first-level managers, the situational model, states that for optimal team performance, the leader needs to assess the level of maturity of the team, in terms of their task competence and commitment (Oah et al., 2018). Previous studies suggested that supervisors need to reinforce staff safe behaviors, emphasize safety over productivity, participate in safety activities and encourage employee involvement in safety programs and initiatives. found that less successful teams exhibited significantly less leadership behavior, more unsafe acts, and explicit performance distribution (Smits & Wagner, 2011). According to a study conducted in PHC centers in Alexandria, supervision evaluation

showed that; 75 % of the PHC centers enhance 18 supervision (Mohamed et al., 2015), according to a study conducted in Gaza hospitals, the supervision evaluation obtained 62% (Saqqa, 2015).

Staffing

In an understaffed facility, employees are overworked and fatigued which increases the danger of adverse events caused by human errors and system deficiencies, so the availability of personnel is a major concern for many PHC centers (Sherif et al.,2021). Staff shortages increase stress in the workplace, and stress increases the chance of cognitive failure (Abiodum & Toyinbo., 2021). So good staffing is considered a key to decreasing errors and preventing adverse events when patients are treated safely by dedicated healthcare staff. It has been found that short-staffing increases the nurse's risk of experiencing burnout which can lead to an increased turnover in employment, staffing levels make a difference to patient outcomes (mortality and adverse events), patient experience, quality of care, and the efficiency of care delivery. Safe staffing is essential to the overall health care system. Staffing affects the ability of all health staff to deliver safe, quality care in all practice settings. By eliminating unsafe staffing practices and policies, we can provide better health care for all (Ansah et al., 2021). Staffing encompasses all those factors that can influence the PHC staff and their behavior at work and the ability to work individually or in teams towards the PHC mission. A study shows a higher ratio of staff to patients increases patient safety and there is strong evidence that a shortage of nursing staff is associated with an increased length of hospital stays (Ansah et al., 2021). So staffing and human resource strategies for the healthcare workforce should be developed to address the progress of needs, assessment of the existing gaps, determine the staff shortage, supervise and train the junior staff for raising the patient safety awareness in the health care system. A lot of studies was measured staffing dimension in many health care centers in different countries, results showed the following; according to the study was conducted in Tunisia PHCs, the staffing assessment was obtained 34.7% (Tlili et al., 2020), According to the study was conducted in Kuwait, results of staffing assessment at PHCs 41% (Ghobashi et al., 2014) According to the study was Alexandria, the staffing assessment was obtained 60% (Mohamed et al., 2015). And according to the study conducted in Gaza hospital, the staffing assessment obtained 58% (Saqqa, 2015)

Communication and Information Sharing

Communication has an important role in creating a good climate for the exchange of the information necessary for achieving the organizational goals, also it reflect unique picture about the organizational services toward its customer. So, promoting good communication environment is one of most important goals of the human resource managers. Effective communication occurs when the massage received and understood as the sender wants, also the sender has to collect the information about the idea he wants to explore, making a good assessment about the receiver of the massage then to choose the right rout of communication so that the massage can be understood as he wants. Studies shows that most problem experienced in people management are duo to ineffective communication, strategic human resource management appreciate the role of communication as it is an easy cost-effective way of transmitting the mission, vision, rules, regulation and policies of the organization, also the degree to which the employee 13 understand and accept the massage the best commitment to these policies and the best result will be gotten. Frequent meetings with the top management, departmental and team meetings present the best opportunities for effective communication. Other channels include close interaction between staff and supervisors, billboards, brochures and instruction manuals (Itika, 2011) An effective safety information system is crucial to adequate dissemination of top-down communications (e.g., safety instructions, policies, and procedures) and also for bottom up communications (e.g., feedback from workers to the organization). Impaired or Ineffective safety information leads to errors of assessment and diagnosis of safety problems which leads to bad prognosis or disasters. In addition, reduced status distinctions through encouraging communication, sharing ideas, and promoting greater concern and trust amongst workers leads to a sense of common fate which encourages an effective mutual communication, finally positive communication between managers and workers is helpful to ease worker relations, which has been identified as an important HRM issue in relation to safety (Glendon et al., 2006).A lot of studies was evaluated communication in many health care centers in different countries, and the results appeared the follows; according to the study was conducted in Kuwait, the results of communication assessment at PHCs 41% (Ghobashi et al., 2014) needs a lot of efforts to improve the communication at the PHCs, according to the study was conducted in Tunisia PHCs, the communication assessment was obtained 42% (Tlili et al., 2020), according to the study conducted in Alexandria, the communication assessment was obtained 66.7% (Mohamed et al., 2015). And according to

the study conducted in Gaza hospital, the communication assessment obtained 62% (Saqqa, 2015)

Reporting errors

Such a shift from a culture in which workers are discouraged from reporting errors to one in which they are encouraged to report errors or failures may be accomplished by stopping the practice of focusing blame on the health-care workers at the 'sharp-end' and focusing instead on processes and procedures (Listyowardojo et al., 2012). Ophthalmic hospitals should be transparent in reporting advese events, and results should be posted and updated promptly. Focusing on actual adverse events should be the first step in the improving because this strategy deals with high-profile cases, which is more focused and more effective in using currently limited healthcare system resources (Sorra and Famolaro, 2011). Therefore, successfully preventing unsafe events depends on comprehensive systematic data collection, precise analysis, and wide and effective participation. Also, there are two types of reporting systems: mandatory reporting systems focus on serious and fatal incidents and voluntary systems that are used often for less severe events. Although both systems require supporting and cooperation of healthcare staff (Sorra & Famolaro, 2011), there is some debate about the value of voluntary reporting systems in case of the fear of blame and the legal responsibility that will make healthcare staff choose not to disclose medical mishaps until a positive culture is created

This literature review focuses on the safety policies and procedures in ophthalmic governmental hospitals in the Gaza Strip. The study identifies the specific safety hazards and risks faced by ophthalmic hospitals, such as training, protective equipment, r infection control practices, equipment malfunctions, and inadequate security measures. Physical hazards and risks include falls, facilities for special needs, temperature, beds for elderly, while biological hazards include exposure to infectious agents, vaccination, washing hands. The review highlights the importance of implementing proper safety measures and risk management strategies to address these hazards and risks and ensure the safety of patients and staff in ophthalmic governmental hospitals.

Chapter Three

Methodology

Introduction:

In order to answer the research questions or to examine the research topic, this chapter outlines how relevant information is obtained, including Methodology, design, adjustments to the instruments, sample recruitment, and study population, eligibility requirements, study design, methods for gathering data, and data sources analysis. The examination also looks into the validity and dependability of the modified instrument, the study's restrictions, and administrative and ethical approval.

3.1 Study Design:

Research design is the overarching strategy that a researcher uses to link conceptual study concerns to relevant (and practicable) empirical research in order to provide accurate and interpretative data. The triangulated design of this study uses both quantitative and qualitative data approaches to reinforce the design and mitigate any flaws in any methodology (Phellas, 2006; Punch, 2005). In order to collect both quantitative and qualitative data at the same time, the triangulation model is commonly employed in health research (Bowling, 2005). Using this technique will boost the reliability of study research findings (Burns, 1997)

3.2 Study setting:

The study took place at the two governmental ophthalmic hospitals (Elnaser ophthalmic hospital, European Gaza hospital.)

3.3 Study period:

The study started in March 2022 and completed in march2023

3.4 Study population

3.4.1 The quantitative part:

The population of the study includes all formal healthcare workers in governmental ophthalmic hospitals. The population consists of health care providers at ophthalmic

government hospitals, including specialists, residents, ophthalmic doctors, nurses, anesthesiologists, and anesthesia technicians and administrators. According to the General Hospitals Directorate, there are around (185) providers.

3.4.2 The qualitative part:

The quantitative part included key informants from different departments from both Elnasser ophthalmic hospital and European Gaza hospital presented by semi structure questioner developed to help in identification number of. The qualitative method includes key informative interviews

3.4.2.1 Selection of key informants' interviews:

The selection of the key informant is a purposive sample started by writing a list of 10 key informants from different places, who had the knowledge about safety measures and risk management and responsible for providing or planning for providing safety services. The researcher started calling each key informant, introduce himself and the aim of the study and set a suitable appointment with him/her. The researcher assured the privacy and confidentiality, during the interview. The researcher answered all the key informant concern about the study. The researcher presented the administrative approval that obtained from the MOH to conduct the study (Table 3.1). This way assisted the researcher to gather important information regarding the problem directly from knowledgeable people and it help to explore the other side of the picture with are hidden in reality in addition to that it provides a sense of flexibility which give the chance to discover new ideas and issues not expected during planning of the study, moreover its inexpensive and easy to conduct (USAID, 2011).

Table (3.1): Hospital

NO.	Ophthalmic hospital	EGH hospital
1	Hospital manger	Hospital manger
2	Medical manger	Medical manger
3	Nursing manger	Nursing manger
4	Patient safety officer	Patient safety officer
5	Quality manger	Quality manger

3.5 Eligible criteria:

3.5.1 Quantitative part

Inclusion criteria:

• All formal health care providers at governmental ophthalmic hospitals: specialist's seniors, anesthesiologist, nurses, technicians and administrators.

Exclusion criteria:

Volunteers, students, less than 6-month experience

3.5.2 Qualitative part:

. Key informants, policy makers and administrators from both Elnaser ophthalmic hospital and European Gaza hospital (Hospital manager, medical manager, Nursing manger, Head of anestric department, Quality and patient safety officer).

3.5.3 Selection of key informative persons

The researcher selected the managers based on their positions and participating in safety and risk management for at least two year and still working

Exclusion criteria for key informants:

- Key informant people who have experience less than two year.
- Key informant people who do not practice their tasks and responsibilities currently

3.6 Data collection tools:

There are both qualitative data and quantitative ones. Generally, data collected by different tools:

3.6.1 Quantitative part:

A designed questionnaire distributed among all formal health care providers. The questioner addresses different variables in patient safety and risk management (annex 1,2). The questionnaire covers sociodemographic items such as gender, education years of experience, and nature of work. In addition, it includes a set of safety measures and risk management items related to both Elnaser ophthalmic hospital and European Gaza hospital.

3.6.1.1 Development of tools:

Quantitative study the researcher used a self-designed questioner after making pilot study after the evaluation of the questionnaire by 7 experts from different backgrounds to assess the relevance of the domains and the questions with the overall aim of the study. Again, modifications done according to the recommendations of experts after consulting the supervisor. (Annex 4).and this stage aims to explore the appropriateness of the study tools, the clarity of meanings and scales or accessibility to data checklist, and the time it takes to fill the questionnaire. About 15 participants included from both hospitals

3.6.2 Qualitative part:

Semi structure questioner prepared for key informants (annex 5), based on related literature reviews like-books, journals, articles periodicals, published and unpublished research studies, it was reviewed and used for the development of tool. Experts in public health units are consulted for developing appropriate tools.

In this part, the researcher collected data through semi – structured interview based on related literature reviews like-books, journals, articles periodicals, published and unpublished research studies, it was reviewed and used for the development of tool. The interview with (Hospital manger, medical manager, Nursing manger, Head of anestric department, Quality and patient safety officer) These interviews include focused questions about safety procedure and risk management strength and weaknesses).

3.6.3 Study instruments

This study utilized different instruments Quantitative data: Structured questionnaire developed; its main items:

Socio-demographic characteristics (age, place of work, academic degree, gender, years of experience).

Section one: Measuring safety measures this part consist of 9 axes (frequency of incident reporting, supervisor expectations and procedures, patient safety, organizational learning, teamwork within units, open communication, feedback and communication about error, non-punitive response about the error, Recruitment, hospital administration support, teamwork across vacancies, deliveries and transfers).

Section two: Is a matrix (matrix scale) and it consist of three axes (physical risk, biological risk, risk specific your workplace neither to the employee nor to the patient

Qualitative data:

The researcher used open ended (semi-structured) questions through patient safety and risk management questions to explore the strength and weakness found in ophthalmic governmental hospitals, in general, questions will be around the following

- Challenges facing to improve safety measures
- The obstacles they face in the health system, which they hope to overcome to ensure safety and remove risk.
- Who provides support to improve safety and reduce risk?
- Where are the gaps in the health system?

3.7 Data Entry and Analysis:

After receiving ethical and administrative approval from the relevant departments, the data collection process began; privacy and confidentiality were always protected

3.7.1 Quantitative data:

The researcher designed tool to evaluate safety measures and risk management in ophthalmic governmental hospitals based on the inclusion criteria. The designed questioner contains two sections.

The first part about safety measures contains section one: Measuring safety measures in your hospital This part consists of 9 axes: (frequency of incident reporting, supervisor expectations and procedures, patient safety, organizational learning, teamwork within units, open communication, feedback and communication about error, non-punitive response about the error, Recruitment, hospital administration support, teamwork across vacancies, deliveries and transfers).

The second part It is a matrix (matrix scale) and it consists of three axes (physical risks, biological risks, risks specific to employees). Each question contains two options: Yes - No. If your answer is yes, this means that there is no danger in your workplace neither to the employee nor to the patient. But if the answer is (no), then this means that there is a risk and requires you to describe the possibility and severity of the risk.

3.8 Qualitative part:

3.8.1 Key informant:

The data acquired through key informant interviews were performed at the key informant's preferred location following the completion of a consent form to engage in the conversation, an explanation of the objective of the interview, the intended uses of the information, and assurances of anonymity. The researcher took written notes to collect the data (Annex5), and the transcript was completed right away after the meeting. The raw data for the study came from these transcripts, which were then examined and evaluated.

3.9 Data analysis:

3.9.1 Quantitative Data:

The researcher used the Statistical Package for Social Sciences version 25for data coding, entry and analysis. All data in questioner were statistically analyzed using SPSS computer software. This was done through several steps; checking and verifying the collected data

from errors as missing data. After that data was entered through the mode was prepared, data cleaning and then the processing of this refined data was established. SPSS program version 25 was used as statistical programs to analyze the obtained quantitative data. Each item of the safety measures and risk management was assessed through frequency tables. Numbers and percentages presented the results through the used tables in the result chapter. according to results A high agreement is 80% or above; a moderate agreement is 60–79.9% and a low agreement is less than 60% (KARAKOÇ et al., 2023). The code of scale showed in table (3.2).

Table (3.2): The code of scale

Section Two: Risk Management		**Code**
Yes		**5**
Very little	No injuries	**4**
Minor	First aid treatment	**3**
Medium	Needs medical treatment	**2**
Major	Severe injuries or fractures	**1**
Disastrous	death or permanent disability	**0**
Safety Measures		
Safety Measures	Strongly Agree	**5**
	Agree	**4**
	Neutral	**3**
	Disagree	**2**
	Strongly Disagree	**1**
Hospital safety arrangements		
Hospital safety arrangements	Yes	**1**
	Partially	**0.5**
	No	**0**
Training		
Training	Yes	**1**
	No	**0**

3.9.2 Qualitative data

The researcher analyzed the data after consultations with the supervisor. The researcher obtained the main findings from the transcripts of the key informant interviews.

3.9.3 Quantitative data:

Rigor refers to the working extent that the researcher applied to enhance the quality of the studies. In quantitative data, this is can be achieved through measurement of the validity and reliability. More effort was applied to improve validity in quantitative data which

means the extent to which any measuring instrument measures what it is to be measured, so the researcher should take into his consideration that it is necessary to consider how 44 effective the instruments were used in collecting data which answers the research questions and is representative of the sample. From the reliability aspect, test is called a reliable when it can be used by a different number of researchers under stable conditions, with give consistent and fixed results. Reliability reflects consistency and replicability over time. In other words, reliability means to which degree is the test free from measurement errors, which mean the more measurement errors occur the less reliable the test, So the researcher tried to improve reliability by standardization of data collection methods, follow up for the gathered data was obtained for mistakes, in addition data review should be done before data analysis.

3.9.4 Qualitative data:

Unlike the quantitative data, the qualitative data reliability and validity replaced by data trustworthiness, which can be obtained and improved by the following criteria:

- Peer review: the researcher prepared semi structure questions for key informant's interviews, then asked two experts to revise the questions in order to enhance the quality of the questions and to assure that it will get the required answers for the research study.
- Transferability which means that the findings and results of the study can be generalized to other contexts.
- Dependability which means that the findings are consistent and could be repeated.
- Conformability, which implies objectivity, lack of prejudice on the part of the researcher, and lack of personal stake in the results. Credibility can be increased in qualitative data in a number of ways, including the following:
- Triangulation: in this method the researcher views the research problem from different aspects by using different data collection ways and use different theories to mirror the developing result (Ohman, 2005).
- Once in-depth interviews are complete, the researcher should start writing right remember discussion-related body language, facial expressions, and voice tones. The outcomes were more transparent and reliable as a result of this

- Long-term participation: using these techniques, the researcher may be sure that participants are searching for the right response by asking questions from many angles and understanding the questions' meanings

3.10 Pilot Study:

Pilot study is a preliminary small-scale study which aim to investigate whether crucial components of a main study and it can reveal gaps in the design of a proposed procedure and these can then be addressed for small group of participants then after checking it expended on large scale studies. Pilot study was done before starting data collection for further improvement of validity and reliability of the study through taking consultation from experts' researcher to check and evaluate questions of patients and key informant questions. A pilot key informant interview was done and they are included in the study analysis. A pilot study was carried out in ophthalmic governmental hospitals to evaluate its clarity and to determine whether it was friendly and easy to understand, considering inclusion criteria in order to test the study tools and to revise the methods and logistic of data collection before starting the actual fieldwork. The pilot study also was investigated the following: (1) how long it takes to complete the questionnaire; (2) whether participants felt they had enough opportunity to share their views; (3) suggestions for changes; (4) other comments.

3.11 Validity and reliability pilot result

3.11.1 Validity of the questionnaire

We can define the validity of an instrument considered as a determination of the extent to which the instrument reflects the abstract construct being examined. "Validity refers to the degree to which an instrument measures what it is supposed to be measuring". High validity is the absence of systematic errors in the measuring instrument. When an instrument is valid; it truly reflects the concept, it is supposed to measure. Achieving good validity requires care in the research design and sample selection. The amended questionnaire was reviewed by the supervisor and seven experts in the safety and risks. The experts agreed that the questionnaire was valid and suitable enough to measure the purpose that the questionnaire was designed.

3.11.2 Half-Split Method

As shown in table (3.3), the correlation between forms was 0.936 and Unequal Length Spearman-Brown Coefficient was 0.967 and finally, Guttman Split-Half Coefficient was 0.966. This result ensures the high reliability of the questionnaire.

Table 3.3: Split and half for each domain of the questionnaire

Split half			R
Cronbach's Alpha	Part 1	Value	0.893
		N of Items	43
	Part 2	Value	0.892
		N of Items	43
	Total N of Items		86
Correlation Between Forms			0.936
Spearman-Brown Coefficient	Equal Length		0.967
	Unequal Length		0.967
Guttman Split-Half Coefficient			0.966

3.12 Reliability of the instrument

The reliability of an instrument is the degree of consistency with which it measures the attribute it is supposed to be measuring. The test is repeated to the same sample of people on two occasions and then compares the scores obtained by computing a reliability coefficient. Can be achieved by using Cronbach's Alpha coefficient and Table 3.4 shows the values of Chronbach's Alpha for each questionnaire domain of participants. The table illustrated the reliability of domains; values of Chronbach's Alpha were in the range of 0.736 and 0.968. Cronbach's alpha equals 0.954 for the entire questionnaire in the pilot sample, which indicates the good reliability of the entire questionnaire.

Table 3.4: Reliability of the research for each domain of the questionnaire

No.	Domains	No. of item	Cronbach's Alpha
1.	Frequency of reporting the event	6	0.829
2.	Feedback	3	0.954
3.	Communication	7	0.910
4.	Employment	4	0.736
5.	Hospital management support	7	0.841
6.	Teamwork across hospital units	4	0.920
7.	Deliveries and transfers	4	0.922
Safety Measures		**35**	**0.960**
	Training	5	0.922

	Hospital safety arrangements	7	0.844
Total		**12**	**0.921**
D1.2	Management physical Hazards	11	0.857
D1.3	Management biological Hazards	15	0.946
D1.4	Management personnel risks	13	0.921
Risk Management		**39**	**0.968**
Total		**86**	**0.954**

3.13 Internal Consistency

To check internal validity, the researcher calculated the correlation between each item and the corresponding domain. Tables (3.5) present the correlation coefficient for each item of a domain and the total of the corresponding domain. The P-values are less than 0.05 in most items; thus, the correlation coefficients of most items are significant at $\alpha = 0.05$, therefore it can be said that all items of each domain are consistent and valid to measure what was set.

Table (3.5): Correlation coefficient of each item of definitions related to pneumonia and the total of this domain

Items	Safety Measures		Items	Training		Items	Risk Management	
	r	P-value		r	P-value		r	P-value
Q1	0.784	0.000*	Q1	0.787	0.000*	Q1	0.521	0.019*
Q2	0.642	0.002*	Q2	0.829	0.000*	Q2	0.532	0.016*
Q3	0.705	0.001*	Q3	0.840	0.000*	Q3	0.480	0.027*
Q4	0.685	0.001*	Q4	0.760	0.000*	Q4	0.557	0.010*
Q5	0.475	0.034*	Q5	0.829	0.000*	Q5	0.447	0.038*
Q6	0.728	0.000*	Q6	0.669	0.001*	Q6	0.534	0.016*
Q7	0.847	0.000*	Q7	0.753	0.000*	Q7	0.515	0.019*
Q8	0.807	0.000*	Q8	0.495	0.035	Q8	0.753	0.000*
Q9	0.781	0.000*	Q9	0.640	0.002	Q9	0.690	0.001*
Q10	0.742	0.000*	Q10	0.728	0.000*	Q10	0.508	0.022*
Q11	0.878	0.000*	Q11	0.787	0.000*	Q11	0.393	0.049*
Q12	0.515	0.020*	Q12	0.725	0.000*	Q12	0.602	0.005*
Q13	0.790	0.000*				Q13	0.508	0.022*
Q14	0.782	0.000*				Q14	0.528	0.017*
Q15	0.783	0.000*				Q15	0.415	0.045*
Q16	0.650	0.002*				Q16	0.663	0.001*
Q17	0.588	0.006*				Q17	0.508	0.022*
Q18	0.679	0.001*				Q18	0.663	0.001*
Q19	0.610	0.004*				Q19	0.508	0.022*
Q20	0.665	0.001*				Q20	0.614	0.004*
Q21	0.738	0.000*				Q21	0.561	0.008*
Q22	0.702	0.001*				Q22	0.602	0.005*
Q23	0.686	0.001*				Q23	0.589	0.008*
Q24	0.870	0.000*				Q24	0.461	0.032*
Q25	0.795	0.000*				Q25	0.528	0.017*
Q26	0.505	0.023*				Q26	0.415	0.045*
Q27	0.353	0.126*				Q27	0.725	0.000*
Q28	0.521	0.044*				Q28	0.508	0.022*
Q29	0.678	0.001*				Q29	0.425	0.039*
Q30	0.697	0.001*				Q30	0.661	0.002*
Q31	0.717	0.000*				Q31	0.394	0.048*

Q32	0.629	0.003*				Q32	0.538	0.015*
Q33	0.444	0.049*				Q33	0.518	0.019*
Q34	0.446	0.048*				Q34	0.661	0.002*
Q35	0.535	0.005*				Q35	0.728	0.000*
						Q36	0.602	0.005*
						Q37	0.540	0.014*
						Q38	0.508	0.022*
						Q39	0.602	0.005*

*Significant at P≤0.05; P>0 05: Not significant; & **r:** Pearson correlation

Ethical Considerations:

- An academic approval was obtained from the School of Public Health at Al-Quds University after the proposal discussion.
- Ethical approval was obtained from the Helsinki Committee (see Annex3)
- Approval letters were sent to the general director of hospitals (Annex3).
- An informed consent attached to each participant, and key informants' interviews

Study limitations:

- Time limitation.
- Lack of related local studies and literatures.

Chapter Four

Results and Discussion

4.1 Introduction

The results and discussion were noted in this chapter. A descriptive analysis that details the baseline characteristics of participants and the perception of the study sample toward the questions were part of the statistical analysis of the data. The graph was displayed using Excel and the researcher's statistical test was frequencies (percentage), student t-test, and one-way ANOVA test by SPSS version 26.

4.2 Descriptive statistics

4.2.1 Sample distribution according to sociodemographic data of the respondents

The present study is a cross-sectional study that included 160 responders (out of 185 participants with response rate 86.5%). the socio-demographic characteristics that were studied included gender, hospital, age, academic degree, years of experience, departments, dealing directly with patients' number of weekly hours, and specialists.

4.2.2 Distribution of the study population according to their gender

Figure 4.1 Pointed out that more than half of the study population were males (60.0%) and 40.0% were females. These findings to were consistent with Mamaril et al., (2022) which showed males higher than females while these findings disagree with Khanani et al., 2022 who pointed out that the rate was higher for women rather than men. These results were the same in line with the most recent MOH report, which shows that 54% of participants were male and 46% were male (MOH, 2018).

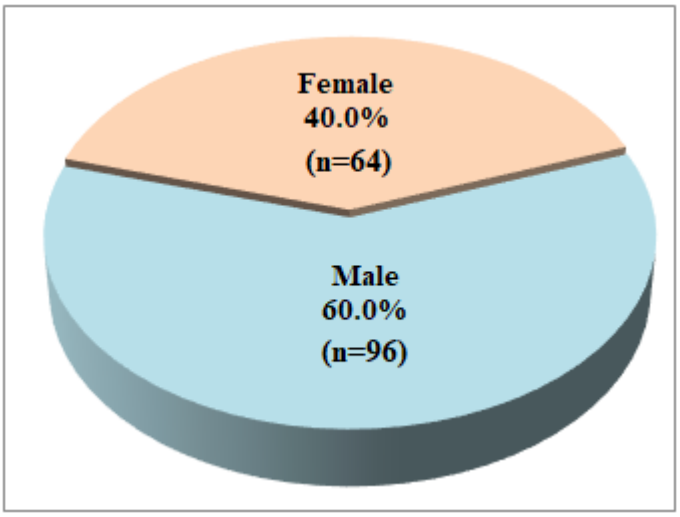

Figure (4.1): Distribution of the study population according to their gender.

4.2.3 Distribution of the study population according to their age groups

Figure 4.2 illustrated that the highest age groups of the participants were aged between (31 to 40 years) years (40.6%) followed by 25.6% of them being aged 30 years or less years and 21.9% of them being aged 41 to 50 years. The results showed that the lowest age groups of the study were aged between (More than 50 years) years (11.9%). The average age among participants was 38.0±9.1 years. In brief, the average mean age of participants was 38.0 years. The age was varied because of the average between starting work at 22 and retirement age . These results to some extents were consistent with others studied and showed that the highest age groups of the medical team in governmental hospitals were aged between (31 to 40 years) years (Bolme et al., 2020 Ekpenyong et al., 2020 & Imsuwan et al., 2020).

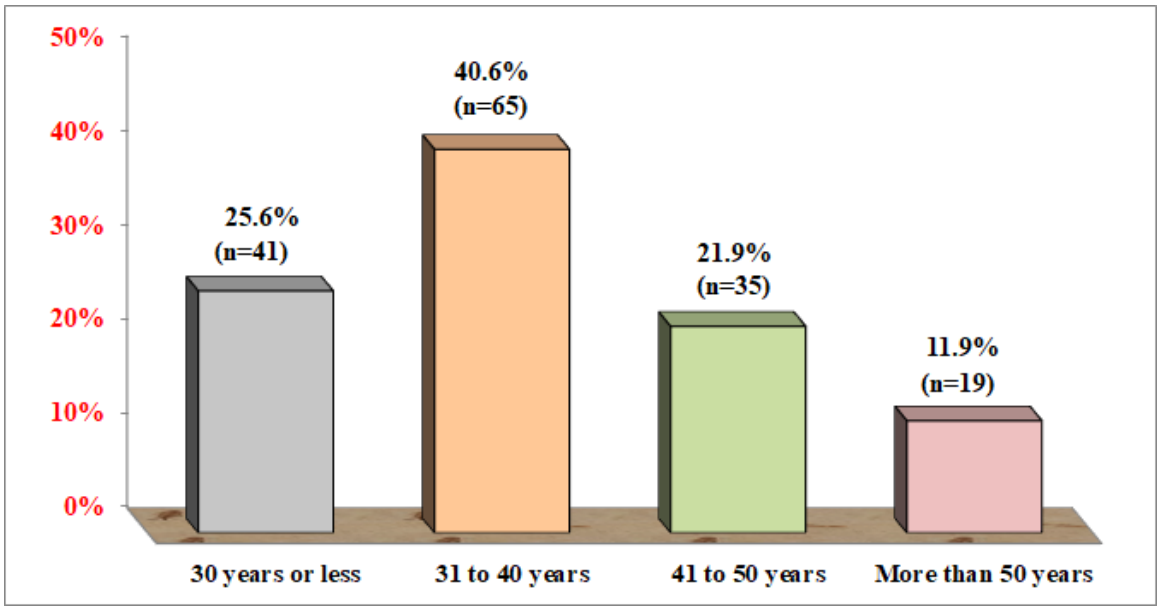

Figure (4.2): Distribution of the study population according to their age groups.

4.2.4 Distribution of the study population according to their academic degree

Figure 4.3 illustrated that the highest educational level of the participants was a bachelor's (51.9%) followed by 19.4% of them who finished master's degrees and 14.4% of them who finished a diploma degree. The results showed that the lowest education levels were doctorate (3.1%). Our result agrees with Zhan et al., 2020: Bolme et al., 2020; Jin et al., 2022) in their result illustrated that nearly similar most half participants finished their bachelor's degree.

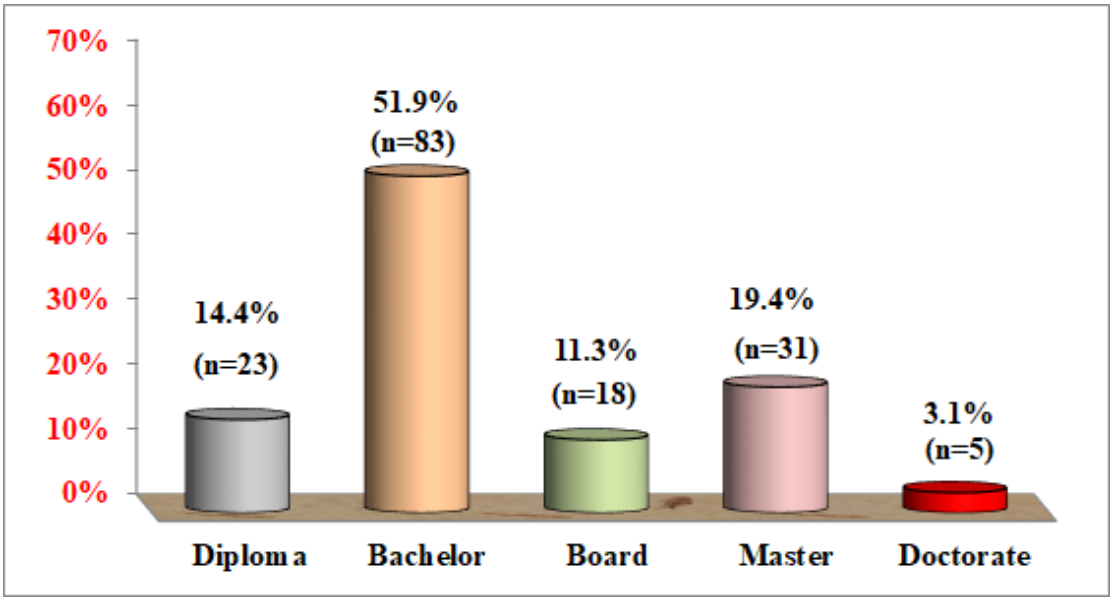

Figure (4.3): Distribution of the study population according to their academic degree.

4.2.5 Distribution of the study population according to their socio-demographic information

Table 4.1 illustrated the distribution of the study population according to their socio-demographic information. The distribution of the study population according to Hospital showed that the highest percentage of participants working in Al-ophthalmic governmental hospital which represents 77.5% and 22.5% of participants worked in European hospitals. The results detected that the majority of the study population have years of experience of 11 to 15 years (30%) while 28.1% of them have years of experience of more than 15 and 26.9% of them have years of experience of 5 years or less. The average years of experience among participants were 12.5 ±7.7 years. On the other hand, the results showed that the lowest groups of the study participants were 6 to 10 years (15%). Regarding, the department, The table pointed out that the highest groups of participants were working in outpatient clinics (30.0%), followed by 16.3% Surgical operations, 16.3% administration, 15.6% optometry clinic, 8.1% daily care, 4.4% anaesthesia, 3.8% of pharmacy and 3.1% overnight. On the other hand, the results showed that the lowest group 2.5% was working in the laser department. The results of the study showed 93.8% of participants dealt directly with the patient. The results detected that the majority of the study population have numbers weekly hours work of 35 to 40 hours (77.5%) while 15.6% of the study population have numbers of weekly hours 41 to 60 hours and 3.8% more than 80 hours. On

the other hand, the results showed that the lowest groups of the study participants have numbers of weekly hours 61 to 80 hours in work (3.1%). Finally, the categories of specialists were 27.5% nurses, 23.1% doctors (surgeons), 21.9% optometrists, 16.3% administrators, 3.8% pharmacists, 3.1% anaesthesiologists (doctors), 3.1% doctors (non-surgeons) and 1.3% anaesthesiologist (technician), respectively.

The result of our study years of experience parallels the results of Camargo et al., (2022). In another study, the department did work that was similar to our results (Hanrahan et al., 2022; Rattanasirivilai & Shirodkar; 2021). Also, another study conducted by others studied medical team perceptions regarding safety and risk management and they found most of their medical team worked between 35 to 40 hours (Brill et al.,2022; Mady et al., 2022). These results are similar to current results.

Table (4.1) Distribution of the study population according to their socio-demographic information

Socio-demographic characteristics		**N**	**%**	**Mean±SD**
Hospital	Elnaser ophthalmic Governmental Hospital	124	77.5%	
	European hospital	36	22.5%	
Years of experience	5 or less	43	26.9%	12.5 ±7.7
	6 to 10	24	15.0%	
	11 to 15	48	30.0%	
	More than 15	45	28.1%	
The department you work	Outpatient Clinic	48	30.0%	
	Surgical operations	26	16.3%	
	Administration	26	16.3%	
	Optometry Clinic	25	15.6%	
	Daily care	13	8.1%	
	Anaesthesia	7	4.4%	
	Pharmacy	6	3.8%	
	Overnight	5	3.1%	
	Laser dep.	4	2.5%	
In your job, do you deal directly with patients؟	Yes	150	93.8%	
	No	10	6.3%	

Table (4.1): Continued

Socio-demographic characteristics		N	%	Mean±SD
Number of weekly hours	35 to 40 Hours	124	77.5%	
	41 to 60 hours	25	15.6%	
	61 to 80 hours	5	3.1%	
	More than 80 hours	6	3.8%	
Category	Doctors (Surgeons)	37	23.1%	
	Doctors (Non-surgeons)	5	3.1%	
	Anesthesiologists (Doctors)	5	3.1%	
	Anesthesiologist (Technician)	2	1.3%	
	Optometrists	35	21.9%	
	Pharmacist	6	3.8%	
	Nurse	44	27.5%	
	Administrator	26	16.3%	

4.3 Safety Measures

4.3.1 Frequency of reporting the event domains

Table (4.2) The distribution of the participants according to the frequency of reporting the event domains

Frequency of reporting the event		Strongly disagree	Disagree	Neither agree	Agree	Strongly agree	Mean	SD	% Mean	Rank
Q1.1.1 When an error occurs, the error is reported and documented	N	78	8	14	11	49	2.66	1.79	53.20	2
	%	48.80%	4.90%	8.80%	6.90%	30.60%				
Q1.1.2 Patient safety is not sacrificed to get more work done.	N	71	11	16	7	55	2.78	1.80	55.60	1
	%	44.40%	6.80%	10.00%	4.40%	34.40%				
Q1.1.3 There is incidence reports in you department	N	66	21	33	7	33	2.50	1.55	50.00	3
	%	41.30%	13.10%	20.60%	4.40%	20.60%				

Table (4.2): Continued

Q1.1.4 When an event is reported, the problem, not the person, appears to be documented. .	N	73	26	36	10	15	2.18	1.32	43.60	5
	%	45.60%	16.20%	22.50%	6.30%	9.40%				
Q1.1.5 Employees do not worry that mistakes they make are kept in their files	N	57	45	47	2	9	2.13	1.09	42.60	6
	%	35.60%	28.10%	29.40%	1.30%	5.60%				
Q1.1.6 Errors are documented for the purpose of evaluation, rectification and improvement, not for the purpose of phishing and punishment	N	76	22	29	8	25	2.28	1.48	45.60	4
	%	47.50%	13.80%	18.10%	5.00%	15.60%				
Total							**2.42**	**0.96**	**48.4**	

The means of the frequency of reporting the event items are pointed out in the table (4.2). It is ranked the total frequency of reporting the event domain. According to the results, the average total frequency of reporting the event domain was 48.4%. The results showed that the highest item was item number (2) “Patient safety is not sacrificed to get more work done” with a weighted mean is 55.60%, followed by item number (1) “When an error occurs, the error is reported and documented” with a weighted mean is (53.20%). While the lowest item (5) “Employees do not worry that mistakes they make are kept in their files” (42.60%), followed by item was the number (4) “When an event is reported, the problem, not the person, appears to be documented” (43.60%).

Furthermore, our result is lower than Michelottiet al. (2014) who studied a quality-improvement report on nurses administering intravitreal injections in place of ophthalmologists. However, their results pointed out that the average total frequency of reporting the event domain was 46.0%. while Makary, (2006) reported an average total frequency of reporting the event domain at 53.0%). Therefore, the researcher recommended that the work team in ophthalmic governmental hospitals need safety measures and risk management in the program and it will be improve effect on performance.

4.3.2 Feedback domains

Table (4.3) The distribution of the participants according to the feedback domains

Feedback		Strongly disagree	Disagree	Neither agree	Agree	Strongly agree	Mean	SD	% Mean	Rank
Q1.2.1 Error led to positive changes	N	85	13	31	12	19	2.17	1.44	43.40	2
	%	53.1%	8.1%	19.4%	7.5%	11.9%				
Q1.2.2 Mistakes are taken advantage of by taking a lesson to improve and improve the work	N	78	18	26	11	27	2.32	1.54	46.40	1
	%	48.8%	11.1%	16.3%	6.9%	16.9%				
Q1.2.3 After making changes to improve patient safety, we evaluate their effectiveness.	N	88	17	33	11	11	2.00	1.29	40.00	3
	%	55.0%	10.6%	20.6%	6.9%	6.9%				
Total							**2.16**	**1.18**	**43.2**	

The means of the feedback items are pointed out in the table (4.3). the total feedback domain. According to the results, the weighted mean for the feedback was 43.2%. The results showed that the highest item was item number (2) “Mistakes are taken advantage of by taking a lesson to improve and improve the work” with a weighted mean is 46.40%, followed by item number (1) “Error led to positive changes” with a weighted mean is (43.40%). While the lowest item (3) “After making changes to improve patient safety, we evaluate their effectiveness” (40.0%).

Safadi et al., (2020) Found bad feedback in Ophthalmology practice during the COVID-19 pandemic regarding safety and risk management. Also, he illustrated the intern skills and characteristics improved during the ratings of teamwork differed substantially by safety and risk management with the weighted mean for the feedback being 41.7%.

Another study by Hanrahan et al., (2022) assessed the safety and effectiveness of telephone triage in prioritizing patient visits to an ophthalmic emergency department. The results of the study give further scope to improve the model of care into the feedback safety among health worker team and patients and sharing healthcare information.

As seen from the opinion of lower feedback safety among the health worker team, the researcher recommends that there is a need to improve in the lowering causes of feedback and design courses that focus on the acquired clinical skills rather than the improving skills.

4.2.1 Communication domains

Table (4.4) The distribution of the participants according to the communication domains

Communication		Strongly disagree	Disagree	Neither agree	Agree	Strongly agree	Mean	SD	% Mean	Rank
Q1.3.1 Staff will speak freely if they see something that might negatively affect patient care	N	81	16	34	12	17	2.18	1.40	43.60	4
	%	50.6%	10.0%	21.3%	7.5%	10.6%				
Q1.3.2 Employees do not hesitate to question the decisions or actions of those with greater authority	N	64	33	46	9	8	2.15	1.16	43.00	6
	%	40.0%	20.6%	28.8%	5.6%	5.0%				
Q1.3.3 Employees are afraid to ask questions when things don't seem right	N	46	46	58	4	6	2.24	1.02	44.80	1
	%	28.7%	28.7%	36.3%	2.5%	3.8%				
Q1.3.4 We are provided with feedback on changes made based on event reports	N	62	26	57	6	9	2.21	1.17	44.20	3
	%	38.8%	16.20 %	35.60 %	3.80 %	5.60%				
Q1.3.5 We have been informed of errors that occur	N	63	31	45	6	15	2.24	1.27	44.80	1
	%	39.4%	19.30 %	28.10 %	3.80 %	9.40%				
Q1.3.6 We discuss ways to prevent errors.	N	83	17	31	8	21	2.17	1.44	43.40	5
	%	51.9%	10.6%	19.4%	5.%	13.1%				
Q1.3.7 Workshops are held to study errors in order to avoid or mitigate them	N	69	30	46	4	11	2.11	1.20	42.20	7
	%	43.1%	18.8%	28.7%	2.5%	6.9%				
Total							**2.19**	**0.77**	**43.8**	

The means of communication items are pointed out in table (4.4). It is ranked as the total communication domain. According to the results, the weighted mean for the

communication domain was 43.8%. The results showed that the highest item was item number (3) “Employees are afraid to ask questions when things don't seem right” with a weighted mean is 44.80%, followed by item number (5) “We have been informed of errors that occur” with a weighted mean is (44.80%). While the lowest item (7) “Workshops are held to study errors to avoid or mitigate them” (42.20%), followed by item was the number (2) “Employees do not hesitate to question the decisions or actions of those with greater authority” (43.00%).

Cheung et al., (2020) illustrated that there is a statically significant relationship was found between the communication of medical teamwork with experience from Hong Kong Eye Hospital ($P<0.05$) and overall communication had to lower teamwork. Also, our results agree with Stollery et al., (2008) showed that the communication domain was less than 50%. Any errors reported to us when they happen are limited while employees are not afraid to challenge the judgments or actions of people in positions of power. As seen from the opinion of the researcher poor communication can cause tensions to escalate, potentially ending in an employee conflict. Failure to communicate may lead to employees making incorrect assumptions, such as allowing other employees to take up their work when this responsibility has not been discussed as a team.

4.2.2 Employment domains

Table (4.5) The distribution of the participants according to the employment domains

Employment		Strongly disagree	Disagree	Neither agree	Agree	Strongly agree	Mean	SD	% Mean	Rank
Q1.4.1 We have enough staff to handle the workload.	N	48	58	41	4	9	2.18	1.07	43.60	2
	%	30.0%	36.3%	25.6%	2.5%	5.6%				
Q1.4.2 The staff in this unit are working longer hours than they need to achieve the best patient care.	N	76	21	44	3	16	2.14	1.31	42.80	3
	%	47.5%	13.1%	27.5%	1.9%	10.0%				
Q1.4.3 We are using more unemployment/temporary staff to make better patient care.	N	58	44	45	5	8	2.13	1.10	42.60	4
	%	36.3%	27.5%	28.1%	3.1%	5.0%				
Q1.4.4 We work in "crisis mode", trying to do a lot and very quickly	N	81	14	32	9	24	2.26	1.49	45.20	1
	%	50.6%	8.8%	20.0%	5.6%	15.0%				
Total							**2.18**	**0.82**	**43.6**	

The means of employment items are pointed out in table (4.5). It is ranked as the total employment domain. According to the results, the weighted mean for the employment domain was 43.60%. The results showed that the highest item was item number (4) “We work in "crisis mode", trying to do a lot and very quickly” with a weighted mean is 45.20%, followed by item number (1) “We have enough staff to handle the workload” with a weighted mean is (43.60%). While the lowest item (4) “We are using more unemployment/temporary staff to make better patient care” (42.60%), followed by item was the number (2) “The staff in this unit are working longer hours than they need to achieve the best patient care” (42.80%).

Lim et al., (2021) and Tsui et al., (2021) showed that lower scoring in both items employing additional unemployed/temporary workers to provide better patient care and this unit's personnel is working longer hours than necessary to provide the finest patient care possible. These results agree with ours. As seen from the opinion of the researcher lower score of enough staff to handle the workload items because there is a limited number of staff in ophthalmic hospitals.

4.3.3 Hospital management support domains

Table (4.6) The distribution of the participants according to the hospital management support domains

Hospital management support		Strongly disagree	Disagree	Neither agree	Agree	Strongly agree	Mean	SD	% Mean	Rank
Q1.5.1 The employees are contacted to determine the difficulties they face	N	72	29	41	8	10	2.09	1.21	41.80	5
	%	45.0%	18.1%	25.6%	5.0%	6.3%				
Q1.5.2 I receive words of reinforcement from my supervisor/manager when he sees that the work has been done	N	62	27	49	9	13	2.28	1.26	45.60	3
	%	38.8%	16.9%	30.6%	5.6%	8.1%				
Q1.5.3 Ensure that the fire extinguishing equipment is available and suitable	N	69	17	36	7	31	2.46	1.54	49.20	1
	%	43.1%	10.6%	22.5%	4.4%	19.4%				
Q1.5.4 My supervisor/managers seriously consider employee suggestions for improvement	N	71	30	44	8	7	2.06	1.15	41.20	7
	%	44.4%	18.8%	27.4%	5.0%	4.4%				
Q1.5.5 My supervisor follows my work closely and guides me in my work on an ongoing basis	N	74	25	42	10	9	2.10	1.22	42.00	6
	%	46.3%	15.6%	26.2%	6.3%	5.6%				
Q1.5.6 When stress builds up, my supervisors/managers demand that we work faster, even if it comes at the expense of patient safety	N	43	64	43	2	8	2.18	1.01	43.60	4
	%	26.9%	40.0%	26.8%	1.3%	5.0%				
Q1.5.7 My supervisors/managers overlook patient safety issues that occur over and over again	N	35	64	48	4	9	2.30	1.02	46.00	2
	%	21.9%	40.0%	30.0%	2.5%	5.6%				
Total							**2.21**	**0.70**	**44.2**	

The means of hospital management support items are pointed out in the table (4.6). It is ranked as the total hospital management support domain. According to the results, the weighted mean for the hospital management support domain was 44.20%. The results showed that the highest item was item number (3) “Ensure that the fire extinguishing equipment is available and suitable” with a weighted mean is 49.2%, followed by item number (7) “My supervisors/managers overlook patient safety issues that occur over and over again” with a weighted mean is (46.0%). While the lowest item (4) “My supervisor/managers seriously consider employee suggestions for improvement” (41.20%), followed by item was the number (5) “My supervisor follows my work closely and guides me in my work on an ongoing basis” (42.00%).

Our results agree with a study by Lee et al., (2007) & Greenan et al., (2022)that aimed to assess hospital management support and the results showed that hospital management support was limited and their supervisors/managers did not take employee recommendations for improvement seriously and their supervisor does not regularly monitor their job and does not provide ongoing guidance to us.

As seen from the opinion of researchers lowering in employment domains because of elevated workload and a limited number of staff in ophthalmic hospitals

4.3.4 Teamwork across hospital units’ domains

Table (4.7) The distribution of the participants according to the teamwork across hospital units domains

Teamwork across hospital units		Strongly disagree	Disagree	Neither agree	Agree	Strongly agree	Mean	SD	% Mean	Rank
Q1.6.1 There is good cooperation between hospital units that need to work together.	N	85	20	31	8	16	2.06	1.35	41.20	4
	%	53.1%	12.5%	19.4%	5.0%	10.0%				
Q1.6.2 The hospital units work well together to provide the best patient care.	N	85	17	31	7	20	2.13	1.42	42.60	2
	%	53.1%	10.6%	19.4%	4.4%	12.5%				
Q1.6.3 Hospital units coordinate well with each other.	N	82	18	33	9	18	2.14	1.40	42.80	1
	%	51.2%	11.3%	20.6%	5.6%	11.3%				
Q1.6.4 Working with employees from other hospital units is often unpleasant.	N	88	9	39	12	12	2.07	1.33	41.40	3
	%	55.0%	5.6%	24.4%	7.5%	7.5%				
Total							**2.10**	**1.15**	**42.0**	

The means of teamwork across hospital unit items are pointed out in table (4.7). It is ranked as the total teamwork across the hospital unit's domain. According to the results, the weighted mean for teamwork across the hospital units domain was 42.0%. The results showed that the highest item was item number (3) "Hospital units coordinate well with each other" with a weighted mean is 42.80%, followed by item number (2) "The hospital units work well together to provide the best patient care" with a weighted mean is (42.60%). While the lowest item (1) "There is good cooperation between hospital units that need to work together" (41.20%), followed by the item was the number (4) "Working with employees from other hospital units is often unpleasant" (41.40%).

Our results agree with a study by Berry et al., (2020) and that aimed to measure Patient safety culture in Iranian teaching hospitals: baseline assessment, opportunities for improvement, and benchmarking. The study showed that lowering in teamwork across hospital units and a lowering in the score of cooperation between hospital units that must collaborate. Also, a study conducted another study by Kumbi et al., (2020) and showed that lowering in working with staff from different healthcare departments is frequently uncomfortable. Finally, Kakemam et al., (2020) showed that lowing teamwork across hospital units and patient safety culture in Iranian teaching hospitals in the baseline assessment, opportunities for improvement, and benchmarking. Lind et al., (2022) showed that teamwork helps to improve communication between healthcare professionals, increase efficiency, and ensure that the best decisions are being made for patients. Without teamwork, the hospital's ability to provide quality care to patients is compromised. As seen from the opinion of the researcher lack of teamwork can lead to increased stress and fatigue for healthcare workers, which can lead to decreased morale and poorer job satisfaction. Additionally, lowering teamwork across a hospital has a negative impact on patient care.

4.3.5 Deliveries and transfers domains

Table (4.8) The distribution of the participants according to the deliveries and transfers domains

Deliveries and transfers		Strongly disagree	Disagree	Neither agree	Agree	Strongly agree	Mean	SD	% Mean	Rank
Q1.7.1 Things may happen that are not overlooked when transferring patients from one unit to another. ®	N	49	47	56	5	3	2.17	0.96	43.40	3
	%	30.6%	29.4%	35.0%	3.1%	1.9%				
Q1.7.2 Important patient care information is often lost during shift changes. ®	N	36	70	44	5	5	2.21	0.93	44.20	2
	%	22.5%	43.8%	27.5%	3.1%	3.1%				
Q1.7.3 Problems often arise with the exchange of information across hospital units. ®	N	39	67	47	3	4	2.16	0.90	43.20	4
	%	24.4%	41.8%	29.4%	1.9%	2.5%				
Q1.7.4 Shift changes are a problem for patients. ®	N	38	60	49	7	6	2.27	1.00	45.40	1
	%	23.8%	37.5%	30.5%	4.4%	3.8%				
Total							**2.20**	**0.67**	**44.0**	

®: Reverse question: The mean was inverted due to negative expression in the questions

The means of delivery and transfer of items are pointed out in table (4.8). It is ranked as the total deliveries and transfers domain. According to the results, the weighted mean for the deliveries and transfers domain was 44.0%. The results showed that the highest item was item number (4) “Shift changes are a problem for the patient” with a weighted mean is 45.40%, followed by item number (2) “Important patient care information is often lost during shift changes” with a weighted mean is (44.20%). While the lowest item (3) “Problems often arise with the exchange of information across hospital units.” (43.20%), followed by item was the number (1) “Things may happen that are not overlooked when transferring patients from one unit to another” (43.40%).

These results agree with Vintzileos et al., (2020), who studied deliveries and transfers in hospitals and they found deliveries and transfers in hospitals were lowering due to several factors that can contribute to a decline in deliveries and transfers in hospitals. These include changes in healthcare policy, increased competition from other healthcare providers, rising costs of care, and a decrease in the demand for hospital services.

Additionally, advancements in technology, such as telemedicine, can reduce the need for in-person hospital visits, resulting in fewer transfers and deliveries. Lastly, changes in the demographics of the population, such as an aging population, can lead to a decrease in the number of births, resulting in fewer deliveries and transfers in hospitals.

Another study showed that transfers in hospitals are limited to ensure the safety of the patient. Transfers can cause delays in diagnosis and treatment, as well as disruption to the patient's care plan. Additionally, transferring patients can increase the risk of medical errors, infections, and other complications (Trivedi & Patel 2021).

Sockolow et al., (2018) showed that problems often arise with the exchange of information across hospital units due to a lack of standardization and organization. Different units may use different software programs to track patient information, which can cause communication issues and delays in care. However, information may not be shared on time, leading to incorrect or incomplete patient records. Bell et al., (2020) pointed out that issues can arise when different units do not have the same level of access to patient information, leading to potential privacy violations. Finally, communication breakdowns can lead to inaccurate or misunderstood instructions, which can lead to delays, mistakes, and other issues.

Caruso et al., (2022) showed that lowering shift changes can be a problem for the patient because it can lead to fatigue and burnout in healthcare workers, which can lead to a decrease in the quality of care for the patient. Additionally, frequent shift changes can disrupt the continuity of care and lead to miscommunication between healthcare workers and the patient. This can lead to delays in treatment and a lack of understanding of the patient's condition and needs.

As seen from the opinion of researchers lowering transfers in governmental hospitals maybe happen for a variety of reasons, such as patient falls, delays in communication between medical staff, improper use of medical equipment, and inadequate patient assessment. In some cases, inadequate staffing or training can contribute to bad transfers. Poor communication between medical staff can also result in improper patient transfer, as can a lack of knowledge or experience on the part of medical staff. Other factors, such as overcrowding and a lack of resources, can also contribute to bad transfers.

4.3.6 Safety measures

Table (4.9) The distribution of the participants according to the safety Measures

Safety Measures	Mean	SD	% Mean	Rank
1. Frequency of reporting the event	2.42	0.96	48.40	1
2. Feedback	2.16	1.18	43.20	6
3. Communication	2.19	0.77	43.80	4
4. Employment	2.18	0.82	43.60	5
5. Hospital management support	2.21	0.7	44.20	2
6. Teamwork across hospital units	2.1	1.15	42.00	7
7. Deliveries and transfers	2.2	0.67	44.00	3
Total	2.21	0.62	44.20	

The means of safety measures of domains are pointed out in the table (4.9). It is ranked as the total safety measures domain. According to the results, the weighted mean for the Safety measures domain was 44.2%. The results showed that the highest domain was domains number (1) “Frequency of reporting the event” with a weighted mean is 48.40%, followed by domains number (2) “5. Hospital management support” with a weighted mean is (44.2%). While the lowest domain (6) “Teamwork across hospital units” (42.0%), followed by domains was the number (2) “Feedback” (42.0%).

These results agree with another study showed that hospitals often lack adequate safety measures due to a variety of factors, including understaffing, financial constraints, lack of safety protocols, and outdated equipment Buxton al., (2019). Also, Peters et al., (2018) showed that hospitals struggle to keep up with the ever-changing safety standards and regulations, and are often unable to invest in the necessary safety measures.

In the same way, Chirico et al., (2021) reported that many hospitals lack the necessary training and resources to properly implement safety protocols. Finally, Alhaidari et al., (2021) showed overcrowding and long wait times can also lead to a decrease in safety measures as the staff is unable to properly monitor and respond to potential risks.

As seen from the opinion of the researcher safety measures in hospitals are important to protect both patients and the staff. Hospitals are places where people go to heal, and the last thing anyone wants is to be injured or become ill while there. Safety measures such as routinely cleaning surfaces, properly sterilizing instruments, and minimizing the risk of falls can help ensure that patients and staff are safe while in a healthcare setting.

4.4 Training

Table (4.10) The distribution of the participants according to the training

Training	Yes		No		Mean	SD	% Mean	Rank
	N	%	N	%				
Q2.1 You received training courses to deal with the transfer and carrying of the patient	49	30.6%	111	69.4%	0.306	0.46	30.6	5
Q2.2 You received appropriate training courses on how to operate the electric shock device	55	34.4%	105	65.6%	0.344	0.48	34.4	4
Q2.3 You received resuscitation training	78	48.8%	82	51.2%	0.488	0.50	48.8	1
Q2.4 You have received training and know how to use a fire extinguisher in your workplace	74	46.3%	86	53.8%	0.463	0.50	46.3	2
Q2.5 You received training on medical events (errors) that must be documented	57	35.6%	103	64.4%	0.356	0.48	35.6	3
Total					**0.39**	**0.34**	**39.00**	

The means of training items are pointed out in the table (4.10). It is ranked as the total training domain. According to the results, the weighted mean for the training domain was 39.0%. The results showed that the highest item was item number (3) “You received resuscitation training” with a weighted mean is 48.8%, followed by item number (4) “You have received training and know how to use a fire extinguisher in your workplace” with a weighted mean is (46.3%). While the lowest item (1) “You received training courses to deal with the transfer and carrying of the patient” (30.6%), followed by item was the number (2) “You received appropriate training courses on how to operate the electric shock device.” (34.4%).

These results agree with another study that showed that Qureshi et al., (2022). The study showed that there are several reasons why there may not be training courses available in hospitals. These include the fact that hospitals may not have the resources to provide such courses, or they may not have the personnel to facilitate them. Additionally, hospitals may have limited budgets to allocate for such courses, and there may be limited space available

for them. Furthermore, hospitals may prioritize other activities over training courses, such as patient care.

Kostyrka-Allchorne et al., (2022) illustrated that limited safety training courses in hospitals may be necessary due to limited resources or budget constraints. Safety training is often expensive to provide, and hospitals may not have the funds to provide comprehensive training. Additionally, hospitals may have limited staff who can provide the training, and there may not be enough time or resources to provide comprehensive training. Furthermore, hospitals may need to prioritize other areas of training, such as medical education or patient care.

As seen from the opinion of researchers limited training in hospitals due to budgetary constraints, lack of available trainers, or simply not having the resources or time to provide training for the work team. Also, there are several reasons to a work team may not have received appropriate training courses on how to operate the electric shock device. These include: not being aware that such training courses exist; not having access to the necessary resources or training materials; not having the time or resources to attend the training and not understanding the importance of the training; and the lack of a suitable instructor.

4.5 Hospital safety arrangements

Table (4.11) The distribution of the participants according to the hospital safety arrangements

Hospital safety arrangements	No		Partially		Yes		Mean	SD	% Mean	Rank
	N	%	N	%	N	%				
Q3.1 There are clear and written policies and procedures for occupational safety within the hospital	25	15.6%	53	33.1%	82	51.2%	0.68	0.37	68.00	4
Q3.2 There are procedures from the hospital administration to ensure the availability of safety devices	28	17.5%	44	27.5%	88	55.0%	0.69	0.38	69.00	3

Table (4.11): Continued

Hospital safety arrangements	No		Partially		Yes		Mean	SD	% Mean	Rank
	N	%	N	%	N	%				
Q3.3 Hospital management is only concerned with patient safety after an adverse event has occurred	66	41.3%	35	21.9%	59	36.9%	0.48	0.44	48.00	7
Q3.4 There are tips to prevent infection	13	8.1%	23	14.4%	124	77.5%	0.85	0.31	85.00	1
Q3.5 Safety and security systems and procedures are periodically and comprehensively evaluated in the hospital	22	13.8%	43	26.9%	95	59.4%	0.73	0.36	73.00	2
Q3.6 There is a clear guide to dealing with medical devices and equipment to avoid the expected dangers	42	26.3%	51	31.9%	67	41.9%	0.58	0.41	58.00	6
Q3.7 There are forms for documenting medical events	35	21.9%	40	25.0%	85	53.1%	0.66	0.41	66.00	5
Total							**0.66**	**0.22**	**66.00**	

The means of hospital safety arrangements of items are pointed out in the table (4.11). It is ranked as the total hospital safety arrangements domain. According to the results, the weighted mean for the hospital safety arrangements domain was 66.0%. The results showed that the highest item was item number (4) “There are tips to prevent infection” with a weighted mean is 85.0%, followed by item number (5) “Safety and security systems and procedures are periodically and comprehensively evaluated in the hospital” with a weighted mean is (73.0%). While the lowest item (3) “Hospital management is only concerned with patient safety after an adverse event has occurred” (48.0%), followed by item was the number (6) “There is a clear guide to dealing with medical devices and equipment to avoid the expected dangers” (58.0%).

Our results agree with another study that showed that decreasing hospital safety arrangements levels can have serious and potentially deadly consequences. It can lead to an increase in medical errors, patient injuries, and even deaths. In addition, inadequate safety procedures can lead to higher costs for medical care and possible legal liability for the hospital. Furthermore, it can lead to a decrease in patient satisfaction and a negative reputation for the hospital (Trakulsunti et al., 2022).

Custer et al., 2016 showed that hospital management is primarily concerned with patient safety after an adverse event has occurred because they want to ensure that similar events do not occur in the future. Also, Cado et al., (2020) showed that adverse events can cause long-term physical, emotional, and financial harm to patients, their families, and the hospital. Hospital management needs to review and analyze adverse events to identify any potential underlying causes and take steps to prevent them from happening again.

As seen from the opinion of the researcher the primary reason why moderate ophthalmic governmental hospital safety arrangements exist is due to the limited resources available to hospitals. And the second factors are hospitals often struggle to allocate resources in a way that adequately addresses patient safety concerns while also dealing with a range of other budgetary constraints. The third reason is due to the ever-changing nature of the healthcare industry, it can be difficult for hospitals to keep up with the latest safety regulations, protocols, and best practices. Finally, hospitals may be limited in terms of the staff, equipment, and technologies available for safety measures.

4.6 Risk management

4.6.1 Management physical hazards

Table (4.12) The distribution of the participants according to the management physical hazards

Management Physical hazards		Yes	No					Mean	SD	% Mean	Rank
			Very little	Minor	Medium	Major	Disastrous				
Q4.1 The floors of the department are made of a rough material that prevents slipping	**N**	79	10	14	28	9	20	3.58	1.70	71.60	10
	%	49.4%	6.3%	8.8%	17.5%	5.6%	12.4%				
Q4.2 Entrances, exits, and floors are in a safe condition and have no fractures	**N**	112	7	10	8	7	16	4.19	1.48	83.80	3
	%	70.0%	4.4%	6.3%	5.0%	4.3%	10.0%				
Q4.3 Hospital facilities take care of people with special needs	**N**	93	7	7	10	16	27	4.05	1.43	81.00	6
	%	58.1%	4.4%	4.4%	6.2%	10.0%	16.9%				
Q4.4 Signs are placed if the floors are wet	**N**	33	11	11	27	25	53	3.23	1.48	64.60	11
	%	20.6%	6.9%	6.9%	16.9%	15.6%	33.1%				
Q4.5 There are handrails on both sides of the wall and on the stairs	**N**	97	4	5	18	12	24	4.11	1.35	82.20	4
	%	60.6%	2.5%	3.1%	11.3%	7.5%	15.0%				
Q4.6 Toilets are good for the elderly	**N**	59	5	9	29	17	41	3.61	1.44	72.20	9
	%	36.9%	3.1%	5.6%	18.1%	10.6%	25.7%				
Q4.7 The temperature is right and the air conditioning is working	**N**	130	3	4	7	6	10	4.54	1.13	90.80	2
	%	81.3%	1.9%	2.5%	4.4%	3.7%	6.2%				
Q4.8 Medical devices are checked daily	**N**	94	2	11	18	11	24	4.04	1.39	80.80	7
	%	58.8%	1.3%	6.9%	11.3%	6.7%	15.0%				
Q4.9 There are measures taken to reduce pollution (energy generators)	**N**	91	5	5	16	15	28	4.06	1.36	81.20	5
	%	56.9%	3.1%	3.1%	10.0%	9.4%	17.5%				
Q4.10 Beds for elderly patients are equipped with bars to prevent falls and are of appropriate height	**N**	137	1	3	13	2	4	4.60	1.05	92.00	1
	%	85.6%	0.6%	1.9%	8.1%	1.3%	2.5%				
Q4.11 There is a fire alarm	**N**	65	2	4	38	17	34	3.70	1.34	74.00	8
	%	40.6%	1.3%	2.5%	23.8%	10.5%	21.3%				
Total								3.97	0.79	79.40	

The means of management physical hazards of items are pointed out in the table (4.12). It is ranked as the total management physical hazards domain. According to the results, the weighted mean for the physical hazards domain was 97.40%. The results showed that the highest item was item number (10) “Beds for elderly patients are equipped with bars to prevent falls and are of appropriate height” with a weighted mean is 92.0%, followed by item number (7) “The temperature is right and the air conditioning is working” with a weighted mean is (90.80%). While the lowest item (4) “Signs are placed if the floors are wet” (64.6%), followed by item was the number (1) “The floors of the department are made of a rough material that prevents slipping” (71.6%).

These results agree with another study El-Sallamy et al. (2018) showed that there are many causes of management physical hazards with a weighted mean of 53.3%. Pinoles et al. (2021) showed that physical hazards in hospitals are slippery floors, poorly maintained electrical wiring, Unlabeled hazardous materials, poorly maintained medical equipment, unsecured medical equipment, crowded work areas, lack of handrails or grab bars, poorly lit areas, poorly ventilated areas and unsafe patient handling practices.

As seen from the opinion of the researcher management physical hazards levels in ophthalmic governmental hospitals is important for the safety of both patients and staff. The reason for reducing the risk of slips, trips, and falls, and by creating an ergonomic environment that is comfortable and easy to navigate in hospitals. Also, reducing clutter and ensuring proper storage of medical equipment is essential to preventing accidents and injuries and lowering physical hazards. Finally, good lighting improved ventilation, and providing adequate space help to avoid accidents and improve overall safety.

4.6.2 Management biological hazards

Table (4.13) The distribution of the participants according to the management biological hazards

Management Biological hazards		Yes	No					Mean	SD	% Mean	Rank
			Very little	Minor	Medium	Major	Disastrous				
Q5.1 Protective and safety equipment to prevent infection is available (gloves and masks.....	N	130	7	4	12	3	4	4.39	1.38	87.80	5
	%	81.3%	4.4%	2.5%	7.5%	1.8%	2.5%				
Q5.2 Sharp waste boxes such as needles and scalpels are available in the departments	N	148	2	3	6	0	1	4.74	0.95	94.80	1
	%	92.5%	1.3%	1.9%	3.7%	0.0%	0.6%				
Q5.3 The examination devices are sterilized daily in the morning and after each use	N	120	3	13	9	8	7	4.27	1.41	85.40	7
	%	75.0%	1.9%	8.1%	5.6%	5.0%	4.4%				
Q5.4 Disinfectants are used to sanitize hands	N	143	1	6	8	1	1	4.65	1.06	93.00	2
	%	89.4%	0.6%	3.8%	5.0%	0.6%	0.6%				
Q5.5 Wash hands before and after touching the patient	N	118	6	9	15	4	8	4.21	1.49	84.20	8
	%	73.8%	3.8%	5.6%	9.3%	2.5%	5.0%				
Q5.6 Medical waste is disposed of in its proper place	N	134	2	5	15	3	1	4.49	1.22	89.80	4
	%	83.8%	1.3%	3.1%	9.3%	1.9%	0.6%				

Q5.7 Take vaccinations against infectious diseases and epidemics, especially when the disease spreads	**N**	135	3	8	4	4	6	4.54	1.20	90.80	3
	%	84.4%	1.9%	5.0%	2.4%	2.5%	3.8%				
Q5.8 Wear hand gloves every time you come into contact with the patient	**N**	75	14	14	21	13	23	3.51	1.74	70.20	14
	%	46.9%	8.8%	8.8%	13.0%	8.1%	14.4%				
Q5.9 Insects and pests are controlled to prevent the spread of infection	**N**	99	4	9	19	17	12	4.01	1.46	80.20	10
	%	61.9%	2.5%	5.6%	11.9%	10.6%	7.5%				
Q5.10 A periodic examination of samples of detergents and disinfectants is carried out within the hospital departments	**N**	111	2	8	22	3	14	4.20	1.37	84.00	9
	%	69.4%	1.3%	5.0%	13.6%	1.9%	8.8%				
Q5.11 The design of the place is appropriate to prevent the transmission of infection	**N**	84	5	11	20	15	25	3.85	1.49	77.00	12
	%	52.5%	3.1%	6.9%	12.5%	9.4%	15.6%				
Q5.12 There is an isolation room for infectious diseases	**N**	119	0	9	15	7	10	4.34	1.25	86.80	6
	%	74.4%	0.0%	5.6%	9.3%	4.4%	6.3%				
Q5.13 There is an appropriate distance between patients' beds to ensure patient privacy and non-contagion	**N**	84	5	16	20	17	18	3.74	1.58	74.80	13
	%	52.5%	3.1%	10.0%	12.5%	10.6%	11.3%				
Q5.14 Biohazard containers are marked	**N**	100	0	10	36	6	8	3.95	1.46	79.00	11
	%	62.5%	0.0%	6.3%	22.4%	3.8%	5.0%				
Total								4.21	0.90	84.20	

The means of management biological hazards of items are pointed out in the table (4.13). It is ranked as the total management biological hazard domain. According to the results, the weighted mean for the management biological hazards domain was 84.20%. The results showed that the highest item was item number (2) “Sharp waste boxes such as needles and scalpels are available in the departments” with a weighted mean is 94.8%, followed by item number (4) “Disinfectants are used to sanitize hands” with a weighted mean is (93.0%). While the lowest item (8) “Wear hand gloves every time you come into contact with the patient” (70.2%), followed by item was the number (13) “There is an appropriate distance between patients' beds to ensure patient privacy and non-contagion” (74.8%).

According to a 2016 study by the World Health Organization (WHO), the global average percentage of management biological hazards in hospitals is approximately 92% (Louis et al., 2016) and these results agree with the current study. The percentage of management biological hazards in hospitals can vary widely depending on the type of hospital and the particular procedures and practices that are in place (Ajala et al., 2022).

Several studies agree with the current study and showed general risk factors of management biological hazards in hospitals such as contamination of food or water supplies with bacteria or viruses, exposure to hazardous chemicals or drugs, exposure to infectious agents such as bacteria, viruses, or fungi, exposure to radiation from medical equipment or procedures, inadequate sterilization of medical instruments, poor ventilation leading to airborne infectious agents, unsanitary conditions in patient rooms, bathrooms, and common areas, exposure to bloodborne pathogens, needle-stick injuries and unsafe disposal of hazardous materials (Li et al., 2018; Djalante et al., 2020; Woods et al., 2022).

As seen from the opinion of the researcher in the last years in the Gaza strip hospitals have implemented a variety of strategies to reduce the risk of biological hazards in their facilities. These strategies include adopting standard precautions, such as hand washing and glove use, enforcing regular cleaning and disinfection of surfaces and equipment, and regularly monitoring for biological hazards. Hospitals also use personal protective equipment (PPE), such as masks, gloves, and gowns, to protect healthcare workers from exposure to biological agents. In addition, hospitals may implement policies to reduce the risk of transmission of biological hazards, such as prohibiting staff members from going to work while they are ill and requiring all visitors to wear masks. Finally, many hospitals also have policies in place to ensure proper disposal of medical waste, which helps to reduce the risk of biological hazards.

4.6.3 Management personnel risks

Table (4.14) The distribution of the participants according to the management personnel risks

Management Personnel risks		Yes	No					Mean	SD	% Mean	Rank
			Very little	Minor	Medium	Major	Disastrous				
Q6.1 There are written policies and procedures in your department about work mechanisms	N	102	6	6	24	6	16	4.04	1.49	80.80	7
	%	63.7%	3.8%	3.8%	14.9%	3.8%	10.0%				
Q6.2 Before giving the treatment to the patient, the drug and the dose are clearly confirmed (actual patient correct drug correct dose correct method	N	126	6	3	17	2	6	4.36	1.37	87.20	4
	%	78.8%	3.8%	1.9%	10.4%	1.3%	3.8%				
Q6.3 The identity of the patient is confirmed before starting the treatment procedures	N	129	0	7	12	2	10	4.51	1.12	90.20	2
	%	80.6%	0.0%	4.4%	7.4%	1.3%	6.3%				
Q6.4 the patient wears identification bracelets	N	47	11	9	36	15	42	3.31	1.56	66.20	13
	%	29.4%	6.9%	5.6%	22.4%	9.4%	26.3%				
Q6.5 Take a break after every shift	N	93	3	11	23	10	20	3.95	1.47	79.00	9
	%	58.1%	1.9%	6.9%	14.3%	6.3%	12.5%				
Q6.6 The number of crew is suitable for the workload	N	70	3	13	25	18	31	3.69	1.46	73.80	11
	%	43.8%	1.9%	8.1%	15.5%	11.3%	19.4%				
Q6.7 Periodic medical examination of employees	N	46	8	12	30	25	39	3.33	1.50	66.60	12
	%	28.7%	5.0%	7.5%	18.8%	15.6%	24.4%				
Q6.8 Committed to wearing occupational safety equipment while working	N	101	13	8	13	11	14	3.93	1.67	78.60	10
	%	63.1%	8.1%	5.0%	8.1%	6.9%	8.8%				
Q6.9 You are obligated to wear a white coat and identification card while working	N	110	11	6	10	11	12	4.11	1.56	82.20	6
	%	68.8%	6.9%	3.8%	6.1%	6.9%	7.5%				
Q6.10 The medicines and consumables and their expiry dates are monitored periodically	N	126	2	6	14	3	9	4.43	1.23	88.60	3
	%	78.8%	1.3%	3.8%	8.6%	1.9%	5.6%				
Q6.11 Recording cases of medical errors	N	98	2	9	28	8	15	3.99	1.44	79.80	8
	%	61.3%	1.3%	5.6%	17.4%	5.0%	9.4%				
Q6.12 The name of the drug and the method of use are clear and known to the staff	N	135	2	3	9	6	5	4.59	1.07	91.80	1
	%	84.4%	1.3%	1.9%	5.5%	3.8%	3.1%				
Q6.13 Emergency vehicles are equipped and monitored periodically	N	115	0	8	20	7	10	4.28	1.28	85.60	5
	%	71.9%	0.0%	5.0%	12.4%	4.4%	6.3%				
Total								4.04	0.80	80.80	

The means of management personnel risks of items are pointed out in the table (4.14). It is ranked as the total management personnel risks domain. According to the results, the weighted mean for the management personnel risks domain was 80.8%. The results showed that the highest item was item number (12) “The name of the drug and the method of use are clear and known to the staff” with a weighted mean is 91.8%, followed by item number (2) “The identity of the patient is confirmed before starting the treatment procedures” with a weighted mean is (90.2%). While the lowest item (2) “the patient wears identification bracelets” (66.2%), followed by item was the number (7) “Periodic medical examination of employees” (66.6%).

Jespersen et al., (2020) showed that the prevalence of management personnel risks in hospitals is difficult to quantify due to the lack of reliable data. However, De Groot et al., (2021) estimated that anywhere from 40% of all medical errors are related to management personnel issues such as fatigue, stress, or lack of training. Management personnel risks can also arise from inadequate staffing levels, poor communication, inadequate supervision, or inadequate safety protocols.

Lowering management personnel risks in hospitals is important because it helps to ensure patient safety, reduce liability, and create a safe and healthy work environment (Fleuren et al., 2021). Bauer et al., 2019 showed that controls of management personnel risks also reduce the cost of employment-related lawsuits, and improve the quality of care provided to patients. Hight et al., (2019) showed that the most management personnel risks include improper training, inadequate supervision, inadequate security, inappropriate behavior, and poor management of staff.

As seen from the opinion of the researcher, recently hospitals are heavily regulated by the ministry of health, and healthcare institutions must adhere to strict rules and regulations to protect both patients and staff. This includes ensuring that staff members are properly trained and have the necessary skills to carry out their roles safely and effectively. Additionally, hospitals must maintain rigorous safety protocols, such as adhering to safety standards and using personal protective equipment (PPE) to protect staff and patients. These measures help to reduce the risk of any management personnel-related incidents or injuries.

4.6.4 Risk management

Table (4.15) The distribution of the participants according to the safety Measures

Risk management	Mean	SD	% Mean	Rank
1. Management physical hazards	3.97	0.79	79.40	3
2. Management biological hazards	4.21	0.90	84.20	1
3. Management personnel risks	4.04	0.80	80.80	2
Total	4.07	0.07	81.40	

The means of risk management of the domain are pointed out in the table (4.15). It is ranked as the total risk management domain. According to the results, the weighted mean for the risk management domain was 81.40%. The results showed that the highest domain was domain number (2) “Management biological hazards” with a weighted mean is 84.20%, followed by domain number (3) “Management personnel risks” with a weighted mean is (80.80%). While the lowest domain (1) is “Management physical hazards” (97.40%).

The rate of risk management in hospitals is a strategy used to reduce the number of medical errors and other risks associated with healthcare delivery (Lan et al., 2022). Risk management involves identifying potential risk factors and implementing strategies to reduce or eliminate those risks. The overall goal of the percentage of risk management is to improve patient safety and quality of care in the hospital setting. This may involve implementing new protocols, processes, and technologies, as well as providing regular training and education to hospital staff (Mason et al., 2022). Oh & Lee (2020) agree with the current study and showed that risk management is about 30.0%.

Spinato et al., 2021 showed that risk management in hospitals is limited due to a variety of factors. These include limited resources, high staff turnover, difficulty in obtaining and sharing information, weak communication systems, and an overall lack of understanding of the importance of risk management. Robinson et al., (2022) showed that hospitals are subject to a range of regulatory requirements which can limit their ability to adopt certain risk management strategies. Christensen et al., (2020) pointed out hospitals must work within a complex organizational structure, meaning that processes and procedures may not be uniform across different departments or services. Farokhzadian et al., (2018)

recommended that hospitals must consider patient safety, privacy, and security when developing risk management strategies.

As seen from the opinion of the researcher limited risk management in hospitals is important because it can help to ensure that patients receive the best possible care and that the hospital is compliant with all relevant laws and regulations risk management strategies can also help to reduce costs associated with medical care, as well as help to ensure the hospital is providing the highest quality care to its patients.

4.6.5 Means, SD, and weighted Means of the total domain

The means of risk management of the domain are pointed out in the table (4.16). It is ranked as the total safety measures and risk management domain. The results showed that the highest domain was domain number (1) "Risk Management" with a weighted mean is 81.4%, While the lowest domain (2) is "Safety Measures" (44.2%).

These results agree with another study that showed that safety measures and risk management in hospitals are important to ensure the safety of patients, visitors, and staff. The authors showed that safety measures help reduce the risk of medical errors, falls, infections, and other potential harm (Khan et al., 2015). Also, Meyer et al., (2022) showed that risk management helps identify existing and potential risks, and then helps to develop strategies to reduce these risks.

As seen from the opinion of the researcher safety measures and risk management is slowing in hospitals are important because of the safety of patients and staff, as well as to improve the quality of care. Also, new safety measures recommend in governmental hospitals to reduce the risk of medical errors, reduce the spread of infection, and ensure that patient care is provided safely and effectively. However, Risk management helps to identify and address potential risks, such as hazards or threats to patient safety, and to develop strategies to mitigate or eliminate those risks.

Table (4.16) The distribution of the participants according to the total domain

Total domain	Mean	SD	% Mean	Rank
1. Safety Measures	2.21	0.62	44.20	2
2. Risk Management	4.07	0.07	81.40	1

4.7 Mean difference of safety measures and risk management related to the socio-demographic data

Table (4.17) Mean difference of total safety measures related to the socio-demographic data

Domains	Categories	n	Mean	SD	t/F	P-value
Q1 Gender	Male	96	43.69	10.46	-0.570	0.570
	Female	64	44.83	14.79		
Q2 Hospital	Elnasser ophthalmic Governmental Hospital	124	44.43	12.67	0.550	0.583
	European Hospital	36	43.14	11.27		
Q.3G Age	30 or Less	41	44.66	13.69	1.019	0.386
	31 to 40	65	42.25	12.30		
	41 to 50	35	45.47	12.14		
	More than 50	19	47.05	9.31		
Q4 Academic degree	Diploma	23	42.92	12.33	2.011	0.096
	Bachelor	83	43.21	12.25		
	Board	18	40.57	5.85		
	Master	31	49.36	13.46		
	Doctorate	5	45.80	18.45		
Q.5G Years of Experience	5 years or less	43	44.36	13.57	1.005	0.392
	6 to10	24	41.55	12.28		
	11 to 15	48	43.08	11.13		
	More than 15	45	46.46	12.38		
Q6 The department you work in	Overnight	5	48.64	21.07	1.280	0.258
	Laser Dep	4	40.30	5.42		
	Outpatient Clinic	48	42.15	9.89		
	Surgical operations	26	43.48	10.93		
	Anesthesia	7	49.63	16.21		
	Optometry Clinic	25	44.74	15.97		
	Pharmacy	6	50.30	15.83		
	Administration	26	47.58	12.23		
	Daily care	13	38.45	6.72		
Q7 In your job, do you deal directly with patients؟	Yes	150	43.94	12.47	-0.803	0.423
	No	10	47.18	10.23		
Q8 No. of weekly hours	35 to 40 Hours	124	44.85	12.75	0.934	0.426
	41 to 60 hours	25	43.06	11.70		
	61 to 80 hours	5	38.04	7.31		
	More than 80 hours	6	39.13	7.85		
Q9 Category	Doctors (Surgeons)	37	39.81	8.49	1.983	0.061
	Doctors (Non-surgeons)	5	50.08	5.90		
	Anaesthesiologists (Doctors)	5	54.68	16.76		
	Anaesthesiologist (Technician)	2	37.00	2.83		
	Optometrists	35	44.17	14.74		
	Pharmacist	6	51.67	16.67		
	Nurse	44	45.84	12.16		
	Administrator	26	43.05	11.32		

Table (4.18) Mean difference of total risk management to the socio-demographic data

Domains	Categories	n	Mean	SD	t/F	P-value
Q1 Gender	Male	96	82.87	12.90	1.564	0.120
	Female	64	79.34	15.43		
Q2 Hospital	Elnasser ophthalmic Governmental Hospital	124	80.47	13.91	-1.660	0.099
	European Hospital	36	84.86	14.08		
Q.3 Age	30 or less	41	79.88	18.00	1.100	0.351
	31 to 40	65	80.40	13.98		
	41 to 50	35	82.75	9.63		
	More than 50	19	86.13	10.57		
Q4 Academic degree	Diploma	23	81.54	11.37	0.166	0.955
	Bachelor	83	80.94	15.79		
	Board	18	80.58	13.35		
	Master	31	83.23	11.77		
	Doctorate	5	81.77	12.94		
Q.5G Years of Experience	5 years or less	43	78.53	17.43	1.020	0.385
	6 to10	24	80.72	14.64		
	11 to 15	48	83.00	11.61		
	More than 15	45	83.00	12.29		
Q6 The department you work in	Overnight	5	80.31	10.26	1.084	0.377
	Laser Dep	4	84.09	12.31		
	Outpatient Clinic	48	82.42	13.38		
	Surgical operations	26	83.84	14.83		
	Anaesthesia	7	84.62	7.46		
	Optometry Clinic	25	77.47	15.50		
	Pharmacy	6	87.69	9.93		
	Administration	26	79.66	14.06		
	Daily care	13	89.11	3.97		
Q7 In your job, do you deal directly with patients؟?	Yes	150	81.30	14.30	-0.559	0.577
	No	10	83.87	9.00		
Q8 No. of weekly hours	35 to 40 Hours	124	44.85	12.75	0.937	0.424
	41 to 60 hours	25	43.08	11.69		
	61 to 80 hours	5	38.01	7.30		
	More than 80 hours	6	39.13	7.87		
Q9 Category	Doctors (Surgeons)	37	39.82	8.49	1.978	0.061
	Doctors (Non-surgeons)	5	50.12	5.93		
	Anaesthesiologists (Doctors)	5	54.67	16.75		
	Anaesthesiologist (Technician)	2	37.02	2.77		
	Optometrists	35	44.17	14.74		
	Pharmacist	6	51.64	16.67		
	Nurse	44	45.84	12.15		
	Administrator	26	43.05	11.32		

Table 4.17 and 4.18 shows the mean difference in the average of safety measures and risk management related to socio-demographic data. The results showed that there is no statistical difference in the average of safety measures and risk management levels regarding the socio-demographic data (P>0.05).

These results agree with several studies that showed no relation between both safety measures and risk management levels regarding the socio-demographic data (Chan et al., 2020; Møller, & Jensen, 2022)

As seen from the opinion of the researcher there is no established risk management level when it comes to sociodemographic data because it is highly subjective. Factors such as gender, hospital, age, academic degree, years of experience, departments, dealing directly with patients' number of weekly hours, and specialists can be difficult to measure and quantify, and they can vary greatly depending on the individual and the context. As a result, risk management levels are not typically applied to sociodemographic data. Also, safety measures and socio-demographic data are not directly related because safety measures are focused on preventing or reducing the risk of harm to people or property, while socio-demographic data is focused on describing the characteristics of a population. Safety measures are often put in place in response to socio-demographic data, but the two are not intrinsically linked.

4.8 Correlation between the safety measures and risk management among the study population

Table (4.19) The correlation between the safety measures and risk management among the study population

		Safety Measures
Risk Management	r	0.199*
	P-vale	0.012

*Significant at P≤0.05; P>0 05: Not significant; & r: Pearson correlation.

Table 4.19 shows the correlation between safety measures and risk management among the study participants. Pearson correlation showed that there is a positive significant correlation between the safety measures and risk management ($P < 0.05$).

These results agree with another study showed that a positive relationship between safety measures and risk management (Adeleke et al., 2018). Also, Huy et., (2021) showed a reverse between relation safety measures and risk management levels.

As seen from the opinion of the researcher the positive correlation between safety measures and risk management is an important one, as implementing safety measures can help reduce risks and mitigate the potential for harm to personnel, property, and the environment. Safety measures can help identify and address hazards, reduce the likelihood of an incident occurring, and provide procedures for responding to an emergency. Risk management, meanwhile, is the process of identifying, assessing, and controlling risks to ensure that they are managed effectively. By implementing safety measures, organizations can reduce risk and help create a safer, healthier, and more productive workplace.

Qualitative part:

During the discussion with the key informants about the problems they found in their work in safety measure and risk management, many factors are discovered. Obstacles and challenges that were faced Gaza varied between the key informants; it may be due to their different points of view that may arise according to their different work positions, experiences, expectations and their priorities. The main problem areas that were observed are listed below as they mentioned.

The researcher concluded through collecting and analyzing many key informants interviews the key informants accompanied by some facial expressions describe their agreement and satisfaction about safety measures and risk management in governmental ophthalmic.

Policies and Procedures:

There is a consensus that the hospital has policies and procedures even though they are incomplete, but they are in the process of development, follow-up and modernization are

moving the steps right and the Ministry is currently preparing a safety manual and risk management for the Ministry of Health.

Manger of the hospital said that the hospital has safety and risk management policies and procedures however it is not completed but we continue to update and work to enrich it.

Patient safety officer also expressed: There are procedures and policies, even if they are incomplete, but they are in the right direction Work is underway to prepare the Safety and Risk Management Manual at the Ministry of Health

Transparency and credibility:

This point was contested by the competent, some of whom explained that there is documentation and registration. This is due to the point that everyone speaks according to his supervisory location, where he explained that his culture accepts any event or medical line that is unacceptable and unacceptable to patients and their families.

There are reports of operational incidents of his lens falling during his transplant, rupture occurrence

Gaza's health work system is not isolated from its Arab, regional and international surroundings. The viewer of the issue of medical errors in those States is well aware that whoever works is wrong and that the issue of medical error is common sense and common sense is inconsistent with the intention of the health team to cause harm to the patient. Attention is drawn to the existence of factors that may contribute to the creation of such errors as lack of staff, and medical consumables.

The second destination says that there is no documentation and there is a lack of transparency and sincerity and hopes that there are models and reports to be adhered to by the staff.

Taking a patient record from the patient and documenting it is very important, especially the issue of the sensitivity of medicines or chronic diseases and sharing information with the staff, especially upon delivery and receipt. This is a challenge that promotes the health system and the presence of a medical event. The Ministry establishes specialized

committees comprising specialized professionals, legal professionals and observers from outside the Ministry in order to get to the truth.

Efforts to come up with the Medical Accountability Act. In case of medical event, we tell them in political way

*Manger of hospital s*aid depending on the situation like in case of the occurrence of a problem during the operation is not intended, but it will affect the vision, for example

And he adds there is no culture among our people about understanding the error, although it happens in many countries of the world

Of course, we have heard about assaults on medical personnel, regardless of whether the case was wrong or not

not directly due to blame culture of patient

*Nursing director try to e*explain the thing in a political way is the best

Patient safety honestly said There is a lack of transparency in informing patients of any medical event or error

Training:

The Ministry is very keen to upgrade the level of service provided to the patient. This is evident through the volume of scientific courses for all health service providers and the introduction of the Palestinian Board of Physicians program, in addition to sending many doctors outside the country to specialize in advanced fields.

conduct training needs assessment and coordinate with the Department of Manpower Development.

Strengths and weaknesses:

There is a consensus that the Ministry is provided with half-time and annual reports through which we identify strengths and weaknesses

Quality control officer: Ministry is provided with half-time and annual reports through which we identify strengths and weaknesses

Communication:

Effective communication for safety is a critical aspect as it plays a crucial role in identifying and mitigating potential hazards or risks., communication for safety should be approached systematically, beginning with the identification of potential hazards and the development of a clear communication plan. The plan should outline the types of information that need to be communicated, who should receive the information, and the most effective methods for disseminating it. Clear and concise language should be used to ensure that all stakeholders understand the information being communicated, and feedback mechanisms should be in place to ensure that the communication is effective. Additionally, regular training and education programs should be implemented to promote a culture of safety and ensure that all members of the academic community are aware of the importance of effective communication for safety. Ultimately, effective communication for safety is essential to the success of any academic institution, as it ensures that potential hazards are identified and addressed in a timely and effective manner, thereby promoting the health and well-being of all members of the academic community

The researcher discussed this item with key informants, and they all agreed on the importance of encouraging communication aimed at influencing workforce behaviors. This can be achieved by engaging employees in fulfilling their ambitions and overcoming challenges, as well as encouraging them to share their experiences for continuous improvement.

Updating policies and procedures:

Updating policies and procedures is a critical aspect of maintaining an effective and efficient organization. As technology, regulations, and best practices evolve, policies and procedures must also be updated to reflect these changes. Failure to keep policies and procedures up-to-date can lead to compliance issues, safety concerns, and decreased productivity. To effectively update policies and procedures, organizations should establish a clear process that includes identifying necessary updates, developing revised policies and procedures, and communicating the changes to all relevant stakeholders. It is essential to

involve all relevant departments and personnel in the update process to ensure that the revised policies and procedures align with the organization's goals and objectives. Additionally, training and education programs should be implemented to ensure that all employees are aware of the updates and understand how to follow the revised policies and procedures. By regularly updating policies and procedures, organizations can ensure that they remain compliant, safe, and productive in a constantly changing environment.

The key informative confirmed that modify and refine plans even if we are in the middle of the track. Do not hesitate to modify any point of coordination with the competent authorities in providing infrastructure for handling medical waste. Check all employees prior to recruitment to ensure that they are free of infectious diseases periodically after recruitment. Daily or periodic inspection work to implement safety procedures

Registration, Reports and Files:

Registration, reports, and files are essential components of any well-organized and efficient organization. Registration involves the process of documenting information about individuals or entities, including personal information, contact information, and other relevant details. Reports, on the other hand, provide critical information about the organization's performance, finances, and operations, allowing management to make informed decisions based on accurate data. Files refer to the storage of documentation, including contracts, agreements, and other records that are essential to the organization's operations.

To ensure effective registration, reports, and files management, organizations should establish clear policies and procedures for their management, including who is responsible for their maintenance and how they will be accessed and updated. It is essential to have standardized formats and templates for registration, reports, and files to ensure consistency and accuracy.

In addition, proper records management practices must be followed, including secure storage, data backup, and retention schedules, to ensure that all records are maintained according to legal and regulatory requirements. Implementing modern technology, such as

cloud storage and digital document management systems, can also help streamline registration, reports, and files management, making it easier to access and retrieve information.

Effective management of registration, reports, and files is critical to the success of any organization, ensuring that accurate data is available to support informed decision-making and regulatory compliance

Results obtained show the gap in registration and medical events reports only what are documented. Some events such as a falling lens or a rupture during the transplant of the lens, and other reports about an incorrect line or procedure are not documented.

The hospital key informative submit recommendations to the Department that there is a problem with the reports and files of patients and we hope that the Department will work to solve these problems.

Medical manger There are great efforts being made to document the files and document any medical error, if it occurs, in order to benefit and draw lessons.

Quality manger add There is a ministerial safety protocol where events are documented. Medical events are documented in the Operations Department, such as the occurrence of a lens or the occurrence of rupture

Emergency alternative plans:

Emergency alternative plans are an essential component of any organization's risk management strategy. Such plans are designed to provide alternative courses of action in the event of an emergency or unexpected event that may disrupt normal operations. Emergency alternative plans should be developed based on a thorough risk assessment and should be regularly reviewed and updated to ensure they remain relevant and effective. A good emergency alternative plan should include a clear chain of command, communication protocols, and specific procedures for responding to emergencies. It should also identify critical resources and assets, as well as the potential risks and impacts of different scenarios. Additionally, it is important to ensure that employees are trained on the emergency alternative plans and that the plans are regularly tested to evaluate their effectiveness. The goal of an emergency alternative plan is to ensure that an organization

can continue to function in the face of disruption, minimize the impact of an emergency, and facilitate the resumption of normal operations as quickly and safely as possible. By having a well-designed and regularly updated emergency alternative plan in place, organizations can minimize the risk of damage to their reputation, financial losses, and most importantly, ensure the safety and well-being of their employees and stakeholders.

There is unanimous consensus that there are contingency plans and they are updated periodically, such as the emergency plan for war situations, work, shift schedules and divided according to the place of residence and alternative in case it is not possible to attend

Plans to rationalize consumption and deal with emergencies or infections. There are protocols adopted

Chapter Five

Conclusion and Recommendation

5.1 Conclusion

The study aimed to assess the safety measures and risk management in ophthalmic governmental hospitals in the Gaza strip and sociodemographic dada and both safety measures and risk management in ophthalmic governmental hospitals. The results indicated that the total score of safety measures levels was low, with the lowest domain being teamwork across hospital units. The results showed that the overall safety measures level was low, with the highest-ranked domains being frequency of reporting the event and hospital management support, and the lowest-ranked domains being teamwork across hospital units and feedback. Also, the results shown that hospitals face numerous challenges in implementing effective safety measures due to various factors such as lack of resources, outdated equipment, and inadequate training. Despite these challenges, it is crucial that hospitals prioritize the implementation of safety protocols to protect both patients and staff. By routinely cleaning surfaces, sterilizing instruments, and minimizing the risk of falls, hospitals can ensure that patients and staff remain safe while receiving and providing healthcare.

The weighted mean for the training domain was low, while the weighted mean for the hospital safety arrangements domain was moderate. In terms of risk management, the total score was high, with the highest domain being biological hazards. There was no statistical difference in the average of safety measures and risk management levels regarding socio-demographic data. However, a positive significant correlation was found between safety measures and risk management. These findings suggest that hospitals need to focus on improving safety measures, particularly in the areas of teamwork and training, to enhance risk management practices.

The study has found a positive significant correlation between safety measures and risk management among the study participants. The results highlight the importance of implementing safety measures in order to reduce risks and mitigate potential harm to

personnel, property, and the environment. By identifying and addressing hazards and providing procedures for responding to emergencies, organizations can effectively manage risk and create a safer workplace. Ultimately, this study adds to the body of knowledge on the importance of safety measures and risk management in organizations, and emphasizes the need for continuous improvement in these areas.

Based on the findings from the interviews with key informants, the researcher concluded that there are several problems and challenges that hinder the implementation of safety measures and risk management in Gaza's governmental ophthalmic. These challenges vary among key informants due to their different positions, experiences, expectations, and priorities. However, there is a consensus among key informants regarding the existence of policies and procedures, although they are incomplete and require further development and modernization. There is also a need for transparency and credibility in documenting and registering medical events and reports. The Ministry of Health is preparing a safety manual and risk management to address these issues. The Ministry is also keen to upgrade the level of service provided to patients through training courses and sending doctors abroad for specialization. The findings also highlight the importance of communication, learning lessons, and having emergency alternative plans in place. Finally, the researcher recommends the establishment of specialized committees to investigate medical events and the need to address the gap in registration and medical event reporting to enhance the safety measures and risk management in Gaza's governmental ophthalmic.

5.2 Recommendation

Safety Measures

- Develop a comprehensive safety and risk management policy.
- Establish safety protocols for all areas of the organization.
- Implement a safety culture through training and education.
- Create an incident reporting system for safety.
- Regularly review and update safety policies.
- Utilize technology to monitor safety activities.
- Develop communication protocols for responding to safety issues.
- Invest in safety equipment, such as personal protective equipment (PPE).
- Offer incentives for employees who demonstrate proper safety practices.

- Develop a safety committee for regular safety reviews.
- Future researcher about evaluation training program to improve safety culture

Risk Management

- Regularly review risk management policies.
- Develop communication protocols for responding to risk management issues.
- Offer incentives for employees who demonstrate proper risk management practices.
- Develop a safety committee for regular risk management reviews.

Future researcher

-Specific studies for each dimension of the safety measures and risk management separately are needed.

-In-depth research about the role of the different managerial levels and their attitudes and behaviors in promoting the communication

-Future researcher about evaluation training program to improve safety culture and risk management

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Annexes

Annex (1) Questionnaire

بسم الله الرحمن الرحيم

Part One: Personal Data: Please put a tick (√) in front of the appropriate option:

Gender	□ Male	□ Female			
Hospital	□Al oyoun Governmental Hospital		□ European Hospital		
Age	less than 30	□40 −30	□50−40	□≥50	
Academic Degree	□ Diploma	□ Bachelor	□ Board	□ Master	□ Doctorate
Years of Experience	□ Less than 5 years	□10 − 5	□15−10	□≥16	
The department you work in	□ Overnight Dep.	□ Laser Dep.	□ Outpatient Clinic	□ Surgical operations	
	□ Anesthesia	□ Optometry Clinic	□ Pharmacy	□ Administration	□ daily care
In your job, do you deal directly with patients?؟		□ Yes	□ No		
No. of weekly hours	□40−35 Hours	□ 60−40hours	□ 80−60 hours	□≥80 hours	
Category	**Doctors**	**Anesthesiologist**	**Optometrists**	**Pharmacist**	
	□Surgeons □Non surgeons	□Doctors □Technician			
	□**Nurse**	□**Administrator**			
	□	□			

Part Two: Measurement of risk management and safety measures in the hospital in which you work (Al-Ayoun Governmental, European Gaza). This part consists of two parts:

Section One: Safety Measures:

Section one: **Measuring safety measures in your hospital**

This part consists of 9 axes: (frequency of incident reporting, supervisor expectations and procedures, patient safety, organizational learning, teamwork within units, open communication, feedback and communication about error, non-punitive response about the error, Recruitment, hospital administration support, teamwork across vacancies, deliveries and transfers). Please, answer the questions that highlight safety measures inside your hospital

Please put a tick (√) in front of the appropriate option:

	Section One: Safety Measures					
1	**Frequency of reporting the event**	Strongly Agree (5)	Agree (4)	Neutral (2)	Disagree (2)	Strongly Disagree (1)
1	− When an error occurs, the error is reported and documented					
2	− Patient safety is not sacrificed to get more work done.					
3	- There is incidence reports in you department					
4	- When an event is reported, the problem, not the person, appears to be documented . .					
5	- Employees do not worry that mistakes they make are kept in their files					
6	- Errors are documented for the purpose of evaluation, rectification and improvement, not for the purpose of phishing and punishment					

2	**Feedback**	Strongly Agree (5)	Agree (4)	Neutral (2)	Disagree (2)	Strongly Disagree (1)
1	- Error led to positive changes					
2	- Mistakes are taken advantage of by taking a lesson to improve and improve the work After making changes to improve patient safety, we evaluate their effectiveness.					
3	**Communication**	Strongly Agree (5)	Agree (4)	Neutral (2)	Disagree (2)	Strongly Disagree (1)
1	- Staff will speak freely if they see something that might negatively affect patient care					
2	- Employees do not hesitate to question the decisions or actions of those with greater authority					
3	- Employees are afraid to ask questions when things don't seem right					
4	- We are provided with feedback on changes made based on event reports					
5	- We have been informed of errors that occur					
6	- We discuss ways to prevent errors.					
7	- Workshops are held to study errors in order to avoid or mitigate them					

4	**Employment**	Strongly Agree (5)	Agree (4)	Neutral (2)	Disagree (2)	Strongly Disagree (1)
1	−We have enough staff to handle the workload.					
2	−The staff in this unit are working longer hours than they need to achieve the best patient care.					
3	−We are using more unemployment/temporary staff to make better patient care.					
4	− We work in "crisis mode", trying to do a lot and very quickly					
5	**Hospital management support**	Strongly Agree (5)	Agree (4)	Neutral (2)	Disagree (2)	Strongly Disagree (1)
1	- The employees are contacted to determine the difficulties they face					
2	- I receive words of reinforcement from my supervisor/manager when he sees that the work has been done					
3	- Ensure that the fire extinguishing equipment is available and suitable					
4	- My supervisor/managers seriously consider employee suggestions for improvement					

5	- My supervisor follows my work closely and guides me in my work on an ongoing basis					
6	- When stress builds up, my supervisors/managers demand that we work faster, even if it comes at the expense of patient safety					
7	- My supervisors/managers overlook patient safety issues that occur over and over again					
6	**Teamwork across hospital units**	Strongly Agree (5)	Agree (4)	Neutral (2)	Disagree (2)	Strongly Disagree (1)
1	−There is good cooperation between hospital units that need to work together.					
2	−The hospital units work well together to provide the best patient care.					
3	−Hospital units coordinate well with each other.					
4	−Working with employees from other hospital units is often unpleasant.					
7	**Deliveries and transfers**	Strongly Agree (5)	Agree (4)	Neutral (2)	Disagree (2)	Strongly Disagree (1)
1	−Things may happen that are not overlooked when					

	transferring patients from one unit to another					
2	−Important patient care information is often lost during shift changes.					
3	−Problems often arise with the exchange of information across hospital units.					
4	- Shift changes are a problem for patients.					

Please put a tick (√) in front of the appropriate option:

8	**training**	**Yes (1)**	**No (0)**
1	You received training courses to deal with the transfer and carrying of the patient		
2	You received appropriate training courses on how to operate the electric shock device		
3	received resuscitation training You		
4	You have received training and know how to use a fire extinguisher in your workplace		
5	Youreceived training on medical events (errors) that must be documented		

9	**Hospital safety arrangements**	**YES (1)**	**NO (0)**	**PARTIALLY (0.5)**
1	There are clear and written policies and procedures for occupational safety within the hospital			
2	There are procedures from the hospital administration to ensure the availability of safety devices			

3	Hospital management is only concerned with patient safety after an adverse event has occurred			
4	There are tips to prevent infection			
5	Safety and security systems and procedures are periodically and comprehensively evaluated in the hospital			
6	There is a clear guide to dealing with medical devices and equipment to avoid the expected dangers			
7	There are forms for documenting medical events			

Section Two: Risk Management

It is a matrix (matrix scale) and it consists of three axes (physical risks, biological risks, risks specific to employees). Each question contains two options: Yes - No. If your answer is yes, this means that there is no danger in your workplace neither to the employee nor to the patient.

But if the answer is (no), then this means that there is a risk and requires you to describe the possibility and severity of the risk.

I would like you to use the description below, which shows the risks, when filling out the questionnaire

Section Two: Risk Management		**Code**
Yes		**5**
Very little	**No injuries**	**4**
Minor	**First aid treatment**	**3**
Medium	**Needs medical treatment**	**2**
Major	**Severe injuries or fractures**	**1**
Disastrous	**death or permanent disability**	**0**

No.	**Question**	**Yes (5)**	**If the answer is no**				
1	**Management of Physical Hazards**		**Degree of Hazard**				
			Very little (4)	**Minor (3)**	**Medium (2)**	**Major (1)**	**Disastrous (0)**
1	The floors of the department are made of a rough material that prevents slipping						
2	Entrances, exits and floors are in safe condition and have no fractures						
3	Hospital facilities take care of people with special needs						
4	Signs are placed if the floors are wet						
5	There are handrails on both sides of the wall and on the						

	stairs						
6	Toilets are good for the elderly						
7	The temperature is right and the air conditioning is working						
8	Medical devices are checked daily						
9	There are measures taken to reduce pollution (energy generators)						
10	Beds for elderly patients are equipped with bars to prevent falls and are of appropriate height						
11	There is a fire alarm						

No.	**Question**	**Yes (5)**	**If the answer is no**				
1	**Management of Biological Hazards**		**Degree of Hazard**				
			Very little (4)	**Minor (3)**	**Medium (2)**	**Major (1)**	**Disastrous (0)**
1	Protective and safety equipment to prevent infection is available (gloves and masks…….						
2	Sharp waste boxes such as needles and scalpels are available in the departments						
3	The examination devices are sterilized daily in the morning and after each						

	use						
4	Disinfectants are used to sanitize hands						
5	Wash hands before and after touching the patient						
6	Medical waste is disposed of in its proper place						
7	Take vaccinations against infectious diseases and epidemics, especially when the disease spreads						
8	Wear hand gloves every time you come into contact with the patient						
9	Insects and pests are controlled to prevent the spread of infection						
10	A periodic examination of samples of detergents and disinfectants is carried out within the hospital departments						
11	The design of the place is appropriate to prevent the transmission of infection						
12	There is an isolation room for infectious diseases						
13	There is an appropriate distance between patients' beds to ensure patient privacy and non-contagion						
14	Biohazard containers are marked						

No.	Question	Yes (5)	If the answer is no				
1	**Management of Personnel risks**		**Degree of Hazard**				
			Very little (4)	**Minor (3)**	**Medium (2)**	**Major (1)**	**Disastrous (0)**
1	There are clearly written policies and procedures in your department about work mechanisms						
2	Before giving the treatment to the patient, the drug and the dose are clearly confirmed (actual patient - correct drug - correct dose - correct method)						
3	The identity of the patient is confirmed before starting the treatment procedures						
4	the patient wears identification bracelets						
5	Take a break after every shift						
6	The number of crew is suitable for the workload						
7	Periodic medical examination of employees						

5	Committed to wearing occupational safety equipment while working						
6	You are obligated to wear a white coat and identification card while working						
10	The medicines and consumables and their expiry dates are monitored periodically						
11	Recording cases of medical errors						
12	The name of the drug and the method of use are clear and known to the staff						
13	Emergency vehicles are equipped and monitored periodically						

Thank you

Annex (2): Questionnaire

بسم الله الرحمن الرحيم

استبـــانه

الموظف المحترم / أود أن أعلم سيادتكم أنه قد تم اختيارك للاشتراك في الدراسة البحثية للباحثة/ **لينا عبد الكريم نجم** بعنوان: "إجراءات السلامة والمخاطر في مستشفيات العيون الحكومية".

كجزء من متطلب برنامج ماجستير الجودة وسلامة المرضى – جامعة القدس أبو ديس.

تهدف هذه الدراسة إلى تقييم مستوى إجراءات السلامة وإدارة المخاطر في مستشفى العيون الحكومي والأوروبي

أقدر لكم عالياً مشاركتكم في تعبئة هذه الاستبانه ونذكركم بأن جميع البيانات التي سيتم الحصول عليها هى خاصة بالبحث العلمي فقط وستكون في سرية تامة ومشاركتكم في هذا البحث مهمة

لذا أرجو من سيادتكم تعبئة هذه الاستبانه بأمانة وموضوعية لتحقيق الفائدة المرجوة بما يخدم موضوع الصحة والسلامة المهنية مع العلم هذه الاستبانه ستستغرق 10–15 دقيقة لاستكمالها

توقيع بالموافقة بالمشاركة .....

التاريخ .....

الباحثة

الصيدلانية/ لينا عبد الكريم نجم

الجنس	□ ذكر	□ أنثى			
المستشفى	مستشفى العيون الحكومي□		مستشفى الأوروبي□		
العمر	.....				
الدرجة العلمية	□ دبلوم	□ بكالوريوس	□ بورد	□ ماجيستير	□ دكتوراه
سنوات الخبرة	.....				
القسم الذي تعمل به	□ أقسام المبيت	□ الليزر	□ العيادة الخارجية	□ العمليات	□ الرعاية اليومية
	□ التخدير	□ البصريات	□ الصيدلية	□ الشئون الادارية	
بحكم وظيفتك هل تتعامل مباشرة مع المرضى؟		□ نعم	□ لا		
كم ساعة تعمل أسبوعيا	□35- أقل من 40 ساعه	□40- أقل من 60 ساعة	□60-80 ساعة	□≤ 80 ساعه	
الفئة	أطباء	تخدير	أخصائي بصريات	صيادلة	
	جراحين □ غير جراحين □	أطباء □ فنيين □	□	□	
	تمريض	اداريين			
	□	□			

الجزء الأول: البيانات الشخصية: الرجاء وضع اشاره(√) امام الخيار المناسب:

الجزء الثاني: قياس إدارة المخاطر وتدابير السلامة في المستشفى التي تعمل بها (العيون الحكومي، غزة الأوروبي) وهذا الجزء يتكون من قسمين:

القسم الأول: تدابير السلامة

القسم الأول: قياس تدابير السلامة في مستشفاك ويتكون من 9محاور (تواتر الإبلاغ عن الحدث, , التغذية الراجعة, التواصل, التوظيف, دعم إدارة المستشفى, العمل الجماعي عبر الوحدات, عمليات التسليم و الانتقالات, التدريب, ترتيبات السلامة لدى المستشفى).

نود من سيادتكم الإجابة على بعض الأسئلة التي تبرز تدابير السلامة داخل مستشفاك

الرجاء وضع علامة (√) امام الخيار المناسب:

	القسم الأول: تدابير السلامة					
1	**- تواتر الإبلاغ عن الاحداث الطبية**	**موافق بشده (5)**	**موافق (4)**	**محايد (3)**	**غير موافق (2)**	**غير موافق بشده (1)**
1	-عند حدوث خطأ، يتم الإبلاغ وتوثيق الحدث الطبي					
2	– لا يتم التضحية بسلامة المرضى لإنجاز المزيد من العمل.					
3	-هناك تقارير بالحوادث التي حدثت بقسمك					
4	– عندما يتم الابلاغ عن حدث ما ويبدو انه يتم توثيق المشكلة وليس الشخص					
5	– يشعر الموظفون بالثقة أن الأخطاء التي يرتكبونها لا تحفظ في ملفاتهم					
6	– يتم توثيق الأخطاء بغرض التقييم والاستدراك والتحسين وليس لأجل التصيد والعقاب					
2	**التغذية الراجعة**	**موافق بشده (5)**	**موافق (4)**	**محايد (3)**	**غير موافق (2)**	**غير موافق بشده (1)**

1	– الأخطاء أدت هنا إلى تغييرات إيجابية.					
2	– يتم الاستفادة من الأخطاء بأخذ العبرة لتحسين وتجويد العمل.					
3	– بعد إجراء تغييرات لتحسين سلامة المرضى، نقوم بتقييم فعاليتها.					
3	**التواصل**	**موافق بشده (5)**	**موافق (4)**	**محايد (3)**	**غير موافق (2)**	**غير موافق بشده (1)**
1	– سيتحدث الموظفون بحرية إذا رأوا شيئًا قد يؤثر سلبًا على رعاية المرضى					
2	– الموظفين على ثقه بقرارات او أفعال من لديهم سلطه اكبر					
3	– يخشى الموظفون طرح الأسئلة عندما لا يبدو الأمر على ما يرام.					
4	– يتم تزويدنا بتغذية راجعة حول التغييرات التي تم إجراؤها بناءً على تقارير الأحداث.					
5	– يتم إبلاغنا بالأخطاء التي تحدث.					
6	– نناقش طرق منع حدوث الأخطاء.					
7	– يتم عقد ورش عمل لتدارس الاخطاء بغرض تجنبها أو التخفيف منها.					
4	**التوظيف**	**موافق بشده (5)**	**موافق (4)**	**محايد (3)**	**غير موافق (2)**	**غير موافق بشده (1)**
1	– لدينا عدد كافٍ من الموظفين للتعامل مع عبء العمل.					
2	– يعمل الموظفون في هذه الوحدة لساعات أطول مما يجب لتحقيق ما هو أفضل لرعاية المرضى.					
3	– نحن نستخدم بطالة(موظفين مؤقتين) أكثر لتحقيق ما هو أفضل لرعاية المرضى.					

4	– نحن نعمل في "وضع الأزمة"، نحاول أن نفعل الكثير وبسرعة كبيرة					
5	دعم ادارة المستشفى					
1	– يتم التواصل مع العاملين لتحديد الصعوبات التي تواجههم					
2	– اتلقى كلمات التعزيز من مشرفي /مديري عندما يرى ان العمل قد تم إنجازه.					
3	– يتم التأكد من وجود اجهزة طفاء الحريق وصلاحيتها					
4	– ينظر مشرفي / مديري بجدية في اقتراحات الموظفين للتحسين					
5	– يتابع مشرفي عملي عن كثب ويقوم بتوجيهي في عملي بصورة مستمرة					
6	– عندما يتراكم الضغط، يطلب مشرفي/ مديري أن نعمل بشكل أسرع، حتى لو كان ذلك على حساب سلامه المريض					
7	– يتغاضى مشرفي/مديري عن مشاكل سلامه المرضى التي تحدث مرارا و تكرارا					
6	**العمل الجماعي عبر وحدات المستشفى**	**موافق بشده (5)**	**موافق (4)**	**محايد (3)**	**غير موافق (2)**	**غير موافق بشده (1)**
1	– هناك تعاون جيد بين وحدات المستشفى التي تحتاج إلى العمل معًا.					
2	– تعمل وحدات المستشفى بشكل جيد معًا لتقديم أفضل رعاية للمرضى.					
3	– تنسق وحدات المستشفى مع بعضها البعض بشكل جيد					
4	– غالبًا ما يكون العمل مع موظفين من وحدات المستشفى الأخرى أمرًا					

	مقبولا ومستوعبا.					
7	**عمليات التسليم والانتقالات**	**موافق بشده (5)**	**موافق (4)**	**محايد (3)**	**غير موافق (2)**	**غير موافق بشده (1)**
1	– قد تحدث أشياء خاطئة ولكن يتم التغاضي عنها عند نقل المرضى من وحدة إلى أخرى					
2	– غالبًا ما تُفقد معلومات رعاية المريض المهمة أثناء تغيير المناوبات.					
3	– غالبًا ما تحدث مشكلات في تبادل المعلومات عبر وحدات المستشفى.					
4	– تغييرات التحول (تغيير الشفتات) هي مشكلة بالنسبة للمرضى.					

الرجاء وضع علامة (√) امام الخيار المناسب:

8	**التدريب**	**نعم (1)**	**لا (0)**
1	– تلقيت دورات تدريبيه للتعامل مع نقل وحمل المريض		
2	– تلقيت دورات تدريبه مناسبه في كيفية تشغيل جهاز الصدمات الكهربائية		
3	– تلقيت تدريبا عن الإنعاش		
4	– تلقيت تدريب وتمتلك معلوماتك عن كيفية استخدام طفاية الحريق في مكان عملك		
5	– تلقيت تدريب على الاحداث الطبية (الاخطاء)التي يجب ان توثق		

9	ترتيبات السلامة في المستشفى	نعم (1)	لا (0)	بشكل جزئي (0.5)
1	– هناك سياسات واجراءات مكتوبه وواضحة عن السلامة المهنية داخل المستشفى			
2	–هناك إجراءات من إدارة المستشفى للتأكد من توافر اجهزة السلامة			
3	– إدارة المستشفى مهتمة بسلامة المرضى فقط بعد وقوع حدث سلبي			
4	– هناك ارشادات لمنع حدوث العدوى			
5	– يتم تقييم انظمه واجراءات الامن والسلامة بشكل دوري وشامل في المستشفى			
6	– يوجد دليل واضح للتعامل مع الاجهزة والمعدات الطبية لتفادى الاخطار المتوقعة			
7	– يوجد نماذج لتوثيق الاحداث الطبية			

القسم الثاني: إدارة المخاطر

القسم الثانى:

عبارة عن مصفوفه (matrix scale) و يتكون من ثلاث محاور(مخاطر فيزيائية, مخاطر بيولوجية , مخاطر خاصه بالعاملين) يحتوى كل سؤال على خيارين نعم – لا فاذا كانت اجابتك بنعم فهذا يعنى عدم وجود خطورة بمكان عملك (سواء للموظف او المريض)

اما اذا كانت الإجابة (لا) فهذا يعنى ان هناك خطورة و يتطلب منك وصف احتماليه و شده الخطر

ارجو من سيادتكم استخدام الوصف ادناه الذى يوضح الخطورة عند تعبئه الاستبانة

كارثي	**موت او اعاقه دائمه**
رئيسي	**إصابات شديده او كسور**
متوسط	**يحتاج علاج طبى**
بسيط	**علاج بالإسعافات الأولية**
ضئيل	**لا إصابات**

م	**السؤال**	**نعم (5)**	**إذا كانت الإجابة لا**				
1	**إدارة المخاطر الفيزيائية**		**شده الخطورة**				
			ضئيل (4)	**بسيط (3)**	**متوسط (2)**	**رئيسي (1)**	**كارثي (0)**
1	ارضيات القسم مصنوعة من ماده تمنع الانزلاق						
2	المداخل والمخارج في حاله آمنه ولا يوجد بها كسور						
3	مرافق المستشفى تراعي ذوي الاحتياجات الخاصة						
4	توضع إشارات إذا كانت الارضيات مبلله						
5	توجد درابزينات على جانبي الحائط وعلى الدرج						
6	دورات المياه مجهزه لكبار السن						
7	درجه الحرارة مناسبه ويوجد تكييف يعمل						

8	يتم فحص دوري للأجهزة الطبية بقسمك							
9	أسرة المرضى كبار سن مزوده بقضبان لمنع السقوط كما ان ارتفاعها مناسب							
10	يوجد طفايات حريق تعمل بشكل سليم							
11	يوجد نظام انذار مبكر للمستشفى للتنبيه في حالات وجود الخطر							

م	**السؤال**	**نعم (5)**	**إذا كانت الإجابة لا**				
1	**إدارة المخاطر البيولوجية**		**شده الخطورة**				
			ضئيل (4)	**بسيط (3)**	**متوسط (2)**	**رئيسي (1)**	**كارثي (0)**
1	معدات الوقاية والسلامة لمنع العدوى متوفرة (القفازات وكمامات.....						
2	صندوق المخلفات الحادة مثل الابر والمشارط متوفرةبالأقسام						
3	يتم تعقيم أجهزة الفحص يوميا صباحا وبعد كل استخدام						
4	تستخدم المطهرات لتعقيم الأيدي						
5	تغسل الأيدي عاده قبل وبعد ملامسه المريض						
6	يتم التخلص من النفايات الطبية بمكانها الصحيح						
7	تأخذ التطعيمات ضد الامراض المعدية والأوبئة خصوصا عند انتشار المرض						
8	ترتدى قفازات اليدين عند كل مرة تتعامل فيها مع المريض						

9	يتم مكافحه الحشرات والآفات لمنع انتشار العدوى							
101	يتم عمل فحص دوري لعينات المنظفات والمطهرات داخل اقسام المستشفى							
11	تصميم المكان ملائم لمنع انتقال العدوى							
12	هناك غرفه عزل للأمراضالمعدية							
13	هناك مسافة مناسبه بين اسرة المرضى تضمن خصوصيه المريض وعدم انتقال العدوى							
14	يتم وضع علامة خطر بيولوجي على حاويات المواد البيولوجية							

م	**السؤال**	**نعم (5)**	**إذا كانت الإجابة لا**				
1	**إدارة مخاطر متعلقة بالعاملين**		**شده الخطورة**				
			ضئيل (4)	**بسيط (3)**	**متوسط (2)**	**رئيسي (1)**	**كارثي (0)**
1	توجد سياسات وإجراءات مكتوبه بقسمك حول اليات العمل وبشكل واضح						
2	قبل إعطاء العلاج للمريض يتم التأكد من الدواء والجرعة بشكل واضح (المريض الفعلي –الدواء الصحيح –الجرعةالصحيحة– الطريقةالصحيحة)						
3	يتم التأكد من هويه المريض قبل البدء بإجراءات العلاج						
4	يرتدى المريض اساور تعريفيه						
5	تأخذ قسط من الراحة بعد كل مناوبة عمل						
6	عدد الطاقم مناسب لحجم العمل						

7	يتم الفحص الطبي الدوري للعاملين						
8	تلتزم بارتداء معدات السلامة المهنية اثناء العمل						
9	تلتزم بارتداء المعطف الأبيض والبطاقة التعريفية اثناء دوامك						
10	يتم متابعه الأدوية والمستهلكات وتواريخ صلاحيتها بصفه دوريه						
11	تسجل حالات الأخطاء الطبية						
12	اسم الدواء وطريقه استخدام واضحة ومعروفه لدى الطاقم						
13	عربات الطواري مجهزة ويتم متابعتها دوريا						

شكرا لتعاونكم معنا

Annex (3): Approvals

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: 06/06/2022 **Number:** PHRC/HC/1137/22

Name: Leena Abed Elkarim Ali Nijim 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:

Safety Measures And Risk Management In Ophthalmic Governmental Hospitals In Gaza Strip

The committee has decided to approve the above mentioned research. Approval number PHRC/HC/1137/22 in its meeting on 06/06/2022

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

State of Palestine
Ministry of health

دولة فلسطين
وزارة الصحة

السيد : جهاد عبدالقادر عكاشه المحترم

التاريخ:04/09/2022

رقم المراسلة 1047597

مدير دائرة /الإدارة العامة للوحدات الإدارية المساعدة /وزارة الصحة

السلام عليكم ,,,

الموضوع/ تسهيل مهمة الباحثة لينا عبد الكريم قنديل

التفاصيل // السلام عليكم نهديكم أطيب التحيات ونود منكم تسهيل مهمة الباحث/ة لينا عبد الكريم علي قنديل الملتحق/ة ببرنامج ماجستير الإدارة الصحية – جامعة القدس أبو ديس في اجراء بحث بعنوان: Safety Measures and Risk Management in the Ophthalmic Governmental Hospitals of the Gaza Strip? حيث الباحث/ة بحاجة لتعبئة استبانة من عدد من العاملين في مرافق وزارة الصحة (المستشفيات التي بها قسم للعيون) واجراء مقابلة مع ذوي المناصب الاشرافية ، دون اجراء أي تدخل طبي او سحب عينات دم ، نأمل توجيهاتكم لذوى الاختصاص بضرورة الحصول على الموافقة المستنيرة من المشاركين ، بما لا يتعارض مع مصلحة العمل وضمن أخلاقيات البحث العلمي، ودون تحمل الوزارة أي أعباء أو مسئولية وتفضلوا بقبول التحية والتقدير

ملاحظات / تسهيل المهمة الخاص بالدراسة أعلاه صالح لمدة 3 أشهر من تاريخه. يرجى التأكد من توافق الاستبانة المرفقة والتي يتم تعبئتها ميدانيا على ان لا يتم أي إضافة او تعديل على الاستبانة المرفقة كذلك يجب الالتزام بالأسئلة المرفقة أثناء المقابلات

علي حسن البلبيسى
حكيم جامعي

المرفقات

- focus group Lena Nijim-Qandeel.docx
- أدوات البحث لينا عبد الكريم قنديل.pdf

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Annex (4): Control panel

NO.	Name	Working setting
1	Dr. Bassam Abu Hammed	Al-Quds University
2	Dr. Yehia Abed	Al-Quds University
3	Dr. Nezam Elashqar	Islamic University of Gaza
4	DR. Rami Abdallah	Patient safety and infection control manger Ministry of health
5	Dr. Hussam Dawood	Medical manger ophthalmic hospital
6	Pharmacist Rania Elqoqa	Patient safety officer ophthalmic hospital
7	Mohamed Moshtaha	Quality manger ophthalmic hospital

Annex (5): Key informants' questions

Key informant name	position
Date	duration

1) The hospital has safety and risk management policies and procedures?

……

……

2) Sufficient programs and plans are available and ready to respond to risks

in the hospital?

……

……

3) The hospital has alternative plans in case of emergencies?

……..

……

4) There is a clear methodology for identifying risks according to indicators determined by the world Health Organization (WHO)?

…….

……

5) There is a trained staff of hospital worker who determine the risk and the required safety measures?

……

……..

6) The hospital administration identifies the strength and weaknesses it faces?

……...

……

7) Safety and risk procedures are determined periodically in the hospital?

……..

……

8) The administration draws lessons from previous event?

……..

……..

9) There is a special protocol for how to respond to various risks and events?

……..

……

10) There is plan to train the staff regarding safety procedures and risks?

……

……..

11) There is honesty and transparency with patients and their families when there is a medical error or adverse event?

…….

……..

12) The hospital provides the Ministry with quarterly and annual reports on patient procedures and risk management?

……..

……..

13) The hospital has documented and written reports and files on safety procedures and risk management?

…….

……..

14)We actively encourage communication and collaboration between quality management, risk management and patient safety?

…….

…….

Thanks for cooperation

عنوان الدراسة: "إجراءات السلامة والمخاطر في مستشفيات العيون الحكومية".

الطالبة: لينا عبد الكريم نجم

إشراف: د. أشرف الجدي

ملخص الدراسة:

تعد تدابير السلامة وإدارة المخاطر أمرًا أساسيًا في مستشفيات العيون لضمان حصول المرضى على أعلى مستوى من الرعاية. تساعد إدارة المخاطر السليمة على تقليل فرص الأخطاء الطبية والحوادث التي يمكن أن تؤدي إلى إصابات خطيرة أو وفاة. كما أنها تساعد في حماية المستشفى من المسؤولية المحتملة. تتضمن إدارة المخاطر في مستشفيات العيون تحديد وتقييم وإدارة المخاطر التي يمكن أن تؤثر بشكل محتمل على سلامة وجودة الرعاية المقدمة.

الهدف: تقييم تدابير السلامة وإدارة المخاطر في المستشفيات العيون الحكومية في قطاع غزة.

الطرق: تم استخدام تصاميم وصفية تحليلية وعبرية. شملت مجموعة الدراسة جميع العاملين في المستشفيات العيون **الحكومية** بما في ذلك الأخصائيون والمقيمون والممرضون وأطباء التخدير وفنيو التخدير والمسؤولين. أكمل حوالي 86٪ (185/160) من المستجيبين الاستبيان بشكل صحيح. تم ضمان صحة وموثوقية الاستبيان؛ كرو نباخ ألفا يساوي 0.954 للاستبيان بأكمله. تم إجراء تحليل البيانات باستخدام برنامج (SPSS) الإصدار 25.

النتيجة: كان مجموع درجات مستويات التدابير الأمنية منخفضًا (44.2٪). كان المتوسط لمجال التدريب منخفضًا (39.0٪) في حين كان المتوسط لمجال ترتيبات سلامة المستشفى معتدلًا (66.0٪). كان مجموع درجات مستويات إدارة المخاطر عاليًا (81.40٪) وتم تصنيف مجال إدارة المخاطر كما يلي: إدارة المخاطر البيولوجية (84.30٪)، إدارة مخاطر الأفراد (80٪)، وإدارة المخاطر الفيزيائية (79.40٪). أظهرت النتائج وجود علاقة إيجابية ومعنوية بين التدابير الأمنية وإدارة المخاطر .(P <0.05) أخيرًا، أظهرت النتائج عدم وجود فرق إحصائي في متوسط مستويات التدابير الأمنية وإدارة المخاطر فيما يتعلق بالبيانات الديموغرافية .(P> 0.05) أظهرت النتائج أيضًا وجود علاقة إيجابية ومعنوية بين التدابير الأمنية وإدارة المخاطر .(P <0.05) بناءً على النتائج التي تم الحصول عليها من المقابلات مع الأشخاص الذين يمتلكون معلومات مهمة، فإن العيادات الحكومية في غزة تواجه مشكلات في مجالات السلامة وإدارة المخاطر بسبب عدم وجود سياسات وإجراءات كاملة، وعدم الشفافية، وعدم إبلاغ الحوادث الطبية بشكل كامل. تعمل وزارة الصحة على إعداد دليل السلامة ولجان متخصصة للتحقق من الأحداث الطبية لتعزيز إجراءات السلامة و إدارة المخاطر.

الاستنتاج: تشير النتائج إلى أن مستوى السلامة العام كان منخفضًا، خاصة في مجال التدريب، ولكنه كان معتدلًا في مجال ترتيبات سلامة المستشفى. ومن ناحية أخرى، كان مستوى إدارة المخاطر عاليًا، حيث ترتيب إدارة المخاطر البيولوجية هو الأعلى. كما وجدت الدراسة وجود علاقة إيجابية بين تدابير السلامة وإدارة المخاطر، لاستنادًا إلى هذه النتائج، توصي الدراسة بأن تركز المستشفيات على تحسين تدريب تدابير السلامة و إدارة المخاطر الفيزيائية لضمان سلامة الموظفين والمرضى. تسلط الدراسة الضوء على أهمية إدارة المخاطر الفعالة في مستشفيات العيون الحكومية . تواجه مستشفيات الحكومية العيون غزة مشاكل في مجال السلامة وإدارة المخاطر التي تتطلب وضع سياسات وتعزيز الشفافية والتقارير الطبية الكاملة. وزارة الصحة تتخذ خطوات للتعامل مع هذه المسائل.