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**Patient Experiences of Undesirable Safety Events during
Hospital Care: A Study in the Palestinian Medical Complex,
Ramallah**

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Hospital Care: A Study in the Palestinian Medical Complex,
Ramallah**

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Thesis Approval

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Care: A Study in the Palestinian Medical Complex, Ramallah**

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Declaration

I certify that this thesis submitted for a master's degree is the result of my own research, except where acknowledged otherwise, and that this thesis –or any part of the same material- has not been submitted for a higher degree to any other university or institution.

Signature:

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Date: July 04, 2015

Dedication

To My Dear Husband, Alaa Rashed Hattab ...

Acknowledgment

To my mother ...

To my supervisor Dr. Motasem Hamdan ...

To all of you who supported and encouraged me

Thank you.

Abstract

Background: Some patients are subjected to undesirable safety events during hospitalization and their health may be negatively affected by the health care received. The consequences can be permanent injury, an increased length of stay (LOS) in hospital, and in some cases even death. As health systems become more complex and interrelated, the focus on patient safety has intensified. Wide-ranging efforts have been devoted to evaluating the harm incurred by patients and to learning from errors, but data about health care problems reported solely from the perspective of professionals engaged in this field is insufficient. Therefore, this study addresses patient-centered data that take into account the patient's experience of undesirable safety events within three main categories: medical complications, health care process problems and communication problems.

Aim: To investigate patient experience of undesirable safety events and to evaluate the extent and nature of harm occurring during hospitalization.

Methods: The survey design was a quantitative, descriptive cross-sectional survey. Existing updates to the Picker survey tool were reviewed, translated and adapted to the Palestinian context, and validated by an expert committee in the area of patient safety. Chronbach's alpha test was conducted to test the reliability of the survey categories and items and showed an overall acceptable internal consistency (0.778). The study was carried out in the Palestinian Medical Complex in Ramallah. The study sample consisted of adult medical and surgical patients who had already spent at least four days in hospital.

Findings: The survey was conducted on a total of 98 patients, of whom fifty percent were females and fifty percent were males, with a mean age of 57 years. Of those surveyed, 46.9%

were over 60 years of age; 58.2% were medical patients; and 41.8% were surgical patients. The mean length of stay was seven days.

Patients reported a total of 851 undesirable events (an average of 8.68 events per person). Patients reported 168 medical complications (20%), 187 health care process problems (22%), and 496 communication problems (the highest event rate with 58%). About 43% of the patients rated the undesirable safety events they had faced as high risk, and 20.4% of patients indicated that they had had serious concerns about experiencing a medical error in their care prior to being admitted to hospital.

The results showed that patients with poor and very poor health were more exposed to experience undesirable safety events ($P = 0.015$). Also, surgical patients reported more problems in the care process than medical patients ($P = 0.047$). Participants who had experienced health care process problems rated their experience of undesirable events as posing a high degree of risk ($P < 0.001$). Finally, communication problems between patients and health professionals have a very detrimental effect on patient health ($P < 0.001$).

Conclusions: The overall level of undesirable events was high compared with international experience. Patients with poor and very poor health, and surgical patients, reported such events more frequently. Interventions aimed at reducing harm, including improvements in the quality of care and patient engagement in safety initiatives, need to be developed to enhance patient safety.

تجارب المرضى للأحداث غير المرغوب فيها أثناء إقامتهم في المستشفى: دراسة في مجمع فلسطين الطبي - رام الله

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ملخص الدراسة

مقدمة: يتعرض المرضى أثناء إقامتهم في المستشفى لأحداث غير مرغوب فيها تؤدي لإصابة أعداد كبيرة منهم للأذى قد ينتج عنها إصابات دائمة أو إطالة فترة المكوث في المستشفى أو حتى في بعض الحالات قد يتعرض المريض للوفاه. ومع تعقيد الأنظمة الصحية وتداخلها تم تكثيف التركيز على سلامة المرضى و بذل جهود واسعة النطاق لتقييم الأضرار التي يتكبدها المرضى والتعلم من الأخطاء. لكن جمع المعلومات عن الأخطاء في مجال الرعاية الصحية من وجهة نظر المهنيين العاملين في هذا المجال غير كاف. لذلك تتناول هذه الدراسة بيانات المرضى التي تركز على أن تأخذ في الاعتبار تجربة المريض للأحداث غير المرغوب فيها ضمن ثلاث فئات رئيسية: المضاعفات الطبية والأخطاء الاجرائية ومشاكل الاتصال والتواصل مع المريض

الهدف: هذه الدراسة تهدف الى اكتشاف تجارب المرضى حول الأحداث غير المرغوب فيها التي تتعلق بسلامتهم، وقياس طبيعة ومدى الأذى الذي يتعرضون له خلال تلقيهم للخدمات الطبية في المستشفيات.

منهجية البحث: استخدم الاسلوب المقطعي الوصفي لاجراء الدراسة. حيث تمت مراجعة كل التطويرات على الاداة التي استخدمها بيكر في قياس تجارب المرضى، وتمت ترجمة النسخة الانجليزية من الاستبيان الى اللغة العربية وتم تحكيمة من قبل لجنة مختصة في مجال سلامة المرضى وتمت ملائمتها ليتناسب مع السياق في فلسطين، وتم عمل اختبار قوة الارتباط الداخلي لعناصر الاداة التي كانت نتيجتها مقبولة 0.778 ، تم تنفيذ الدراسة في مجمع فلسطين الطبي- رام الله ، وشملت عينة الدراسة المرضى البالغين من قسми الباطني والجراحه الذين امضوا اكثر من اربع ايام في المستشفى.

النتائج: اشترك في الدراسة ما مجموعه 98 مريضاً، من بينهم خمسين في المئة من الإناث و خمسين في المئة من الذكور، مع متوسط عمر 57 عاماً. 46.9% من الذين شملهم الاستطلاع كانت أعمارهم أكثر من 60 عاماً، و 58.2% من المرضى من قسم الباطني، و 41.8% من المرضى من قسم الجراحه، مع متوسط مدة إقامة في المستشفى سبعة أيام.

أظهرت النتائج ان مجموع الأحداث غير المرغوب فيها التي تعرض لها المرضى المشاركين تساوي 851 حدث ، بنسبه 8.68 حدث لكل مريض، حيث كانت موزعه 168 مضاعفات علاجية 20%، كذلك 187 احداث اجرائية 22%، و 496 مشكلة اتصال و تواصل مع المريض وهو اعلى نسبه 58% . بالاضافه الى ان 41.8% من المرضى قيموا وضعهم الصحي بأنه سيئ.

وايضا 42.9% من المرضى وصفوا الاحداث غير المرغوب فيها التي تعرضوا لها بأنها شديدة الخطورة ، وان 20.4% من المرضى كان لديهم قلق التعرض لخطا طبي قبل قدومهم للمستشفى. واطهرت النتائج ان هناك علاقة ذات دلالة احصائية تربط بين سوء الوضع الصحي للمريض واحتمالية تعرضه للأحداث السلبية ، حيث انه كلما زاد وضعه الصحي سوءا تزيد احتمالية التعرض للاحداث غير المرغوب فيها.

أظهرت النتائج أن المرضى الذين يعانون من حالة صحية سيئة وسيئة جدا هم اكثر عرضة من غيرهم لتجربة الأحداث غير المرغوب فيها ($p = 0.015$). أظهرت النتائج ايضا وجود علاقة ذات دلالة احصائية توضح ان مرضى قسم الجراحه هم الأكثر عرضة من مرضى قسم الباطني للتعرض للمشاكل الاجرائية اثناء تلقيهم للعلاج في المستشفى ($p = 0.047$). وبالتالي اوضحت النتائج ايضا وجود علاقة ذات دلالة احصائية تربط بين المرضى الذين يتعرضون لمشاكل اجرائية وبين وصفهم لهذه الاحداث التي تعرضوا لها بأنها كانت شديدة الخطورة ($p = 0.001$). ووضحت النتائج أن الاتصال والتواصل مع المريض له تأثير ذا دلالة احصائية على صحة المريض ($p = 0.001$).

الخلاصة: خلصت هذه الدراسة الى ان المستوى العام للأحداث غير المرغوب فيها يعتبر عالي بالنسبة للتجارب العالمية ، وان المرضى الذين هم بحاله صحية سيئة او سيئة جدا ، ومرضى الجراحه هم الاكثر عرضه لمثل هذه الأحداث، كما اكدت الدراسة على ضرورة تحسين التدخلات الهادفه للحد من الاذى مثل تشجيع تحسين الجودة ومشاركة المرضى في مبادرات السلامة من أجل تحسين سلامة المرضى.

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List of Abbreviations

BA	Bachelor's degree
CDC	Center for Disease Control and Prevention
HCL	Health Care-associated Infection
ICU	Intensive Care Unit
IOM	Institute of Medicine
LOS	Length of stay
MOH	Ministry of Health
NHS	National Health System
PMC	Palestinian Medical Complex
PU _s	Pressure ulcers
SPSS	Statistical Package for the Social Sciences
UK	United Kingdom
US	United States of America
WHO	World Health Organization

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Chapter One

Introduction

1.1 Introduction

The foundations upon which health care providers base all care is the Hippocratic medical oath: “Never do harm to anyone”. Doctors and nurses are dedicated to achieving the noble goals of protecting patient well-being and providing the best treatment possible.

Unfortunately, the harsh reality is that errors do occur and patients do suffer harm as a result. The reduction of medical errors and optimal health care safety is an issue of international concern, especially in light of the report by the Institute of Medicine that around 98,000 deaths due to medical errors could be prevented each year in US hospitals (IOM, 1999). As efforts to ensure patient safety have escalated globally, a basic tenet of health care provision has become the reduction of medical errors as a basic human right. In 2002, World Health Organization (WHO) member states endorsed a World Health Assembly resolution on patient safety: “A world in which patients are treated as partners in efforts to prevent all avoidable harm in health care, calls for honesty, openness and transparency”.

The management of patient safety should start with an assessment of the level of harm and conclude with strategies to ensure patient safety. However, plans to improve and manage safety in medical care often ignore the patient’s perspective, which ought to be a key component of any quality improvement strategy. Patients may experience considerable physical or psychological trauma, both as a result of an adverse outcome or from the manner in which the incident is addressed (Vincent, 2002). In 2011 the Palestinian Ministry of Health (MOH) introduced quality as a priority in government hospitals based on the Palestinian National Health Strategy report (MOH, 2010). Next the Palestine Medical Complex (PMC) in Ramallah adopted the WHO initiative of patient-friendly hospitals to improve access to good quality and safe health services.

Unfortunately, hospitals and health policy makers in Palestine still lack evidence and baseline patient safety data necessary to generate views and policies designed to improve patient safety.

This study concentrates on investigating the patient experience of undesirable safety events (medical errors and adverse events) since the provision of a 'good experience' of care for patients is a central goal of the Palestinian health system.

1.2 Problem Statement and Justification

Undesirable events that occur during health care are the focus of increasing attention in the international medical world. So far, the focus has been on medical errors and complications, problems in the medical process itself, and communication problems, with most existing information based on a review of medical records and on reports of incidents by health care staff: "Both sources of information have strengths, but also weaknesses because many events may be under-recorded" (Agoritsas, 2005).

An investigation into the patient experience of undesirable safety events in hospitals will enable us to evaluate the extent and nature of harm sustained by patients in Palestinian hospitals. It will encourage the role of the patient in monitoring and identifying adverse events and taking appropriate action. The psychological impact and physical stress on patients of the ever-present threat of medical error must also be taken into consideration as patients are the most important partners in health care (Bognar, 2009).

The need for this type of research was identified by the Palestinian MOH in its national health strategy, which stated: "Ensuring the quality of services and the right to appropriate and safe health services for individuals will contribute to realizing the right to health for all" (MOH, 2010). Therefore, engaging hospitalized patients as partners in identifying medical errors and injuries is a potentially promising strategy towards enhancing patient safety. It may prove the

theory that patients are able to identify adverse events affecting their care, even if the events are not captured by the hospital incident reporting system or recorded in the medical record (David & Schwappach, 2011).

Despite a growing body of studies exploring safety issues from the perspectives of health care professionals or from hospital records, the researcher knows of no published research that explores the patient's perspective of safety in Palestinian hospitals.

1.3 Significance of the Study

Patient safety is a serious global public health issue. In recent years, countries have increasingly recognized the importance of improving patient safety. But the most remarkable feature of the many existing health systems is surely the lack of attention paid to the patient.

Safety is addressed and discussed from many different aspects and resources (professionals, records, management). Yet the one source of experience and expertise that remains largely ignored is that of the patient's own perception of their care, especially in the hospital setting (Ashish, 2008).

In one study, 11% of patients were identified as experiencing at least one adverse event on the basis of a record review, but when subjected to an interview, 23% of patients identified at least one event. Thus, agreement between the record review and interview was poor (Weissman, 2008). In another study, only 55% of the adverse events detected by interview were documented in the medical records and none had been recorded in the critical incident reporting system (Weingart, 2005).

Information from patients regarding safety related events and perceptions of safety acts as a supplement to other methods of safety monitoring and could be extremely valuable:

- Hospitals may obtain data otherwise not available to identify “hot spots” and areas for improvement.
- Patients may share experiences and perceptions of safety following their stay in hospital with their family and others, and these reports may impact on the public image of the health care facility.

As a consequence, hospitals are likely to have an interest in providing “safe care” from the patient’s perspective. This requires hospitals to take patients’ reports seriously and to draw firm conclusions about areas for improvement based on these reports (David & Schwappach, 2011).

1.4 Aims and Objectives

To investigate patient experiences of undesirable safety events while undergoing treatment in the Palestinian Medical Complex (PMC), Ramallah; to evaluate the extent and nature of harm to patients; and to assess the perceptions and concerns of patients in relation to safety issues.

1.5 Specific Objectives

- To assess the experience of patients of undesirable safety events: medical complications, health care process problems, and communication problems.
- To investigate the degree of danger of undesirable safety events experienced from the patient’s point of view.
- To assess the relationship between the number of undesirable events reported and the participant’s characteristics.

To assess the relationship between the status of the patient’s health, hospital departments, self-rated health and patient reporting of experiences of undesirable safety events.

1.6 Limitations

This study is the first study that attempts to explore the patient's perception of undesirable events in hospitals in Palestine. However, the study has some limitations:

- The study investigates only the patient's perceptions and views of undesirable events; it does not compare these with patient records.
- Patients had to be in sufficient good health to be interviewed.
- Patients were interviewed during their hospital stay, despite the possibility of deterioration in health after discharge.

1.7 Study Assumptions

- Participants would wish to discuss undesirable events undergone during hospitalization.
- Participants would interact positively and share their opinions about safety openly.

Chapter Two

Literature Review

2.1 Introduction

A review of relevant literature is an important factor in the development of a research project. The researcher carried out an extensive review of literature on the research topic to gain a deeper insight into the problem and to collect a wide range of information relevant to scientific aspects of the study in order to achieve the desired goals.

The literature review in this chapter focuses on three key areas: 1) the history of patient safety; 2) undesirable safety events; 3) local, regional and international studies on this topic.

2.2 History of Patient Safety

The history of patient safety stems from the father of medicine (Hippocrates) and his famous saying, "First do no harm". Patient safety is central to quality health care as reflected in the Hippocratic Oath: "I will prescribe regimes for the good of my patient according to my ability and my judgment and never do harm to anyone...In every house whenever I come, I will enter only for the good of my patient" (Bognar, 2009). The Hippocratic Oath has provided doctors with ethical guidance on non-maleficence, beneficence and justice for many years. A fourth element was added in the 20th century: respect for the decision making capacities of autonomous persons, enabling individuals to make reasoned informed choices.

Hippocrates not only offered guidance to do no harm, but also advocated the participation of patients in their choice of treatment. In another words, he highlighted the concept of treating the patient as a partner in the health care process, a concept which has matured in recent years in the form of patient-centered care.

In 1847 Dr. Ignaz Semmelweis controversially suggested that doctors in obstetric clinics in Vienna should disinfect their hands with chlorinated lime, a move that led to a drop in the mortality rate from over 18% to less than one percent (The Health Foundation, 2013).

Then, in 1859, Florence Nightingale wrote a statement in “Notes on Hospitals” acknowledging that infections acquired during treatment in hospital often resulted in a worse illness or even death. She demonstrated that many deaths occurring in hospitals were preventable, even in the late 1800s, by recognizing that in-hospital death rates were much higher than predicted compared with actual death rates occurring in patients treated for a similar illness outside hospitals. She also discovered that more soldiers died from sickness in hospital than from wounds sustained in battle (The Health Foundation, 2013).

In 1862 Louis Pasteur proposed the germ theory of disease, and in 1867 Joseph Lister developed antiseptics (Mendaglio, 2013). In 1963 the Committee on Safety of Drugs was established by the UK government following serious birth defects caused by the thalidomide drug between 1957 and 1961. The committee later developed into the current Medicine and Healthcare Products Regulatory Authority (MHRA) (Mendaglio, 2013).

Next, in 1990, James Reason published his book “Human Error” that expounded the theory of the “Swiss cheese” model of system failure. The Swiss cheese model of accident causation illustrates that, although many layers of defense lie between hazards and accidents, there are flaws in each layer that, if aligned, can allow an accident to occur.

In 1999, a report entitled “To Err is Human” was published by the US Institute of Medicine. The report stated that, according to estimates, preventable medical errors in US hospitals exceeded the deaths attributed to motor vehicle wrecks and breast cancer. At least 44,000 to 98,000 people die in hospitals each year due to unsafe care (IOM, 1999).

Further events followed: In 2000 there was the publication of “An Organization with a Memory”, a report by an expert group on learning from adverse events in the UK; in 2002 the Quality Improvement Committee was established under the New Zealand Public Health and Disability Act; in 2004 the WHO World Health Assembly Resolution urged WHO and member states to pay the closest possible attention to the problem of patient safety; and WHO launched the World Alliance for Patient Safety. Then, in 2005, the London declaration called for Patients for Patient Safety: “A world in which patients are treated as partners in efforts to prevent all avoidable harm in health care” (WHO, 2005).

2.3 Undesirable Safety Events

2.3.1 Medical Complications

Research has been conducted to study the medical complications that may affect patients: infections, medication errors, falls, pressure ulcers, etc.

The US Centers for Disease Control and Prevention (CDC) conducted a health care-associated infection (HAI) prevalence survey in 2011 to provide an updated estimate of the overall problem of HAIs in US hospitals. Based on a large sample of 722,000 patients, the survey estimated that on any given day, about one in 25 hospital patients had at least one health care-associated infection. About 75,000 hospital patients with HAIs died during their hospitalization. More than half of all HAIs occurred outside of the intensive care unit (CDC, 2011).

Medication errors also constitute a major danger for patients. Medical errors affect 850,000 people in the UK annually (Fathi, 2014). According to the results of a Harvard medical practice study in the US, drug complications were the most common type of adverse event (19%), followed by wound infections (14%), and technical complications (13%) (Lucian & Leap, 1991).

Pressure ulcers (PUs) are preventable, but PU rates continue to escalate alarmingly. A study in the US estimated that 2.5 million patients would develop a PU and 60,000 US patients would die from complications related to a hospital-acquired PU (Sullivan, 2013).

Falls in hospitals are also considered a complication of inpatients and 6.1% of patients who responded to our questionnaire stated that they had undergone a fall. In the UK approximately 152,000 falls are reported in acute hospitals every year, with over 26,000 reported by mental health units and 28,000 by community hospitals (NPSA, 2007). In US hospitals, the percentage was 6.3% in 2011 (AHRQ, 2011).

2.3.2 Problems in the Health Care Process

Health care is made up simply of thousands of interlinked processes that result in a very complex system. By focusing on each individual stage of the health care process separately, we can fundamentally determine where defects exist and address the challenges posed in health care. It is important that any improvements to the health care process are evaluated and the reporting of process errors can enhance better functioning overall. Thus, changes to around 20% of health care processes can actually have an impact on improving 80% of performance (Haughom, 2014).

In a Harvard medical practice study on the nature of adverse events in hospitalized patients, a sample of 30,195 randomly selected hospital records revealed that nearly half of adverse events (48%) that had occurred were associated with an operation. Adverse events during surgery were due to a process problem (37%) more than to negligence (17%) (Lucian & Leap, 1991).

2.3.3 Communication Problems

A review of reports from the Joint Commission revealed that communication failures were implicated at the root of over 70 percent of sentinel events (Joint Commission, 2008). Current research indicates that ineffective communication between health care professionals is one of the leading causes of medical errors and patient harm (Dingley & Daugherty, 2009).

Communication problems between patients and health care workers are far too often the root cause of inadequate medical treatment, unnecessary errors, excess pain, and even death. Kuzel reported from interviews with adult patients that 82 of 221 problematic incidents predominantly involved a breakdown in the clinician-patient relationship. This means that around 37% of incidents were due to communication problems; a further 29% of total incidents were due to racism (Kuzel, 2004).

Emily Shafer advocates the importance of doctor-patient communication throughout the diagnosis, treatment, and recovery processes to enable health care professionals to provide quality care. She examined the claim by Walter Baile (a doctor and professor of behavioral science and psychiatry) that it is essential for doctors to understand both their patients' emotions and their own when discussing diagnoses and treatment options. The author discusses a variety of programs that train physicians, nurses, and social workers to relay difficult messages to patients and enhance crucial communication skills (Joint Commission, 2008).

In financial terms, it is worth considering the huge costs: it is estimated that \$236 billion is spent on unnecessary health care expenses annually due to the inability of patients to understand what medical providers are communicating to them (Healthcare Facts).

2.4 Previous Studies

- Local and regional studies

Consideration of the issue of patient safety is limited in Palestinian hospitals and other countries in the region, and studies on this topic are scarce. The few existing studies to investigate adverse events in public hospitals simply examined the health care professionals (nurses, doctors, etc.) rather than considering patient satisfaction with the health care they received.

- International studies

The majority of extant data on patients' retrospective reports of medical errors and undesirable safety events originates from the United States or Switzerland. Recently, research was initiated within UK hospitals; this type of research is more prevalent in developed countries (Davis, 2012).

Some evidence from the US indicated a significant level of awareness of safety issues among the general population. For example, in a national telephone survey carried out in 1997 by Louis Harris and Associates on behalf of the National Patient Safety Foundation, 42% of respondents indicated that they or their close friends and relatives had experienced a medical error (Harris, 1997).

Switzerland is a forerunner in the field of patient safety. Studies of patients' perspectives of patient safety (Agoritsas et al., 2008) found that patients were able to report undesirable events that occurred during hospital care. These events occur in about half of all cases of hospitalization and have a negative impact on patient satisfaction: 50.6% of patients reported at least one event.

Also in Switzerland, in 2008 David & Schwappach conducted a patient survey to assess experiences of safety-related events in hospital and found that 75% of participating patients reported that they had experienced definitive events during hospitalization.

A qualitative study in the UK focused particularly on one safety aspect - organizational care transfers. Adult patients were interviewed to examine patient perceptions of safety and identify how these could be used to construct additional safeguards and reduce safety incidents within organizational care transfers, which are known to be high risk. The findings identified communication, responsiveness and avoidance of traditional safety risks as essential factors in making patients feel safe (Scott, Dawson & Jones et al., 2012).

Table 2.1: Studies examining the patient perspective of safety in health care

Author	Title & Objectives	Participants	Setting	Main results
(Anton J. Kuzel, 2004)	<p>Patient reports of preventable problems and harm in primary health care.</p> <p>Objectives:</p> <p>To develop patient-focused typologies of medical errors and harm in primary care settings and to discern which medical errors and harm appear to be the most significant.</p>	38 in-depth anonymous interviews of adults.	<p>From rural, suburban, and urban locales in Virginia and Ohio.</p> <p>US</p>	<p>The 38 narratives described 221 problematic incidents. There were several reports of perceived racism. The incidents were linked to 170 reported harms, 70% of which were psychological, including anger, frustration, belittlement, and loss of relationship and trust in one's clinician. Physical harms accounted for 23% of the total and included pain, bruising, worsening medical condition, and adverse drug reactions</p>
(Weingart SN1, 2005)	<p>What can hospitalized patients tell us about adverse events? Learning from patient-</p>	228 adult inpatients in a medical unit of a	<p>Boston</p> <p>US</p>	<p>528 interviews, Seventeen patients (8%) experienced 20 adverse events. Eleven (55%) of 20 adverse events and 4 (31%) of 13</p>

	<p>reported incidents.</p> <p>Objectives: Inpatients identify adverse events (errors or injuries in their care) in order to identify and characterize adverse events and near-miss errors.</p>	Boston teaching hospital.		<p>near misses were documented in the medical record, but none were found in the hospital incident reporting system.</p> <p>Patients with 3 or more drug allergies were more likely to report errors compared with patients without drug allergies.</p>
(Evans SM1, 2006)	<p>Consumer perceptions of safety in hospitals.</p> <p>Objectives: To seek public opinion on: 1) the rate and severity of adverse events experienced in hospitals; and 2) the perception of safety in hospitals to enable predictors of lack of safety to be identified.</p>	<p>n = 2,884 patients</p> <p>Household interviews</p>	South Australia	<p>Respondents stated that 7.0% of hospital admissions were associated with an adverse event; 59.7% of respondents rated the adverse event as really serious, and 48.5% stated prolonged hospitalization was required as a consequence of the adverse event.</p>
(Van Vorst RF1, 2007)	<p>Rural Community Members' Perceptions of Harm from Medical Mistakes: A High Plains Research Network (HPRN) Study</p> <p>Objectives: To learn about community</p>	286 patients and family members.	Colorado	<p>A total of 286 surveys, with 172 respondents (60%) reporting a total of 180 perceived medical mistakes.</p> <p>Reported types of harm included emotional, financial, and physical harm.</p>

	members' definitions and types of harm from medical mistakes.			
(Wasson JH1, 2007)	<p>Patients use internet technology to report incidents when things go wrong.</p> <p>Objectives:</p> <p>To investigate how an automated health assessment system can be used to identify adverse events.</p>	<p>44,860 adults aged 19-69 years.</p> <p>Internet survey involving communities and clinical practices.</p>	Across the US	<p>The percentage of adverse events was eight times higher for patients with the greatest burden of illness than for those with the least (3.4% vs. 0.4%).</p> <p>9% of the adverse events seemed to be serious.</p>

Chapter Three

Conceptual Framework

3.1 Introduction

This chapter presents the operational definition for the dependent and independent variables that influence the experience and reaction of patients towards safety issues in local hospitals.

3.2 Study Dependent Variables

Experiences of Undesirable Safety Events

Experience is a key concept in this study. Experience is related to knowledge or a mastery of an event or subject gained through involvement in or exposure to it, or the fact of being consciously affected by an event (Press, 1989).

Undesirable events are defined as “an unintended or unexpected incident, which could have, or did lead to harm for the patient – this could be physical, psychological or financial” (Davis, 2012). For the purposes of this study, undesirable events broadly capture adverse events, medical errors, near misses, and quality related problems with a goal of reporting all the events that touched or harmed the patient physically, psychologically, or financially.

Thus, the concept of “an adverse event” is central to this study. Many definitions of adverse events are given in the WHO report of January 2009, “Conceptual Framework for the International Classification for Patient Safety”. Among them are the following:

- An event or occurrence that is usually unexpected and undesirable.

- An event that represents a marked negative deviation from the “standard of care” that occurs in a health care facility; incidents include major substitution of medications or leaving a patient unattended for a prolonged period of time (WHO, 2009).
- An adverse event is any undesirable experience associated with the use of a medical product in a patient (FDA Safety Information, 2014).

The Palestinian Medical Complex (PMC) in Ramallah comprises five hospitals: Ramallah Public Hospital; Al-Sheikh Zayed Hospital; the National Center for Blood Diseases-Hippocrates; Bahrain Pediatric Hospital; and the Kuwaiti Specialized Surgery Hospital. The PMC has 214 beds and provides a wide range of services, including neonatal care, maternity care, internal medicine, pediatrics, general and specialized surgery, and cardiovascular surgery.

3.2.1 Medical Complications

A **complication** is a pathological process or event occurring during a disease that is not an essential part of the disease; it may result from the disease or from independent causes (Farlex Medical Dictionary, 2012).

Complications that develop while receiving medical care are a widespread and complex problem. They are the result of a procedure, treatment, or illness and may be influenced by many factors, leading to complications in the patient’s health. This study covers the key elements that are the major manifestations of this phenomenon: phlebitis, infection, medication error, bleeding, transfer to intensive care, pressure ulcers, a fall in hospital, and re-operated urgently within three days.

One of the most common complications suffered by patients during hospitalization is phlebitis: the inflammation of a vein that typically occurs during the insertion of an intravenous line (IV). It is most common on the dorsum of the hand, particularly in hospitalized patients where an IV may be in situ for several days; older patients are also more susceptible to phlebitis (Advanced Pain Control and Sedation).

In this study the researcher used “**Undesirable events**” as a dependent variable to measure the safety of hospital care from the perspective of three categories. Table 3.1 below shows 13 types of medical complication used to assess the category of medical complications.

Table 3.1: Medical complications and corresponding items

Category: Medical complications, 13 items
1. You developed an inflammation of a vein (phlebitis) because of an intravenous line
2. You acquired an infection in the hospital
3. You experienced an allergic reaction to a drug
4. You were given an infusion or drug that was not intended for you
5. You were given an infusion or drug at the wrong time
6. You were given the incorrect dose of an infusion or drug
7. A dose was missed in error
8. You bled profusely after an operation or a catheter
9. You tolerated a blood transfusion very poorly
10. You were transferred to intensive care because of a complication that occurred in hospital
11. You had to undergo re-operation urgently within 3 days of an initial operation
12. You developed a pressure ulcer (skin wound) in hospital
13. You were injured (fracture, wound) in a fall at the hospital

3.2.2 Health Care Process Problems

The health care process is a series of actions or steps taken in order to achieve a particular end in the diagnosis, treatment, and prevention of disease, illness, injury, and other physical and mental impairments in human beings (WHO, 2004).

Common process problems include the failure to order an appropriate test, to create a proper follow-up plan, to obtain an adequate history or perform an adequate physical examination, and incorrect interpretation of diagnostic tests. Further analysis revealed errors in judgment, failures of due care or memory, knowledge deficits, patient-related factors, and patient discharge as causal factors (Gandhi, 2006).

Successful interventions that focus on improving quality and safety can target sections of the error chain, but patient participation with feedback of their experiences of such events is an initial step from which to proceed. Table 3.2 below shows the 12 items identified in the category of the health care process.

Table 3.2: Health care process and corresponding items

Category: Health care process problems, 12 items
<ol style="list-style-type: none"> 1. You noticed that staff did not disinfect their hands before examining you 2. Doctors made an incorrect diagnosis 3. You did not receive sufficient painkillers 4. Your medical records or X-rays were unavailable when needed 5. A test was repeated by mistake without being required 6. A test was cancelled by mistake 7. An error occurred in a test result 8. A test could not be conducted because of equipment breakdown 9. Your operation took place on the wrong side of the body 10. You were mistaken for another patient during a test or treatment 11. You were given food/drink that was not allowed on your diet 12. The fluids in your drip were not changed when they should have been

3.2.3 Communication Problems

The CDC and the National Cancer Institute have defined health communication as: The study and use of communication strategies to inform and influence individual decisions that enhance health (CDC, 2011).

Patients reported positive experiences if members of the health care team took their problem seriously, explained information clearly, and tried to understand the patient's experience and offer viable options.

Studies have shown that patients are more likely to be satisfied with care when they establish a rapport with the physician, are given information about their symptoms and the treatments prescribed, are able to ask questions and to discuss their ideas and those of the health care provider, and perceive the physician as seeking to build a partnership (Sudore et al., 2009). Studies have also shown that effective communication leads to improved patient outcomes and fewer malpractice claims (Arnold, 2003).

It is clear that effective communication between doctors and patients benefits everyone involved. In our study, 13 items were identified in this category relating to the patient's experience of events involving difficulties in communication.

Table 3.3: Communication in health care and corresponding items

Category: Communication problems, 13 items
1. Doctors or nurses ignored information you gave to them
2. Doctors or nurses did not respect confidentiality
3. Your consent was not obtained before a test or an intervention
4. You were handled or moved in a rough manner
5. You felt physically abused
6. You felt rejected by the health care team
7. The side effects of your medication were not explained to you

8. Health care staff did not introduce themselves and explain who they were
9. The organization of the ward was not explained to you (e.g. location of toilets, meal times)
10. You were not given enough information about your care after discharge from hospital
11. You did not feel that you could ask doctors and nurses questions if you wanted to
12. You were not treated with dignity and respect by the doctors and nurses
13. You were addressed informally without your agreement

3.3 Independent Variables

The independent variables in this study were selected based on previous studies that showed an influence by independent variables on the experience of undesirable safety events by patients.

- **Gender:** Categorized into male and female respondents.
- **Age:** Categorized into three groups: 18-40, 41-60, and over 60 years.
- **Length of stay (LOS):** The total number of calendar days between an inpatient's admission and discharge dates, but not including the day of discharge.
- **Educational level:** The level of education of the respondents categorized into four groups: illiterate, primary, secondary, or tertiary education.
- **Self-rated health** (also called self-reported health, self-assessed health or perceived health): This refers to a single question such as, "In general, would you say that your health is very good, good, poor, or very poor?"
- **Patient concern about errors in care during the hospital stay:** This refers to the extent of anxiety experienced by the patient about a medical error during hospital care, in other words, the extent of trust in hospital care.

Chapter Four

Methodology

4.1 Introduction

This chapter describes the research methodology and includes the study design and setting, participants, the survey instrument, validity and reliability of the instrument, data collection method, data analysis, and ethical considerations.

4.2 Research Design and Setting

This study used a quantitative, descriptive, cross-sectional survey design to assess the frequencies of undesirable safety events in the Palestinian Medical Complex-Ramallah. The study was conducted between December 2014 and January 2015.

4.3 Study Population

The study population consisted entirely of medical and surgical patients recruited from the Palestinian Medical Complex in Ramallah. Patients were eligible to participate if they were over 18 years of age, conscious and able to communicate with the researcher, and had stayed a minimum of four days in hospital. This latter condition was imposed on the basis of studies like that of Davis et al. (2012), which stated that patients were less likely to experience detectable errors or other problems in a period of less than four days.

4.4 Study Instrument

The study instrument was developed after reviewing the literature related to undesirable safety events in hospitals and by utilizing data obtained as part of a 2001 routine patient opinion survey at Geneva University Hospitals, Switzerland (Agoritsas et al., 2005). The researcher then utilized all updates on the tool in subsequent years (David & Schwappach, 2008); (Schwappach, 2011); and (Davis, 2012).

The survey started by collecting the participant's characteristics in six sections that included gender, age, length of stay, level of education, self-assessment of health, and hospital department (see Annex 1).

The second part identified 38 items for inclusion as undesirable safety events. These broadly describe suboptimal outcomes and processes that may or may not result from error, and may or may not result in subsequent harm. Patients were asked to report whether the event had occurred and were offered the response categories "yes definitely", "no", or "possibly". The items identified fell under the three main categories of patient safety events: medical complications; health care process problems; and communication problems. These categories related to the following undesirable events: phlebitis, infection, hand hygiene omissions, allergic reaction, drug administered at wrong time, drug dosage omission, documents, test repetition, test omission, patient confused, fall, ICU transfer, re-operation, unplanned discharge, and communication problems.

The third part consisted of three questions that rated the severity of events (from 1 to 10), concerns about safety, and self-reported events, including communications with staff about events and safety concerns.

The final section of the survey was an open-ended question to provide patient respondents with an opportunity to offer any recommendations or suggestions to improve the safety of hospital care.

The questionnaire was developed in English and then translated into Arabic. Back translation was performed to evaluate the quality of the translation by native translators of both languages. The Arabic version was distributed to participants.

4.5 Data Collection

Permission to conduct the study was received from MOH and the administration of PMC as a first step in the data collection process (Annex 3).

Following a review of the time sheet of patient admissions with the head nurse of the department, the researcher conducted the survey with patients who had spent more than four days in the hospital, approaching each patient one by one, explaining the nature of the study, and asking for their agreement to participate. Although the study tool was designed to be a self-administered questionnaire, all patients chose to fill in the questionnaire with the researcher due to their illness and so they could ask for clarifications of any points.

Each questionnaire contained a cover letter and definitions of key concepts used in the tool such as patient safety and undesirable events. Participants were assured of the confidentiality of the information collected and the anonymity of respondents. The researcher explained to the participants that questionnaires would be handled solely by the researcher and not shared with the hospital management.

Data collection was conducted over a two-month period between December 2014 and January 2015.

4.6 Data Analysis

Data were entered and analyzed using the Statistical Package for Social Sciences (SPSS version 18) software. Prior to the analysis process, the researcher re-coded the age and length of stay from section one into intervals. Next, the response categories of section two were converted from response categories “yes, definitely”, “no”, and “possibly”, into “yes” or “no” by merging the answer “possibly” with “no” so as to evaluate only the events that had definitely taken place. In section three on the patient’s perception of the degree of risk, the categories of 10 choices were reduced into three choices: low risk from 1 to 3; moderate risk from 4 to 6; and high risk from 7 to 10. A descriptive statistical analysis was generated for all variables of the questionnaires. The results constituted the mean scores for each category of the study according to hospital and participant characteristics.

4.7 Validity and Reliability

Validity and reliability are two fundamental elements in the evaluation of a measurement instrument.

4.7.1 Validity

Validity is the degree to which any instrument succeeds in describing or quantifying what it is designed to measure (Jonathan Weiner, 2007).

The study instrument was developed in Geneva and UK. It was primarily developed by Agoritsas in Geneva hospitals by utilizing data obtained as part of the Picker patient opinion instrument (Jenkinson, 2002), which covered various aspects of care received in hospitals, and the data obtained as part of a 2001 routine patient opinion survey at Geneva University Hospitals. The tool was subsequently tested for validity by David & Schwappach (2008). In 2011 Schwappach

made further amendments to the tool for use in Swiss hospitals and the tool was later used in a London teaching hospital. We adapted and contextualized the tool to conform to Palestinian culture.

Once the study instrument had been developed, it was sent to experts in patient safety: doctors, nurses, medical laboratory technologists, pharmacists, and a patient to check and provide guidance on instrument and data collection. The researcher utilized their feedback and amendments, which focused on the terms used in section two (Annex 4).

4.7.2 Reliability

Reliability is the degree to which an assessment tool produces stable and consistent results (Phelan, 2005).

The reliability of the tool in this study was estimated using Cronbach's alpha coefficient (Cronbach's alpha). "Alpha was developed by Lee Cronbach in 1951 to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1. Internal consistency describes the extent to which all the items in a test measure the same concept or construct, and hence it is connected to the inter-relatedness of the items within the test" (Tavako, 2011).

Cronbach's alpha test was conducted and showed an internal consistency for all the 38 items of the study categories (Cronbach's 0.778), which may be considered as acceptable. Cronbach's alphas for the study categories were as follows: medical complications (Cronbach's $\alpha=0.824$), health care process problems (Cronbach's $\alpha=0.564$), and communication problems (Cronbach's $\alpha=0.819$).

4.8 Pilot Study

After developing the questionnaire, a pilot study was conducted on a sample of 11 patients who were treated in PMC and met the conditions of the study.

The pilot study was conducted to help the researcher to examine the feasibility of an approach that is intended to be used in a larger scale study, to design a research protocol, assess whether the research protocol is realistic and workable, and establish whether the sampling frame and technique are effective.

Some changes were adopted by the researcher following the pilot study as a result of the researcher obtaining a deeper understanding of the reality on the ground. Prior to the pilot, the study was intended to be conducted on discharged patients who been interviewed earlier by a researcher while they were hospitalized. However, the pilot led the researcher to conclude that it is very difficult to obtain the phone numbers of patients to contact them after discharge, so the study contained only hospitalized patients.

4.9 Ethical Considerations

The study was approved by the PMC and a written letter of permission was granted (Annex 3). Participation was voluntary. The participants were informed about the purpose of the study and its significance. Participants were assured that their responses would be confidential, completely anonymous, and only used for the purposes of scientific research.

Chapter Five

Results & Findings

5.1 Introduction

This chapter presents the findings and results of the survey. The first section discusses the characteristics of the respondents' demographic status and the department in which they were treated. Section two presents the statistical results of patients' responses to each of the individual items in the survey. Section three provides a descriptive analysis of the survey results, including bivariate analysis of the dependent variables (the study categories-undesirable events) and the participant's characteristics (gender, education, length of stay, etc.).

5.2 Characteristics

A total of 98 patients were surveyed, of whom fifty percent were females and fifty percent were males, with a mean age of 57 years. Of those surveyed, 46.9% were more than 60 years of age, and 58.2 % were medical patients from medical departments and cardiac patients from the catheterization unit. Of the total number of respondents, 41.8% were surgical patients who had undergone specialized surgery (open-heart surgery, tumors, kidney transplants, and orthopedic surgery). Respondents had spent at least four days in hospital; the mean length of stay was seven days; 54.1% rated their personal health as good and 41.8% rated their health as poor.

Table 5.1 Descriptive information about the participants

Variables	Freq.	%
Gender		
Male	49	50.0
Female	49	50.0

Age groups		
<= 40 years	16	16.3
41 – 60	36	36.7
> 60	46	46.9
Education level		
Illiterate	28	28.6
Primary	24	24.5
Secondary	31	31.6
University and over	14	14.3
Length of stay-days		
Short stay: 5-9 days	46	46.9
Medium stay: 10-15 days	32	32.7
Long stay: more than 15 days	19	19.4
Department		
Medical	57	58.2
Surgical	41	41.8
Self-rated health		
Very good	1	1.0
Good	53	54.1
Poor	41	41.8
Very poor	2	2.0

5.3 Undesirable Safety Events

Table 5.2 presents descriptive information on patient responses to each of the individual items in the survey relating to health care medical complications, process problems or communication problems (38 items in total). Affirmative responses (yes answers) indicated less favorable assessments of care or that the user had experienced an undesirable event. In total, 815 undesirable events were reported (rate of 8.68 per person). Patients reported 168 medical complications (20% event rate); 187 health care process problems (22% event rate); and 496 communication problems (58% event rate).

Table 5.2 Undesirable safety events

No.	Variable	Yes		Possible		No	
		Freq.	%	Freq.	%	Freq.	%
	Medical complications						
1	You developed an inflammation of a vein (phlebitis) because of an intravenous line	53	54.1	0	0.0	45	45.9
2	You acquired an infection in the hospital	19	19.8	2	2.1	75	78.1
3	You experienced an allergic reaction to a drug	13	13.3	3	3.1	82	83.7
4	You were given an infusion or drug that was not intended for you	1	1.0	38	38.8	59	60.2
5	You were given an infusion or drug at the wrong time	3	3.1	42	42.9	53	54.1
6	You were given an incorrect dose of an infusion or drug	4	4.1	42	42.9	52	53.1
7	A dose was omitted by mistake	2	2.0	44	44.9	52	53.1
8	You bled profusely after an operation or catheterization	15	15.5	5	5.2	77	79.4
9	You tolerated a blood transfusion very poorly	7	7.1	4	4.1	87	88.8
10	You were transferred to intensive care because of a complication that occurred in hospital	15	15.3	0	0.0	83	84.7
11	You had to be re-operated urgently within 3 days of an initial operation	3	3.1	0	0.0	95	96.9

No.	Variable	Yes		Possible		No	
		Freq.	%	Freq.	%	Freq.	%
12	You developed a pressure ulcer (skin wound) in hospital	22	22.4	2	2.0	74	75.5
13	You were injured (fracture, wound) in a fall at the hospital	6	6.1	2	2.0	90	91.8
	Total (1-13)	168		184		924	
	Health care process problems						
14	You discovered that staff did not disinfect their hands before examining you	17	17.3	8	8.2	73	74.5
15	Doctors made an incorrect diagnosis	19	19.4	5	5.1	74	75.5
16	You did not receive enough painkillers	10	10.2	9	9.2	79	80.6
17	Your medical record or X-rays were unavailable when needed	3	3.1	7	7.1	88	89.8
18	A test was repeated needlessly by mistake	2	2.1	51	53.1	43	44.8
19	A test was cancelled in error	3	3.1	60	62.5	33	34.4
20	An error occurred in a test result	7	7.3	53	55.2	36	37.5
21	A test could not be conducted because of an equipment malfunction	61	62.2	2	2.0	35	35.7
22	The wrong side of your body was operated on	7	7.2	16	16.5	74	76.3
23	You were confused with another patient during a test or a treatment	1	1.0	7	7.2	89	91.8
24	You were given food/drink that you were not allowed on your diet (e.g. if you were NBM)	43	44.3	19	19.6	35	36.1
25	Your fluids in your drip were not changed when they should have been	14	14.4	14	14.4	69	71.1
	Total (21-25)	187		243		655	
	Communication problems						
26	Doctors or nurses ignored information you gave to them	34	35.1	4	4.1	59	60.8
27	Doctors or nurses did not respect confidentiality	33	34.0	7	7.2	57	58.8
28	Your consent was not obtained before a test or an intervention	24	24.7	2	2.1	71	73.2
29	You were handled or moved in a rough manner	6	6.2	3	3.1	88	90.7

No.	Variable	Yes		Possible		No	
		Freq.	%	Freq.	%	Freq.	%
30	You felt physically abused	7	7.2	1	1.0	89	91.8
31	You felt rejected by the health care team	25	26.0	1	1.0	70	72.9
32	The side effects of your medication were not explained to you	88	90.7	0	.0	9	9.3
33	Health care staff did not introduce themselves and explain who they were	78	81.3	9	9.4	9	9.4
34	You were not given an explanation about how the ward works (e.g. location of toilets, meal times)	76	78.4	14	14.4	7	7.2
35	You were not given an explanation about what to expect from your treatment while in hospital	53	54.6	12	12.4	32	33.0
36	You did not feel that you could ask doctors and nurses questions if you wanted to	41	42.3	5	5.2	51	52.6
37	You were not treated with dignity and respect by the doctors and nurses	24	24.7	5	5.2	68	70.1
38	You were addressed informally without your agreement	7	7.2	5	5.2	85	87.6
	Total (26-38)	496		66		695	
	Overall total (1-38)	851		493			

5.4 Perceived Degree of Danger of Undesirable Events

The researcher asked respondents to rate the degree of danger of the undesirable event on a scale from 1 to 10. The results showed that 42.9% of patients considered that the undesirable safety event they had faced was high risk, 12.2% considered the event as a moderate risk, and 44.3% as a low risk.

Table 5.3: Perceived degree of danger of undesirable events

	Freq.	%
Patient reports of degree of risk of		

undesirable events they faced		
Low risk (1-3)	43	44.3
Moderate risk (4-6)	12	12.2
High risk (7-10)	42	42.9

5.5 Patient Concerns about Potential Errors

Patients were asked if they had any concerns about potential medical errors before coming to the hospital. The results indicated that 54.1% of patients were not concerned at all, but 20.4% indicated that they had had serious concerns.

Table 5.4: Extent of patient concerns about potential errors

	Freq.	%
Patient concern about errors in care during the hospital stay		
Seriously concerned	20	20.4
Somewhat concerned	25	25.5
Not concerned at all	53	54.1

5.6 Staff Communication with Patients

Participants were asked if the staff had communicated with them to discuss or apologize for any harm they suffered during hospitalization. The majority of participants (94.9%) answered negatively.

Table 5.5: Frequency of staff communication with patients

	Freq.	%
Did the staff communicate with you to discuss or apologize for any harm you suffered during hospitalization?		
Yes	5	5.1
No	93	94.9

5.7 Patient Reporting of Undesirable Events

Participants were asked if they had reported the undesirable events that they had experienced during hospitalization and if so, to whom. The responses showed that 64.3% had not reported the incident; only 35.5% responded positively that they had reported the incident to the head nurse or on social media and radio.

Table 5.6: Patient reporting of undesirable events

	Freq.	%
Patient reporting of any undesirable events faced		
Yes	35	35.7
No	63	64.3

5.8 Impact of Hospital and Participant Characteristics

Table 5.7 shows the impact of respondent characteristics on the mean scores of the categories addressed by the study. In reviewing this table, we found significant differences between medical complications and the respondent's personal assessment of health. Patients who rated their health as very poor scored significantly higher (3.0) than patients who rated their health as very good (P

=0.024). This demonstrates that patients with poor and very poor health are significantly more exposed to potential medical complications during hospitalization.

Also, significant differences were found between communication problems and self-assessment of health ($P < 0.05$). Patients who rated their health as very poor scored significantly higher (9.50) than patients who rated their health as poor (5.78), good (4.55), and very good (1.00) with ($P = 0.015$). Again, this demonstrates that patients with poor and very poor health are more exposed to experience communication problems.

Statistical evidence was also found that linked problems in the health care process with the department where the participant had been treated. Where a surgical department scored significantly higher (2.27) than a medical department (1.65) with ($P = 0.047$), this indicated that surgical patients reported more problems in the care process than medical patients.

Another significant difference was ascertained between problems in the health care process and the degree of risk of an undesirable event reported by survey respondents. Those reporting a high risk scored (2.02), higher than patients reporting a low risk (1.21) with ($P < 0.001$, $F = 15.630$). Thus, participants who experienced problems in the health care process rated their experiences of undesirable events as representing a high degree of risk.

Considerable statistical evidence was also found between communication problems and the reported degree of risk. There were significant differences ($P < 0.001$, $F = 23.849$) as patients reporting a high risk scored higher (7.07) than patients reporting a low risk (3.56). This signifies that problems in communication between patients and health professionals have a seriously detrimental effect on patient health.

Table 5.7: Mean scores of undesirable events by participant characteristics

	Medical complications			Health care process problems			Communication problems		
	Mean	F	P	Mean	F	P	Mean	F	P
Gender									
Male	1.41	2.895	.092	2.06	.985	.324	5.49	1.602	.209
Female	1.92			1.76			4.73		
Age group									
< 40	1.31	1.501	.228	2.62	2.162	.121	5.31	.206	.814
41-60	1.47			1.75			4.86		
>60	1.93			1.78			5.24		
Education									
Illiterate	2.18	1.856	.143	1.68	1.217	.308	4.37	1.224	.306
Primary	1.54			1.67			5.13		
Secondary	1.35			1.87			5.81		
University	1.36			2.50			4.71		
Length of stay-days									
4-5	1.32	2.404	.072	1.71	1.080	.362	5.00	2.098	.106
6-10	1.77			1.90			4.94		
11-15	1.25			1.88			4.38		
>15	2.86			2.86			7.71		
Self-rated health									
Very good	.00	3.307	.024	1.00	.262	.852	1.00	3.653	.015
Good	1.30			1.85			4.55		
Poor	2.10			1.98			5.78		
Very poor	3.00			2.50			9.50		
Department									

Medical	1.58	.429	.514	1.65	4.044	.047	4.82	1.286	.260
Surgical	1.78			2.27			5.51		
Degree of risk									
Low risk	1.47	2.290	.107	1.21	15.630	P<0.001	3.56	23.849	P<0.001
Moderate	1.17			1.42			3.83		
High risk	2.02			2.79			7.07		

5.9 Recommendations by Patients

The final question in the survey was an open-ended question asking for comments and recommendations by patients and 67 respondents made observations that may be summarized in the following:

- The need and importance of introducing improvements to the system, especially in the medical care by doctors to patients. Patients requested a system in which just one specialist doctor would supervise and manage the patient, since the involvement of multiple doctors and changes in prescriptions for medicine every 24 hours is detrimental to patient safety.
- Reduce the number of student trainees, improve the efficiency of workers, and increase the number of nurses.
- Increase the number of medical staff in emergency departments, and improve the effectiveness of assessments and the treatment and referral of patients.
- To give patient safety priority over administrative procedures such as the routine examination of insurance documents and payments.
- To acknowledge the rights of patients and adopt a more patient-friendly manner when dealing with patients. There should also be greater respect for patient privacy and improved services to patient rooms.

Chapter Six

Discussion

6.1 Introduction

This chapter presents a discussion of the findings and the three categories identified in relation to experiencing undesirable safety events during hospital care: medical complications, process problems, and communication problems. The study also discusses the variables associated with undesirable events.

This study is the first to investigate patient experiences of undesirable safety events while receiving hospital care in Palestine. The aim was to evaluate the extent and nature of patient harm and to assess patients' perceptions and concerns regarding safety issues.

6.2 Medical Complications

The findings show that the rate of harm was 8.68% per individual. This percentage is much higher than that reported in previous studies in the UK (3.2%) (Davis, 2012), and in Switzerland (1.072%) (Schwappach, 2008).

In the category of medical complications, 54.1% of respondents reported an inflammation of a vein or phlebitis. The next most common undesirable event was a pressure ulcer during hospitalization (22.4%). In addition, 19.8% acquired an infection while in hospital. A review of each medical complication item reflects a high percentage of harm experienced. If patients are able to identify and report these events to health care staff, this may mitigate negative effects (Davis, 2012). However, reporting by patients of experiences of medical complications is open to question. For instance, a study conducted in a hospital complex in Geneva, Switzerland, on the prevalence of variations of nosocomial infections showed that 8% of patients reported a nosocomial infection, consistent with a prevalence of 11% recorded in hospital records (Sax, 2001).

Further evidence from Geneva University Hospital showed that 4.9% of patients reported skin lesions compared with a prevalence of 3.1% in hospital records for pressure ulcers (Agoritsas et al., 2005). We cannot exclude a combination of under-reporting by some patients and over-reporting by others. This demonstrates a disparity in the ability of patients to supply an exact margin of medical complications.

These results from the survey were compatible with those of Davis (2012) in the UK, who reported that phlebitis was the most common medical complication at 13.75%, followed by a hospital-acquired infection at 7.5%. However, our study results differed from those of Schwappach (2001) in Switzerland where 5.5% reported an allergic reaction to a drug as the most common medical complication.

6.3 Process Problems

The most common problem in the care process was that tests could not be conducted due to equipment breakdown or malfunction (62.2%). In addition, 19.4% of patients were given an incorrect diagnosis by their doctor or patients had to undergo the tests in an external laboratory, incurring a financial burden and denting patient confidence in their hospital care, tests and the diagnosis based on the results (Davis, 2012).

Another process problem cited by 44.3% of respondents was that they were given food or drink that was forbidden on their diet (e.g. solid food after surgery, white bread for diabetic patients, insufficient or poor quality food). This finding may also indicate that the food is below the standard of quality expected for food served in hospitals. Good food can encourage patients to eat well, giving them the nutrients they need to recover from surgery or illness. Conversely, poor food can have a negative impact on the health of patients (Alford, 2010). This finding was compatible with that of Davis (2012) in the UK, where poor quality food was reported.

An operation carried out on the incorrect side of the body is a common process problem. This is a preventable medical error for which developed countries have introduced regulations to reduce the frequency. In our findings, this problem occurred in 7.2% of respondents compared with just 0.7% in Switzerland, according to Agoritsas et al. This may be explained by the hospital failing to apply site-verification protocol or the standard interventions to eliminate surgical procedures on the incorrect site (Robert & Michaels, 2007).

According to a Harvard medical practice study on the nature of adverse events in hospitalized patients, 48% of adverse events that occurred were associated with an operation and adverse events during surgery were due to a process problem more than to negligence (Lucian & Leap, 1991).

6.4 Communication Problems

In total, patients reported 851 undesirable events in their health care. The majority of those who experienced harm believed the problem was related to communication: 496 events or 58%. The most commonly reported problem was a lack of explanation about the side effects of medication (90.7%), followed by health care staff failing to introduce or explain themselves to the patient (81.3%): although this is not necessarily an error, it confuses the patient and has a negative psychological impact on them. In developed countries like the US, this leads to an increase in malpractice depositions. According to Beckman et al. (1994), the following four communication problems were present in over 70% of malpractice depositions: abandoning the patient; disregarding the patient's opinion; poor delivery of information; and failing to understand the patient's perspective (IFHCC, 2011).

The problem does not stop here since 42.30% of patients were also not told what to expect from their treatment and could not ask questions to which they wanted answers. This factor may lead to re-admission or treatment complications. This finding is similar to that of Davis, Rachel E.et

al. (2012) in London, that communication problems are the major problem. There are some differences in content: Patients in London were not told how the ward worked (location of toilets, meal times), while Palestinian patients struggle with respect and dignity and 24.7% reported to our researcher that they were not treated with dignity. There is good reason to believe that patient reports of communication problems are trustworthy since such events can only be meaningfully assessed by the patients themselves (Agoritsas, 2005).

6.5 Variables Associated with Undesirable Events

Not all undesirable events were associated uniformly with patient characteristics in our data findings. Patients in poor and very poor health are significantly more exposed to experiences of undesirable safety events ($P = 0.015$). Our study finding is similar to that of Schwappach that poor or very poor general health ($P < 0.001$) and a lower level of education predicted the probability of reporting a definite event (Schwappach et al., 2011). Also, surgical patients reported more care process problems than medical patients ($P = 0.047$). Our finding is congruent with the Joint Commission report on adverse events, which found that the sentinel event reported most frequently is surgery on the incorrect side of the body, occurring at a rate of 13.5% (Joint Commission, 2009). The Minnesota Department of Health in its fifth annual report on adverse events revealed the distribution of process problems related to surgery: 7% incorrect site surgery, 12% retained objects, and 5% incorrect procedure (MDH, 2009).

Participants who had experienced health care process problems rated their experiences of undesirable events as a high degree of risk ($P < 0.001$). This is similar to the finding of Agoritsas et al. (2005) that most problems related to the care process were also associated with lower patient ratings.

Communication problems between patients and health professionals have a serious impact on patient health ($P < 0.001$). This seems logical; if patients were not treated with respect and dignity and could not ask the questions they wanted, or were not given information regarding their treatment or had information explained in a way they understood, this can result in patient failure

to abide by medical advice. In turn, this increases complications and hospital re-admissions (Davis, 2012).

6.6 Conclusion

This study provides evidence of the extent and nature of incidents in which patients may experience harm. The overall level of undesirable events is high in relation to international experience: three times greater than the British experience and more than five times higher than the Swiss experience. Communication problems were reported most frequently, but process problems also led to serious consequences and medical complications to the health of patients. Patient characteristics are associated with the degree of harm experienced, so patients with poor and very poor health, and surgical patients, were more exposed to such events. Interventions aimed at reducing harm, like improvements in quality and patient engagement in safety initiatives, need to be developed to enhance patient safety.

Further research is required in the following areas:

- Patient experiences of undesirable safety events from the patients' perspective compared with hospital records (a comparative study).
- A qualitative study of patient experiences of undesirable safety events to provide in-depth understanding of the issues.
- Patient experiences of undesirable safety events in other hospital departments (obstetrics, maternity, emergency, etc.).

6.7 Recommendations

Based on the results of the study, we propose the following recommendations to promote patient safety in hospitals:

- Standards of care should be adopted in all health care processes to improve medical care and minimize undesirable events, for example the necessity of performing a pre-operative assessment and post-operative care in surgery.
- Serious steps should be undertaken in all care processes to conform to international quality standards that guarantee patient safety.
- More emphasis is required on effective communication with patients to eliminate a considerable number of avoidable errors.
- Communication and interaction between health professionals themselves should be improved.
- To sustain ongoing evaluation and improvements to patient safety, genuine engagement by patients in the health care process is vital and patients should be encouraged to voice their opinions.
- Hospitals should take advantage of the safety initiatives and experiences of other countries in reducing high rates of undesirable events (phlebitis, medication errors, falls and pressure ulcers).
- The hospital management must introduce procedures to ensure that all tests in hospital laboratories are reliable and thereby reduce financial, psychological and physical harm incurred by patients.
- The hospital management must improve the effectiveness of coordination between different hospital departments and between hospital facilities such as laboratories and radiology departments to reduce delivery times and inconvenience to patients, e.g. pneumatic tube systems.

This study will serve as baseline for future studies.

References

1. Advanced Pain Control and Sedation. (2009). Retrieved from Advanced Education In General Dentistry: organization web site:
http://ccnmtl.columbia.edu/projects/aegd/mod01_mec_ivcomp.html
2. AHRQ. (2011). never events-AHRQ. Retrieved from Agency for health care reseach & quality: organization web site: <http://psnet.ahrq.gov/primer.aspx?primerID=3>
3. Alford, L. (2010). Hospital Food Review Sourcing more local and sustainable food. London, from
<https://www.soilassociation.org/LinkClick.aspx?fileticket=qf0jvMzz26U%3D&tabid=1312>.
4. Anton J. & Kuzel, S. H. (2004). Patient Reports of Preventable Problems and Harms in Primary Health Care. *Annals of Family Medicine*, 333–340.
5. Asad Fathi, M. H. (2014). Survey of medication error by nurses self-report in intensive care unit of Imam Khomeini hospitalTehran. *International Research Journal of Applied and Basic Sciences*, 1726-1732.
6. Ashish K., J. O. (2008). Patient perception of hospital care in the united state. *The New England Journal of Medicine*, 359:1921-31
7. Bognar, Á. (2009). From Hippocratic Oath to Patient safety Culture Paradigm Change about Quality and Safety.PHD thesis, university of SZEGED
8. CDC. (2011, May 10). Gateway to Health Communication & Social Marketing Practice. Retrieved from Centers for Disease Control and Prevention: organization web site:
<http://www.cdc.gov/healthcommunication/healthbasics/whatishc.html>
9. Centers for Disease Control and Prevention. (2011). Center of disease control and prevention. Retrieved March 26, 2014, from Healthcare-associated infection(HAIs):
<http://www.cdc.gov/HAI/surveillance/index.html>

10. Commission, J. (2008).). Promoting Effective Communication-Language Access Services in Health Care. Joint Commission .
11. Commission, T. J. (2009). Sentinel Event Statistics. The Joint Commission.
12. David L.B. Schwappach L, (2011). New perspectives on well-known issues?: Patients' experiences and perceptions of safety in Swiss hospitals. (ZEFQ).ELZEFIOR, 542-548.
13. David LB Schwappach1, 2. (2008). Against the silence": Development and first results of a patient survey to assess experiences of safety-related events in hospital. BMC Health Services Research, 472-6963/8/59.
14. Davis, R. (2012). Hospital patients' reports of medical errors and undesirable. Journal of Evaluation in Clinical Practice , 1365-2753.
15. Dingley C, Daugherty K, Mary K. Derieg R (2009). improving Patient Safety Through Provider Communication Strategy Enhancements. Bannock: Denver Health Medical Center, Denver, CO.
16. Evans SM1, B. J. (2006). Consumer perceptions of safety in hospitals. PMC Public Health, doi: 10.1186/1471-2458-6-41.
17. FDA Safety Information. (2014, october 1). Retrieved from food & drug administration: <http://www.fda.gov/Safety/MedWatch/HowToReport/ucm053087.htm>
18. Farlex Partner Medical Dictionary. (2012). Retrieved July 22 2015 from <http://medical-dictionary.thefreedictionary.com/complication>
19. Foundation, T. H. (2013, dec.). Patient safety timeline. Retrieved from patient safety resource center: <http://patientsafety.health.org.uk/resources/patient-safety-timeline>
20. Gandhi, T. K. (2006). Missed and Delayed Diagnoses in the Ambulatory Setting:A Study of Closed Malpractice Claims. Annals of Internal Medicine, 488-496.
21. Haese, M. (2008). 10 Common Errors Healthcare Professionals Make Communicating With Their Patients. Lippincott Williams & Wilkins, Inc., Volume 33 - Issue 6 - p 240.
22. Harris, L. (1997). Public opinion of patient safety issues. National Patient Safety Foundation.

23. Haughom, D. J. (2014). Five Deming Principles That Help Healthcare. Health Catalyst, <https://www.healthcatalyst.com/5-Deming-Principles-For-Healthcare-Process-Improvement>
24. Health, M. D. (2009). Fifth Annual Public Report of adverse events. minnesota: Adverse Health Events in Minnesota.
25. Health, M. o. (2010). Palestinian National Health Strategy.Ramalla.
26. James D. Agresti. Just Facts, January 25, 2012. Revised 5/19/14. Healthcare Facts. <http://www.justfacts.com/healthcare.asp>
27. IFHCC. (2011). Patient-Centered Communication Series:eam and Patient-Centered Communication Skills for the Patient Medical Home. New Haven, USA: Institute for Healthcare Communication.
28. IOM. (1999). To error is human. usa: th institue of medicine.
29. Jonathan Weiner, D. (2007). Measurement: Reliability and Validity Measures. Johns Hopkins University.
30. Lucian L. Leape, M, Troyen A. Brennan, J.D. Laird N, Ann G. Lawthers, S, Russell L, , Benjamin A. Barnes, Liesi Hebert, Joseph P. Newhouse, Paul C. Weiler L, and Howard Hiatt . (1991). The Nature of Adverse Events in Hospitalized Patients — Results of the Harvard Medical Practice Study II. the new england journal of medicine-N Engl J Med, N Engl J Med 1991; 324:377-384.
31. M, F. A. (2014). Survey of medication error by nurses self-report in intensive care unit of Imam Khomeini hospital Tehran. International Research Journal of Applied and Basic Sciences, 1726-1732.
32. Medical Emergencies and Complications- IV Complications. (n.d.). Retrieved from Advanced Education In General Dentistry: http://ccnmtl.columbia.edu/projects/aegd/mod01_mec_ivcomp.html

33. Mendaglio, S. (2013, jan. 30). Patient Safety & Infection Control in Healthcare Facilities. Retrieved from <https://prezi.com/xgkw1opkfb6/patient-safety-infection-control-in-healthcare-facilities/>
34. MOH, M. o. (2010). Palestinian National Health Strategy. Ramallah.
35. Nancy Sullivan, B. (2013). Preventing In-Facility Pressure Ulcers. In B. Nancy Sullivan, Making Health Care Safer II: An Updated Critical Analysis of the Evidence for Patient Safety Practices. USA: AHRQ.
36. Phelan, C. (2005). Exploring Reliability in Academic Assessment. UNI.
37. Press, O. U. (1989). Oxford English Dictionary(OED).
38. Robert K. Michaels, M. M. (2007). Achieving the National Quality Forum's "Never Events". *Annals of surgery*, 526–532.
39. Sax HI, H. S. (2001). Variation in nosocomial infection prevalence according to patient care setting:a hospital-wide survey. *TheJournal of The Hospital Infection*, 27–32.
40. Schwappach, D. L. (2008). Against the silence": Development and first results of a patient survey to assess experiences of safety-related events in hospital. *Bio Med Central BMC Health Services Research*, 1472-6963/8/59.
41. Schwappach, D. L. (2011). New perspectives on well-known issues': Patients' experiences and perceptions of safety in Swiss hospitals. *Z. Evid. Fortbild. Qual. Gesundh. wesen (ZEFQ)*, 542–548.
42. Tavako, M. (2011). Making sense of Cronbach's alpha. *Int J Med Educ*, 53–55.
43. Thomas Agoritsas,Patrick A. Bovier, Thomas V. Perneger. (2005,). Patient Reports of Undesirable Events During Hospitalization. *J Gen Intern Med*, 20:922-928.
44. Van Vorst RF1, A.-G. R. (2007). Rural community members' perceptions of harm from medical mistakes: a High Plains Research Network (HPRN) Study. *JABFM Journal of American Bord of Family Medicine* , 135-143.
45. Vincent, A. C. (2002). Patient safety: what about the patient? *Qual Saf Health Care* .

46. Wasson JH1, M. T. (2007). Patients use an internet technology to report when things go wrong. *Quality and Safety in Health Care*, 213–215.
47. Weingart SN1, P. O. (2005). What can hospitalized patients tell us about adverse events? Learning from patient-reported incidents. *J Gen Intern Med.*, 830–836.
48. Weissman. (2008). Comparing patient-reported hospital adverse events with medical record review: do patients know something that hospitals do not? *Ann Intern Med.*, 149(2):100-8.
49. WHO. (2004). *aglosary of terms for community health care and services for older persons* . Japan: World Health Organization
50. WHO. (2009). *Conceptual Framework for the International Classification for Patient Safety*. WHO.

Annexes

Annex 1: Questionnaire of Patient Experiences of Undesirable Safety Events
(English version)

Patient experiences of undesirable safety events in hospital care

Section 1:

1. Gender

1	Male	2	Female
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2. Age ----- years

1	18-30	2	31-45	3	61 and above
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3. Length of stay-days

----- Days

1	Less than 5 days	2	5-10	3	11-15	4	More than 15
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4. Education

1	Illiterate	2	Primary	3	Secondary	4	Tertiary Education
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5. Self-rated condition of health

1	Very good	2	Good	3	Poor	4	Very poor
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6. Hospital department

1	Medical department	2	Surgical department	3	Orthopedic department
4	Catheterization unit & CCU	5	ICU		Other

Section two

Please choose to what extent you agree or disagree with the following sentences in relation to your experience or exposure to any of the following undesirable safety events:

Nub.	Items	Yes	Possibly	No
	Medical complications			
.1	You developed an inflammation of a vein (phlebitis) because of an intravenous line			
.2	You acquired an infection in the hospital			
.3	You experienced an allergic reaction to a drug			
.4	You were given an infusion or drug that was not intended for you			
.5	You were given an infusion or drug at the wrong time			
.6	You were given the incorrect dose of an infusion or drug			
.7	A dose of a drug was omitted in error			
.8	You bled profusely after an operation or catheterization			
.9	You tolerated a blood transfusion very poorly			
.10	You were transferred to intensive care because of a complication that occurred in hospital			
.11	You had to be re-operated urgently within 3 days of an initial operation			
.12	You developed a pressure ulcer (skin wound) in hospital			
.13	You were injured (fracture, wound) in a fall at the hospital			
	Health care process problems			
.14	You discovered that staff did not disinfect their hands before examining you			
.15	Doctors made an incorrect diagnosis			
.16	You did not receive sufficient painkillers			

.17	Your medical record or X-rays were unavailable when needed			
.18	A test was repeated needlessly by mistake			
.19	A test was cancelled in error			
.20	An error occurred in a test result			
.21	A test could not be conducted because of equipment malfunction			
.22	You were operated on the incorrect side of the body			
.23	You were confused with another patient during a test or a treatment			
.24	You were given food/drink you were not allowed on your diet (e.g. if you were NBM)			
.25	Your fluids in your drip were not changed when they should have been			
	Communication problems			
.26	Doctors or nurses ignored information you gave them			
.27	Doctors or nurses did not respect confidentiality			
.28	Your consent was not obtained before a test or an intervention			
.29	You were handled or moved in a rough manner			
.30	You felt physically abused			
.31	You felt rejected by the health care team			
.32	The side effects of your medication were not explained to you			
.33	Health care staff did not introduce themselves and explain who they were			
.34	It was not explained to you how the ward works (e.g. location of toilets, meal times)			
.35	You were not told what to expect from your treatment while in hospital			

5. If the answer to the previous question is yes, from whom did you seek assistance?

1. Head of section (doctor or nursing administrator)
2. Hospital management
3. Complaints box
4. Ministry of Health
5. Police – Court
6. Lawyer
7. Media
8. A relative
9. Other -----

Section 4:

Please add your recommendation as a patient for improving patient safety while receiving health care:

Annex 2: Questionnaire of Patient Experiences of Undesirable Safety Events (Arabic version)

استبيان دراسة تجارب المرضى للأحداث غير المرغوب فيها أثناء تلقيهم الرعاية الصحية في المستشفيات

عزيزي المشارك، في هذه الدراسة

تحية طبية وبعد،

انا الباحثة: مي بشر حطاب طالبة دراسات عليا في كلية الصحة العامة-جامعة القدس تخصص سياسات وادارة صحية اقوم بعمل هذه الدراسة لاتمام متطلبات رسالة الماجستير.

هذه الدراسة تهدف الى التعرف على آرائكم و وجهات نظركم وتجاربكم حول الأحداث غير المرغوب فيها التي تتعلق بسلامتك كمريض , ومدى وجود ممارسات غير آمنة تؤثر على سلامة المرضى بشكل عام او تحول دون التوافق مع حقوق المريض بخدمة طبية آمنة وبدون أي اذى او خطأ خلال تلقيه للخدمات الطبية في المستشفيات.

حيث ان مجمع فلسطين الطبي يتبنى مبادرة منظمة الصحة العالمية للمستشفيات صديقة المريض، وتحرص كافة الطواقم الطبية والادارية على تحقيق خدمة طبية آمنة يكون فيها المريض هو مركز العناية الطبية كما تشير التوصيات العالمية patient centered.

تتكون الاستبانة من بعض (البنود \ العبارات) التي تعتبر أحداث غير مرغوب فيها وتمس سلامة المريض بغض النظر اذا تسببت بايذاء المريض ام لا، وهذه العبارات و الآراء ذات علاقة بسلامة المرضى موزعه على أربع أجزاء. تستغرق اجابة هذه الاستبانة من ١٠ – ١٥ دقيقة.

و أخيراً، نود أن ننوه الى أن المشاركة في الدراسة طوعية ولاغراض البحث العلمي فقط الهادف لتحسين جودة الخدمات المقدمة، مع مراعاة السرية التامة حول هوية الشخص الذي قام بتعبئة الاستبانة .

كذلك نود اعلامكم باننا لن يكون بمقدور إدارة المجمع اوالأطباء او الممرضين والفنيين أو الباحثون معرفة هوية المشاركين في البحث، حيث ستم معالجة المعلومات بشكل عام وليس بشكل خاص.

تعريف

- سلامة المرضى: هو ما يعرف بحماية المريض من الأذى و منع وقوع أي أذى له بما في ذلك أي نتائج سلبية قد تحدث جراء تقديم الرعاية الصحية له.
- حدث غير مرغوب فيه: الألم أو الإصابة المتعلقة بالإدارة الطبية و(الممارسات الصحية) في جميع جوانب الرعاية، بما في ذلك التشخيص والعلاج، والفشل في تشخيص أو علاج، والأنظمة والمعدات المستخدمة لتقديم الرعاية، بغض النظر إذا تسببت بايذاء المريض أم لا .

القسم الاول: معلومات عامه:

1. الجنس ذكر أنثى
2. العمر _____
3. كم المدة التي أمضيتها في المستشفى (عدد ايام مدة الاقامه في المستشفى) _____

4. المؤهل العلمي:
- | | |
|------------------|--------------------------|
| أمي (غير متعلم) | <input type="checkbox"/> |
| ثانوي | <input type="checkbox"/> |
| أساسي | <input type="checkbox"/> |
| جامعي فما فوق | <input type="checkbox"/> |

5. كيف تقييم وضعك الصحي حاليا؟

- | | |
|---------|--------------------------|
| جيد جدا | <input type="checkbox"/> |
| سيئ | <input type="checkbox"/> |
| جيد | <input type="checkbox"/> |
| سيئ جدا | <input type="checkbox"/> |

6. اسم القسم الذي تلقيت العلاج فيه :

- قسم الباطني.
- قسم الجراحة.
- قسم العظام.
- قسم العناية القلبية.
- قسم العناية المكثفه.
- غير ذلك حدد _____

القسم الثاني :

الرجاء ان تختار مدى موافقتك او رفضك للجمل التالية بما يتعلق بتجربتك او تعرضك لأي من الاحداث غير المرغوب فيها ذات صلة بسلامة المرضى التالية:

الرقم	العنصر	نعم بالتأكيد	من الممكن	لا
1.	حدث معك إتهاب أو إحمرار وريدي مؤلم مع حكة بسبب الإبرة التي وضعت لك في الوريد.			
2.	إلتقطت أي عدوى أو إتهاب أثناء وجودك في المستشفى، على سبيل المثال: (إتهاب في مجرى البول أو إتهاب دموي أو إتهاب مكان العملية الجراحية)			
3.	حصل لك تحسس من الادوية التي اعطيت لك خلال اقامتك بالمشفى			
4.	تم اعطاؤك حقنة او دواء ليست مقرررة لك (لم يتم وصفها اصلا لك)			
5.	تم اعطاؤك دواء او حقنة في الوقت الخطأ			
6.	تم اعطاؤك جرعه خاطئة من العلاج			
7.	تم حذف او نسيان جرعة من العلاج عن طرق الخطأ			
8.	نزفت كثيرا بعد العملية الجراحية او عند وضع الابرة الوريدية أو كيس البول أو اجراءات مشابهه.			
9.	تم اجراء عملية نقل دم لك بطريقة مؤلمة وغير سليمة			
10.	كنت قد نقلت للعناية المركزة بسبب مضاعفات حدثت لك في المستشفى			
11.	تم اعادة اجراء عملية جراحية لك بشكل عاجل خلال ثلاث ايام من اجراء العملية الجراحية الاولى			
12.	اصبت بتقرحات جلدية خلال اقامتك بالمستشفى			
13.	تعرضت لأي حادث وقوع في المستشفى			
14.	كنت قد اكتشفت أن الطاقم الصحي لم يغسلوا/لم يظفروا أيديهم قبل أن يلمسوك			
15.	تم تشخيصك بشكل خاطئ من قبل الأطباء			
16.	لم يتم اعطاؤك كمية كافية من المسكنات			
17.	كانت سجلاتك الطبية أو الصور الاشعاعية/ نتائج الفحوصات غير موجودة عند الحاجة لها.			
18.	تم اعادة نفس الفحوصات بدون الحاجة لذلك بالخطأ			

			19. تم الغاء فحص مقرر لك بالخطا
			20. حدث خطأ في نتيجة فحص – استلمت نتيجة فحص خاطئة
			21. لم يكن ممكنا اجراء اختبارات/ فحوصات لك وذلك بسبب تعطل الأجهزة أو عدم توفرها في المستشفى أصلا
			22. تم تنفيذ اجراء تشخيصي أو علاجي او جراحي في مكان خاطئ في جسدك أو في مكان قريب من الموقع المطلوب
			23. تم الخلط بينك وبين مريض آخر أثناء اجراء الفحوصات أو العلاج
			24. تم تقديم طعام أو شراب غير ملائمين لوضعك الصحي أو في وقت غير مسموح لك فيه تناول الطعام : مثلا عندما كنت صائما قبل العملية الجراحية
			25. لم يم تبديل المحاليل الوريدية في الوقت الذي كان ينبغي ان يتم تبديلها فيه
			26. الاطباء أو التمريض قد اهملوا المعلومات التي قدمتها لهم
			27. الاطباء او التمريض لم يحترموا خصوصيتك
			28. لم يتم اخذ موافقتك قبل الاجراء الطبي ، أو الفحوصات (مثلا قبل اجراء عملية جراحية، نقل دم، فحوصات).
			29. تم التعامل معك او نقلك بخشونه
			30. تعرضت لأي اعتداء جسدي او تعنيف
			31. شعرت برفض أو عدم تقبل من قبل طاقم الرعاية الصحية
			32. الاثار الجانبية للأدوية التي تم اعطاؤك اياها لم توضح لك
			33. الطاقم الطبي لم يعرفوا عن انفسهم ولم يوضحوا لك من هم
			34. لم يتم شرح آلية عمل القسم لك، مثلا: اوقات وجبات الطعام او مكان الحمام
			35. لم يشرح لك اي احد ما هو المتوقع من علاجك خلال فترة مكوثك في المستشفى
			36. لم تشعر انه بإمكانك ان تسأل الأسئلة التي تريد ان تسألها سواء للأطباء أو للتمريض
			37. لم يتم معاملتك باحترام وكرامه من قبل الطاقم الطبي
			38. تمت معاملتك بطريقة غير رسمية وبدون موافقتك

القسم الثالث :

1. اذا كنت قد اصبت بحدث غير مرغوب فيه , واذا طلب منك أن تعطي درجة لخطورة الحدث غير المرغوب به الذي أجبت عليه في السؤال السابق ،فما هي درجة الخطورة التي تعطيها لذلك الحدث؟ (علما ان الرقم واحد هو الاقل خطورة والرقم 10 الاعلى خطورة):

10	9	8	7	6	5	4	3	2	1
شديد الخطورة					قليل الخطورة				

2. هل انتابك اي قلق او تخوف داخلي من ان تعاني من اي خطأ طبي فترة مكوثك في المستشفى؟

كان لدي قلق شديد.

كان لدي بعض القلق.

لم أشعر بالقلق بتاتا

3. هل تم التواصل معك من قبل الطاقم الطبي او الاداري لتوضيح او الاعتذار عن أي حدث غير مرغوب فيه او أذى اصابك خلال فترة الإقامة في المستشفى؟

نعم

لا

4. اذا كنت تعرضت لحدث غير مرغوب به اثناء وجودك في المستشفى ، هل قمت بالتبليغ عن ذلك الحدث؟

نعم

لا

5. اذا كانت اجابة السؤال السابق نعم ، لمن توجهت لطلب المساعدة؟

1. ادارة القسم الموجود فيه (الطبيب او التمريض المسؤول)

2. ادارة المستشفى.

3. صندوق الشكاوى.

4. وزارة الصحة.

5. الشرطة/القضاء.

6. محامي.

7. الاعلام.

8. أحد الاقارب.

اجابة اخرى ،وضح -----



الجزء الرابع:

يرجى اضافة اي توصيات من اجل تحسين سلامة وحماية المرضى اثناء تقديم الرعاية الصحية للمرضى في هذه المؤسسة:

مع تمنياتي لكم بصحة جيدة

الباحثة: مي طارق بشر

Annex 3: Formal letter to request permission from hospital director

<p>State of Palestine Ministry of Health - Nablus General Directorate of Education in Health</p>		<p>دولة فلسطين وزارة الصحة - نابلس الإدارة العامة للتعليم الصحي</p>
<hr/>		
Ref:	الرقم:	
Date:	التاريخ:	
<p>الأخ مدير مجمع فلسطين الطبي المحترم،،،</p>		
<p>تحية واحترام،،،</p>		
<p><u>الموضوع: تسهيل مهمة الطلبة من بشير</u></p>		
<p>تمانياً مع سياسة وزارة الصحة المتطوّقة بتعزيز التعاون مع الجامعات والمؤسسات الأكاديمية بإتاحة فرص التدريب أمام الطلبة والخريجين والباحثين في المؤسسات الوطنية وإسهاماً في تنمية قدراتهم.</p> <p>يرجى تسهيل مهمة الطلبة من محمود بشير خطاب - ماجستير السياسات والإدارة الصحية - جامعة القدس، في عمل بحث التخرج بعنوان "دراسة تجارب المرضى للأحداث غير المرغوب فيها أثناء تلقيهم الرعاية الصحية في المستشفيات"، وذلك من خلال السماح للطلبة بتوزيع استبانة الدراسة على المرضى الذين اضطروا المستشفى لمدة أكثر من يومين وما زالوا مقيمين في المستشفى أو خرجوا وعادوا للعيادات الخارجية في مجمع فلسطين الطبي- رام الله، علماً بأنه سيتم الالتزام بمعايير البحث العلمي والحفاظ على سرية المعلومات.</p>		
<p>مع الاحترام،،،</p>		
<p> د. أمل أبو عوض ق. أ. مدير عام التعليم الصحي</p>		
<p>نسخة: عميد كلية الصحة العامة (المعزوم) جامعة القدس</p>		
P.O .Box: 14 Tel/Fax: 09-2333901	Healtheducation.dep@gmail.com	ص.ب. 14 فناكس: 09-2333901

Annex4: List of Experts Group for Survey Validation

No.	Name	Position
1	Abedalrouf Saleem	Quality Planning Department – Ministry of Health
2	Ayman Abu Mouhsen	Quality and patient safety coordinator-Palestine Medical Complex-MoH
3	Dr.Mowafaq Naseef	Intern & Director of the Critical Care Department at Palestine Medical Complex, Ramallah, Palestine
4	Thafer Alqam	Quality Coordinator /Salfit Hospital /MOH, and Head of Red Crescent Society- Salfit Branch
5	A. A.	Open heart patient treated in PMC, holding a Bachelor's degree in Information Technology and aged 30.