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MIDDLE EAST UNIVERSITY
Amman - Jordan

The Impact of Application of International Safety Goals on Patient Safety Culture:

A Field Study In Private Hospitals That Working in the City Of Amman

أثر تطبيق الأهداف الدولية للسلامة في ثقافة سلامة المرضى

دراسة ميدانية في المستشفيات الخاصة العاملة في مدينة عمان

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Management Department

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Authorization

I, Amaal Abousallah authorize Middle East University to supply hard and electronic copies of my thesis to libraries, establishments, bodies, and institutions concerned with research and scientific studies upon request according to the university regulations.

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Committee Discussion and Decision

This Thesis of the student Amaal Abousallah which studied (**The Impact of Application of International Safety Goals on** Patient Safety Culture: A Field Study in Private Hospitals That Working in The City of Amman) was successfully Defended and Approved on 17 / 1/ 2018

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Researcher

Amaal Abousallah

Dedication

This thesis is dedicated to my precious family;

To my wonderful husband Dr: Magde Boukhatwa, the greatest man in my life, whose unconditional love and support at each time of my life, No word can describe what you have done for me. Thank you for believing in me.

To my children; I am really honored to have you in my life, thank you for your love, help, patience, and

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Researcher

Amaal Abousallah

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The impact of Application of International Safety Goals on patient Safety Culture:

Afield study in Private Hospitals working in the City of Amman

Supervised by:

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Abstract

The study aimed at describing the impact of International Patient Safety Goals dimensions on the Private Jordanian Hospitals, from the perception of the medical staff. The descriptive and analytical method was used. The population is the Private Jordanian Hospitals that have Joint Commission International Accreditation of patient safety. The study used the qualitative method by collecting data via questionnaires for a sample that size of 156, which were distributed among the medical staff in Jordan Private Hospitals. The questionnaire was adopted from Agency of Healthcare Research & Quality refined by literature review and panel of referees committee, In addition, the researcher used the Statistical Package for Social Science (SPSS ver.16) for descriptive statistics. Statistical techniques such as descriptive statistics, correlation, and simple regressions were used to test the hypotheses. The results show that there is an agreement on the high application of International Patient Safety Goals variables among Private Jordanian Hospitals, also the relationship between total International Patient Safety Goals and Patient Safety Culture is strong, all International Patient Safety Goals variables have an effect on Patient Safety Culture of Private Jordanian Hospitals. Finally, the current study recommends considering improving the elements of International Patient Safety Goals together because they are strongly interrelated and have a positive impact on the three-level aspects of the patient safety culture.

Key Words: International Patient Safety Goals, Patient Safety Culture Private Jordanian Hospitals, unit level aspect, Hospital level aspect & patient safety outcome.

أثر تطبيق الأهداف الدولية للسلامة في ثقافة سلامة المرضى

دراسة ميدانية في المستشفيات الخاصة العاملة في مدينة عمان

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الملخص

هدفت الدراسة إلى وصف أثر الأهداف الدولية للسلامة على المستشفيات الأردنية الخاصة، من وجهة نظر الطاقم الطبي.تم استخدام المنهج الوصفي والتحليلي في التحليل الإحصائي وقد كان مجتمع الدراسة المستشفيات الأردنية الخاصة الحاصلة على الاعتماد الدولي لسلامة المرضى.استخدمت الدراسة المنهج النوعي, من خلال جمع البيانات عن طريق الاستبانة وذلك لعينة بحجم 156 تم توزيعها على الطاقم الطبي في مستشفيات الأردن الخاصة. تم اعتماد الاستبانة من قبل وكالة الرعاية الصحية للأبحاث والجودة و إيضا تمت مراجعتها وتحكيمها من قبل لجنة المحكمين ، بالإضافة إلى ذلك استخدم الباحث الحزمة الإحصائية للعلوم الاجتماعية (سبس ver.16) للإحصاءات الوصفية. واستخدمت التقنيات الإحصائية مثل الإحصاء الوصفي، والارتباط، والانحدارات البسيطة لاختبار الفرضيات.

وأظهرت النتائج أن هناك اتفاقا على التطبيق العالي للمتغيرات الدولية لأهداف سلامة المرضى في المستشفيات الأردنية الخاصة، كما أن العلاقة بين مجموع أهداف السلامة الدولية للمرضى وثقافة سلامة المرضى قوية، وجميع متغيرات أهداف السلامة الدولية لها تأثير على ثقافة السلامة في المستشفيات الأردنية الخاصة. وأخيرا توصي الدراسة الحالية بالنظر في تحسين عناصر الأهداف

الدولية لسلامة المرضى معا لأنها مترابطة بقوة ولها تأثير إيجابي على الجوانب الثلاثة لثقافة سلامة المرضى.

الكلمات المفتاحية: الأهداف الدولية للسلامة ، ثقافة سلامة المرضى , المستشفيات الخاصة ألأردنية, مستوى الوحدة، مستوى المستشفى ونتائج سلامة المرضى.

CHAPTER ONE
BACKGROUND AND IMPORTANCE OF THE STUDY

1.1. Introduction

Nowadays patient safety is a new healthcare issue in the healthcare organizations that includes the reducing and preventing medical fault that often leads to harmful health consequences. Health care has become more efficient and also become more complex, with greater application of new technologies and therapies, which needs adopting with the international patient safety goals to improve the patient safety environment to simulate international competition and to increase the competitive advantages of the healthcare organizations at the national and international grades.

The concept of patient safety has been variously conceptualized. Patient safety forms the basis of healthcare allocation just as physiological and biological,, safety needs form the basis of Maslow's hierarchy(Maslow, 1954). Likewise can be achieved if the patient does not feel safe or is, actually not safe. But the healthcare system is exceedingly complex, and ensuring patient safety needs the ongoing, focused efforts of every member of the healthcare team (Ulrich& Kear, 2014).

The simplest definition of patient safety by World Health Organization (WHO), is the prevention of mistakes and side effects to patients associated with health care (WHO, 2016).

Patient safety in health care hospitals has presented with much awareness to reinforce patient safety culture since in its landmark publication, "To Err Is Human," the Institute of Medicine defines patient safety as "freedom from accidental injury, Error is defined as" the failure of a planned action to be completed as prepared (i.e., error of execution) or the use of a wrong plan to achieve an aim (i.e., error of planning)." (Kohn et al, 2000).

In needed World Health Organization, said that the frequency and dimension of preventable adverse patient events was not well known until the1990s, when many countries reported terrible numbers of patients harmed and killed by medical errors. Recognizing that healthcare error impact 1 in every 10 patients around the world, (WHO) calls patient safety an endemic concern (Ulrich& Kear, 2014)

According to Patrick A. Palmieri, et al. (2008) patient safety has emerged as a discrete healthcare issue supported by not fully developing scientific framework. There is a significant Trans disciplinary body of theoretical and research literature that informs the science of patient safety. On the other hand, Hooshmand,et al.(2014) have perceived lack of standards and quality issues in providing healthcare services have been identified as the reasons for the need for an international goals as a qualitative approach.

Morello et al, (2013) is recognizing that there is a trend focus on standardizing and enhancing patient safety culture to promote patient safety in hospitals. This is give consideration to the increasing number of literature records on patient safety performance.

Alahmadi (2010) believed that, leadership is an important element to the effectiveness of patient safety initiatives. Response to errors is an important determinant of safety in healthcare organizations. In order for health care organizations to create a culture of safety and improvement, they must eliminate fear of blame and provide a climate of open communication and continuous learning. Patient safety is an important component of risk management, international goals.

Mazur& et al, (2008) also explained that, If Toyota Production System (TPS) analysis procedure applied in health care industry this resolve medication delivery problems at hospital, and lead to increase performance behind medication delivery in all healthcare settings. Therefore patient risk as well as systems waste can be decreased.

Promoting a culture of safety has become one of the columns of patient safety. As healthcare facilities make every effort to improve their quality of care and provide their service in an adequate standard, focusing on patient safety has become an international priority (Colla, 2005). Now is recognized in many countries, with international awareness supported by the World Health Organization’s World Alliance for Patient

Safety. And yet there continue to be considerable challenges to implementing patient safety policies and practices. One essential requirement for accepting any new approach is a clear articulation of its premises and manifestations. Elements of patient safety have been presented by thought leaders, and models have been expressed. However, a single rendition that can help a thorough adoption of patient safety throughout health care has not been available. (Emanuel et al. 2008).

According to El-Jardali (2011), Hellings (2007) & Etchegaray & Thomas , 2012) In recent years, a lot of developed and developing Countries has been published surveys on patient safety culture in hospitals, and the situating safety culture in hospital is the first step of developing a safety culture, while numerous areas of the world have documented patient safety culture, there is a lack of such undertakings from Arabic countries with a few exceptions which indicates that awareness of the existing safety culture of an individual or group is the initial step towards improvement of healthcare service through safe and quality care.

There is dearth of such study in Jordan, which deals with the impact of application of international patient safety goals that submitted from international bodies such as the world Health Organization (WHO) and Joint Commission International (JCI), However patient safety is a recent domain in Jordan hospitals and few strains have been made to assess the patient safety by following those goals.

The aim of this study to illustrate the overall perception of patient safety culture among health care providers as well as to identify the common strength and areas of patient safety.

1.2. Problem Statement

Many researches indicated that, the patient safety is related in many ways to patient global public health problem, but only few were oriented to the relation between the application of international patient safety goals and patient safety culture in the hospitals. And considering the importance of evaluating these variables and the relation between them, this topic has been chosen for the study.

Ulrich & Kear, (2014) describes the concepts of patient safety and patient safety culture as the foundations for excellent health care delivery patient safety and patient

safety cultures must be strong enough to be able to move quickly to the last stage of data reality, to accept the challenge and the responsibility of ensuring that patients are safe when they are in our care, and to do all in our power and beyond to create patient safety cultures that nurture and support the our staff and our patients.

James, (2013) recommended in his study, the epidemic of patient harm in hospitals must be possessed more seriously if it is to be reduced. Wholly engaging patients and their advocates during hospital care, systematically seeking the patients' voice in identifying harms, transparent accountability for harm. However corresponding to Aboul –Fotouh et al, (2012) Patient safety still has many zones for improvement that need continuous assessment and monitoring to gain a safe environment both for patients and health-care professionals.

AlMandhari et al, (2014) also demonstrated that, the developing a culture of safety is a core element of many efforts to improve patient safety and care quality in acute care settings.

Based on the previous studies and their recommendations to achieve the hospital's patient safety goals, the relation between international goals and patient safety has to be assessed to considering the impact on each other. Hospitals are introduced in a severe competition under the prompt and speedy improvement in the health care services, the application of international patient safety goals have a vast impact on most hospital's services in all department with a strong positive effect on the patient safety condition.

1.3. Study objectives

The current study seeks to identify the impact of application the international patient safety goals (according to the manual of WHO, 2016) to improve the patient safety, through:

1. Providing conceptual and intellectual framework for basic study variables (international safety goals and patient safety).
2. Describing the level of patient safety culture in private hospitals.
3. Detecting the impact of application of international safety goals on patient safety culture.

4. Describing the level of application of international safety goals in private hospitals.

1.4. Study Importance

Its focus on private hospitals in Jordan and their patient safety culture, where it was analyze some of the variables, which have impact on the hospital management, as well as it is expect to reach advantage for the researchers in the area of enhancing management fields.

This study was give a general review about variables (international Safety goals and patient safety culture) and their correlations. In addition, this study could be generalized over many hospitals, since most of the hospitals are affected by the international patient safety goals.

Finally, the results from this study were benefit the hospitals concerning how to deal with international safety goals and take benefit of having patient safety standards and handle them correctly which lead to a successful sustainable hospital, on the other hand these results may be applied to reduce medical errors and improving the entire system of heath care.

1.5. Study Questions and Hypothesis

St**udy questions**: which were answered by medical staff (physicians and nurses). Based on the above the main problem can be determined by the following questions:

First main question:

5. 1- What is the practices level for the impact of application of international safety goals on patient safety culture?

Second main question:

2- Is there an impact of international safety goals application on patient safety culture?

2.1- Is there an impact of Patient Identification & communication on patient safety culture?

2.2 - Is there an impact of Safety of medications & surgery on patient safety culture?

2.3 - Is there an impact of Infections &fall hazards reduction on patient safety culture ?

Study Hypothesis

$H0_1$: There is no significant impact of international safety goals application on patient safety culture at the hospital at ($\alpha \leq 0.05$).

$H0_{1.1}$: There is no significant impact of Patient Identification &communication on patient safety culture at ($\alpha \leq 0.05$).

$H0_{1.2}$: There is no significant impact of Safety of medications &surgery on patient safety culture ($\alpha \leq 0.05$).

$H0_{1.3}$: There is no significant impact of Infections &fall hazards reduction on patient safety culture at ($\alpha \leq 0.05$).

1.6. Study Model

In dependent variable **Dependent variable**

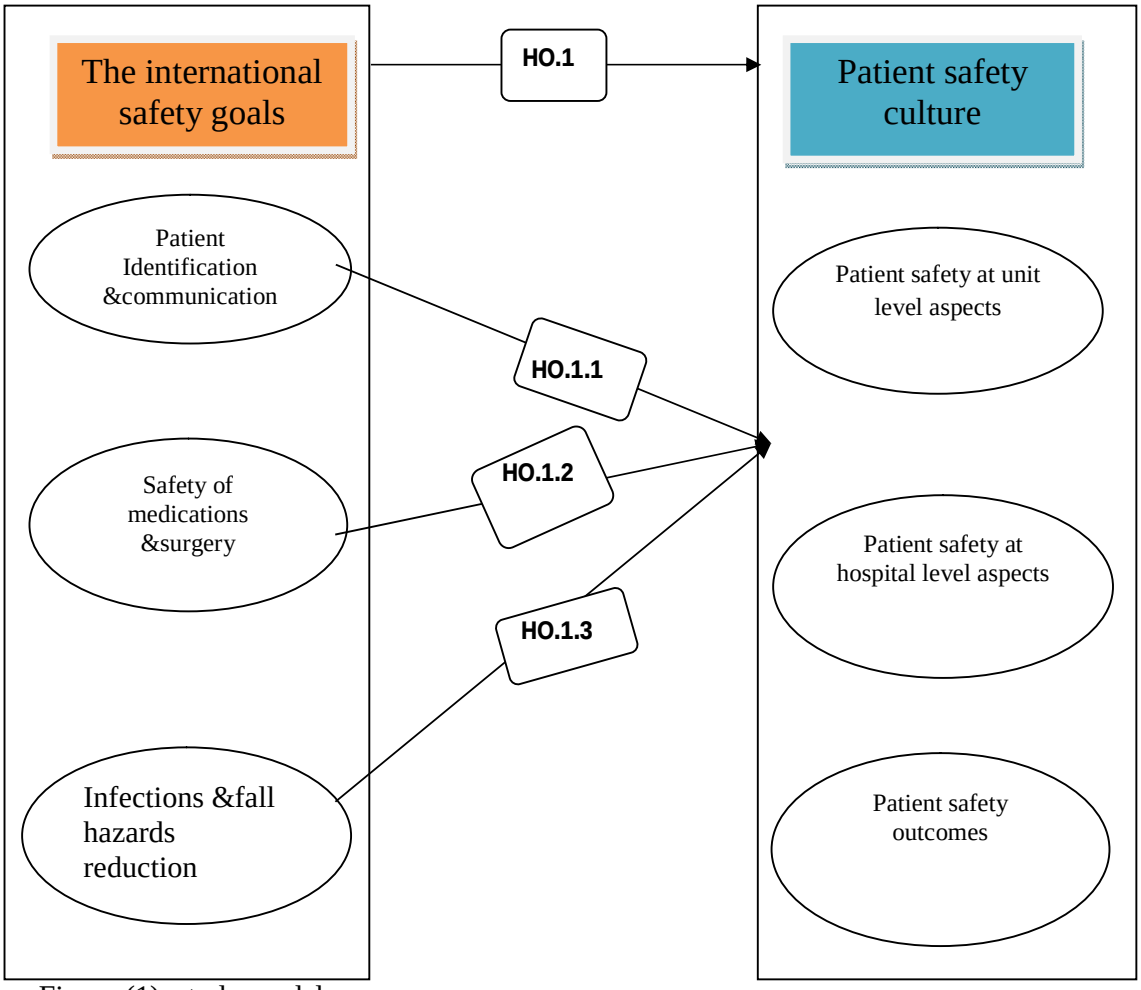

Figure (1): study model.

A simplified representation of study variables: Independent variables:. {source based on &Agency of health research and quality and joint international commission (2017)}. Dependent variables:{source based on Elmontsri, (2017)}

1.7.Limitations

Human Limitation: This study was carried on medical staff working at Private Jordan Hospitals.

Place Limitation: This study was carried on selected Private Jordan Hospitals.

Time Limitation: This study was carried out within the period between 1stsemester and 2nd semester of academic year 2017/2018.

1.8. Study Delimitation:

The use of 3 hospitals limits its generalizability to other hospitals. The study was carried out in Jordan; therefore, generalizing results to other hospitals and/or countries may be questionable. Extending the analyses to other hospitals and countries represent future research opportunities, which can be done by further testing with larger samples within same hospital, and including other hospitals were help mitigate the issue of generalizing conclusions on other hospitals. Moreover, further empirical researches involving data collection over diverse countries especially Arab countries are needed.

Limitations to data access refer to the fact that data gathering through the questionnaires and annual reports is controlled to the period of these questionnaires, which may limit the quality and quantity of the data collected. And lack of similar studies in Jordan and other Arab countries.

1.9. Scientific Limitations

In this study, the relation between different variables were analyzed. The first variable was international safety goals was divided into six sub- variables; based on: joint commission international JCI (2017) & Ammouri et al, (2015) divided the patient safety to twelve variables; supervisor/manager expectation and promoting patient safety, organizational learning /continuous improvement, teamwork within unit at the hospital, non-punitive response to error, staffing, hospital management support for patient safety, team work across hospital units, hospital handoff and transitions, communication openness, feedback and communication of safety, overall perception of safety and frequency of events reported.

1.10. Conceptual and operational Definitions:

Conceptual Definitions:

International Patient safety goals: Are a set of requirements that are crucial for foundation of a patient Safety approach at hospital level (WHO manual2016). The National Patient Safety Foundation identified the key property of safety as emerging from the proper interaction of components of the health care system, that way leading to a defined focus for patient safety, namely systems. (Cooper et al, 2000).

International patient safety goals, holds three variables (as in figure1.2):-

1. Patient identification &effective communication.
2. The safety of medications and &surgery.
3. Reduce the risk of infections & falls.

Its measured through the individual's response to the questionnaire.

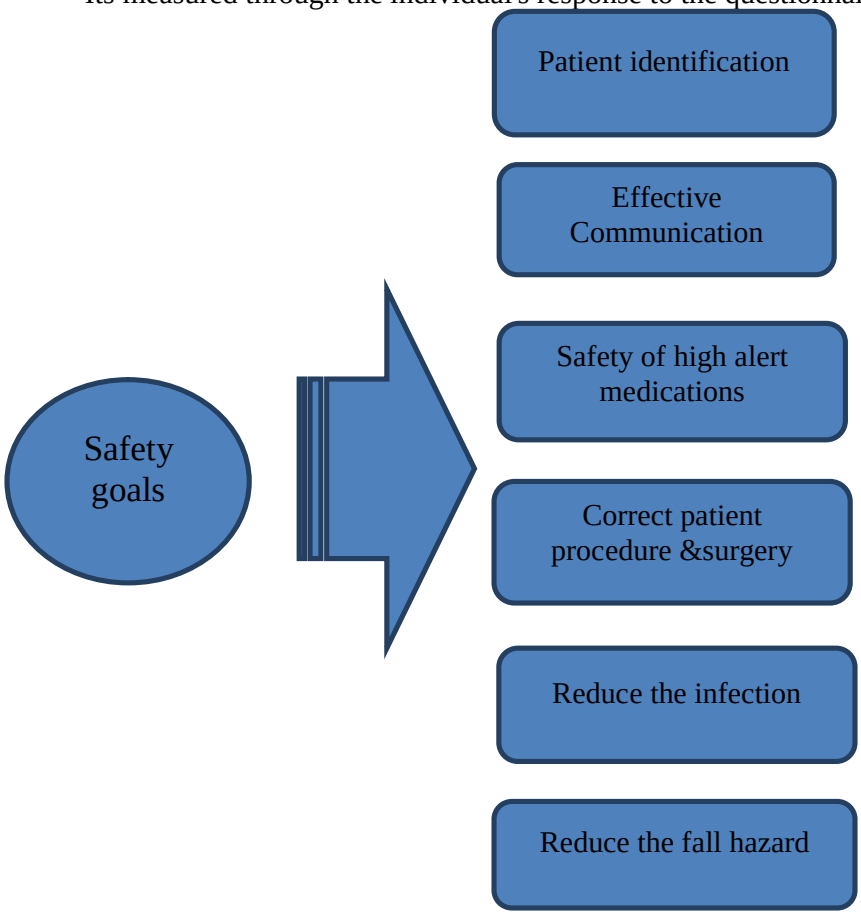

Figure (1.2): International patient safety goals. (Source: Prepared by researcher)

Patient identification:

The capacity to identify any patient and coincide them to the perfect care pathway and healthcare professional must represent an ultimate right for any person. (Jonas et al, 2014). To ensure that all patients attending hospital are correctly identified. It is the responsibility of all staff admitting, treating or registering a patient, whether an inpatient or outpatient to ensure that they have correctly identified that patient. For unknown and unconscious patients (such as trauma patients), identification is made by Resuscitation staff until a unique identification has been made by means of a number on a band, or until the patient's true identity is established (water, 2015).Correct patient identification is achieved when the healthcare worker is able to confirm that the identity markers given by the patient or the patient's guardian/ representative, match those on the patient's identity band and documents. Misidentification, occurs when the patient identity markers given by the patient, or his/her guardian/representative, do not match exactly, those on the patient's identity band and/or documents. It can also occur when a healthcare worker mistakes one patient for another by not following correct identification policy (Thiru et al, 2003).

- **Effective Communication:**

It is an interaction between two or more people that produces a desired effect and is a key element of quality of a care for patients with advanced and serious illness and their family member, effective communication between providers and patients and their families is fundamental in palliative care. Clinical communication is a multidimensional concept, which encompasses the core of effective clinical practice. Communication involves sharing information, thoughts and feelings between two or more people, and it is effective when the interaction carries the intended message. Thus, the quality of communication in the care of patients with advanced and serious sickness is a key determinant of patient and family outcomes (Fawole et al.2013& Hasan & Rashid, 2016).Explaining how and why communication contributes to health outcomes requires a deeper understanding of how specific, well defined aspects of communication are linked to specific outcomes, as well as an understanding of how contextual factors – within the clinical setting as well as family and social factors extrinsic to the clinical setting – moderate or mediate the effects of communication on health. This requires that investigators move beyond descriptive conceptual frameworks to formulate theoretical

explanations linking communication to health. Moreover, researchers must also recognize and try to account for the fact that outcomes, especially those related to cancer and chronic disease, are likely less influenced by a single clinician–patient encounter, and more by the cumulative effect of the patient's communication over time with their physicians, others on the health care team, families, and friends (street et al .2009).

- **Safety of high alert medications:**

Medication errors are outstanding problems among hospitalized patient and may occur during prescribing, transcribing, prescription, auditing, dispensing, administration, and monitoring (Lan, et. al, 2014). Enormous opportunities exist to improve medication safety, especially in domains related to culture, information management, and a communication consumer (Smetzer et al, 2003) .Medication errors strike at the heart of being a nurse-the responsibility to do well and avoid harm. Medication errors have serious direct and indirect results, and are usually the consequence of breakdowns in a system of care. Direct results include patient harm as well as increased healthcare costs. Indirect results include harm to nurses in terms of professional and personal status, confidence, and practice (Hume, 1999 & Stetler et al, 2000).

- **Correct patient procedure &surgery:**

Patient Safety for definitive direction on improving the precision of patient identification, correct surgery site, and developing and implementing policies and procedures (Gibbs, 2005). Performing a procedure on the wrong side of a patient's body, performing a wrong procedure, or performing the correct procedure on the wrong patient constitute some of the worst medical errors that clinicians and patients experience. The Institute of Medicine report" To Err Is Human" painted a broad picture of the magnitude of medical errors in the United States and gave directions for safety improvements(Donaldson ,et .al,2000& Seiden & Barach, 2006).Wrong-site surgery is unacceptable but exceedingly rare, and major injury from wrong-site surgery is even rarer. Current site-verification protocols could have prevented only two thirds of the examined cases. Many protocols involve considerable complexity without clear added

benefit (Kwan et al, 2009). Wrong site surgery can be simply defined as “the performance of an operation or surgical procedure on the wrong part of the body

-Incorrect side (for example, left eye rather than right), which can obviously only occur with paired structures such as kidneys, ovaries, or eyes

-Correct side but incorrect location—occurs where there is more than one similar anatomical structure to choose from (for example, incorrect finger on the correct hand or incorrect eye muscle on correct eye)

-Correct side and correct anatomical site but the incorrect operation (for example, resection of a muscle rather than recession) (Gibbs, 2005).

- **Reduce the risk of health care associated infection:**

Nosocomial, or hospital-acquired, infections (more appropriately called health care–associated infections) are today by far the most common complications affecting hospitalized patients(Leape, et al.1991). Noso-comial” term is used for any disease acquired by patient under medical care. It is an infection acquired by patient during hospital stay. Recently, a new term, “healthcare associated infections” is used for the type of infections caused by prolonged hospital stay and it accounts for a main risk factor for serious health issues leading to death (Khan, et al .2015). Hand hygiene is the single most important factor in preventing transmission of disease causing organisms, hand hygiene prevents cross-infection in hospitals, but health-care workers' adherence to guidelines is poor. Easy, timely access to both hand hygiene and skin protection is necessary for satisfactory hand hygiene behavior. Alcohol- based hand rubs may be better than traditional hand washing as they require less time, act faster, are less irritating, and contribute to sustained improvement in compliance associated with decreased infection rates. This article reviews barriers to appropriate hand hygiene and risk factors for noncompliance and proposes strategies for promoting hand hygiene(Pittet, 2001)

- **Reduce harm from falls:**

Falls are a significant trouble of acute care hospital settings, and can have severe outcomes, especially for older patients: Fall prevention has therefore been recognized as a significant area for research and intervention. In order to target interventions and use resources efficiently, a major strategy of fall prevention approach has been the

development and/or use of risk assessment tools to detect patients who are at high risk of falling. (Myers & Nikoletti 2003).

Patient safety culture:

Aspden et al. (2004),They define patient safety simply as "the prevention of harm to patients".The National patient safety institution defines patient safety as "the avoidance, prevention, and amelioration of harmful outcomes or injuries be caused from the processes of health care".(Cao et al .2010). Patient safety has three sub variables: clinical governance, quality improvement and risk management, and its measured through the individual's response on the questionnaire. The most important aspect of patient safety culture is its applicability within healthcare settings.The entrance of 'culture' in patient safety came into prominence within the background that the majority of errors and adverse events more accurately stem from a complex chain of events that jointly contribute to the cause rather than human errors". (Al-Mandhari et al, 2014).Safety culture is the anthology of "attitudes, beliefs, perceptions, and values that employees share in relation to safety" (Cox and Cox1999).

Patient safety culture: are divided into three level aspects (as in figure 1.3), each level aspect subdivided into three sub variables, which adopted by Ammouri et al, (2015) as following:

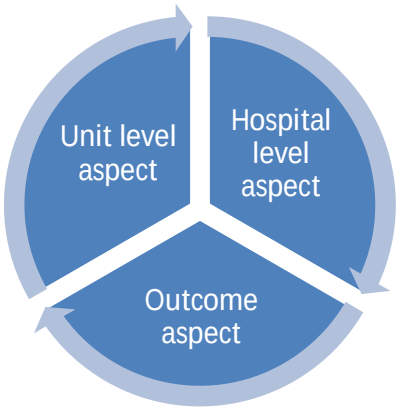

Figure (1.3): The level of patient safety culture. (Source: Prepared by researcher).

A .Unit-level aspects:

1. Supervisor/manager expectations and actions promoting safety
2. Organizational learning-continuous improvement
3. Teamwork within units
4. Communication openness
5. Feedback and communication about error
6. Non-punitive response to error
7. Staffing.

B. Hospital-level aspects:

8. Hospital management support for patient safety.
9. Teamwork across units.
10. Hospital handoffs and transitions.

C .Outcome-level aspects:

11. Overall perceptions of safety.
12. Frequency of event reporting.

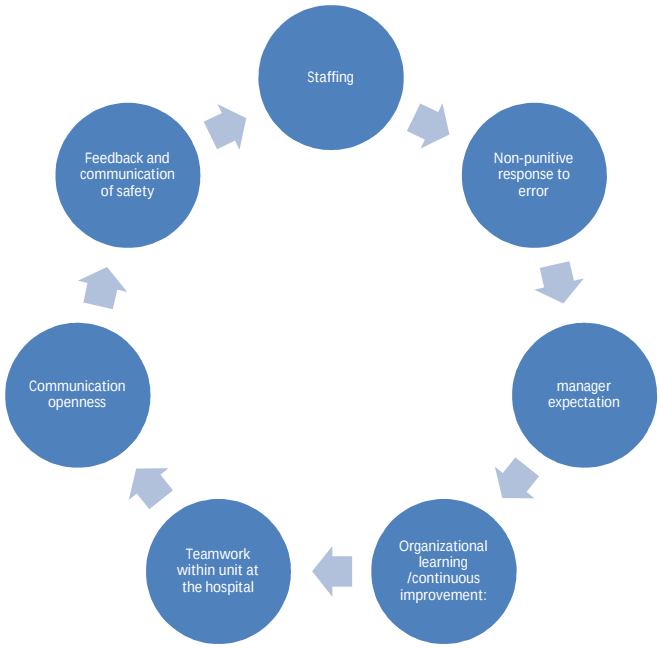

Figure (1.4): Unit-level aspects of patient safety culture.(Source: prepared by researcher).

A.Unit-level aspects (as in figure 1.4):

1. Supervisor/manager expectation and promoting patient safety:

Supervisor/manager says a good word when a job done according to established patient safety procedures, supervisor/manager seriously considers staff suggestions for improving patient safety. Whenever pressure builds up, supervisor/manager wants them to work faster, even if it means taking shortcuts supervisor/manager overlooks patient safety problems that happen over and over.

2. Organizational learning /continuous improvement:

Actively doing things to improve patient safety, mistake have led to positive changes, make changes to improve patient safety, and evaluate their effectiveness.

3. Teamwork within unit at the hospital:

People support one another in terms of work in the unit, when a lot of work needs to be done quickly, they work together as a team to get the work done In the unit, people treat each other with respect, and when one area in the unit get really busy, others help out.

4. Communication openness:

Staff was freely speak up if they see something that may negatively affect patient care, they feel free to question the decisions or actions of those with more authority Staff are afraid to ask questions when something does not feel right.

5. Feedback and communication of safety:

They give feedback about changes put into place based on event reports ,they are informed about errors that happen in the unit. Also, they discuss ways to prevent errors from happening again.

6. Non-punitive response to error:

Staff feel like their mistakes are held against them, when an event is reported, it feels like the person is being reported, not the problem Staff worry that mistakes are kept in their file.

7. Staffing:

They have enough staff to handle the workload. Staff in this unit work long hours which might affect patient care, they use more agency/ temporary staff than is best patient care, when work in ‘crisis mode’ trying to do too much, too quickly.

B.Hospital level aspects (as in figure1.5):

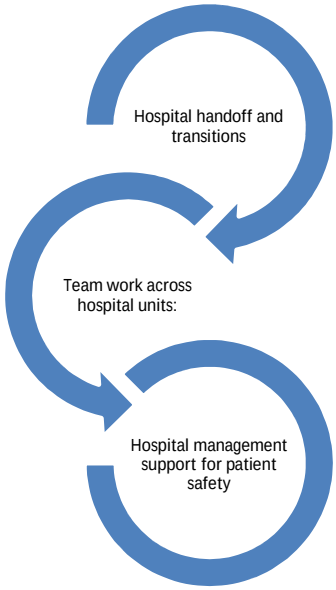

Figure (1.5): Hospital level aspects. (Source: prepared by researcher).

8. Hospital management support for patient safety:

Hospital management provides a work climate that promotes patient safety, hospital management show that patient safety is a top priority also, they don’t interested in patient safety only after an adverse event happens.

9. Team work across hospital units:

Hospital units coordinate well with each other there is good cooperation among hospital units that need to work together it is often not easy to work with staff from other hospital units, hospital units work well together to provide the best care for patients.

10. Hospital handoff and transitions:

Things 'fall between the cracks' when transferring patients to another unit, important patient care information is often lost during shift changes. Problems often occur in the exchange of information across hospital units, shift changes are problematic for patients in this hospital.

Patient Safety Outcome (as in figure 1.6):

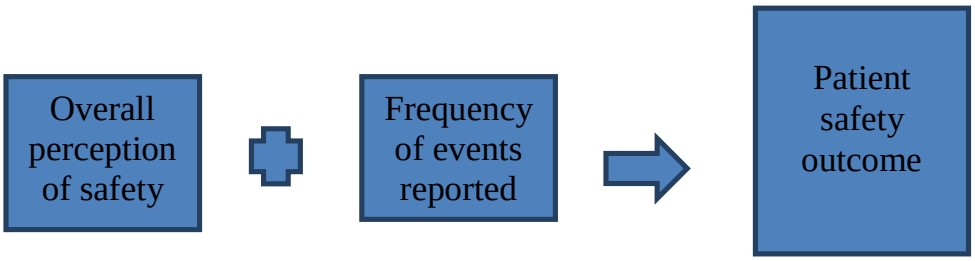

Figure (1.6): Outcome level aspects.

Source: Prepared by researcher.

11. Overall perception of safety:

It is just by chance that more serious mistakes do not happen around here, Patient safety is never sacrificed to get more work done. They have patient safety problems in the unit, their procedures and systems are effective in preventing errors.

12. Frequency of events reported:

- When a mistake is made, but is caught and corrected before it affects the patient, how often is this reported?

- When a mistake is made, but has no potential to harm the patient, how often is this reported?
- When a mistake is made that could harm the patient, but does not, how often is this reported?

Operational Definitions:

International patient safety goals: can be defined as the typical standards and criteria which must be applied in the healthcare hospitals to attain the appropriate patient safety.

Identify patient correctly: The process of identification of patient by accurate methods, and maneuvers.

Effective Communication: is the process which lead to improving the relation between the healthcare providers and patient and their family.

Safety of high alert medications: medications have a lot of types with different adverse effects, which need high precaution criteria, and safety measurements to handling them.

Correct patient procedure &surgery: the correct definition and accurate matching of given data with the same patient, to avoid mistakes and errors.

Reduce the risk of health care associated infection: is the process of reducing and preventing the infections which occur during staying of patient in the hospital.

Reduce harm from falls: the falls result from incorrect handling of patient may lead to a huge side effects and even to death, so the proper procedures must be follow to avoid it.

Patient safety culture: is the process of decreasing, mitigation and prohibition of the harmful events which occur during healthcare.

The patient safety culture are divided into twelve variables:

Unit level aspects:-

1. Supervisor/manager expectation and promoting patient safety:

supervisor/manager says a nice word when a job finished according to assured patient safety steps, supervisor/manager seriously considers staff opinions for upgrading patient safety and promoting patient safety culture.

2. Organizational learning /continuous improvement:

Learning even from mistake lead to better improvement of patient safety culture, continuous monitoring lead to decrease and avoid the errors and good results.

3. Teamwork within unit at the hospital:

People assist each other in field of work in the unit, when a heavy work needs to be done quickly, they work together as a team to get the work done. In the unit, people help each other with appreciation, and when one place in the unit get overload, others provide help.

4. Communication openness:

Staff's ability to comment if they see something that may negatively affect patient care, they feel free to ask those with more authority. Staff cannot able to ask if something does not feel right.

5. Feedback and communication of safety:

One of the most effective ways to improve a safety culture and prevent injuries is to optimize safety-related communication throughout an organization.

6. Non-punitive response to error:

Hospitals are struggling with finding ways to address errors without punishing those responsible

7. Staffing:

They have enough staff to handle the workload. Staff in this unit work long hours which might affect patient care, they use more agency/ temporary staff than is best patient care, when work in ‘crisis mode’ trying to do too much, too quickly.

8. Hospital management support for patient safety:

Hospital management facilitate a work culture that gives patient safety, hospital management represent that patient safety is a first seniority also, they don’t included in patient safety only after complications occur.

9. Team work across hospital units:

Hospital units communicate well with each other there is an excellent collaboration among hospital units that require to work together It is not easy to work with staff from other hospital units, hospital units work well together to the good care for patients.

10. Hospital handoff and transitions:

The extent to which important patient care information is transferred across hospital units and during shift changes.

11. Overall perception of safety:

The conception of general meaning of patient safety culture.

12. Frequency of events reported:

The number of events that happen at hospital which lead to patient harm and to which extent they harm them.

Chapter Two

Theoretical Framework and Previous studies

2.1. Introduction

This chapter was include the theoretical framework that related to the study's variables; international patient safety goals and patient safety, also it contains an explanation of the previous studies which are in correlation to this study and the following is an introduction to that:

2.1.1 International patient safety goals:

Safety needs, much like physiological needs require maintenance throughout life, so does the need to feel secure. This need is more psychological, with that being said, safety needs may be different for each individual, depending on where he or she is in life (Poston, 2009).

Holden& Karsh (2009),demonstrated that, many educational programs in the health care field teach Maslow's hierarchy in order to address the needs of patients and where they are in their life from a psycho-logical perspective, simply because it helps identify and address the needs of those particular patients(Poston, 2009).

After the Institute of Medicine reports, there were many attempts to decrease medical error. Clinician reviewed their practices, researchers explained better ways of doing things, and safety and quality facilities focused attention on the subject of patient safety. In 2002, The Joint Commission established National Patient Safety Goals to enhance patient safety by assisting healthcare facilities to address specific areas of concern with related to patient safety. The goals center on problems in healthcare safety and how to resolve them. A Patient Safety Advisory Group, composed of expert nurses, physicians, pharmacists, risk managers, clinical engineers, and other professionals with hands-on experience in addressing patient safety issues in a wide diversity of healthcare framework, assists (Ulrich & Kear, 2014).

These goals play an important role in the performance of the hospital since success of any hospital according to its amplitude to maintain the accurate patient safety which involve the introduction of international standards to encourage the hospital's opportunities of creativity and competition, as well, awareness to international goals has

become a main role for development and advancement in light of international development in the healthcare processing (WHO, 2016).

2.1.2 The international patient safety goals

The international patient safety goals are classified as the following:

1. Patient identification**.**
2. Effective communication**.**
3. Safety of high Alert medication.
4. Ensure correct patient surgery**.**
5. Reduction of health care associated infection**.**
6. Reduction of the patient harm resulting from falls**.**

Patient identification:

The potential for misidentification is an ever -present harm, especially in the debilitated or unconscious patient. (Jonas et al, 2014). As well as, the World Health Organization recognizes that patient misidentification can contribute to medication, surgical and charting errors (Campbell et al, 2014). Utilize at least two routes to identify patients. For example, utilize the patient's name and date of birth. That is done to make sure that each patient gets the right medicine and therapy. Make sure that the right patient gets the right blood when they get a blood transfusion (Excellence, 2013).

Effective communication:

Communication failures in healthcare teams are associated with medical errors and negative health outcomes. These findings have increased emphasis on training future health professionals to work effectively within teams (Brock et al, 2013).Whereas patients need to be able to communicate effectively with their healthcare providers in order to get healthcare that is tailored to their needs(O'Halloran, Worrall & Hickson, 2015). The whole verbal and telephone request or test result is written down by the receiver of the request or test result. The complete verbal and telephone request or test result is read back by the receiver of the request or test result. The request or test result is confirmed by the individual who gave the order or test result (kim et al, 2107). The

relationship between team communication and patient safety4 has increased the emphasis placed on training future health professionals to work within teams (Kyrkjebø et al, 2006), (Anderson et al, 2009) & (DeSilets, 2010).

Safety of high Alert medication:

Smeulers (2015), demonstrated that, Medication safety is an important, because medication errors are a common, serious and expensive type of medical error. Medication errors are typically defined as deviations from a physician's order Physicians, pharmacists, and nurses can be involved in the occurrence of medication errors (Fontan et al. 2003).

Medications are very different and have a wide range of risk profiles. Those with a heightened risk of causing patient harm are known as high-alert medications; they have serious consequences for patients when misused (Maaskant et al, 2013).

Medication safety is important because medication errors are the most common type of medical error and are associated with considerable health care expenses (Smeulers et al, 2014).

A better recognition of what alarms are delivered, whether providers exceed them, and what responses providers suggested when they respond to them may give insights into how the alerts themselves should be delivered, and also into policies around significant use.(Nanji et al. 2014). Before an operation, label medicines that are not categorized. For example, medicines in cups, tubes, and basins. This in the area where drugs and supplies are set up. Take additional care with patients who take drugs to thin their blood. Record and pass along right information about a patient's drugs. Detect what drugs the patient is taking. Compare those drugs to new drugs given to the patient. Make sure the patient define which drugs to take when they are at home. Tell the patient it is significant to bring their up-to-date list of drugs every time they visit a physician (Excellence, 2013). Rules and/or procedures are developed to address the identification,

location, labeling, and storage of high-alarm drugs. The rules and/or procedures are implemented (kim et al, 2107).

Ensure correct site, correct procedure &correct patient surgery:

Sometimes the problems that you expect to be the easiest to fix turn out to be the most vexing. Since the Joint Commission first highlighted the problem of wrong-site surgery in 1998, the issue has been the subject of summits, protocols, checklists and process-improvement projects across the country (Butcher,2011).The criteria are presented with the understanding that it is the responsibility of the healthcare facilities to develop, and establish policies and procedures for identification of the surgical patient, and emphasis of the correct surgery site and procedure according to established health care organization protocols (Gibbs,2005). Kwaan et al. (2006) argues that, wrong-site surgery is unacceptable but exceedingly rare, and main injury from wrong-site surgery is even rarer.

Factors that have been show to increase the risk of wrong –site surgery and invasive procedures include combined and bilateral diseases, morbid obesity or physical deformity, incomplete or inaccurate communications, poor booking processes, unusual time pressures, emergency procedures, and the need for multiple procedures or multiple surgeons (O'Neill& Klein, 2014).

Wrong site operations are preventable reverse events that often result in patient injury. While recent index suggests that wrong site operations are rare and harms minimal, incidence of like catastrophic events can likely be significantly decreased (Michaels et al., 2007). an immediately recognized mark for surgical-site identification and includes the patient in the marking process, a checklist or other process to confirm preoperatively the right site, right procedure, and right patient and that all documents and equipment needed are on hand, correct, and functional. The complete surgical team conducts and documents a time-out procedure just before starting a surgical operation. Policies and procedures are progressing that support unique process to ensure the right site, right procedure, and right patient, including medical and dental procedures done in settings other than the operating unit (kim et al, 2107).

Reduce the risk of health care associated infection:

Nosocomial , or hospital-acquired, infections (more appropriately called health care–associated infections) are today by far the most common complications affecting

hospitalized patients. National Healthcare Safety Network along with Centers for Disease Control for surveillance has classified nosocomial infection sites into 13 types with 50 infection sites, which are specific on the basis of biological and clinical criteria. Utilize the hand cleaning principles from the Centers for Disease Control and Prevention or the World Health Organization. Put goals for improving hand washing, the goals to improve hand cleaning. Confirmed principles to prevent infections that are difficult to manage, principles to prevent infection of the blood from central lines, principles to prevent infection after surgery and principles to prevent infections of the urinary tract that are caused by catheters (Excellence, 2013).

Identification of risk factors allows clarification of those that are different from those that are not and facilitates the development of specific interventions to decrease the risk of infection. For example, avoiding the use of invasive devices altogether by means of alternative strategies (for example, performing urinary drainage by condom catheter) and decreasing the interval of utilize of the device (for example, decreasing the number of days of mechanical ventilation) have been proposed in many guidelines. Strategies to inhibit infections have been subdivided into various groups (education-based, process-based, and systems-based), but many of the suggested interventions — like “use antibiotics wisely” or “educate and train staff” have been vague and difficult to implement(Fleming et al., 2000) Olsen & Fraser,2002)

Reduce the risk of patient harm resulting from falls:

Falls and their complications are responsible for a large part of preventable health care costs. (Ambrose et al., 2013). Measurement of fall rates and fall prevention practices is an elements of all quality improvement programs (Kerzman & Goldberg 2016). Implements a process for the initial assessment of patients for fall risk and reassessment of patients when indicated by a change in condition or medications, among others. Measures are implemented to reduce fall risk for those assessed to be at risk. Measured are monitored for results, both successful fall injury reduction and any unintended related consequences (WHO, 2010).

2.1.3 Patient Safety Culture Definition:

Across the past years, patient safety has been to an increasing extent recognized as an issue of global significant (Perneger2006). In 2005, the World Health

Organization (WHO) established the World Alliance for Patient Safety to coordinate and accelerate global efforts to improve patient safety. Every year millions of patients are harmed by unsafe health care. Estimates indicate that in developed countries as many as one in 10 patients is harmed while receiving hospital care. In developing countries, the probability of patients being harmed in hospitals is higher than in industrialized nations. In developed countries, 5-10% of hospitalized patients acquire an infection, between 7.5% and 10.4% of patients in acute care experience an adverse drug event.

Vicente (2002) demonstrated that, many healthcare providers now detect that patient safety poses a significant risk to public health. The American statistics in particular are frequently cited: preventable medical fault is the eighth leading cause of death, they are responsible for 44 000–98 000 deaths annually in hospitals alone, and they result in patient injuries that cost between $17 billion and $29 billion annually.

Several safety problems occur at the end stage of the care process “at the bedside” for example, drug administration errors or lack of hand hygiene, and have a relatively high potential for being noticed by patients. Patients are potentially acute observers of their care, so it is increasingly recognized that patients could make valuable contributions to their health-care safety and the prevention of errors and reverse effect (Liu et al. 2017). Patient safety is a core element in medical health care, which needed for promote safety and decrease medical errors in surgical procedure, prevention infection and avoidance of medication errors. Patient safety culture surveys different considerably .Achievement of a culture conductive to patient safety may be an excellent goal in its own right, but more effort must be expended on understanding the relation between measures of patient safety cultures and patient outcomes (Colla et al, 2005).

The World Health Organization calls patient safety an endemic concern. Well-designed patient safety initiatives are needed to be integrated with organizational policies, particularly the pressing need to address the bioethical component of medical errors and their disclosure, communication openness and emotional issues related to them and investing the bright areas of skillful organizational learning and strong team working attitudes (Ghobashi,2014&WHO2016).

Promoting a culture of safety has become one of the pillars of patient safety. As healthcare organizations make every effort to improve their quality of care and provide their service in an adequate standard, focusing on patient safety has become an international priority (Colla, 2005). Also, Neva& Sorra (2003) Assessing the safety culture is a crucial first step in developing an understanding of the hospitals' performance in patient safety. It informs about the perceptions of healthcare staff regarding safety.

Neva & Sorra (2003) & Mardon et al,(2010) have perceived safety culture as a pro-social behavior that has direct bearing on patient safety measures practiced in organizational settings. Which support the idea that more positive patient safety culture is associated with fewer adverse events in hospitals. Although patient safety has been increasingly recognized as an issue of global importance, but much work remains to be done and ensuring safer care is an enormous challenge (WHO, 2010).

2.1.4 Patient safety culture variables:

In this study Patient safety culture: are divided into three level aspects, each level aspect subdivided into three sub variables, which adopted by Ammouri et al, (2015) as the following:

Aboul-Fotouh et al, (2012), Ghobashi (2014) & Aljabri (2012) adopted the twelve sub variables from the Agency for Healthcare Research and Quality and defined them as following:

1. Supervisor/manager expectation and promoting patient safety:

Hospital management provides a work climate that permits patient safety and shows that patient safety is a high priority.

2. Organizational learning /continuous improvement:

Mistakes have led to positive changes and changes are evaluated for their effectiveness.

3. Teamwork within unit at the hospital:

Staff support one another, treat each other with respect, and work together as a team.

4. Communication openness:

Staff was freely speak up if they see something that may negatively affect patient care, and feel free to question those with more authority.

5. Feedback and communication of safety:

Staff are informed about errors that happen, given feedback about changes put into place based on event reports, and discuss ways to prevent errors.

6. Non-punitive response to error:

Staff feel that their mistakes are not held against them, and mistakes are not kept in their personnel file.

7. Staffing:

There are enough staff to handle the workload and work hours are appropriate to provide the best care for patients.

8. Hospital management support for patient safety:

Hospital management provides a work climate that promotes patient safety and shows that patient safety is a top priority.

9. Team work across hospital units:

Hospital units cooperate and coordinate with one another to provide the best care for patients.

10. Hospital handoff and transitions:

Important patient care information is transferred across hospital units and during shift changes.

11. Overall perception of safety:

Procedures and systems are good at preventing errors and there is a lack of patient safety problems.

12. Frequency of events reported:

Mistakes of the following types are reported:

1) Mistakes caught and corrected before affecting the patient, 2) mistakes with no potential to harm the patient, and 3) mistakes that could harm the patient, but do not.

2.2. Previous studies:

1. Kirk et al (2007), study entitled: **"Patient safety culture in primary care: developing a theoretical framework for practical use"** aimed to develop a framework for making the concept of safety culture meaningful and accessible to managers and frontline staff, and facilitating discussion of ways to improve team/ organizational safety culture.

During first phase a comprehensive review of the literature and a postal survey of experts helped identify the key dimensions of safety culture in primary care. Semi structure interviews with 30 clinicians and managers explored the application of these dimensions to an established theory of organizational maturity. In second phase the face validity and utility of the framework was assessed in 33 interviews and 14 focus groups.

In this study there is nine dimensions were identified through which safety culture is expressed in primary care organizations. Organizational descriptions were developed for how these dimensions might be characterized at five levels of organizational maturity. The resulting framework conceptualizes patient safety culture as multidimensional and dynamic, and seems to have a high level of face validity and utility within primary care. It helps clinicians' and managers' understanding of the concept of safety culture and promotes discussion within teams about their safety culture maturity.

This study concluded that, the framework moves the agenda on from figurative language about the importance of safety culture to away of understanding why and how the shared values of staff working within a healthcare organization maybe operationalized to originate a safe environment for patient health care.

2. Helling, et al., (2009) study entitled: **"Challenging patient safety culture: survey results"** The purpose of this paper is to measure patient safety culture in five Belgian general hospitals.

The Patient Safety Culture Hospital questionnaire was distributed hospital-wide in five general hospitals. It evaluates 10 patient safety culture dimensions and 2 outcomes. The scores were expressed as the percentage of positive answers towards patient safety for each dimension. In total, 3,940 individuals responded (overall response rate ¼ 77 per cent), including 2,813 nurses and assistants, 462 physicians, 397 physiotherapists, laboratory and radiology assistants, social workers and 64 pharmacists and pharmacy assistants.

The dimensional positive scores were found to be low to medium in all the hospitals. The lower scores were “hospital management support for patient safety” (35 %), “non--punitive response to error” (36 %), “hospital transfer and transition” (36 %), “staffing” (38 % and “teamwork across hospital units” (40 %). The dimension “teamwork within hospital units” generated the highest score (70 %). Although the same dimensions were considered problematic in the different hospitals, important variations between the 5 hospitals were observed.

The results showed that important aspects of the patient safety culture in these hospitals need improvement. This is an important challenge to all stakeholders interesting to improve patient safety.

3. Manser (2009), study entitled: "**Teamwork and patient safety in dynamic domains of healthcare"**: The object of this study to examine teamwork in highly dynamic variables of healthcare such as operating rooms, intensive care, emergency medicine, or trauma and resuscitation teams with a focus on aspects relevant to the quality and safety of patient care.

Results were reflected evidence from three main areas of research supports the relationship between teamwork and patient safety:

A. Studies investigating the factors contributing to critical incidents and reverse events have shown that teamwork plays an important role in the causation and prevention of reverse events.
B. Research concentrating on healthcare providers' perceptions of teamwork demonstrated that:
    1. Staff's perceptions of teamwork and attitudes toward safety-relevant team behavior were related to the quality and safety of patient care.
    2. Perceptions of teamwork and leadership style are associated with staff well-being, which may impact clinician' ability to give safe patient care.
C. Teamwork behaviors related to high clinical performance have identified patterns of communication, coordination, and leadership that support effective teamwork.

This study Concluded that; research using different methodological approaches has led to significant progress in team research in healthcare. The challenge for future research is to further develop and validate instruments for team performance assessment and to develop sound theoretical models of team performance in dynamic medical domains integrating evidence from all three areas of team research identified in this review. This was support to improve team training efforts and aid the design of clinical work systems supporting effective teamwork and safe patient care.

4. Singer & Lamm (2009), study entitled. "**The Social Neuroscience of Empath**y" demonstrated the relationship between patient safety culture and patient safety indicator data from 91 hospitals in 37 states. Their results specified that, higher levels of patient safety culture were associated with higher safety performance. They also explained that, a better patient safety culture was associated with a lower risk of patient safety issues when the patient safety culture was measured as perceptions of frontline staff but not when measured by the perceptions of patient safety culture by senior management. This led the researchers to notice that, senior executives might not fully appreciate the safety hazards in their facilities.

5. Tjia et al, (2009),study entitled: **"Nurse-Physician Communication in the Long-Term Care Setting: Patient Safety Goals"**. The aim of this study was to

describe nurses' perceptions of nurse-physician communication in the long-term care setting. Multi-method study including a self-administered questionnaire and qualitative semi structured telephone interviews of licensed nurses from 26 facilities in Connecticut. The questionnaire measured perceived openness to communication, mutual understanding, language comprehension, frustration, professional respect, nurse preparedness, time burden and logistical barriers. Qualitative interviews focused on identifying barriers to effective nurse-physician communication that may not have previously been considered and eliciting nurses' recommendations for overcoming those barriers.

The results identified several barriers to positive nurse-physician communication: loss of physician openness to communication, logistic challenges, lack of professionalism, and language barriers. Feeling hurried by the physician was the most frequent barrier (28%), followed by finding a quiet place to call (25%) and difficulty reaching the physician (21%). In qualitative interviews, there was consensus that nurses needed to be brief and prepared with relevant clinical information when communicating with physicians and that physicians needed to be more open to listening.

The study reflected a combination of nurse and physician behaviors contributes to ineffective communication in the hospital. These findings have important inclusions for patient safety and support the development of structured communication interactions to improve quality of nurse physician communication.

6. Halligan & Zecevic, (2011),study entitled: **“Safety culture in healthcare: a review of concepts, dimensions, measures and progress”** including definitions of safety culture and safety climate, identifying theories, dimensions and measures of safety culture in healthcare, and reviewing progress in improving safety culture 139 studies were included in this review.

The results of this suggested that there is disagreement among researchers as to how safety culture should be defined, as well as whether or not safety culture is intrinsically diverse from the concept of safety climate. This variance extends into the dimensions and measurement of safety culture, and interventions to influence culture change.

In conclusion, the first step for healthcare organizations to improve safety culture is to clearly define and conceptualize the concept. Since culture is a context-specific, local phenomenon, it may be best to focus on the unit-level rather than the entire organization.

7. Aboul-Fotouh et al, (2012) study entitled: **"Assessment of patient safety culture among healthcare providers at a teaching hospital in Cairo, Egypt"**. The study explained the need to promote the patient safety culture among health-care staff at Ain Shams University hospitals.

This study assessed the healthcare staff's perceptions of patient safety culture within the organization and determined factors that played a role in patient safety culture.

The healthcare staff in different departments answered an Arabic version of the Agency of Healthcare Research and Quality hospital survey for patient safety culture.

The result showed that Patient safety culture still has many areas for improvement that need continuous evaluation and monitoring to maintain a safe environment both for patients and health-care providers.

8. Abdelhai et al, (2012**). "Assessing Patient Safety Culture and Factors Affecting It among Health Care Providers at Cairo University Hospitals"** This study aimed to evaluate patient safety culture perceptions among health care staff and to determine factors that may crucially influence patient safety culture at randomly selected departments of Cairo University Teaching Hospitals.The study adapted the "Hospital Survey on Patient Safety Culture"

The current study suggested that, an effective safety culture should be initiated, supported, and maintained among both front-line personnel and senior management, to improve and develop patient safety and quality.

9. Aljabri (2012) study entitled**: "Assessment of Patient Safety Culture in Saudi Hospitals: A Baseline Study in the Eastern Region"**. The study aim was to conduct a baseline assessment of the patient safety culture in two hospitals in the

Eastern Region of Saudi Arabia; to determine general strengths and detect the areas for patient safety improvements.

Cross-sectional design was adopted using the validated Hospital Survey on Patient Safety Culture questionnaire released by the Agency for Health care Research and Quality. The survey evaluated 12 patient safety culture dimensions, and a total of 726 healthcare staff participated giving a 61% response rate.

The results demonstrated the important information on several patient safety issues and the areas for improvements. It also assessed the different patient safety dimensions at both, the unit and hospital levels.

Additionally, it raised staff awareness and guided policy makers, managers and leaders to implement proper safety improvement interventions.

10. Mikuaova, et al, (2012).study entitled: **"Patient Safety Assessment in Slovak Hospitals"** This survey was conducted in the Slovak hospitals during with the main objectives to determine how healthcare workers perceive patient safety in their organization and how they assess safety culture in individual units.

A sample included 3 hospitals. The Hospital Survey on Patient Safety Culture Questionnaire from AHRQ (Agency for Healthcare Research and Quality) was used. The response rate was 75%. AHRQ methodic, Pearson's Chi-squared test, pair wise proportion test ($p \leq 0,05$) and Cronbach's alpha were used for statistical analysis.

The result highlighted some positive and negative points that could be helpful for hospital management teams to increase incentives for patient safety and for the maintenance of patient safety culture therefore to improve healthcare quality and safety in these hospitals.

11. Wagner et al, (2013) Study entitled: **"Assessing patient safety culture in hospitals across countries"**, The objective of this study, is to illustrated the similarities and differences in hospital patient safety culture in three countries: The Netherlands, the USA and Tawian. The study was conducted in a total of 210407 professionals participated in the study.

The results showed that the comparison of patient safety data has shown similarities and differences within and between countries, and all three countries can enhance areas of their patient safety culture.Countries can identify and share best practices and learn from each other.

12. Hamdan & Saleem (2013).Study entitled**:" Assessment of patient safety Culture in Palestinian public hospitals".** The aim of this study to assess the prevalent patient safety culture in Palestinian public hospitals.

The sample of clinical and non- clinical hospital staff from 11 general public hospitals in the West Bank. Most of the participants were nurses and physicians (69.2%) with direct contact with patients (92%), mainly employed in medical/surgical units (55.1%).

The study explained the existence of a punitive and blame culture, under-reporting of events, lack of communication openness and inadequate management support that are key challenges for patient safe hospital care. The baseline survey results are valuable for designing and implementing the patient safety plans and for measuring future develop.

13. Sahebalzamani & Mohammady (2014) study entitled:**"A study of patient safety management in the framework of clinical governance according to the nurses working in the ICU of the hospitals in the East of Tehran".** The improvement of patient safety conditions in the frame of clinical service governance is one of the most important issues worldwide.

The importance of this concern and its impacts on the health of patients helped the researcher to conduct this study to assest patient safety management in the frame of clinical governance according to the nurses working in the intensive care units of the hospitals of the east of Tehran.

For the collection of data, a researcher building a questionnaire in five categories, involving culture, leadership, training, environment, and technology, as well as on safety items was used. To assess the validity of the questionnaire, content validity test

was conducted, and the reliability of the questionnaire was assessed by retest method, in which the value of alpha was equal to 91%.

The results of this research indicate that nurses have an approximately appropriate view toward safety management. This can be a key opportunity for managers and health service providers to present approaches such as orientation of senior managers of the organization to safety, creating a reporting system, development of team work, and execution of clinical governance programs. In addition, an opportunity can be provided for health system managers to be able to improve patient safety and build confidence in the society by concentrating on clinical governance patterns and by appropriate planning.

This study explain the opinion of the management and personnel of the hospital is necessary for the improvement of safety culture. For that, the management of hospitals can show interest in safety, develop an events reporting system, improve teamwork, and implement clinical governance plans.

14. El-Jardali, & et.al (2014). Study entitled**:"Patient safety culture in a large teaching hospital in Riyadh: baseline assessment, comparative analysis and opportunities for improvement"** the aimed of this study to explained the details findings of a baseline assessment of the patient safety culture in a large hospital in Riyadh and compares results with regional and international studies that utilized the Hospital Survey on Patient Safety Culture.

This study also aims to demonstrate the association between patient safety culture predictors and outcomes, considering respondent characteristics and facility size. The sample was conducted based on3000questionnaires targeted hospital staff (physicians, nurses, clinical and non-clinical staff, pharmacy and laboratory staff, dietary and radiology staff, supervisors, and hospital managers). The researcher used the comparative analysis and Regression analysis.

The result showed that points of strength were Organizational Learning and Continuous Improvement and Teamwork within unit’s areas requiring improvement.

In this study, Patient safety practices are critical toward improving the performance and quality of services in healthcare organizations. Much can be done in the health facilities and in the context of KSA in general to improve areas of weakness and further enhance areas of strength.

15. Ammouri et.al, (2015). Study entitled:**"Patient safety culture among nurses"**. The aim of this study was to research nurses' perceptions about patient safety culture and to determine the factors that require to be confirmed in order to enhance and maintain the culture of safety among nurses in Oman.

The result showed that, nurses who recognized more supervisors or managers expectations, feedback and communications about errors, teamwork across \hospital units, and hospital handoffs and transitions had more overall perception of patient safety culture. Background: Patient safety culture in primary care is the first step to achieve high quality health care.

16. Mohamed et al, (2015)study entitled**:" Assessment of Patient Safety Culture in Primary Healthcare Services in Alexandria, Egypt"** This study to assessing the perceptions of primary healthcare staff about patient safety culture and examine the areas of weakness and strength for improvement concerning this problem. study servey was direct structured interview f of a modified "Hospital Survey on Patient Safety Culture" adopted questionnaire. The overall number of respondents was 250 participants (response rate = 76.2%). The main outcome measures involve patient safety culture score including sub scores on 12 dimensions and 42 items.

The results showed that the total median% score for perception of patient safety culture at the facility level was 68.6%. The highest positive score were teamwork within units (80.0%), management support for patient safety (80.0%), supervisor expectations and actions promoting patient safety (75.0%) and handoffs and transitions (75.0%). Dimensions with low score were frequency of events reported and staffing (60% give positive response for each). More than two-fifths (43.6%) did not report any events in the 12 months preceding the survey.

This study recommended on improving patient safety culture to be a priority among health center administrators. Healthcare members should be enhanced to report errors.

17. Webair et al, (2015)Study entitled:" **Assessment of patient safety culture in primary care setting, Al-Mukala, Yemen"** The aim of this study to assesses patient safety culture in primary care settings in Al-Mukala, Yemen.

Survey was introduced in primary healthcare centers and units in Al-Mukala. Sample from the available 16 centers was included. An Arabic version of the Medical Office Survey on Patient Safety Culture was distributed to all health workers.

In this study,the response rate from the participating centers was 71 %. (N = 78). The percent positive responses of the items is equal to the percentage of participants who answered positively. Positive safety culture was defined as 60 % or more positive responses on items or dimensions. Patient safety culture was perceived to be generally positive with the exception of the dimensions of 'Communication openness'.

This study was Concluded that,patient safety culture in Al-Mukala primary care setting is generally positive, patient safety and quality rating were low. Application of a safety and quality management system in Al-Mukala primary care setting are essential. Further research is needed to confirm the applicability of the Medical Office Survey on Patient Safety Culture for Al-Mukala primary health care.

18. Musavi et al, (2016). Study entitled:**"Assessment of Patient Safety for Quality Improvement Based on Joint Commission International Accreditation Standards in Farabi Eye Hospital of Tehran University of Medical Sciences"** the study aimed to examine patient safety in Farabi Eye Hospital by Joint Commission International accreditation standards for quality improvement.

The data were collected through interviews with all heads departments (n=80) and observation of documentation in every department by appraisers in Farabi Hospital. To test the data, Spearman's rank correlation coefficient and Mann-Whitney U tests were run using SPSS Version 16.

The result explained that Farabi Eye Hospital is relatively efficient as to patient safety as a quality improvement factor. However, there were some shortcomings regarding some standards, which suggest deficient compliance with the JCI standards in this hospital. Absence of comprehensive training programs and defective policies and documentation are the main factors for patient safety culture improvement.

The findings in this study, demonstrated that Farabi Eye Hospital is relatively efficient as to patient safety as a quality improvement factor. However, there were some deficiencies regarding some standards, which suggest deficient compliance with the JCI standards in this hospital. Absence of comprehensive training programs and defective policies and documentation are the key factors for patient safety quality improvement.

19. Meddings et al, (2017) study entitled: **"Evaluation of the association between Hospital Survey on Patient Safety Culture measures and catheter-associated infections results of two national collaborative"** aimed to examine the association between hospital units results for the Hospital Survey on Patient Safety Culture and catheter associated infection rates, through analyzed data from two prospective cohort studies from acute-care intensive care units (ICU)and non-ICUs participating in the AHRQ collaborative. National Healthcare Safety Network catheter-associated infections per 1000catheter-days were collected at baseline and quarterly post implementation. The HSOPS was collected at baseline and again 1 year later. Infection rates were modeled using multilevel negative binomial models as a function of HSOPS components over time, adjusted for hospital-level characteristics.

The study concluded that, no association between results of the HSOPS and catheter-associated infection rates when measured at baseline and post intervention in two successful large national collaborative. These results suggest that it may be possible to improve rates without making significant changes in safety culture, particularly as measured by instruments like HSOPS.

20. Raeissi, & Nasiripour (2017). Study entitled: **"Assessment of Safety Culture in Iranian Academic Hospitals"**: the aim of this study was to establish a baseline for patient safety culture in Iranian academic hospitals.

The sample was researched based on questionnaires, distributed in 26 academic hospitals linked to the Iran and Tehran universities of Medical Science, the data were analyzed using a one –sample and independent test. The major finding of this study revealed the patient safety culture of the investigated hospitals is not at an ideal level and is in need of serious improvement, particularly in the variables of feedback and communication openness, staffing, and non-punitive response to error. The same conditions work true for other Iranian hospital (the Afshar and Sadoughi hospitals in the city of Yazd, Iran), and American hospitals were used for comparison purposes in the study.

Summary of previous studies on patient safety cultures in Arab countries:-

21. Elmontsri, (2017), study entitled: "**Status of patient safety culture in Arab countries: a systematic review"** to assess the level of patient safety culture in Arab countries based on the findings of the Hospital Survey on Patient Safety.

The researchers performed electronic searches of the MEDLINE, EMBASE, CINAHL, Pro Quest and Psych INFO, Google Scholar and Pub Med databases, with manual searches of index of inclusive articles and key journals.

The 18 studies met inclusion criteria. They view identified that non-punitive response to error is seen as a serious issue which needs to be improved .Healthcare professionals in the Arab countries tend to think that a 'culture of blame' still exists that prevents them from reporting incidents. Also they found total similarity between the reported composite score for dimension of teamwork within units in all of the

Reviewed studies. Teamwork within units was found to be better than teamwork across hospital units. All of the Arabic previous studies reported that organizational learning and continuous improvement was satisfactory as the average score of this dimension for all studies was 73.2%. Moreover, the review found that communication openness seems to be a concerning issue for healthcare professionals in the Arab countries.

This review suggest the requirement for patient safety culture as a strategy for improving the patient safety in the Arab world.

2.2.1 What distinguishes the current study from previous studies?

This study was emphasize on variables combined from these various studies that have not been related before to study its effects. Such as the application of international safety standards and its impact on patient safety culture. The researcher was attempt to explain and research these unexplored territories of safety studies and report the findings to enrich the knowledge of upcoming studies.

Chapter Three

Study Methodology

3.1 Introduction:

The current study was considered as a descriptive and analytical study. It aims at studied the impact of application of international safety goals on patient safety culture in Amman- Jordan Hospitals. It was start with literature review and experts interviews to improve the currently used measurement model and to discuss the international patient safety goals and patient safety culture variables. Then a panel of judges were exploded to assure that the items that was included in questionnaire was suitable, the survey was carried out and the data was collected from the medical staff working at Private Jordanian Hospitals. Finally, the results were compared with previous research approaches

3.2 Study Population and Study Sample:

3.2.1 Study Population

The field of the current study was three Private Hospitals in Amman; Al-asra's, AL- Istiklal, and Jordan hospitals, because they have Joint Commission International Accreditation of patient safety.

3.2.2 Study Sample

The study population Consist of (600) medical staff (the source is Private Hospitals Association).

Study sample consist of (234) medical staff (according to size of population, the number of observations selected).

3.3 Data Collection Methods (Tools):

Data that was used to attain the goals of the study can be divided into two sets: secondary and primary data.

Secondary data was collected from annual reports, journals, books, researches, thesis, dissertations, articles, working papers, and the Worldwide Web.

Primary data was collected from expert interviews, content analysis, panel of judges and the survey (questionnaire). The questionnaire was developed in contrast with hypotheses and research model.

3.3.1 Tool of Collecting Primary Data:

The proper tool was chosen and tested to suit the current study and to match the study hypothesis and research model. Basically the original questionnaire items were developed relying on previous studies. Then, the questionnaire was revised and validated by an academic panel of judges and references. Then, the questionnaire was also reviewed and validated by professional and highly experienced experts in the field of Jordan Private Hospitals.

The Questionnaire:

Initial items to measure various constructs were developed depending on past researches.

Questionnaire Variables:

The questionnaire variables are divided into two sections:

A. First section is composing of demographic characteristics which related to gender, age, academic qualification, position, and experience.
B. Second section is composing of both independent and dependent variables

as follows:

1. Independent Variable (international patient safety goals):

According to literature review like: Ulrich& Kear, (2014) WHO (2016), this study identifies three important dimensions that contribute to Jordan private hospitals. Each variable was measured by 3-5 items and the total were27 items (from item 1 to item 27 in the questionnaire).

2. Dependent variable (patient safety culture):

Based on Wagner et al (2013) Ammouri et al, (2015), this study took it as three dimensions. The total items were 42 items (from item 28to item 69 in the questionnaire).

All variables were measured by five- point Likert-type scale to take the advantage of the staffs perceptions, ranging from value 1(strongly disagree) to value 5 (strongly agree) used throughout questionnaire.

Panel of judges and referees: panel of judges and referees were selected from both well-known academicians, and professional with highly experienced professionals in the private hospital management.

3.3.2 Data Collection and Analysis:

Research data were collected during the time period of November & December at 2017. The targeted private Jordan hospitals were 5 hospitals. This research tried to survey all these hospitals but only 3hospitals had been reached due to several reasons such as problems with routine and financial procedures, the crowded hospital schedules, and the lack of cooperation of some hospitals. Questionnaires were handed to 234 medical staff out of 600 medical staff working in private hospitals. 170questionnaires were collected. Fourteen questionnaires were ignored due to incomplete statements from respondents. Consequently, the valid questionnaires were 156. So, only 66.6% of the total unit was analyzed.

The SPSS version 16 was used to allocate the impact of international safety goals on patient safety culture at Private Jordan Hospitals.

3.4 Methods and Procedures:

Validity indicates whether the instrument measures what it is planned to measure. Whereas, the reliability refers to the internal consistency and stability; it is the prospect that there was not changed in answers each time the measures are used (Sekaran & Bougie, 2016).

3.4.1 Data Validity Test:

Two methods were used to confirm content and construct validity: First, content validity, multiple sources of data (literatures, journals, researches, thesis, working papers, web sites, expert interviews at private Jordan hospitals) was used to develop and refine the model and measures. Then second face validity, panel of judges was carried out to modify the perfect form of the questionnaire.

3.4.2 Data Reliability Test:

Reliability test (Cronbach's alpha coefficients of internal consistency) was used to test the consistency and suitability of the measuring tools. The reliability was evident by strong Cronbach's alpha coefficients of internal consistency.

So, if Alpha Coefficients is more than 60% were accepted (Sekran 2003).

Table (3.1) Reliability Test

No	Variables	No. of items	**Cronbach's Alpha**	**Correlation coefficient**
A	Patient Identification& communication	**10**	**0.898**	0.880-0.561
B	Safety of medications &surgery	**10**	**0.872**	0.890-0.355
C	Infections &fall hazards reduction	**9**	**0.850**	0.845-0.587
D	Patient safety at unit level aspects	**8**	**0.891**	0.800-0.468
E	Patient safety at hospital level aspects	**14**	**0.925**	0.743-0.399
F	Patient safety outcome	**18**	**0.951**	0.887-0.785
TOTAL		**69**	**0.970**	

As shown above in table (3.1) that Cronbach's Alpha coefficient value for independent variables were ranging from 0.850and 0.898and for dependent variables

were ranging between 0.891and 0.951which means that Cronbach's Alpha coefficient value is accepted and highly reliable.

The Importance of each item was calculated as follows:

(5-1)/3 = 1.33.

Three levels of importance was considered according to the following intervals:

1. Low degree of importance lies between 1 and 2.33(1 + 1.33 = 2.33).
2. Medium degree of importance lies between 2.34 and 3.67 (2.34+ 1.33 = 2.34-3.67).
3. High degree of importance lies between: 3.68 up to 5. While, the ranking were calculated based on t-Value.

Chapter Four

DATA ANALYSIS AND HYPOTHESIS TESTING

4.1. Introduction:

The first goal of the research is to study the impact of application of international safety goals on patient safety culture in Amman- Jordan Hospitals.

In this chapter the results and related analysis were expressed. In addition, it was focus on the significant results with its statistical indications.

First, the study variables were analyzed and described from statistical point of view by using means, standard deviations, t-values, importance and ranking.

Second, the chapter was represent correlation among independent variables, then their correlation with dependent variables.

At the end, study hypothesis were tested by simple regressions.

4.2. Respondents' Demographic Description:

Table (4.1) below shows the general characteristics of the respondents in Terms of gender, age, education, position, division, and years of experience:

1. Gender: Most of the respondents are female's with111 (71.2%) while male rated 45 (28.85%). This indicates that most of the medical staff in Private Jordan Hospitals are females; due the traditions and culture.
2. Age: The highest percentage of the respondents' ages were less 35years (62.8%), then 35-less than45 years (23.1%), then ages 45-less than55years (10.9%) and ages 55years &more (3.2%). This indicates that the average of the ages of medical staff are less than35 years.

Table (4.1): Demographic Analysis

Variable	Level / category	Number	percentage %
Gender	Male	45	28.85
	Female	111	71.2
	Total	156	100.0
Age	Less than 35 years	98	62.8
	35-less than 45years.	36	23.1

	45-less than 55 years	17	10.9
	55 years & more	5	3.2
	Total	156	100.0
Educational Qualification	Diploma	37	23.7
	Bachelor's degree	94	60.3
	Master degree	15	9.6
	Doctoral degree	10	6.4
	Total	156	100.0
Communication	Direct	148	94.9
	Indirect	8	5.1
	Total	156	100.0
Career's experience	1–5 years	44	28.2
	6-10 years	76	48.7
	11-15 years	19	12.2
	16-more than20 years	17	10.9
	Total	156	100.0
Job position	Physician	26	16.7
	nurse	113	72.4
	Techs	3	1.9
	Therapist	2	1.3
	Medical Assistant	1	0.6
	Pharmacists	7	4.5
	Medical Lab	3	1.9
	Technologist	1	0.6
Total		**156**	**100.0**

3. Education: Most of the respondents were holding the bachelor's degree 94 (60.3%), the diploma degree 37 (23.7%), then master degree15 (9.6%) and finally the doctoral degree10 (6.4%).
4. Communication with patient: most of the respondents were communicating directly with patients148 (94.9%), indirect communication were only 8 (5.1%).

5. Career's experience: The majority of the respondents' experiences were having 6– 10 years of experience 76(48.7%) then those with above 1 – 5years of experience 44 (28.2%), followed by 11-16 years of experience 19(12.2%) and more than 20 years of experience 17 (10.9%).
6. Clinical hospital jobs: This study divided the jobs into 8 groups; the majority of the respondents were nurses 113(72.4%) followed by Physicians 26(16.7%) then Pharmacists7 (4.5%).both technician and medical lab with equal distrbution3 (1.9%) then Therapist 2(1.3%) and Medical Assistants and Technologists1 (0.6%).

4.3. Study Variables Analysis (Descriptive Analysis):

This part analyzes and describes the independent and dependent variables from statistical point of view including means, standard deviations, t-values,ranking and importance

Independent Variables (International patient safety goals):-

A. patient identification and effective communication variables:

Table (4.2) shows that the average means of the respondents' perception about the degree of applying of the patient identification and effective communication variables are ranging from (2.7051to 4.4615), with standard deviation that ranges from (0.84242 to 1.71226). Such results show that there is an agreement on high application of patient identification and effective communication variables. The mean of the total patient identification and effective communication variables is (3.9865) with standard deviation (0.79337) which indicates that there is an agreement on high presence of these variables. Finally, the overall result indicates that there is a significant application of the patient identification and effective communication among Private Jordan Hospitals, where (t=15.531>1.96). This indicates that the medical staff working at Private Jordian Hospitals recognise the importance of the application of the patient identification and effective communication variables.

Table (4.2): Mean, Standard Deviation, Importance and Ranking of International patient safety goals (patient identification and effective communication) Variables

NO	Item	Mean	Std. Dev.	T. value	Importance	Sig	Rank
1	The hospital identifies the patient by triple name.	4.3590	.98994	17.146	High	.ooo	**2**
2	The patient's definition is matched before any medical procedure	4.4615	.86049	21.214	High	.ooo	**1**
3	The hospital Provides an identification's bracelet**.**	4.2756	1.08701	14.657	High	.000	**3**
4	The hospital labels the samples after taking the sample directly	4.0321	1.182781	10.898	High	.000	**5**
5	The hospital Checks availability of complete patient data.	4.2564	1.08878	14.413	High	.000	**4**
6	The hospital commits to communication using the five orders.	3.9551	1.07369	11.111	High	.000	**7**
7	The hospital has an active policy for verbal orders	2.7051	1.71226	2.151	Medium	.033	**10**
8	The medical order shall be signed within 24 hours	3.9167	.96358	11.882	High	.000	**8**
9	The hospital Obtains all necessary signatures for the patient.	3.9038	.92128	12.254	High	.000	**9**
10	The hospital Follows the right steps during delivery and receipt	4.0000	.84242	14.826	High	.000	**6**
	Patient identification and effective communication	3.9865	.79337	15.531	High	.000	

T-Tabulated = 1.96

B. Safety of high alert medication and Correct procedures and surgery:

Table (4.3) shows that the means of the respondents' perception about the degree of the application of Safety of high alert medication and Correct procedures and surgery are ranging from (2.9167to 4.6026) with standard deviation that ranges from (0.73773to

1.76328). Such results indicate that there is an agreement on Safety of high alert medication and correct procedures and surgery variable items.

Table (4.3): Mean, Standard Deviation, Importance and Ranking of the Safety of high alert medication and correct procedures and surgery

NO	Item	Mean	Std. Dev.	T. value	Importance	Sig	Rank
11	The hospital identifies a high-risk drug list with a hazard sign.	3.5962	1.24319	5.989	High	.ooo	**5**
12	The hospital Informs the patient about the medication, its properties and side effects	3.2051	1.32333	1.936	High	.oo4	**6**
13	The hospital removes the high-risk drugs from departments and a red label is placed when dispensed from the pharmacy.	2.9167	1.76328	7.590	Medium	.000	**9**
14	The hospital separates similar medicines by name in different places.	3.2051	1.34269	1.908	High	.000	**7**
15	The hospital reviews high-risk drugs by two nurses.	2.9231	1.73219	5.555	medium	.000	**8**
16	The hospital makes a visual mark by the doctor or his assistant on the location of the operation	4.4423	.84426	21.337	High	.000	**4**
17	The hospital completes all approval data for surgery.	4.5064	.80720	23.309	High	.000	**3**
18	The hospital completes all information in the anesthesia data form	4.5641	.73773	26.481	High	.000	**2**
19	The hospital ensures the availability of sterilized equipment, appliances and tools	4.6026	.75074	26.662	High	.000	**1**
	Safety of high alert medication and Correct procedures and surgery	3.7735	.86619	11.154	High	.000	

T-Tabulated = 1.96

The average mean of the total Safety of high alert medication and correct procedures and surgery variable items is 3.7735with standard deviation o.86619, which indicates that there is an agreement on high applying of this variable. Finally, the overall result indicates that there is a significant degree of application of the Safety of high alert medication and Correct procedures and surgery variable at Private Jordan Hospitals, where (t=11.154>1.96). This indicates that the medical staff working at Private Jordan Hospitals realize the importance of increasing the Safety of high alert medication and correct procedures and surgery.

C. Reduce healthcare associated infection and reduce the harm from fall.

Table (4.4) shows that the average means of the respondents' perception about the degree of the application of Reduce healthcare associated infection and reduce the harm from fall items are ranging from3.1154 to 4.6667, with standard deviation that

ranges from.73030to1.74490. Such results indicate that there is an agreement on high applying of Reduce healthcare associated infection and reduce the harm from fall variable items. The mean of the total Reduce healthcare associated infection and reduce the harm from fall variable items is 4.0729with standard deviation.73204which indicates that there is an agreement on high applying of this variable. Finally, the overall result indicates that there is a significant degree of application of the Reduce healthcare associated infection and Reduce the harm from fall variable on the Private Jordan Hospitals, where (t=18.306>1.96).

Table (4.4): Mean, Standard Deviation, Importance and Ranking of the Reduce healthcare associated infection and reduce the harm from fall

No	Item	Mean	Std.dev.	T-value	Importance	Sig	Rank
20	The hand washing is available.	**4.6667**	**.73030**	**28.504**	**High**	**.000**	1
21	The hand washing instructions are available on all basins	**4.0833**	**.95010**	**14.241**	**High**	**.ooo**	5
22	The hand washing is required at every medical procedure.	**4.1538**	**.88101**	**16.358**	**High**	**.000**	4
23	The jewelers, including toiletries, is removed during work	**3.1154**	**1.74490**	**5.358**	**High**	**.000**	8
24	The medical gloves should be worn at every medical procedure	**4.3974**	**.96172**	**18.149**	**High**	**.000**	2
25	There are instructions to ensure safety for those who fall while in hospital	**3.8974**	**.95160**	**11.779**	**High**	**.000**	7
26	The precautions are put in place to deal with cases of patient fall.	**3.9679**	**.94644**	**12.774**	**High**	**.000**	6
27	The special form is applied to deal with unexpected events.	**4.3013**	**.90461**	**17.967**	**High**	**.000**	3
	Reduce infection and Reduce the harm from fall.	**4.0729**	**.73204**	**18.306**	**High**	**.000**	

T-Tabulated = 1.96

Dependent variables:-

1. Unit level aspect:- Supervisor/Manager Expectations & Actions Promoting Patient Safety, Organizational Learning—Continuous Improvement, Teamwork Within Units and Non punitive Response to Errors.

Table (4.5) shows that the average means of the respondents' perception about the degree of the application of Unit level aspect (Supervisor/Manager Expectations & Actions Promoting Patient Safety, Organizational Learning—Continuous Improvement,

Teamwork within Units and Non punitive Response to Errors) items are ranging from2.0192 to 4.0897, with standard deviation that ranges from0.76026 to 1.53810. Such results indicate that there is an agreement on high applying of Unit level aspect (**Supervisor**/Manager Expectations & Actions Promoting Patient Safety, Organizational Learning—Continuous Improvement, Teamwork within Units and Non punitive Response to Errors) variable items. The mean of the total Unit level aspect(Supervisor/Manager Expectations & Actions Promoting Patient Safety, Organizational Learning—Continuous Improvement, Teamwork Within Units and Non punitive Response to Errors) variable items is 3.2596 with standard deviation 0.73938 which indicates that there is an agreement on high applying of this variable. Finally, the overall result indicates that there is a significant medium degree of application of the Unit level aspect (**Supervisor**/Manager Expectations & Actions Promoting Patient Safety, Organizational Learning—Continuous Improvement, Teamwork within Units and Non punitive Response to Errors) variable on the Private Jordan Hospitals, where (t=4.386 >1.96).

Table (4.5): Mean, Standard Deviation, Importance and Ranking of the Unit level aspect items.

No	Item	Mean	Std.dev.	T-value	Important	Sig	**Rank**
28	The manager commends what he does when accordance with patient safety procedures.	**3.1090**	**1.17267**	**4.161**	**High**	**.000**	9
29	The manager accepts suggestions about patient safety	**3.1538**	**1.12539**	**5.707**	**Medium**	**.304**	8
30	The manager ask you to work quickly and concisely if the number of patients in the department increases.	**2.7308**	**1.53810**	**2.186**	**Medium**	**.000**	11
31	Tell manager about the problems that may be facing the safety of patients.	**3.0256**	**1.38167**	**7.5621**	**High**	**.000**	10
32	The hospital take measures to improve patient safety	**3.8910**	**.80781**	**13.777**	**High**	**.000**	2
33	The medical errors are used to	**3.6667**	**.95264**	**8.741**	**High**	**.000**	7

	make a positive change						
34	The patient safety measures are evaluated	**3.7179**	**.76026**	**11.795**	**High**	**.000**	6
35	The errors are corrected before they affect the patient's safety.	**3.8141**	**1.02740**	**9.897**	**High**	**.ooo**	4
36	The colleagues support each other within the department	**3.8397**	**.98043**	**10.698**	**High**	**.ooo**	3
37	The colleagues work as a team to get the job done quickly (if units overloaded).	**3.7692**	**.97614**	**9.843**	**High**	**.ooo**	5
38	The colleagues treat each other with respect in this section	**4.0897**	**.90427**	**15.052**	**High**	**.000**	1
39	The work errors are handled in a transparent manner.	**2.6474**	**1.34790**	**3.267**	**Medium**	**.ooo**	12
40	The emphasis is on addressing errors rather than focusing on penalties.	**2.1603**	**1.40734**	**7.453**	**Low**	**.000**	13
41	There is no concern in recording errors in the job file	**2.0192**	**1.35109**	**9.067**	**Low**	**.000**	14
	Unit level aspect	**3.2596**	**.73938**	**4.386**	**Medium**	**.000**	

T-Tabulated = 1.96

Table (4.6) shows that the average means of the respondents' perception about the degree of the application of Hospital level aspect(Staffing, Management Support for Patient Safety, Teamwork Across Units, Handoffs & Transitions and Communication Openness) items are ranging from2.2051 to 3.9744, with standard deviation that ranges from0.82265 to 1.35744. Such results indicate that there is an agreement on high applying of Hospital level aspect (Staffing, Management Support for Patient Safety, Teamwork across Units, Handoffs & Transitions and Communication Openness) variable items. The mean of the total Hospital level aspect (Staffing, Management Support for Patient Safety, Teamwork Across Units, Handoffs & Transitions and Communication Openness) variable items is 3.0726 with standard deviation 0.73985which indicates that there is an agreement on high applying of this variable. Finally, the overall result indicates that there is a significant degree of application of the Hospital level aspect(Staffing, Management Support for Patient Safety, Teamwork Across Units, Handoffs & Transitions and Communication Openness) variable on the Private Jordan Hospitals, where (t=5.226 >1.96).

Table (4.6): Mean, Standard Deviation, Importance and Ranking of the Hospital level aspect (Staffing, Management Support for Patient Safety, and Teamwork across Units, Handoffs & Transitions and Communication Openness)

No	Item	Mean	Std.Dev	T-value	Important	Sig	Rank
42	There is enough staff to handle the workload	**2.5833**	**1.07738**	**4.830**	**High**	**.000**	13
43	Work within the department for additional hours to provide better patient care.	**2.4808**	**1.34630**	**4.817**	**Medium**	**.000**	14
44	Use a temporary staff to provide better care in case of increased workload..	**2.2051**	**1.31354**	**7.558**	**low**	**.000**	18
45	If the workload increases, we work faster	**2.3141**	**1.35744**	**6.311**	**low**	**.000**	16
46	Management provides the right climate to enhance patient safety	**3.5256**	**.82265**	**7.981**	**medium**	**.000**	7
47	Management asserts that patient safety is paramount	**3.9744**	**.91545**	**13.294**	**High**	**.000**	1
48	Management is concerned with patient safety, not only when mistakes occur	**3.6987**	**1.01231**	**8. 621**	**High**	**.000**	2
49	There is good coordination between hospital departments	**3.5833**	**.93642**	**7.781**	**Medium**	**.000**	4
50	There is good collaboration between departments that need to work together	**3.5321**	**.93959**	**7.073**	**Medium**	**.000**	6
51	The hospital departments work together to provide better patient safety	**3.6410**	**.93665**	**8.551**	**Medium**	**.000**	3
52	Often working with other departments is effortless.	**2.7372**	**1.48590**	**2.209**	**Medium**	**.000**	12
53	Errors rarely occur when transferring patients between departments	**3.5705**	**.88800**	**8.024**	**Medium**	**.000**	5
54	Medical information is rarely lost during a shift	**3.4744**	**.97351**	**6.086**	**Medium**	**.000**	8
55	There are little problems in exchanging information across hospital department	**3.4423**	**.94521**	**5.845**	**Medium**	**.000**	9
56	Changing the shift is not a big problem for patients in this hospital	**2.2885**	**1.27512**	**6.970**	**Low**	**.000**	17
57	Speaks to the manager freely when you notice things that are affecting the safety of patient	**3.0256**	**1.10686**	**5.289**	**Medium**	**.000**	10
58	Have the right to ask about decisions made at the management level	**2.3526**	**1.33829**	**6.042**	**Medium**	**.000**	15
59	Do not be afraid to ask questions about the wrong things	**2.8782**	**1.07369**	**1.417**	**Medium**	**.159**	11
	Patient safety at hospital level	**3.0726**	**.73985**	**5.226**	**Medium**	**.000**	

t-Tabulated = 1.96

D. Patient safety Outcome:- Feedback & Communication About Error, Overall Perceptions of Patient Safety and Frequency of Events Reported.

Table (4.7) shows that the average means of the respondents' perception about the degree of the application of outcome level (Feedback & Communication about Error, Overall Perceptions of Patient Safety and Frequency of Events Reported) items are ranging from3.4038to 3.8910, with standard deviation that ranges from 0.9235 to 1.36068. Such results indicate that there is an agreement on high applying of outcome level (Feedback & Communication about Error, Overall Perceptions of Patient Safety and Frequency of Events Reported) variable items. The mean of the total outcome level (Feedback & Communication about Error, Overall Perceptions of Patient Safety and Frequency of Events Reported) variable items is 3.5904 with standard deviation 0.9235 which indicates that there is an agreement on high implanting of this variable. Lastly, the overall result indicates that there is a significant degree of application of the outcome level (Feedback & Communication About Error, Overall Perceptions of Patient Safety and Frequency of Events Reported) variable on the Private Jordan Hospitals, where (t=7.984 >1.96).

Table (4.7): Mean, Standard Deviation, Importance and Ranking of the Outcome level aspect (Feedback & Communication about Error, Overall Perceptions of Patient Safety and Frequency of Events Reported).

No	Item	Mean	Std.dev	T-value	Importance	Sig	Rank
60	Reports are made about errors that may occur within the partition.	**3.4167**	**.94328**	**5.517**	**Medium**	**.000**	7
61	Notified of any errors that may occur within the section	**3.4167**	**1.04701**	**4.970**	**Medium**	**.304**	7
62	Ways to prevent errors are discussed within the section	**3.4038**	**1.00180**	**5.035**	**Medium**	**.000**	8
63	The hospital administration does not sacrifice the safety of the patient in return for more work done	**3.8910**	**1.08106**	**10.294**	**High**	**.000**	1
64	Hospital procedures	**3.8333**	**1.05850**	**9.833**	**High**	**.000**	2

	and regulations are effective in preventing errors						
65	Rarely, serious mistakes occur	**3.8141**	**1.08838**	**9.342**	**High**	**.000**	3
66	The number of errors in patient safety in this section is few	**3.4872**	**1.36068**	**4.472**	**Medium**	**.000**	5
67	Corrected errors are documented	**3.4038**	**1.06425**	**4.740**	**Medium**	**.000**	8
68	Document harmless errors to the patient	**3.4487**	**1.23547**	**4.536**	**Medium**	**.000**	6
69	Document serious errors that harm the safety of the patient.	**3.7885**	**1.13598**	**8.669**	**High**	**.000**	4
	Patient safety Outcome	**3.5904**	**.9235**	**7.984**	**Medium**	**.000**	

t-Tabulated = 1.96

4.4. Relationships between the Study Variables:

Table (4.8): Bivariate Pearson's Correlation (r) Among Independent Variables, Dependent variables, and between Independent and Dependent Variables.

No	Item	A	B	C	D	E	F
A	Identification and Communication	***1***					
B	Safety of medications &surgery	***.753****	***1***				
C	Reduce hazards from infections &falls	**.762****	**.812****	**1**			
D	**Unit level aspect**	**.484****	**.581****	**.504****	**1**		
E	Hospital level aspect	**.515****	**.530****	**.462****	**.867****	**1**	
F	Outcome aspect	**.547****	**.331****	**.422****	**.640****	**.742****	1

****Correlation is significant at the 0.01(2-tailed) * Correlation is significant at the 0.05 level (2-tailed)** Table (4.8)

Bivariate Pearson Correlation test was give rise to confirm the independency of data. The rule is that, each and every structure should correlate with itself in a way that is much greater to its correlations with other structure. If this rule is positive, then structures are independent and data are ready and valid to be used within regression analyses. Based on the values in Table 4.8, the structures are independent as they correlate with themselves in a way that is compact in comparison to their correlations with other structure.

Also, Table (4.8) shows that the relationships among Independent Variables, with highest correlation (r=.812).the relationships among Dependent Variables, with highest correlation (r=.867) the relationships among Independent& Dependent Variables, with highest correlation (r=.581)

The correlation matrix between the study variables has been statistically performed, the rate of coefficient correlation maintains between the limit of -1 and +1.However, the correlation coefficient {1} is called perfect correlation. And thus, this might cause a collinearity problem. Therefore, the value of correlation coefficient should not exceed (0.9) (Gujarati, 1999). So, the above table shows the relationship among the study variables.

4.5. Testing Study Hypothesis:

Before testing the study hypotheses, the multiple regressions analysis is used to analyze the impact of the International Patient Safety Goals variables on Patient Safety Culture.

To be able to use multiple regressions the following assumptions should befulfilled: Normality, validity, reliability, multi-colleanearity, independence of errors and correlation. R2 also indicates the fitness of the model (Sekaran & Bougie 2016).

Normal Distribution (Histogram):

The histogram in the figure (4.1) shows that the data were normality distributed, since the residuals so not affect the normal distribution.

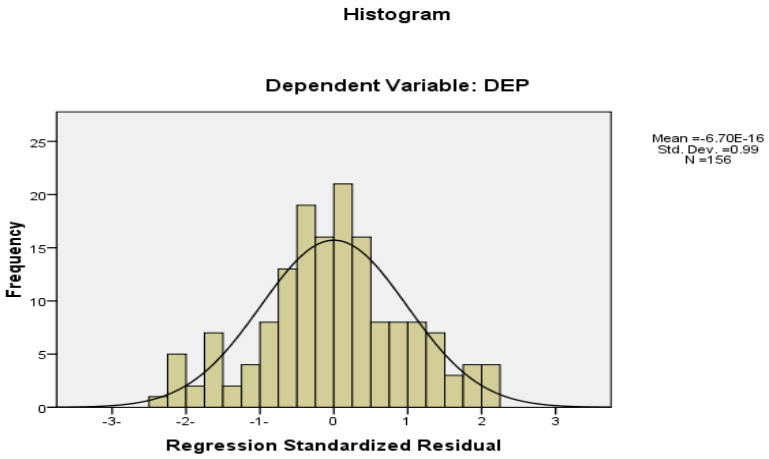

Figure (1.4): Normal Distribution (Histogram).

Linearity Test:

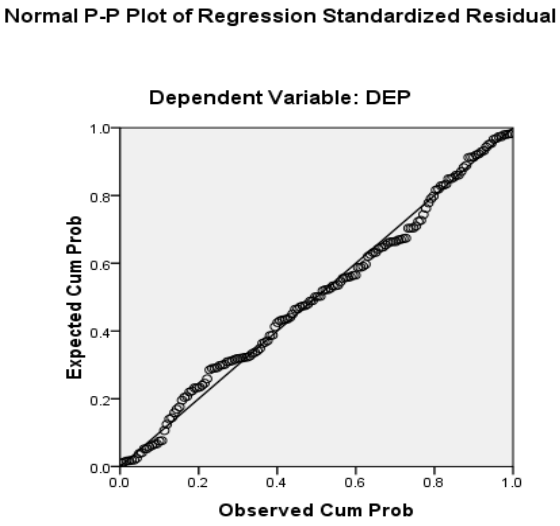

Figure (4.2): shows that the relationship between independent and dependent Variables is linear.

Table (4.9): Multi-Collinearity Test for Main Hypothesis

No	Item	Tolerance	VIF
A	Identification and communication	**.366**	**2.729**
B	Safety of medications &surgery	**.297**	**3.364**
C	Infections &falls hazards reduction.	**.289**	**3.477**

Table (4.9) result also shows that the VIF values are less than 10 and the tolerance values are more than 0.2. This indicates that there is no multi-co linearity within the independent variables of the study.

The Main Hypothesis:

H01: There is no significant impact of International Patient Safety Goals on the Patient safety culture at ($\alpha \leq 0.05$).

Multiple Regressions:

Table (4.10a&b): shows that when regressing the three independent variables of International Patient Safety Goals together against dependent variable Patient safety culture. R2 shows the fitness of the model for multiple regressions and explains the variance of independent variable on dependent variable.

Table (4.10a): Results of simple Regressions Analysis (ANOVA a): Regressing International Patient Safety Goals against the Patient safety culture.

Model	R	R_2	Adjusted R2	F	Sig
1	.586a	.343	.330	26.489	.000a

Since R2 is 34% then the independent variable can explain 34% of variance on dependent variable, since (R2=.343, F=26.489, Sig.=0.000). Consequently, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that International Patient Safety Goals elements have direct impact on Patient safety culture at Private Jordan Hospitals, at ($\alpha \leq 0.05$).

Table (4.10a) again shows the significance effect of each independent variable on dependent variable.

Table (4.10b) Results of Multiple Regressions Analysis (Coefficients a): Regressing International Patient Safety Goals against Total Patient safety culture Dimensions.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	**1.067**	**.276**		**3.870**	**.000**
A	**.313**	**.098**	**.345**	**3.174**	**.002**
B	**.188**	**.100**	**.226**	**1.878**	**.062**
C	**.59**	**.121**	**.059**	**.478**	**.633**

The dependent variable is Unit level aspect.

Where A= Patient Identification &communication.

B= Safety of medications &surgery.

C= Infections &fall hazards reduction.

$H_{0.1}$: Patient Identification& Communication does not have direct impact on the Whole Patient Safety Culture at Private Jordan Hospitals, at ($\alpha \leq 0.05$).

Table (4.11a): Results of Simple Regressions Analysis (ANOVA a): Regressing Patient Identification& Communication against Whole Patient Safety Culture.

Model	R	R_2	Adjusted R2	F	Sig
1	.560a	.313	.309	70.281	.000a

a. predictors (constant),A.

Since R2 is 34% then the independent variable can explain 34% of variance on dependent variable, since (R2=.343, F=70.281, Sig.=0.000). Consequently, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that Patient Identification& Communication elements have direct impact on Whole Patient safety culture at Private Jordan Hospitals, at ($\alpha \leq 0.05$).

Table (4.11b) Results of Multiple Regressions Analysis (Coefficients a): Regressing Patient Identification& Communication against Whole Patient Safety Culture at Private Jordan Hospitals Dimensions.

Model	Un standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	**1.234**	**.246**		**5.012**	**.000**
A	**.508**	**.061**	**.560**	**8.383**	**.000**

Where A= Patient Identification& Communication

Table (4.11b) shows that there is a positive direct impact of: Patient Identification& Communication on the Whole Patient Safety Culture, since (Beta=.560, t=8.383, sig. 0.000, $p<0.05$). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that the Patient Identification& Communication have direct impact on the Whole Patient Safety Culture at ($\alpha \leq 0.05$).

Sub-Hypothesis H0.2: Safety of medications &surgery does not have direct impact on the Whole Patient Safety Culture at Private Jordan Hospitals, at ($\alpha \leq 0.05$).

Table (4.12a): Results of simple Regressions Analysis (ANOVAa): Regressing Safety of medications &surgery against Whole Patient Safety Culture.

Model	R	R_2	Adjusted R2	F	Sig
A	.534a	.285	.280	61.274	.000a

a. predictors (constant),B.

Since R2 is 29% then the independent variable can explain 29% of variance on dependent variable, since (R2=.285, F=61.274, Sig.=0.000). Consequently, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that Safety of medications &surgery elements have direct impact on Whole Patient safety culture at Private Jordan Hospitals, at ($\alpha \leq 0.05$).

Table (4.12b) Results of Simple Regressions Analysis (Coefficients [a]): Regressing Safety of medications &surgery against Whole Patient Safety Culture at Private Jordan Hospitals Dimensions

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.586	.219		7.233	.000
B	. 443	.057	.534	7.828	.000

Where B= Safety of medications &surgery

Table (4.12b) shows that there is a positive direct impact of Safety of medications &surgery on the Whole Patient Safety culture, since (Beta=. 443, t=7.828, sig. 0.000, $p<0.05$), the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that the Safety of medications &surgery has an impact on the Whole Patient Safety Culture at ($\alpha \leq 0.05$).

Sub-Hypothesis H0.3: Infections &fall hazards reduction does not have direct impact on the Whole Patient Safety Culture at Private Jordan Hospitals, at ($\alpha \leq 0.05$).

Table (4.13a): Results of Simple Regressions Analysis (ANOVAa): Regressing Infections &fall hazards reduction against the Whole Patient Safety Culture.

Model	R	R_2	Adjusted R2	F	Sig
C	.505a	.255	.250	52.788	.000a

a.predictors (constant),c.

Since R2 is 26% then the independent variable can explain 26% of variance on dependent variable, since (R2=..255, F=52.788, Sig.=0.000). Consequently, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that Infections &fall hazards reduction elements have direct impact on Whole Patient safety culture at Private Jordan Hospitals, at ($\alpha \leq 0.05$).

Table (4.13b) Results of Simple Regressions Analysis (Coefficients): Regressing Infections &fall hazards reduction against Whole Patient Safety Culture at Private Jordan Hospitals Dimensions

model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.235	.283		4.366	.000
C	0.497	.068	.505	7.266	.000

Where C= Infections &fall hazards reduction.

Table (4.13b) shows that there is a positive direct impact of Infections &fall hazards reduction on the Whole Patient Safety culture, since (Beta=. 497, t=7.266, sig. 0.000, $p<0.05$), the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that the Infections &fall hazards reduction has an impact on the Whole Patient Safety Culture at ($\alpha \leq 0.05$).

From the above tables, the researcher concludes that all International Patient Safety Goals variables have an impact on Patient Safety Culture at Private Jordan Hospitals. The Patient Identification& Communication was holding the highest impact (Beta= 0.560, t=8.383, sig. 0.000), followed by Safety of medications &surgery variable (Beta=.534, t=7.828, sig. 0.000), then Infections &fall hazards reduction hold the least impact (Beta=.505, t=7.266, sig. 0.000).The researcher believe that the highly importance of Patient Identification& Communication refers to the medical staff awareness about the importance of Patient Identification& Communication and it's positively impact on the other two International patient safety goals variables (Safety of medications &surgery and Infections &fall hazards reduction), in other words the first step is to make Patient Identification& Communication to facilitate the Safety of medications &surgery and Infections &fall hazards.

CHAPTER FIVE
RESULTS DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Results' Discussion:

In this chapter, the study results was presented and discussed in light of previous studies as follows:

Result of this study expresses that, there is a significant importance of the International Patient Safety Goals among Private Jordan Hospitals. The researcher refers this result to the awareness of the Physicians, nurses, and other medical staff who work at Private Jordan Hospitals about the significance of International Patient Safety Goals and its effect on the whole Patient safety culture. All independent variables have high degree of patient safety. The researcher believe that the first and highest level of patient safety is related to the Patient Identification& communication which is actually the most important variable among International Patient Safety Goals because Patient Identification& communication is the ultimate goal that all Hospitals seek to achieve. Then, Infections &fall hazards reduction is ranked in the second level of patient safety as it's the link between Safety of medications &surgery and Patient Identification& communication, and it's impossible to achieve either Safety of medications &surgery or Patient Identification& communication without Infections &fall hazards reduction. Finally, Safety of medications &surgery is ranked in the third level and that's may refer to the respondents believe about the highly significance of Patient Identification& communication and Infections &fall hazards reduction because of the difficulties in addressing Safety of medications & surgery, and to change the medical staff behaviors and attitudes toward patient culture.

The result indicates that the medical staff working at Private Jordan Hospitals recognize the high importance of the application of the patient identification and effective communication. Also, the study indicates that the medical staff realize the high importance of increasing the Safety of high alert medication and correct procedures and surgery, and the overall result indicates that there is a significant degree of application of the reduce healthcare associated infection and reduce the harm from fall. This agree

with Ulrich& Kear, (2017), which emphasis on the strong relation between International patient safety goals and patient safety culture.

The overall result indicates that there is a significant medium degree of application of the Unit level aspect (Supervisor/Manager Expectations & Actions Promoting Patient Safety, Organizational Learning—Continuous Improvement, Teamwork within Units and Non punitive Response to Errors), that agree with Hasan & Rashid, (2016), about the patient safety culture improvement, team within work and response to errors.

The result indicates that there is a significant medium degree of application of the Hospital level aspect (Staffing, Management Support for Patient Safety, Teamwork Across Units, Handoffs & Transitions and Communication Openness) which strongly confirms with Aljabri, (2012), which explain how these variables contributes to achieve the excellent patient safety culture, and in controversy with Hamdan & Saleem, (2013), in handling these variables.

The result indicates that there is a significant degree of application of the outcome level(Feedback & Communication About Error, Overall Perceptions of Patient Safety and Frequency of Events Reported),in comparison with Ulrich& Kear, (2014), Ghobashi, et al (2010)& El-Jardali (2011) there is significant matching between these studies and the current study. Also, Helling, et al, (2009), important aspects of the patient safety culture in these hospitals need improvement.

Elmontsri (2017),summaries the results in Arabic culture that, have points of linking between this study and previous studies with similar significant impact of application of international safety goal on patient safety.

5.2. Conclusion:

The result shows that there is an agreement among participants on high application of each international patient safety goals variable (Patient Identification &communication, Safety of medications &surgery and Infections &fall hazards reduction), which indicates that there is an agreement on high presence of these variables in Private Jordan Hospitals. Moreover, the overall result indicates that there is a significant application of the international patient safety goals among Private Jordan Hospitals. This indicates that the medical staff working at Private Jordan Hospitals recognize the importance of the application of the International Patient Safety Goals variables. The results also show that the relationships between International Patient Safety Goals variables is strong relationships.

The relationships between each variable of International Patient Safety Goals and sustainable are strong too**.** The relationships among Patient Safety Culture variables are medium to strong. Furthermore, the correlation between each International Patient Safety Goals variables and Patient Safety Culture is strong to very strong. Furthermore, the relationship between total International Patient Safety Goals and Patient Safety Culture is very strong.

Finally, the current study indicates that all International Patient Safety Goals variables have an impact on Patient Safety Culture at Private Jordan Hospitals. The Patient Identification &communication was having the highest impact, followed by Safety of medications &surgery, then Infections &fall hazards reduction respectively.

5.3. Recommendations:

A. Recommendations for Private Jordan Hospitals:-

(1) The current study recommends applying International Patient Safety Goals to all Private Jordan Hospitals in all cities of Jordan to improve Patient Safety Culture.

(2) The current study recommends and advice for the patient identification and communication.

(3) The current study recommends and advice for the safety of medications and surgery.

(4) The current study advice to manage special training programs on how to apply International Patient Safety Goals for medical staff.

(5) The current study recommends to analyze all infection and fall hazards occurring in daily hospital work to reduce the Infection and fall.

(6) Private Hospitals should allocate the International Patient Safety Goals to follow Patient Safety culture.

(7) The current study recommends including patient safety culture elements within International Patient Safety Goals criteria at Private Hospitals as it may improve the Hospital's reputation.

B. Recommendations for Academics and Future Research:

(8) The current study recommends adding International patient safety goals as elements to Patient Safety culture elements in further studies.

(9) This study is directed towards Private Hospitals. Further empirical research work is needed to test the degree to which the study findings can be generalized to other Public Hospitals.

(10) This study was conducted on Jordan Hospitals. Generalizing Jordanian results to other countries is questionable. Therefore, the study recommends carrying out similar study in different countries especially Arab countries.

(11) Finally, there is a need to analyze data of other Hospitals over a longer time in order to clearly test the application of the International Patient Safety Goals.The important differences between Hospitals could be measured by further studies. So, it is recommended to work out researches that compare results with other countries specially developing countries under similar condition.

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Appendix

Appendix (1)

استبانة حول أثر تطبيق الأهداف الدولية للسلامة على ثقافة سلامة المرضى في المستشفيات الأردنية الخاصة

"The impact of application of international safety goal on patient safety at Private Jordan Hospitals"

Part1:

In this part, I would like to know some basic background information about you. Please tick (√) the appropriate answer.

1. Gender.
□ Male □ Female

2. Age
□ Less than 35 years. □35-less than 45years.
□ 45-less than 55 years. □ 55 years & more

3. Educational Qualification.
□ Diploma □ Bachelor's degree
□ Master degree □ Doctoral degree
4. Commnication with the patients

□direct □indirect

5. Career's experience:-
□ 1–5 year's □ 6-10 years
□ 15-20 year's □ More than 20 years
6. Clinical hospital jobs:-

Physician □ Nurse □ Techs □ Therapist □ Medical Assistants□

Pharmacists□ Medical Lab □ Technologist□ Dietician□

Part 2: circle the suitable answer:- The following 69 items indicate International patient safety goals and its impact on Patient safety culture.

Please, answer these questions based on your perception and not on beliefs.[1 = strongly disagree, 2 = disagree, 3 =Neither agree or nor disagree, 4 = agree, 5 = strongly agree] based on how you feel about the statement.

Identify patient correctly						
1	The hospital identifies the patient by triple name.	1	2	3	4	5
2	The patient's definition is matched before any medical procedure.	1	2	3	4	5
3	The hospital Provides an identification's bracelet.	1	2	3	4	5
4	The hospital labels the samples after taking the sample directly.	1	2	3	4	5
5	The hospital Checks availability of complete patient data.	1	2	3	4	5
Effective communication						
6	The hospital commits to communication using the five orders.	1	2	3	4	5
7	The hospital has an active policy for verbal orders	1	2	3	4	5
8	The medical order shall be signed within 24 hours.	1	2	3	4	5
9	The hospital Obtains all necessary signatures for the patient.	1	2	3	4	5
10	The hospital Follows the right steps during delivery and receipt.	1	2	3	4	5
Safety of high alert medication						
11	The hospital identifies a high-risk drug list with a hazard sign.	1	2	3	4	5
12	The hospital Informs the patient about the medication, its properties and side effects.	1	2	3	4	5
13	The hospital removes the high-risk drugs from departments and a red label is placed when dispensed from the pharmacy.	1	2	3	4	5
14	The hospital separates similar medicines by name in different places.	1	2	3	4	5
15	The hospital reviews high-risk drugs by two nurses.	1	2	3	4	5

	Correct procedures and surgery					
16	The hospital makes a visual mark by the doctor or his assistant on the location of the operation	1	2	3	4	5
17	The hospital completes all approval data for surgery.	1	2	3	4	5
18	The hospital completes all information in the anesthesia data form.	1	2	3	4	5
19	The hospital ensures the availability of sterilized equipment, appliances and tools.	1	2	3	4	5
Reduce healthcare associated infection						
20	The hand washing is available.	1	2	3	4	5
21	The hand washing instructions are available on all basins.	1	2	3	4	5
22	The hand washing is required at every medical procedure.	1	2	3	4	5
23	The jewelers, including toiletries, is removed during work. .	1	2	3	4	5
24	The medical gloves should be worn at every medical procedure.	1	2	3	4	5
Reduce the harm from fall						
25	There are instructions to ensure safety for those who fall while in hospital. .	1	2	3	4	5
26	The precautions are put in place to deal with cases of patient fall..	1	2	3	4	5
27	The special form is applied to deal with unexpected events.	1	2	3	4	5

Part 3:-

Supervisor/Manager Expectations & Actions Promoting Patient Safety						
28	The manager commends what he does when accordance with patient safety procedures..	1	2	3	4	5
29	The manager accepts suggestions about patient safety	1	2	3	4	5
30	The manager ask you to work quickly and concisely if the number of patients in the department increases	1	2	3	4	5
31	Tell manager about the problems that may be facing the safety of patients.	1	2	3	4	5
Organizational Learning—Continuous Improvement						
32	The hospital take measures to improve patient safety.	1	2	3	4	5
33	The medical errors are used to make a positive change.	1	2	3	4	5
34	The patient safety measures are evaluated	1	2	3	4	5
35	The errors are corrected before they affect the patient's safety.	1	2	3	4	5
Teamwork Within Units						
36	The colleagues support each other within the department.	1	2	3	4	5
37	The colleagues work as a team to get the job done quickly (if units overloaded).	1	2	3	4	5
38	The colleagues treat each other with respect in this section.	1	2	3	4	5
Non punitive Response to Errors						
39	The work errors are handled in a transparent manner.	1	2	3	4	5
40	The emphasis is on addressing errors rather than focusing on penalties.	1	2	3	4	5
41	There is no concern in recording errors in the job file.	1	2	3	4	5
Staffing						
42	There is enough staff to handle the workload.	1	2	3	4	5
43	work within the department for additional hours to provide better patient care.	1	2	3	4	5
44	Use a temporary staff to provide better care in case of increased workload..	1	2	3	4	5
45	If the workload increases, we work faster	1	2	3	4	5
Management Support for Patient Safety						
46	Management provides the right climate to enhance patient safety..	1	2	3	4	5
47	Management asserts that patient safety is paramount.	1	2	3	4	5
48	Management is concerned with patient safety, not only when mistakes occur.	1	2	3	4	5

Teamwork Across Units						
49	There is good coordination between hospital departments.	1	2	3	4	5
50	There is good collaboration between departments that need to work together.	1	2	3	4	5
51	The hospital department's work together to provide better patient safety.	1	2	3	4	5
52	Often working with other departments is effortless.	1	2	3	4	5
Handoffs & Transitions						
53	Errors rarely occur when transferring patients between departments.	1	2	3	4	5
54	Medical information is rarely lost during a shift.	1	2	3	4	5
55	There are little problems in exchanging information across hospital department.	1	2	3	4	5
56	Changing the shift is not a big problem for patients in this hospital.	1	2	3	4	5
Communication Openness						
57	Speaks to the manager freely when you notice things that are affecting the safety of patient.	1	2	3	4	5
58	Have the right to ask about decisions made at the management level.	1	2	3	4	5
59	Do not be afraid to ask questions about the wrong things.	1	2	3	4	5
Feedback & Communication About Error						
60	Reports are made about errors that may occur within the partition.	1	2	3	4	5
61	Notified of any errors that may occur within the section	1	2	3	4	5
62	Ways to prevent errors are discussed within the section.	1	2	3	4	5
Overall Perceptions of Patient Safety						
63	The hospital administration does not sacrifice the safety of the patient in return for more work done.	1	2	3	4	5
64	Hospital procedures and regulations are effective in preventing errors.	1	2	3	4	5
65	Rarely, serious mistakes occur.	1	2	3	4	5
66	The number of errors in patient safety in this section is few.	1	2	3	4	5
Frequency of Events Reported						
67	Corrected errors are documented.	1	2	3	4	5
68	Document harmless errors to the patient.	1	2	3	4	5
69	Document serious errors that harm the safety of the patient.	1	2	3	4	5

Appendix (2)

List of Esteemed Academics That Arbitrated the Questionnaire.

NO	Name	University
1.	Prof. Fayez najjar	The world Islamic Sciences Education University
2.	Prof Khalil Ibrahim Elttyef	Faculty of pharmacology ,MEU
3.	Prof Osama Rabbaba	Middle East University
4.	Prof. Mohammad Al No'imi	Jordan University.
5.	Associate Professor Abdullah Ahmed Al Shoura	The world Islamic Sciences Education University
6.	Associate Professor Mohammed Abdulkarim Al-Riggad	The world Islamic Sciences Education University
7.	Associate Professor Marzouq Ayed Al-Qa'id	The world Islamic Sciences Education University.
8.	Assistant Prof. Samer Mousa AlJabali.	MEU
9.	Dr. Abdel-Aziz Ahmad Sharabati	MEU
10.	Dr. Ahmad Ali Saleh	MEU