Joint Commission International Accreditation: Analytic Study at Al-Makassed Islamic Chartable Society Hospital

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Joint Commission International Accreditation: Analytic Study at Al-Makassed Islamic Chartable Society Hospital

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Jerusalem-Palestine 1439/2018
Dedication

I dedicate this valuable work to my parents and family for their love and endless support. And I would like to present my success to my parents, who give the love, warmth and secure, who take the obstacles from my road, who made everything in my life, beautiful and who I love them so much.

To my wife Zeinab for her precious love, constant support and encouragement.
To Dr. Salam Alkhatib for her ongoing support and effort to complete this work.
My thanks go to my sisters for their support and continuous motivation to reach my goals.
I would like to thank my friends for their motivation and continuous support.
To all my colleagues at Al-Makassed Islamic Charitable Society Hospital. I would to express my since gratitude to all participants in the study without them it would have been no result
Sometimes the words and letters unable to express the internal feeling. I can just thank all of them very much.
Declaration

I certify that this thesis submitted for the degree of Master is the result of my own research, except where otherwise acknowledged and that this thesis (or any part of the same) has not been submitted for a higher degree to any other university or institution.

Signature:

Student's Name: Saif Deirya

Date: 14/8/2018
Acknowledgment

I would like to offer my warmest thanks to my supervisors, Dr. Salam Alkhatib for her support, guidance, supervision, continued encouragement and friendship throughout the years of my study. I would like to thank her for her patience, support and inspiration and also for her constructive criticism of my writing.

Saif Deirya
Abstract

Background:

Accreditation, quality and continuous improvement have become an intrinsic part of the discourse and activities of health services. Internationally, dating from 1970s, health care accreditation programs and accrediting organizations emerged and developed. These programs and organizations have been developed as a tool to monitor the healthcare organizations in order to improve the provided healthcare to public. Al-Makassed Islamic Charitable Society Hospital (AMICSH) was accredited in 28th of February 2014. Hospital reaccredited again in October 2017.

Aim of the study:

The aim of the study was to examine nurses’ point of view toward the impact of joint commission international accreditation (JCIA) on quality of care and patient safety at the AMICSH.

Study Design:

A quantitative, descriptive, non-experimental, cross sectional and analytic design was used. The total population of the study was 358 nurses, the sample size was 192 nurses, the proportion for each department was calculated by: (total department's nurses/ total population)*192, 192 questionnaires were distributed to nurses at the hospital, 170 questionnaires were returned with 88.5% response rate.

Study Tool:

A 54 items questionnaire was adopted from previous studies to examine nurses’ perception toward the impact of JCIA on quality of care and patient’s safety at the hospital at AMICSH.
Observation checklist:

In current study the researcher designed observational checklist to ensure if specific standards of JCIA were applied by nurses. It aimed to support and compare quantitative results. It consisted of 27 questions using Yes and No format.

Results:

The study found that nurses at AMICSH had positive point of view toward the impact of JCIA on quality of care and patient safety.

Result showed positive relationships between quality of care and patient’s safety with organizational factors (leadership commitment and support, strategic quality planning, human resources utilization, quality management, use of data and staff involvement) according to nurses at AMICSH. The findings included no significant differences between the selected demographic data (gender, age, department, educational level, occupational category) and nurses’ point of view toward the impact of JCIA on the quality of care. But regarding the years of experience, it was found that nurses who have 5-10 years and 11-15 years of experience had better and positive point of view toward the impact of JCIA on the quality of care compared with nurses who had less than 5 years of experience. The challenge that faced implementation of JCIA was that about third of nurses had neutral point of view toward human resources utilization and data use at AMICSH.

Based on observation data, the waiting time by patients for admission, discharge, or receiving related procedures taking longer time, this will negatively impact on the patient satisfaction and therefore, it is recommended to shorten the waiting time for patients.
Conclusion:

This study suggested that organizational factors are major contributors in improving the quality of care and patient safety. Moreover, these factors when dressed well, nurses point of view might increase which would have positive impact on the quality of care and patient safety. Therefore, this study recommended that hospital administrators and policy makers to implement quality improvement programs that will ultimately improve the health care system and service of the organization.

Effective and efficient training and education programs must target all nurses at the hospital to affect their performance regarding quality improvement. Also continuous monitoring of equipment need to be dominant at the hospital since it is not clearly noticed. Integrating staff in all process at the hospital will facilitate the application of JCIA standers. Moreover, they should be motivated all the time in order to improve the quality at the hospital.
المقدمة

المصطلح

اللجنة الدولية المشتركة لاعتماد جودة المستشفيات: دراسة تحليلية في مستشفى جمعية المقاصد الإسلامية الخيرية

اعد: سيف حاتم محمود دريده

اشراف: الدكتور سلام الخطيب

الملخص

لقد أصبح التحسن المستمر والجودة والاعتماد جزءًا جوهريًا من انضباط وأنشطة الخدمات الصحية.

هذف الدراسة

هدفت الدراسة لفحص إدراك المرضى والممرضين لتأثير الاعتماد الدولي المشترك للجودة على حيويات الرعاية وسلامة المرضي في مستشفى المقاصد الخيرية الإسلامية.

منهجية الدراسة

تم استخدام التصميم الكمي والوصفى وغير التجربى والقطاعى والتحليلى.

BLE BY DIRECTORS.

اداة الدراسة

تم استخدام استبانة مكونة من 54 بنداً من الدراسات السابقة لفحص إدراك المرضى والممرضين والممرضات لتاثير الاعتماد الدولي المشترك للمراجعه وسلامة المريض في مستشفى المقاصد الخيرية الإسلامية.
قائمة الملاحظة:

في الدراسة الحالية، قام الباحث بتصميم قائمة ملاحظات لتتبعها بالمحافظة على تطبيق المعايير المحددة من اللجنة الدولية المشتركة للاعتماد من قبل المرضى والممرضات. هدفت القائمة إلى دعم ومقارنة النتائج الكمية. تألفت من 27 سؤالًا وإجاباتها تحتوي أحد الخيارين "نعم" أو "لا".

النتائج:

وجدت الدراسة أن الممرضين والممرضات في مستشفى جمعية المقاصد الخيرية الإسلامية لديهم تصور إيجابي تجاه تأثير الاعتماد الدولي المشترك للجودة على جودة الرعاية وسلامة المرضى. أظهرت النتائج وجود علاقات إيجابية بين جودة الرعاية وسلامة المريض مع العوامل التنظيمية (الالتزام القيادي والدعم، وتطبيق الجودة الاستراتيجية). واستخدام الموارد البشرية، وإدارة الجودة، واستخدام البيانات ومشاركة الموظفين، وفقًا للممرضين والممرضات في مستشفى جمعية المقاصد الخيرية الإسلامية. كما خلصت النتائج إلى عدم وجود فروق ذات دلالة إحصائية بين البيانات الدموغرافية المختلفة (الجنس العمر، القدر، المستوى التعليمي، الفئة المهنية) وادراك الممرضين والممرضات لتأثير الاعتماد الدولي المشترك نحو جودة الرعاية. ولكن فيما يتعلق ببنوات الخبرة، فقد وجد أن الممرضين والممرضات الذين تراحت خبراتهم بين (5-10) سنوات و(11-15) سنة لديهم تصورات أفضل وإيجابية نحو تأثير اللجنة الدولية المشتركة على جودة الرعاية مقارنة مع الممرضين والممرضات الذين تقل خبرتهم عن 5 سنوات. كان التحدي الذي واجه تطبيق اللجنة الدولية المشتركة أن ثلث الممرضين والممرضات كان لديهم تصور محايد تجاه استخدام الموارد البشرية واستخدام البيانات في مستشفى المقاصد الخيرية الإسلامية.

وبناءً على الملاحظة، فإن وقت الانتظار من قبل المرضى للدخول أو الخروج، أو التلقي إجراءات ذات صلة تستغرق وقتًا أطول، وهذا يؤثر سلبًا على رضا المريض وبالتالي يوصى بتقليل وقت الانتظار للمريض.

الاستنتاج:

اقترحت الدراسة أن العوامل التنظيمية هي من العوامل الرئيسية المساهمة في تحسين جودة الرعاية وسلامة المرضى. وعلاوة على ذلك، فإن الاستخدام الجيد لهذه العوامل، سيرفع مستوى إدراك الممرضين والممرضات لتأثير معايير اللجنة الدولية المشتركة للاعتماد جودة المستشفيات على جودة الرعاية وسلامة المرضى.

يجب أن تستهدف برامج التدريب والتعليم الفعال والكفو جميع الممرضين والممرضات في المستشفى للتأثير على أداءهم فيما يتعلق بتحسين الجودة. كما يجب أن تكون المراقبة المستمرة للمعdds واضحة.
في المستشفى نظرًا لعدم ملاحظة ذلك بوضوح. وسيسهل دمج الموظفين في جميع العمليات في المستشفى لتطبيق معايير اللجنة الدولية المشتركة للاعتماد. علاوة على ذلك، يجب أن يكون لدى الموظفين الدافع طوال الوقت من أجل تحسين الجودة في المستشفى.
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<tbody>
<tr>
<td>ACHSI</td>
<td>Accreditation Canada International, Australian Council on Healthcare Standards International</td>
</tr>
<tr>
<td>AICU</td>
<td>Adult Intensive Care Unit</td>
</tr>
<tr>
<td>AOH</td>
<td>Adult Open Heart</td>
</tr>
<tr>
<td>AMICSH</td>
<td>Al-Makassed Islamic charitable society hospital</td>
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<tr>
<td>ANOVA</td>
<td>Analysis Of Variance</td>
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<tr>
<td>AVH</td>
<td>Augusta Victoria Hospital</td>
</tr>
<tr>
<td>CBAHI</td>
<td>Central Board of Accreditation for Healthcare Institutions in Saudi Arabia</td>
</tr>
<tr>
<td>CBC</td>
<td>Complete Blood Test</td>
</tr>
<tr>
<td>CCU</td>
<td>Cardiac Care Unit</td>
</tr>
<tr>
<td>C.Cath</td>
<td>Cardiac Catheterization Unit</td>
</tr>
<tr>
<td>COHSASA</td>
<td>Council for health service accreditation of Southern Africa</td>
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<tr>
<td>CT</td>
<td>Computed Tomography</td>
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<tr>
<td>EMG</td>
<td>Electromyography</td>
</tr>
<tr>
<td>EMU</td>
<td>Epilepsy Monitoring Unit</td>
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<tr>
<td>ER</td>
<td>Emergency Room</td>
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<tr>
<td>ESQH</td>
<td>European Society for Quality in Healthcare</td>
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<tr>
<td>IRB</td>
<td>Institutional Review Board</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
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<tr>
<td>IPSG</td>
<td>International Patient Safety Goals</td>
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<tr>
<td>ISQua</td>
<td>International Society for Quality in Health Care</td>
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<tr>
<td>JCI</td>
<td>Joint Commission International</td>
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<tr>
<td>JCIA</td>
<td>joint commission international accreditation</td>
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<tr>
<td>JCAHO</td>
<td>Joint Commission on Accreditation of Healthcare Organizations</td>
</tr>
<tr>
<td>KMO</td>
<td>Kaiser–Meyer–Olkin</td>
</tr>
<tr>
<td>KZN</td>
<td>KwaZulu-Natal</td>
</tr>
<tr>
<td>M</td>
<td>Mean</td>
</tr>
<tr>
<td>MRI</td>
<td>Magnetic Resonance Imaging</td>
</tr>
<tr>
<td>MRSA</td>
<td>Methicillin resistant staph aureus</td>
</tr>
<tr>
<td>NCQA</td>
<td>National Committee for Quality Assurance</td>
</tr>
<tr>
<td>Neuro ICU</td>
<td>Neurosurgery Intensive Care Unit</td>
</tr>
<tr>
<td>O.R.</td>
<td>Operating Room</td>
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<tr>
<td>PICU</td>
<td>Pediatric Intensive Care Unit</td>
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<tr>
<td>POH</td>
<td>Pediatric Open Heart</td>
</tr>
<tr>
<td>PMS</td>
<td>Percentage of Mean</td>
</tr>
<tr>
<td>RCT</td>
<td>Randomize Control Trial</td>
</tr>
<tr>
<td>SD</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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<tr>
<td>TJC</td>
<td>The Joint Commission</td>
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<td>UKAS</td>
<td>The UK Accreditation Service</td>
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Chapter One

Introduction

1.1 Background

Internationally, dating from 1970s, health care accreditation programs and accrediting organizations emerged and developed (Greenfield & Braithwaite, 2008). The main aims of Joint Commission International (JCI) are to identify, measure, and share best practices in quality and patient safety with the world (Chang & Lee, 2012). Accreditation, quality and continuous improvement have become an intrinsic part of the discourse and activities of health services. These programs and organizations have been developed as a tool to monitor the healthcare organizations and continue improvement to improve the provided healthcare to public. With an increased worldwide interest in health care evaluation among governments, health care providers, and consumers, the quality of patient care provided through the health care delivery system has become an important point of focus for many countries. Initiatives to deliver quality health care have become a worldwide phenomenon. Accreditation is a learning and continuous quality improvement process that has attracted great interest in recent years as a comprehensive approach to improve and maintain the quality of health care. However, according to the researchers worldwide little is known of the impact of accreditation on the quality of patient care and safety (B. Al-Awa et al., 2012).

The American College of Surgeons set up a standards program to define suitable hospitals for surgical training in 1917. This developed into a multidisciplinary program of standardization and led to the formation in 1951 of the independent Joint Commission on
Hospital Accreditation, now the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), from which all subsequent national programs have been directly or indirectly derived. The National Committee for Quality Assurance (WHO., 2003).

The increased international focus on improving patient outcomes, safety and quality of care has led stakeholders, policy makers and healthcare provider organizations to adopt standardized processes for evaluating healthcare organizations. Accreditation and certification have been proposed as interventions to support patient safety and high quality healthcare. Guidelines recommend accreditation but are cautious about the evidence, judged as inconclusive. The push for accreditation continues despite sparse evidence to support its efficiency or effectiveness (Brubakk et al., 2015).

A hospital seeking to obtain joint commission international accreditation (JCIA) is visited every three years by a survey team that observes hospital operations, conducts interviews, and reviews medical documentation for compliance with a set of standards. The goal of the survey that the JCIA do is to evaluate care, organizational processes and to provide education with the objective of promoting continual improvement for the organization under survey (Devkaran & O’Farrell, 2015). The survey wants to be sure that the accredited hospital follows the standards correctly and to measure the hospital compliance on the standards. Further, the survey team wants to know that the hospital develops strategy for continuous quality improvement.

Accreditation is generally viewed as a formal process by which an authorized body, either governmental or nongovernmental, assesses and determines whether a healthcare organization meets applicable, predetermined, and published standards (Salmon et al., 2003). Al-Makassed Islamic charitable society hospital (AMICSH) seeks to gain JCIA. Most of accreditation programs are voluntary but a few programs are mandatory such as

Although many health-care organizations in developing countries are undergoing or considering accreditation, there is little research on its impact and consequently no conclusive evidence that it improves quality of care (El-Jardali et al., 2008). Research is needed to identify the true impact of accreditations programs on improving quality of care. This study is about nurses’ point of view toward the impact of joint commission international accreditation on quality of care and patient safety at Al-Makassed Islamic Charitable Society Hospital.

1.2 Makassed Islamic Charitable Society Hospital (AMICSH)

AMICSH was established in East Jerusalem in 1968, consists of 250 beds and is considered one of the most important and leading medical institutions in Palestine. The mission of the Hospital is to provide the highest level possible of medical services, and also to promote scientific and medical research programs among doctors working within the specialization program which is sponsored by the Hospital, in order to obtain the certificates of both the Jordanian and Palestinian medical boards and to train medical students belonging to the School of Medicine at the University of Jerusalem. The Hospital is considered a referral hospital, receiving patients from all over the nation – the West Bank and the Gaza Strip. Not only is it a hospital for the treatment of normal or complex cases but it is the main center for the training of medical and nursing students, and resident doctors. AMICSH currently has a staff of 750 employees, which includes 48 specialized doctors and consultants, 74 residents working within the training program sponsored by the Hospital, 3 emergency doctors, 344 nurses, 77 technicians, 164 administrators and 40 hired employees. But during this study total nurses working at the hospital was 386 nurses. The
main objective of the Hospital is to provide medical services to all Palestinians in the West Bank, Gaza Strip and East Jerusalem, regardless of gender, color, race, and religious, political or social affiliations and beliefs, and free of charge (Al-Makassed, 2018). The hospital located at mount olive at East Jerusalem, it is to the East of Al-Aqsa Mosque.

AMICSH provides a range of specialties including:

- Internal Medicine (Cardiology and cardiac catheterization, Endocrinology, Pulmonology, Neurology, Nephrology and Rheumatic Diseases)
- General and specialty Surgery (including Orthopedics, Neurosurgery, Adult and Pediatric Open Heart Surgery, Vascular and Thoracic Surgery)
- Obstetrics & Gynecology, Fetal medicine, Neonatology
- Pediatrics with its various specialties: Genetic diseases, Thoracic, Gastrointestinal diseases, Endocrinology, Rheumatic and Metabolic diseases.
- Radiology department includes: Magnetic Resonance Imaging (MRI), Computed Tomography (CT), CT Angiography and Ultrasound
- Emergency, Out-patients, Central Laboratory, Blood Bank and Pathology Lab.

The Hospital runs specialized labs such as:

- Neurophysiology (Epilepsy Monitoring Unit (EMU)/ Electromyography (EMG))
- Cytogenetic Laboratory and Molecular Genetics Laboratory
- Metabolic Laboratory
- Sleep Lab
In addition, AMICSH also serves as a main teaching/training hospital in association with Al-Quds University and Palestinian, Jordanian and Arab Medical Councils and provides research facilities (Al-Makassed, 2018).

AMICH is one of 5 hospitals at East Jerusalem to gain JCIA, the hospital are: Red Crescent Society Hospital Jerusalem, St Johan Eye Hospital, AVH, And The Jerusalem Princess Basma Center.

1.3 Problem Statement

Around the world, there are numerous and diverse quality improvement initiatives within and across health care organizations. Therefore, there is an increase in the number of the countries implementing accreditation systems for medical institutions (Chang & Lee, 2012). Consequently, many new agencies adopted the standards-based programs to advance the organization’s development. AMICSH has been accredited with the JCIA since the 28 of February, 2014 (JCI, 2016). According to researcher observation, some nurses at the hospital believe that this accreditation adds few to the hospital, and they think that it brings more papers work, and they don’t know why this new workload was added. Therefore, this study is apt to examine nurses’ point of view toward the impact of JCIA on the quality of care and patient’s safety at AMICSH. This will provide more robust evidence for its benefit on structure, process and outcome of hospital care.

1.4 Significances of the Study

The Joint Commission is a private accreditation body that is granted authority by federal and state governments to accredit hospitals accredits more than 15,000 healthcare facilities in the United States (Karen, 2007). In the healthcare institutions the aim is to provide safe care to the patients which correlates with the patient’s safety goal, the implementation of
these standards will improve the quality of care and patient safety. It is important to adopt these standards in AMICSH. On another hand, there is no any hospital in West Bank or Gaza strip has an accreditation, but in the East Jerusalem there are 5 hospitals that have been accredited by the joint commission international, one of them is AMICSH. Nurses constitute about 386 (42.8%) of workforce in AMICSH. This means that nurses represent the largest proportions of health care givers in the institution and therefore their point of view is a critical factor in determining the quality of care in hospitals and the nature of patient outcomes.

Actually only one local study was found related to this study, which was conducted by Jehad Khair at Augusta Victoria Hospital (AVH) in East Jerusalem, shortage of researches in this field motivated the researcher to conduct this research. Some hospitals in Palestine seek to gain JCIA, this study may help them to identify nurses’ point of view toward such certificate. This study will help also in identifying the true impact of accreditations programs on improving quality of care and it can contribute to effective and efficient decision-making to ensure ongoing quality improvement.

This study will add to the researches about the accreditation and its effect on the quality of care and patient safety. This study will come in recommendations to the managers at AMICSH with the needed information about nurses’ point of view regarding the accreditation of the hospital and its effect on patient’s safety.

1.5 Main Goal

To examine nurses’ point of view toward the impact of JCIA on the quality of care and patient’s safety at AMICSH.
1.6 Study Objectives

The study objectives are:

1. To determine nurses’ point of view toward the impact of JCIA on quality of care at AMICSH.
2. To determine nurses’ point of view toward the impact of JCIA on patient safety at AMICSH.
3. To assess the relationships between nurses’ point of view toward the impact of JCIA on quality of care and patient safety at AMICSH with demographic data (gender, age, department, years of experience, educational level, occupational category).
4. To assess the relationships between nurses’ point of view toward the impact of JCIA on quality of care and patient safety at AMICSH related to organizational factors (leadership commitment and support, strategic quality planning, human resources utilization, quality management, use of data and staff involvement).

1.7 Study Questions

The study questions are:

1. Are there significant differences between the demographic data (gender, age, department, years of experience, educational level, and occupational category) and nurses’ point of view toward the impact of JCIA on quality of care at AMICSH?
2. Are there significant differences between the demographic data of (gender, age, department, years of experience, educational level, and occupational category) and nurses’ point of view toward the impact of JCIA on patient safety at AMICSH?
3. Is there a relationship between nurses’ point of view toward the impact of JCIA on quality of care and patient at AMICSH related to organizational factors (leadership...
commitment and support, strategic quality planning, human resources utilization, quality management, use of data and staff involvement)?

1.8 Study Hypothesis

The study statistical hypotheses are:

1. There are no significant differences at alpha=0.05 between the demographic data (gender, age, department, years of experience, educational level, occupational category) and the nurses point of view toward the impact of JCIA on the quality of care at AMICSH.

2. There are no significant differences at alpha=0.05 between the demographic data of (gender, age, department, years of experience, educational level, occupational category) and the nurses point of view toward the impact of JCIA on the patient’s safety at AMICSH.

3. There is no relationship between nurses’ point of view toward the impact of JCIA on quality of care and patient safety at AMICSH related organizational factors (leadership commitment and support, strategic quality planning, human resources utilization, quality management, use of data and staff involvement).

1.9 Conceptual Definition

Joint commission international accreditation: An independent, not-for-profit organization, it is the nation’s oldest and largest standards-setting and accrediting body in health care ("Home Care Accreditation from The Joint Commission," 2016).

Point of view : The mental process of becoming aware of or recognizing an object or idea; primarily cognitive rather than affective of conative, although all three aspects are manifested (Stedman, 2005).
Quality of care: The extent to which health care services provided to individuals and patient populations improve desired health outcomes. In order to achieve this, health care must be safe, effective, timely, efficient, equitable and people-centered (WHO, 2017).

Patient safety: Defined by the Institute of Medicine as “the prevention of harm to patients.” Emphasis is placed on the system of care delivery that prevents errors; learns from the errors that do occur; and is built on a culture of safety that involves health care professionals, organizations, and patients (Hughes, 2008).

1.10 Variables Definitions

Nurses’ point of view about impact of JCIA on quality of care & patient safety are the dependent variable, and the independents variables are: demographic variables, organizational factors and benefits of accreditation.

1.10.1 Dependent variable

Nurses’ point of view about impact of JCIA on quality of care & patient safety.

Joint commission international accreditation: It is an international program that continually monitors the accredited organization in term of quality of care and patient safety.

Quality of care: It is one of the dependent variables; that includes the nurses’ point of view on the improvement of quality of care at AMICSH.

Patient safety: It is one of the dependent variables; it includes the nurses’ point of view on the improvement of patient safety at AMICSH.

Nurses’ point of view about impact of JCIA on quality of care & patient safety is assessed by a scale that designed by Khair (2015) which is 54-item Scale and has been used to measure nurses’ perspective about the impact of JCIA in AVH. It was built based on The
Joint Commission standards. The JCIA standards are grouped into three major areas: those related to providing patient care; those related to providing a safe, effective, and well-managed organization; and, for academic medical center hospitals only, those related to medical professional education and human subjects research programs. Bearing in mind that the JCIA standards apply not only to the entire organization but also to each department, unit, or service within the organization.

According to the scale: nurses’ point of view is the percent of responses that were answered (Agree/Strongly agree) for positively worded items and considered as an area of strength when the percent is above 70%. When the percent is between 50% to 70% is considered neutral and if the point of view is below 50% it is considered negative point of view. Further, the questionnaire is consisted of four subparts; quality part with five questions, patient safety part with eight questions, leadership commitment and support consisted of nine questions, strategic quality planning with six questions, human resource part included six questions, quality management included five questions, how data used in the hospital had five questions, and the last part was about JCIA with ten questions. The questionnaire was a 5 Likert scale, ranged from strongly disagree weighted (1) to strongly agree weighted (5). (See table No1.1). Further, observation checklist about implementation of JCIA guidelines by nurses was designed by the researcher to support and compare quantitative results. The checklist was filled by the researcher and consisted of 27 questions (see appendix1)
Table 1.1 Nurses’ point of view themes and its related questions

<table>
<thead>
<tr>
<th>No.</th>
<th>Nurses’ point of view</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quality</td>
<td>B (1,2,3,4,5)</td>
</tr>
<tr>
<td>2</td>
<td>Patient Safety Results</td>
<td>C (1,2,3,4,5,6,7,8)</td>
</tr>
<tr>
<td>3</td>
<td>Leadership commitment and Support</td>
<td>D (1,2,3,4,5,6,7,8,9)</td>
</tr>
<tr>
<td>4</td>
<td>Strategic Quality Planning</td>
<td>E (1,2,3,4,5,6)</td>
</tr>
<tr>
<td>5</td>
<td>Human resources utilization</td>
<td>F (1,2,3,4,5)</td>
</tr>
<tr>
<td>6</td>
<td>Quality management</td>
<td>G (1,2,3,4,5)</td>
</tr>
<tr>
<td>7</td>
<td>Use of data</td>
<td>H (1,2,3,4,5)</td>
</tr>
<tr>
<td>8</td>
<td>JCI Accreditation</td>
<td>I (1,2,3,4)</td>
</tr>
<tr>
<td>8I</td>
<td>Staff Involvement</td>
<td>I (1,2,3,4)</td>
</tr>
<tr>
<td>8II</td>
<td>Benefits of Accreditation</td>
<td>I (5,6,7,8,9,10)</td>
</tr>
</tbody>
</table>

1.10.2 Independent variables

Demographic variables: Attributes of a human population that are studied statistically (Management Association, 2014). In the current study, independent variables included socio-demographic data (such as gender, age, department, years of experience, educational level and occupational category).

Questions number 1 to 6 in the questionnaire were designed to assess these variables (See appendix 2). It includes the following:

**Gender**: It had two categories: male and female. Question 1 in the questionnaire assessed the gender

**Age**: Nurses in the current study were asked to fill in their age by years. Question 2 in the questionnaire assessed the age

**Department**: Nurses were asked to add their departments. Question 3 assessed department type

**Duration of working in the hospital**: Nurses asked to fill how long they worked at AMICSH in years. Question 4 in the questionnaire assessed years of working.
Education level: It referred to the highest successfully completed educational attainment level, in the current study it had 4 categories, and question number (5) assessed this as the following:

A. Diploma degree.
B. Bachelors of Science degree.
C. higher diploma.
D. Master's Degree.
E. others.

Occupational category: it refereed to current working position nurse holds. In the current study it had 5 category and question number 6 assessed this as the following:

A. practical nurse.
B. staff nurse.
C. Head nurse.
D. supervisor.
E. other.

Workload:

Questions number 7 was designed to assess nurses’ point of view about how they are loaded at work. It is a scale from not work load to very work load and rated from 1 to 10.

Previous training:

Questions from 8-10 were asked about receiving quality training, its duration and type.

Organizational factors: independent variables that include leadership commitment and support, strategic quality planning, human resources utilization, quality management, use of data and staff involvement at AMICSH.
Questions number D to I were designed to assess these variables (See appendix 2). It includes the following:

**Leadership commitment and support:** It referred to strong leadership at the hospital and their support regarding quality improvement. In the current study it had 9 questions to assessed nurses’ point of view regarding it.

**Strategic quality planning:** It referred to the process that the hospital take to plan for quality at the hospital now and on the future. In the current study it had 6 questions to assess nurses’ point of view regarding it.

**Human resources utilization:** It referred to the way that the hospital uses to benefits from human resources at the hospital, nurses in specific. In the current study it had 6 questions to assess nurses’ point of view regarding it.

**Quality management:** It referred to the way that the hospital follows to be sure that the services provided to the patients are consistence. In the current study it had 5 questions to assess nurses’ point of view regarding it.

**Use of data:** It referred to the approach that the hospital uses to benefits from information collected from patients. In the current study it had 5 questions to assess nurses’ point of view regarding it.

**Staff involvement:** It referred to how to the hospital involves their employees in quality improvement activates. In the current study it had 4 questions to assess nurses’ point of view regarding it.

**Benefits of accreditation:** Independent variable and referred in the current study in how staff the hospital view the advantage of JCIA. It had 6 questions to assess nurses’ point of view regarding it.
1.11 Operational Framework

The conceptual framework designed to support assessment of nurses’ point of view toward the implementation of JCIA at AMICSH and its impact on the quality and patients’ safety. It defined nurses’ point of view toward JCIA and constituted of two main domains; organizational domain and socio-demographic domain. Organizational domain divided into leadership commitment and support, strategic quality planning, human resources utilization, quality management, use of data and staff involvement. Socio-demographic domain included gender, age, department, years of experience, educational level, occupational category. The conceptual framework took account of the Joint Commission International Accreditation Standards for Hospitals. The conceptual framework of the current study was adopted from (Khair, 2015), it was developed based on the literature reviewed, and it concludes factors related to the demographic data, the organizational factors, the benefits of JCIA accreditation and how these factors might impact the point of view of nurses towards improvement in quality of care and patient safety at AMICSH. This conceptual model illustrates a variety of individual (socio-demographic), organizational, and work environmental factors that influence nurses’ point of view and consequently nurses’ commitment in implementing JCIA accreditation and high-quality services. (See figure 1)
Socio-demographic characteristics of nurses:

Socio-demographic characteristics of nurses influence the quality of services provided to patients, their commitment and nurses’ point of view toward implementing JCIA accreditation. Abolfotouh et al. (2014) found that age was a significant predictor of nurses’ perception to accreditation, with elder nurses showing more positive perception than younger ones did. Al-Attal (2009) found that senior nurses were more resisted to change and refused implementing of JCIA. However, Khair (2015) study at AVH found no statistically significant differences related to seniority or years of experience among nurses. He further found no statistically significance differences related to gender, age, level of education and nurses’ perception toward the impact of JCI accreditation on quality of care and patient safety at AVH. Al-Shdaifat (2015) found no relationship was found between the extent of implementing total quality management (TQM) in four Jordanian hospitals and socio-demographic variables (gender, age, education level, experience, work
department, and number of patients served daily) except for the availability of a TQM unit. Whilst Al-humedi (2000) found significant differences related to education level, experience, and the academic specialty. The above mentioned studies showed inconsistency in their results related to effect of socio-demographic factors on nurses’ perception toward the implementation of JCIA and therefore this study would examine these relationships in the context of Palestine. All of these factors may affect positively or negatively nurses’ point of view toward the impact of JCIA at AMICSH.

**Quality, patient safety and organizational factors:**

An accreditation program is considered an effective approach for improving the quality of care and patient safety and results in better organizational performance (Mosadeghrad, 2016). Patient safety is one of the components of JCIA standards and a tool to promote quality of care in hospitals. Al-Masabi & Thomas (2017), Khair (2015), Abolfotouh et al. (2014) and Yildiz & Kaya (2014) studies found positive relationships between quality and accreditation with Leadership, Strategic planning, Patient focus, Measurement and analysis, Training, Operational focus, Professional participation, Staff involvement and Benefits of accreditation. Furthermore, El-Jardali et al. (2008) study examined more organizational factors such as leadership, commitment and support, strategic quality planning, education and training, rewards and recognition, quality management, use of data, staff involvement in accreditation and benefits of accreditation and found positive relationships between leadership, commitment and support, staff involvement and use of data and quality results.

Hospital staff nurses’ long hours may have adverse effects on patient care and patient safety as found by Rogers et al. (2004)and Barton & Folkard (1991) who found that the risks of making an error were significantly increased when work shifts were longer than
twelve hours, when nurses worked overtime, or when they worked more than forty hours per week. The interrelationship between organizational factors, individual factors and quality and patient safety from the point of nurses will be examined.

1.12 Implications of the study

JCIA is considered to be recent concern in our region, and AMICSH gains this certificate, so it is crucial to study how nurses view new international quality certificates; also this study will increase nursing literature in this field locally. The results of this study may help to explain how hospital accreditation can affect quality improvement services, and the hospital may use this conclusions to improve the provided services and patient satisfaction as well.

1.13 Assumptions

1. The participant would be truthful in responding to the questionnaire.

2. Adequate research references related to nurses perception toward the impact of JCIA on quality of care and patient safety.

3. The IRB will allow the researcher to conduct the study.

4. The targeted hospital would be cooperative in terms of permitting the researcher to question their employees.

5. The study will discuss the relationship between nurse’s point of view, JCIA, quality of care, patient safety, and organizational factors.

1.14 Study scope (boundaries)

1. Location Boundaries: the study took place at AMICSH, at East Jerusalem.

2. Time Boundaries: the study was conducted between 2017-2018.
3. Person Boundaries: the targeted population of the study was nurses who were working at the hospital at the time of the study.

1.15 Limitations of the Study

1. Lack of local studies related to nurses’ point of view toward the impact of joint commission international on quality of care and patient safety.
2. Instability of the political situation in the country.
3. Limited time for the researcher to do the research.
4. Heavy workload at the hospital so the nurses will take longer time to fill up the questionnaire.

1.16 Thesis Structure

This thesis will be presented in 5 chapters as follows:

**Chapter One:** contains the background of the study, problem statement and study justification, objectives, study hypothesis, conceptual definition, variables definition, conceptual framework, implication of the study, assumptions and the limitations.

**Chapter Two:** includes related literature review of international, regional and local studies and researches.

**Chapter Three:** includes the study methods, population, sampling, and sample size, ethical consideration will also include data collection, processing and analyzing.

**Chapter Four:** presents the results, will include discussion, and recommendations.

**Chapter Five:** includes the conclusion.
1.17 Summary

This chapter provides an overview about joint commission international accreditation, an overview about AMICSH, problem statement and study justification, objectives, study hypothesis, conceptual definition, variables definitions, operational framework, implications to nurses, the assumption, the limitations of the study and thesis structure.
Chapter Two

Literature Review

2.1 Introduction

In this chapter, the joint commission accreditation (JCI) historical background, its benefits and strengths are presented. The researcher reviewed international, regional, and local literature related to hospital accreditation, quality of care and patient safety.

2.2 Joint Commission International Accreditation (JCIA)

Quality improvement and patient’s safety are the most important aspects of health care delivery systems. Improving quality and safety in health care organizations is assured through accreditation (Musavi et al., 2016).

Majority of past researches conducted on late decade in developed and developing countries investigated impact of accreditation programs on healthcare organizations related to its structures, processes, outcomes and patient satisfaction were highly great positive impact (Al-Shammari et al., 2015). Likewise Al-gahtani et al. (2017) find that accreditation had a positive impact on the process and implementation of change in the hospital that resulted in improvement in the delivery of patient care and other health services. Moreover Al-Awa. et al. (2010) found that accreditation has generated positive impact on the quality of patient care and patient safety. Most researchers had targeted nursing staff in their populations and samples to determine the impact of accreditation programs on healthcare services, because of its vital role on quality and safety of healthcare's services (Al-Shammari et al., 2015).
The Joint Commission is founded in 1951, and seeks to continuously improve health care for the public, in collaboration with other stakeholders, by evaluating health care organizations and inspiring them to excel in providing safe and effective care of the highest quality and value. The Joint Commission accredits and certifies more than 21,000 health care organizations and programs in the United States. An independent, not-for-profit organization, The Joint Commission is the nation’s oldest and largest standards-setting and accrediting body in health care ("Home Care Accreditation from The Joint Commission," 2016). A hospital seeking to obtain JCIA is visited every three years by a survey team that observes hospital operations, conducts interviews, and reviews medical documentation for compliance with a set of standards. The goal of the survey is to evaluate care, organizational processes and to provide education with the objective of promoting continual improvement for the organization under survey (Devkaran & O’Farrell, 2015).

JCIA mission aims to continuously improve health care for the public and the vision of JCI is all people always experience the safest, highest quality, best-value health care across all settings (The Joint Commission, 2014).

2.2.1 JCIA Standards for Hospitals

According to JCI (2017) the Joint Commission International Accreditation Standards for Hospitals contain the standards, intents, measurable elements. The standards are organized around the important functions common to all health care organizations. This approach is now the most widely used around the world and has been validated by scientific study, testing, and application. JCI standards define the performance expectations, structures, or functions that must be in place for a hospital to be accredited by JCI. JCI’s standards are evaluated during the on-site survey.
A standard’s intent helps explain the full meaning of the standard. The intent describes the purpose and rationale of the standard, provides an explanation of how the standard fits into the overall program, sets parameters for the requirement(s), and otherwise “paints a picture” of the requirements and goals. The bulleted lists in the intent statement are considered advisory and serve as a helpful explanation of practices that might meet the standard. Numbered or lettered lists in the intent statement include required elements that must be in place in order to meet the standard.

Measurable elements of a standard indicate what is reviewed and assigned a score during the on-site survey process. The MEs for each standard identify the requirements for full compliance with the standard.

The measurable elements are intended to bring clarity to the standards and help the organization fully understand the requirements, educate leadership, department/service leaders, health care practitioners, and staff about the standards, and guide the organization in accreditation preparation.

Standards are divided into sections, they are:

- Patient Centered Standards section, this section consisted of 8 functions, each function has its own standards, the functions are:
  
  1. International Patient Safety Goals: this function has six standards, they are: identify patients correctly, improve effective communication, improve the safety of high-alert medications, ensure safe surgery, reduce the risk of health care-associated infections and reduce the risk of patient harm resulting from falls. Every stander have specific intent statements or measurable elements.
  
  2. Access to Care and Continuity of Care: this function has six standers and they are: screening for admission to the hospital, admission to the hospital,
continuity of care, discharge, referral, and follow-up, transfer of patients and transportation. Each standard has different intent and measurable elements.

3. Patient and Family Rights: General consent, informed consent and organ and tissue donation are standards should be available at the hospital to meet the patient and family right function.

4. Assessment of Patients: Laboratory services, blood bank and/or transfusion services and radiology and diagnostic imaging services are standards use to assess the patients well and in a safe manner.

5. Care of Patients: this function have 9 standards, they are: care delivery for all patients, care of high-risk patients and provision of high-risk services, recognition of changes to patient condition, resuscitation services, food and nutrition therapy, pain management, end-of-life care, hospitals providing organ and/or tissue transplant services, transplant programs using living donor organs. Each standard holds intents and measurable elements.

6. Anesthesia and Surgical Care: Organization and management, sedation care, anesthesia care and surgical care are the standards for this function.

7. Medication Management and Use: this function have 7 standards and they are: Organization and management, selection and procurement, storage, ordering and transcribing, preparing and dispensing, administration and monitoring, all of this standards have different intent and measurable elements.

• Health Care Organization Management Standards, this section have 6 functions, and they divided into standers, the functions are:

1. Quality Improvement and Patient Safety: consisted of 4 standers, they are:
   - Management of quality and patient safety activities, measure selection and data collection, analysis and validation of measurement data and gaining and sustaining improvement.

2. Prevention and Control of Infections: this function have 6 standers and they are:
   - responsibilities, resources, goals of the infection control program, medical equipment, devices, and supplies, transmission of infections and quality improvement and program education.

3. Governance, Leadership, and Direction: Governance of the hospital, chief executive(s) accountabilities, hospital leadership accountabilities, hospital leadership for quality and patient safety, hospital leadership for contracts, hospital leadership for resource decisions, clinical staff organization and accountabilities, direction of hospital departments and services, organizational and clinical ethics and health professional education are the standers for this function.

4. Facility Management and Safety: consisted of 9 standards and they are:
   - Leadership and planning, safety and security, hazardous materials, disaster preparedness, fire safety, medical equipment, utility systems, facility management and safety program monitoring and staff education.

5. Staff Qualifications and Education: Planning, determining medical staff membership, the assignment of medical staff clinical privileges, ongoing monitoring and evaluation of medical staff members, medical staff
reappointment and renewal of clinical privileges, nursing staff, and other health care practitioners are the standers for this function.

6. Management of Information: this function has 4 standers and they are:
   Information Management, Management and implementation of documents, medical record and information technology in health care.
   • Academic Medical Center Hospital Standards, this section have 2 functions which are medical professional education and human subjects’ research programs, these functions are not applicable for AMICSH.

2.2.2 Philosophy of Accreditation

According to the Marx (2004) International Accreditation Philosophy contains the following aspects:

1. Maximum achievable standards.
2. Patient-centered.
3. Culturally adaptable.
4. Process stimulates continuous improvement.

Further the philosophy can be presented as follow according to Altman (2009):


2. Non-Governmental vs Governmental: Accreditation System Needs Governmental Approval and Some Level of Governmental Participation but Governmental Systems are, Less Flexible, Become Regulatory in Nature and Usually Set Minimal Rather Than Optimal Standards
3. Optimal Requirements vs Basic: basic Requirements Protect the Public, and Optimal Requirements Stimulate Improvement and Innovation

4. Outcome Oriented vs System/Process: Most Accreditation Systems Address Structures, Processes and Outcomes but Without Standards and Outcomes they Do Not Result in Continuous Improvement

5. Improvement vs Punishment: When accreditation Used for Punishment so The System Will Be Manipulated to Get the Least Punishment, Not the most Improvement


7. Public vs Confidential: Accreditation Systems Seek to Improve the Quality of Care Provided to the Public. They Thus Deserves to Have Sufficient Information to Make Informed Care Choices. The Public Does Need Help in Interpreting the Results of Accreditation and Need Comparison Information. The Confidentiality of the People in the Accreditation Process Is Important to Protect Them From Influence to Manipulate the System.

Shaw (2006) defined accreditation as a public recognition by a national healthcare accreditation body of the achievement of accreditation standards by a healthcare organization, demonstrated through an independent external peer assessment of that organization’s level of performance in relation to the standards.

Joint commission international, International Society for Quality in Health Care (ISQua), the National Committee for Quality Assurance (NCQA), the European Society for Quality
in Healthcare (ESQH), Accreditation Canada International, Australian Council on Healthcare Standards International (ACHSI), The UK Accreditation Service (UKAS) and QHA Trent Accreditation are organizations that promotes health accreditation and quality improvement around the world (Yildiz & Kaya 2014).

Accreditation is a good tool for the enhancement of patient care, motivation of staff, encouragement of team work and collaboration, implementation of change, and responsiveness to change. It enables the hospital to establish effective policies to support the upgrading of the quality of care and services, for the hospital as well as staff involvement in planning, which is very important for quality improvement (Al-Qahtani et al., 2012).

There is a consistent evidence shows that general accreditation programs improve the process of care provided by healthcare services. There is considerable evidence to show that general accreditation programs improve clinical outcomes of a wide spectrum of clinical conditions (Al-khenizan & Shaw, 2011).

Accreditation organizations are uniquely positioned to provide a comprehensive look at the challenges and successes of health care organizations, and to identify themes and trends in the delivery of health care services. The data collected through accreditation is an invaluable resource for health care providers, governments, policy-makers, and other health care leadership organizations, as it can contribute to effective and efficient decision-making to ensure ongoing quality improvement and reduce costs through risk mitigation (Nicklin, 2013).

Accreditation programs have the potential to bring changes but it is important that they take the differing needs/ expectations of stakeholder groups into account while developing and/or revising their standards. Staff perceptions are one way of interpreting changes.
Accreditation agencies as well as participating organizations should invest in tools that more effectively and objectively help track ongoing changes in centers. This will help strengthen the international evidence base on the effectiveness of accreditation (Rajan et al., 2015). Healthcare accreditation is considered to be an essential quality improvement tool. However, its effectiveness has been critiqued (Rajan et al., 2015).

2.2.3 Strength and Benefits of Joint Commission Accreditation

In October, 2017, The Joint Commission listed many benefits of accreditation that are presented below:

One of the benefits of JCIA is to help organizing and strengthening patient’s safety efforts. Patient’s safety and quality of care issues are at the forefront of Joint Commission standards and initiatives.

Additionally, it Strengthens community confidence in the quality and safety of care, treatment and services, achieving accreditation makes a strong statement to the community about an organization’s efforts to provide the highest quality services.

It also provide a competitive edge in the marketplace, accreditation may provide a marketing advantage in a competitive health care environment and improve the ability to secure new business.

JCIA long term strategy is to improve risk management and risk reduction. Joint Commission standards focus on state-of-the-art performance improvement strategies that help health care organizations continuously improve the safety and quality of care, which can reduce the risk of error or low quality care. This may reduce liability insurance costs, by enhancing risk management efforts; accreditation may improve access to and reduce the cost of liability insurance coverage.
One of the significant benefit of JCIA is providing education to improve business operations, Joint Commission Resources, the Joint Commission’s not-for-profit affiliate, provides continuing support and education services to accredited organizations in a variety of settings.

Additionally, it aims at providing professional advice and counsel, enhancing staff education. Joint Commission surveyors are experienced health care professionals trained to provide expert advice and education services during the on-site survey.

At broader level, it provides a customized, intensive review; Joint Commission surveyors come from a variety of health care industries and are assigned to organizations that match their background. The standards also are specific to each accreditation program so each survey is relevant to its industry.

Enhances staff recruitment and development can be achieved through attracting qualified personnel, who prefer to serve in an accredited organization by the Joint Commission Accreditation. These organizations also provide additional opportunities for staff to develop their skills and knowledge.

Provides deeming authority for Medicare certification is another benefit. Some accredited health care organizations qualify for Medicare and Medicaid certification without undergoing a separate government quality inspection, which eases the burdens of duplicative federal and state regulatory agency surveys.

In some markets, accreditation is becoming a prerequisite to eligibility for insurance reimbursement and for participation in managed care plans or contract bidding. Therefore, hospitals who implemented it can be recognized by insurers and other third parties.
JCI provides guidance to an organization’s quality improvement efforts through providing a framework for organizational structure and management. Accreditation involves preparing for a survey and maintaining a high level of quality and compliance with the latest standards.

Another benefit of accreditation is the possibility to fulfill regulatory requirements in select states. Laws may require certain health care providers to acquire accreditation for their organization. Those organizations already accredited by The Joint Commission may be compliant and need not undergo any additional surveys or inspections.

Accreditation provides practical tools to strengthen or maintain performance excellence. The Leading Practice Library offers good practices submitted by accredited organizations. The Targeted Solutions Tool, an interactive web-based tool from the Joint Commission Center for Transforming Healthcare, allows accredited organizations to measure their organization’s performance and helps them find customized solutions for challenging health care problems.

Final benefit is aligning health care organizations with one of the most respected names in health care. Being accredited by The Joint Commission helps organizations position for the future of integrated care ([The Joint Commission, 2017]).

The joint commission has introduce the idea that quality of care and accreditation should focus on improving risk management in hospitals as well as patient safety (Al-Awa et al., 2011).

According to Marx (2004) accreditation has many strengths, first of all it is external, objective evaluation, the accreditation uses consensus standards, also it involve the health professions, the accreditation is proactive not reactive, it is focus on systems not
individuals, organization wide, moreover accreditation stimulates quality culture in the organization, finally the accreditation is periodic re-evaluation against standards.

2.2.4 Pathway to JCI Accreditation for Hospitals

JCI listed the pathway of hospital accreditation they are as follow:

Hospital and academic medical centers have the same process to be accredited, according to JCI there are 10 steps that hospitals and academic medical centers typically follow toward accreditation success. Average duration of the whole process is 18-24 months.

First Step: the hospital should become familiar with JCI's standards and survey process this step takes 2-3 months duration, in this step the hospital also should become familiar with JCI’s accreditation policies and procedures, then review the hospital accreditation manual and survey process guide, during this process the leadership should be excited because the supportive of leadership is viral to successfully achieving JCIA, and finally the team at the hospital should be informed with the start-up information.

Second Step: the hospital needs to conduct gap analysis and build action plan 2-3 months need to finalize this step, performing a baseline assessment of the hospital’s performance against JCI standers is the first action, then responsibilities to staff should be assign. Assigning responsibilities is an effective order because the hospital will know what task a member should perform, building the hospital accreditation action plan, these plans outlines a hospital's intended operation towards performance improvement. The plan can be used to respond to a minor shortfall in standards compliance after the baseline assessment or as a part of a root cause analysis of a more significant underperformance.
Third Step: the hospital needs to update policies and procedure, this step takes 2 months duration, current policies and procedures should be assessed then the hospital should develop a process to create JCI-compliant polices.

Fourth Step: the hospital should target improvements where needed. It takes about 2-3 months and so as to examine if there are any challenges, to assess the risk for adverse events, without any delay the hospital should remedy the challenges.

Fifth Step: the hospital work with staff to overcome obstacles and this step takes 2-3 months to be met, culture of safety should be explain how to be achieved to staff, if there is any new procedures the staff need to be trained on them, in this step physician leaders need to be involved too.

Sixth Step: the hospital should assess the readiness at the midpoint, about 2-3 months this step takes. In this step, hospital should prepare the staff for mock survey. “A mock survey simulates the JCI on-site accreditation process and offers a model for addressing hospital adherence to JCI standards in day-to-day operations.” Then the hospital needs to conduct patient tracers, “They are a foundational element of JCI on-site surveys”. Their process allows surveyors to select a patient and use that individual's record as a road map. Some hospitals find that bringing in mock surveyors from JCI helps their staff better prepare for actual survey conditions”, the staff also should be involved.

Seventh Step: the hospital needs to continue training for sustainable changes, this phase takes 2-3 months to be done, in which step the hospital needs to keep the staff educated and motivated about improving procedures, then completes the mock survey planning.

Eighth Step: the hospital needs to evaluate and refine processes, the duration is about 2-3 months, and use the accreditation team to spot deficiencies, meanwhile the staff to be encourage to make corrections, finally build a cohesive spirit.
Ninth Step: the hospital should use a mock survey to assess the hospital readiness, which takes about 2-3 months to be finished, final mock survey needs to be conducted at the hospital, then necessary improvements should be spotted, finally the hospital should take plan corrections.

Tenth Step: the hospital should take final modifications that takes 6-7 months, which is the longest step in all process steps, the hospital should make final preparation for the survey, and then JCI survey should be completed. “The survey process involves: an opening conference, leadership interviews, staff qualification and education, a facility tour, and a leadership conference - among other key interactions.” Then the hospital join world hospital search. “Which stand for a complete, online directory of all JCI Accredited organizations. Upgrading to a deluxe profile is free and includes complete contact information, your areas of specialty, and your accreditation information. Request a free, deluxe profile to improve your organization's visibility (Joint Commission International, 2017).

2.3 Quality Improvement, Quality of Care and Patient Safety

Accreditation is based on the premise that adherence to evidence-based standards will produce higher-quality health-care services in an increasingly safe environment. Accreditation can increase public awareness that a health care organization has met national quality standards.

El-Jardali et al. (2008) found that according to Lebanese nurses, hospital accreditation is a good tool for improving of care. And in order to ensure that accreditation brings effective quality improvement practices, there is a need to assess quality based on patient outcome indicators. Additionally, according to Yildiz & Kaya (2014) accreditation has positive impact on quality results.
Since quality is a crucial factor in health care, initiative to address quality of health care have become a worldwide phenomenon (Al-Awa. et al., 2010).

Quality improvement action occurs when organizations take purposeful action in response to observations, feedback or self-reflection resulting from the accreditation process. The accreditation process is viewed as an external audit by many participants, who had coordinated the accreditation process or were involved in managing or promoting quality. It serves as a quality assurance process for the majority of organizations. These organizations use the accreditation process as a self-assessment to validate their efforts and demonstrate quality standards (Desveaux et al., 2017).

Organizational Impact of accreditation remained unclear. The relationship between quality measures and accreditation was found to be complex with some showing no direct relationship between the two and others giving a conflicting finding, that there is, in fact, a relationship (Mukuha, 2017).

Bogh et al. (2016) found that accreditation cycle provides empirical support for the view that mandating an accreditation system and applying accompanying standards are associated with improved quality of hospital care.

A study conducted by Park et al. (2017) showed that accreditation has had a positive impact on Korean hospitals, and has improved quality and patient safety.

Al-Awa et al. (2011); (Al-Awa. et al., 2010) found that as perceived by nursing staff hospital has generated a positive impact on the quality of patient care and patient safety.

Melo (2016) found that hospital’s staff perception that accreditation can contribute to significant improvements in quality and patient safety but attaining these is strongly dependent on how accreditation is implemented in practice and the characteristics of the
hospital setting. Interviewees reported that accreditation led to a higher concern with patient safety as an aspect of healthcare quality which resulted in significant quality and patient safety improvements, including the establishment of a generalized patient safety culture.

On the other hand according to Bahadori & Hosseini (2017) they argued that even with the recent implementation of the hospital accreditation model in Iran, whether the accreditation has improved the quality of care is under question.

**Patient Safety and International Patient Safety Goals (IPSG)**

Many healthcare workers view quality health care as the overarching umbrella under which patient safety resides. For example, the Institute of Medicine considers patient safety “indistinguishable from the delivery of quality health care.” Ancient philosophers such as Aristotle and Plato contemplated quality and its attributes. In fact, quality was one of the great ideas of the Western world (Mitchell, 2008).

Patient safety emerges as a central aim of quality. Patient safety, as defined by the World Health Organization, is the prevention of errors and adverse effects to patients that are associated with health care (The Joint Commission, 2014).

Accreditation is increasingly being utilized as a key driver for implementation of patient safety efforts to reduce patient harm caused by medical errors (Myers, 2011).

When patients are admitted to the hospital, they put their trust in health care professionals to do the right thing, on time, all of the time. Health care systems that are accredited demonstrate to the public that they have maintained compliance with a set of standards that provides the public at least some reassurance that quality and patient safety standards are
being met. Unfortunately, even in accredited health care organizations, patients are harmed by medical errors every day (Myers, 2011).

A definition for patient safety has emerged from the health care quality movement that is equally abstract, with various approaches to the more concrete essential components. Patient safety was defined by the Institute of Medicine as “the prevention of harm to patients.” Emphasis is placed on the system of care delivery that:

1. Prevents errors.

2. Learns from the errors that do occur.

3. Built on a culture of safety that involves health care professionals, organizations, and patients (Hughes, 2008).

Patient safety continues to concern consumers, health professionals, policymakers, insurers and researchers. Organizations at the local, state and national levels are developing policies and implementing strategies to improve patient safety (Al-Awa et al., 2011).

The purpose of the IPSG is to promote specific improvements in patient safety. The goals are:

1. Identify patients correctly: The hospital should develop and implement a process to improve accuracy of patient identifications.

2. Improve effective communication: The hospital ought to develop and implement a process to improve the effectiveness of verbal and/or telephone communication among caregivers.

3. Improve the safety of high-alert medications: The hospital needs to develop and implement a process to improve the safety of high-alert medications.
4. Ensure safe surgery: The hospital should develop and implement a process for the preoperative verification and surgical/invasive procedure site-marking.

5. Reduce the risk of health care-associated infections: The hospital should adopt and implement evidence-based hand-hygiene guidelines to reduce the risk of health care–associated infections.

6. Reduce the risk of patient harm resulting from falls: The hospital needs to develop and implement a process to reduce the risk of patient harm resulting from falls for the inpatient population. (JCI, 2017).

There is no doubt that all accreditation organizations have considered patient safety and risk management as vital aspects of their programs (Al-Awa et al., 2011).

2.4 Reviewed Studies

2.4.1 Studies Related to Patient’s Safety and Accreditation

A quantitative study was conducted by Shammarri et al. (2015) about Impact of Hospital' Accreditation on Patient Safety in Hail City, Saudi Arabia aimed to investigate the nurses' perception toward the impact of Hospital's Accreditation on patient safety related to nursing documentation, patient medication information, and healthcare associated infection. The sample size was (260) nurses. A self-administered questionnaire was used with response rate of (76%). The study has different results; the two important results were regarding the impact of hospital accreditation on patient safety related to patient medication information items the range of mean was from (3.95) to (4.13). The highest mean was (4.13) so this showed that accreditation has positive impact on patients' current medication processes; while the lowest mean was (3.95) the mean accreditation improves medication label format, the average mean was (4.05). Second result related to patient medication information safety related to healthcare association infection (Nosocomial)
items of this dimension the range of mean was from (4.5) to (4.22). The highest mean was (4.5) this mean accreditation has given insight to implement infection control standards such as hand hygiene, while the lowest mean was (4.22) this indicates that accreditation improves culture of reporting incident such as needle stick injury. The average mean related to healthcare association infection was (4.34). According to respondents, this study shows highly positive level of the impact of accreditation on patient safety related to nursing clinical documentation, medication information and healthcare association infection. The strength of the study was giving an overview about the accreditation and its impact on patient safety in Hail City, the researcher mentioned the tool validity and reliability of study instrument, and also maintained the ethical consideration while conducting data collection. The limitation was the focusing only on nurses because there are other health sectors who their perceptions are needed but lacked in this study.

2.4.2 Studies Related to Quality of Care and Accreditation

A quantitative study conducted by El-Jardali et al. (2008) on the impact of hospital accreditation on quality of care and the perception of Lebanese nurses. The study, aimed to assess the perceived impact of accreditation on quality of care through the lens of health care professionals, specifically nurses. The sample of the study consist of nurses from (59) hospitals, with response rate (75.5%). The main result of the study was that nurses perceived an improvement in quality during and after the accreditation process. Predictors of better quality results were leadership, commitment and support, use of data, quality management, staff involvement and hospital size. Quality management consists of six items these items are: the hospital regularly checks equipment and supplies to make sure they meet quality requirements, the hospital has effective policies to support improving the quality of care and services (example: Five Rights Principle in Drug Administration), the hospital tries to design quality into new services as they are being developed, the services
that the hospital provides are thoroughly tested for quality before they are implemented, the hospital views quality assurance as a continuing search for ways to improve, the hospital encourages nurses to continue. The quality management was measured by Quality Management scale; the scale had the greatest impact in medium-sized hospitals comparing with large and small-sized hospitals. Staff Involvement had the greatest impact in small-sized hospitals. The strength of the study was dividing the sample into stratified sample which help to identify the differences between the hospitals regarding their size, also the researchers mentioned the tool used, and present the result in comprehends way. The limitations of the study were the fact that the results were based on the perception of nurses, with no further analysis of patient outcome data. Although patient outcomes could be a good indicator of quality improvement, hospitals in Lebanon do not have standardized outcome indicators. The second limitation was the differential response rate across hospitals of different sizes ((46.9%) in small hospitals, (46.3%) in medium hospitals and (75.8%) in large hospitals) which may bias the results of the study.

A randomized control trail study was conducted by Salmon et al. (2003) about the impact of accreditation on the quality of Hospital Care in KwaZulu-Natal (KZN) Province, Republic of South Africa. The study aimed to assess the effects of an accreditation program on public hospitals’ processes and outcomes in a developing country setting. The sampling frame consisted of 53 public sector hospitals under the management of the KZN province. The sample was stratified according to the hospital bed size, the hospitals that have 50-150 beds they were 11 hospitals, the hospitals that have 151-400 beds were 26 hospital, the hospitals that have 401-1000 beds were 11 and the hospitals that have more than 1000 beds were 5 hospitals, the total hospitals were 53. The sample size calculation was based on the observed accreditation scores of seven public sector hospitals (six hospitals from the North West province and one KZN academic hospital that was excluded.
from this study) that Council for health service accreditation of Southern Africa (COHSASA) had previously accredited. Two outcomes from these hospitals were used: (1) the overall compliance score before and after accreditation, and (2) the medical inpatient service compliance score before and after accreditation. For these seven hospitals, the mean overall compliance scores were (61%) (before) and (87%) (after), and the medical inpatient service mean score was (65%) (before) and (91%) (after). That is, both outcome scores improved about (26%). The main results were COHSASA assists health care facilities in Southern Africa. Facilitated accreditation program was successful in increasing public hospitals’ compliance with COHSASA standards, and that additional work is needed to determine if improvements in COHSASA structure and process standards result in improved outcomes. The study provides clear evidence that hospitals participating in the COHSASA program in the KZN province significantly improved their compliance with COHSASA accreditation standards following the introduction of the program. No increase in standards compliance was observed in the control hospitals, indicating that the observed improvements in the intervention hospitals can be credited to the accreditation program. The limitation include the relatively short time allowed to achieve measurable results following the introduction of the program, since the study is randomize control trial (RCT) study the control and intervention hospitals might have a different performance related to the accreditation programs.

A quantitative study (cross-sectional electronic survey) was conducted by Abolfotouh et al. (2014) titled Nursing Perception Towards Impact of JCI Accreditation and Quality of Care in a Tertiary Care Hospital, Central Saudi Arabia. The study aimed to assess nurses’ perception to JCI accreditation impact, 2) to assess nurses’ perception to quality of health care, and 3) to identify the predictive factors for perception to accreditation and quality of health at King Abdulaziz Medical City, Riyadh, Saudi Arabia. The main result was nurses
perceived an average improvement in quality as a result of accreditation. The limitation of this study was of unavailable pre-intervention measures (pre-accreditation) and it is recommended that future researches with controlled pre- and post-design should be carried out to evaluate the effect of accreditation on the health services.

Another quantitative study conducted by Yildiz & Kaya (2014) titled Perceptions of nurses on the impact of accreditation on quality of care a survey in a hospital in Turkey. The study aimed to investigate perceptions of Turkish nurses on the impact of accreditation on quality of care and the effect of accreditation on quality results. The sample size was 258 nurses who started working in the hospital before it was accredited and continued to work during and after accreditation and who therefore knew both the hospital’s pre-accreditation and post-accreditation periods. The main result showed that accreditation had a positive impact on quality of care provided to patients and patient satisfaction.

2.4.3 Studies Related to Quality of care, Patient Safety and Accreditation

A quantitative study conducted by Al-Awa et al. (2011) about Comparison of Patient Safety and Quality of Care Indicators Between Pre and Post Accreditation Periods in King Abdulaziz University Hospital. The study aimed to evaluate the nursing staff on the quality of patients care and patients’ safety after application of the accreditation process and its contributing factors that can explain changes, if any. The sample of the study consisted of 870 registered nurses of 8 different cultural backgrounds from 22 hospital units were given electronic access to answer the survey questionnaire, with response rate (82.87%) (721) and (93.62%) (657) met the survey criteria. The main result of the study was, there was a highly significant positive attitude towards the application of the accreditation process in the form of (13-35%) increased percentages in response to all items surveyed post-accreditation as compared to the pre-accreditation survey (p<0.001). The conclusion of this
study is that despite all the barriers created by the multicultural, multi-language environment in which they provide the patient care, the accreditation process conducted at King Abdulaziz University Hospital had generated a positive impact on the quality of patient care and patient safety as perceived by nursing staff. The strength of the study was that the research team described the used survey adequately. The limitation of the study was not discussing how the researchers maintained the ethical considerations with the participants and the lack of information about the validity and reliability of the study tool.

Another quantitative study was conducted by Devkaran & O’Farrell (2015) on The impact of hospital accreditation on quality measures in a 150-beds multispecialty hospital in Abu Dhabi, United Arab Emirates. The study aimed to examine the impact of healthcare accreditation on hospital quality measures. The sample consisted of 12,000 patients’ records drawn from a population of 50,000 during the study period (January 2009 to December 2012). Each month (during the study period), a simple random sample of 24 percent of patient records was selected and audited, resulting in 324,000 observations. The study findings showed that preparation for the accreditation survey results in significant improvement as (74%) of the measures had a significant positive pre-accreditation slope. Accreditation had a larger significant negative effect (48% of measures) than a positive effect (4%) on the post accreditation slope of performance. Moreover, accreditation had no significant impact on 11 out of the 27 measures. The domains of these measures are Patient Assessment, Laboratory Safety, Surgical Procedures, Medication error use and near-misses, Anesthesia and Sedation Use, Availability, Content and Use of Patient Records, Infection Control, Surveillance and Reporting, Reporting of Activities as Required by Law and Regulation and International Patient Safety Goals. There were measures that have important dimensions in patients safety and quality of care, these measures were: initial medical assessment done within 24 hours of admission, initial nursing assessment within
24 hours. of admission, pain assessment form completed (100%) per month, Percentage of completed pain reassessment, Monitor the timeliness of complete blood count (CBC) as routine lab results, The turnaround time of troponin lab results, Completion of surgical invasive procedure consent, Percentage of operating room (OR) cancellation of elective surgery, Unplanned return to OR within 48 hours, Reported medication error, Completed anesthesia, moderate and deep sedation consent forms, Completed Modified Aldrete Scores (Pre, Post, Discharge), Completed pre-anesthesia assessments, Completion of anesthesia care plan, Percentage of completed assessment of patient who received anesthesia, Effective communication of risk, benefit and alternatives of anesthesia explained to patients, Percentage of typed post-operative report completed with 48 hours, Hospital acquired methicillin resistant staph aureus (MRSA) rate (Refers to a group of gram-positive bacteria that are genetically distinct from other strains of Staphylococcus aureus. MRSA is responsible for several difficult to treat in humans) (Wikipedia, 2018), Healthcare associated infection hospital-wide, Surgical site infection rate, Mortality rate, Monitoring correct site marking, Monitoring compliance with the time-out procedure, Screening of patient fall risk, Overall hospital hand hygiene compliance rate, Patient fall rate and Fall risk assessment and reassessment. The conclusion of the study was although there was a transient drop in performance immediately after the survey, this study showed that the improvement achieved from accreditation was maintained during the three year accreditation cycle. The strength of the study was in using of randomize sample which the results can be represented, also using a large sample which enable generalizability of the study, the validity was mentioned and maintained. The limitation of the study was the ethical consideration was not applied.

Another qualitative study that was conducted by Khair (2015) titled nurses perception toward the impact of JCI accreditation on quality of care and patients’ safety at Augusta
Victoria Hospital (AVH). The study aimed to assess the nurses’ perception toward the impact of JCI accreditation on quality of care and patients’ safety at AVH. The sample size of the study was 125 nurses working at the inpatient and outpatient departments at AVH. The main result showed that the nurses at AVH have positive perception towards the accreditation impact on quality of care and on patient safety, also the results showed a positive relationship among nurses perception on the organizational factor which include (leadership commitment and support, strategic quality planning, human resources utilization, quality management, use of data and staff involvement). The strength of the study was mentioned Cronbach alpha for all domains in the questionnaire and it exceeded (80%). Study limitation was the results of the study could not be generalized to all other JCI accredited hospital since the study was only conducted at AVH.

Another quantitative study conducted by Al-Awa. et al. (2010) about The Impact of Accreditation on Patient Safety and Quality of Care as Perceived by Nursing Staff in a University Hospital in Saudi Arabia. The study aimed to evaluate the perception of King Abdul-Aziz University hospital nursing staff on the quality of patients care and patients’ safety after application of the Canadian accreditation and its contributing factors that can explain changes, if any. The sample sized of population was 870 registered nurses of 8 different cultural backgrounds from 22 hospital units. The main result was the Canadian accreditation process conducted at King Abdul-Aziz University Hospital has generated a positive impact on the quality of patient care and patient safety as supported by this study. The limitation of the study was validity and reliability was not mentioned.

Another qualitative study conducted by Siman et al. (2014) titled Participation of the nurse manager in the process of hospital accreditation. The study aimed to understand the role of nurse managers in the process of hospital accreditation. The sample size was 5 nurse managers. The main result of the study indicated that nurses’ knowledge and performance
are essential to the process of hospital accreditation, since they assume strategic positions in health facilities and connect with other professionals, and also develop tools to assess care delivery, such as tactical actions.

### 2.4.4 Studies Related to Hospital Accreditation among Health Professionals

A quantitative study conducted by Diab (2011) on the extent to which Jordanian doctors and nurses perceive the accreditation in private hospitals. The study aimed to examine if there's differences between the doctors and nurses’ perception and understanding of the accreditation standard at their hospitals. The sample size of the study's population was 600 doctors and nurses. The main result was doctors and nurses had good perception about the standard of accreditations related to the Management and leadership, Strategic planning for quality, Using Human Resources, Quality Management and Accreditation process and implementation. In management and leadership nurses had a mean of (4.02) comparing with (3.99) for the doctors this indicate that nurses and doctor perceived that managers commitment help in accreditation process. On another hand for the strategic planning for quality nurses had a mean (4.05) and (4.13) for the doctors this mean that nurses and doctors identify the importance of the strategic planning for quality in the accreditation. Also the nurses and doctor indicated the importance of using the human resources in accreditation process, nurses had mean of (4.08) and doctors had mean of (4.03) related to the using human resources. The strength of the study was measuring the Cronbach alpha of the study tool and it was (91.7%). The study limited in the setting as only 4 hospitals out of 62 private hospitals in Jordan were included.

Another quantitative study conducted by Al-gahtani et al. (2017) titled perception of hospital accreditation among health professionals in Saudi Arabia. The study aimed to assess the perceptions of health professionals on the impact of JCI accreditation and
implementation of change towards the delivery of quality patient care. The population of this study was comprised of physicians, nurses, medical technologists, dietitians, and other allied healthcare professionals. Respondents were not selected by sampling. Rather, questionnaires were manually distributed to all health professionals in their designated department and collected with the cooperation of department heads, managers, and staff. Of 1360 survey questionnaires distributed, 934 were returned. The main result of this study was that accreditation had a positive impact on the process and implementation of change in the hospital that resulted in improvement in the delivery of patient care and other health services. The limitation of the study was the limited setting as only including a single institution study with no comparison made to other small, medium, or large-sized JCI-accredited hospitals in Saudi Arabia. Patient satisfaction before and after accreditation was not included.

Another qualitative study conducted by Nekoei-Moghadam et al. (2018) about Hospital accreditation in Iran: A qualitative case study of Kerman hospitals. The study aimed to investigate the evaluation of hospital accreditation in an Iranian context. The sample size was 17 participants, the sample included experts from the university's Office of Improvement (6 people), hospital matrons (3 people), hospital managers (3 people), and experts from accreditation departments (5 people). The main result of this study showed that promoting a culture of quality management and patient safety can resolve many of the problems of an accreditation program. This cannot be achieved without a good working knowledge of accreditation and a strategy to diminish nervousness about the program on the part of staff. The limitation of this study was the vastness of the subject and the wide range of issues identified around accreditation that hampered in-depth exploration. Therefore, it is recommended that each of the subjects identified in this study be explored in a separate study in the future.
2.5 Systematic Review Articles Related to Hospital Accreditation

Al-khenizan & Shaw (2011) in their systematic review findings that there is consistent evidence shows that general accreditation programs improve the process of care provided by healthcare services. There is considerable evidence to show that general accreditation programs improve clinical outcomes of a wide spectrum of clinical conditions. There is also considerable evidence to show that accreditation programs of subspecialties improve clinical outcomes. Accreditation programs should be supported as a tool to improve the quality of healthcare services.

Brubakk et al. (2015) stated that hospitals are now faced with the challenge of improving their patient outcomes and reliability, the study provides a comprehensive overview of the effects of accreditation and/or certification of hospitals on quality and patient safety outcomes and concludes that due to scant evidence, no conclusions could be reached to support its effectiveness. Also they stated that they found that the proven role of accreditation and certification in improving patient and organizational outcomes remain largely undefined.

Greenfield & Braithwaite (2008) in their review of health care accreditation research literature reveals a complex picture. There are mixed views and inconsistent findings. Only in two categories were consistent findings recorded: promote change and professional development. Inconsistent findings were identified in five categories: professions’ attitudes to accreditation, organizational impact, financial impact, quality measures and program assessment. In the remaining three categories—consumer views or patient satisfaction, public disclosure and surveyor issues—they did not find sufficient studies to draw conclusions.
Al-khenizan & Shaw (2012) revealed in their systematic review that several studies had shown that health care professionals were skeptical about accreditation because of concerns about its impact on the quality of health care services. The results of the systematic review indicated that leaders view accreditation as a affirm quality and had the potential to be used as a marketing tool. Concerns that accreditation may not worth the financial and human resources invested in it. Moreover the attitude of the physicians was mixed; in one report physician were skeptical about accreditation. In another report radiologist favored virtual colonoscopy accreditation. On another hand nurses revealed that the perception and quality of care was improved due to accreditation. Laboratory personnel preferred to work in an accredited laboratory and improved the process and knowledge of laboratory tests. But concerns were raised about the cost and the effect of accreditation on the quality of laboratory results.

2.6 Summary

This chapter provide an overview about nurses perception toward the impact of joint commission international on quality of care and patient safety, mention few studied related the research subject.

Summary of strengths and benefits of accreditation:

1. Helps organize and strengthen patient safety efforts
2. Strengthens community confidence in the quality and safety of care, treatment and services
3. Provides a competitive edge in the marketplace
4. Improves risk management and risk reduction
5. Provides education to improve business operations
6. Provides professional advice and counsel, enhancing staff education
7. Provides a customized, intensive review
8. Enhances staff recruitment and development
9. Provides deeming authority for Medicare certification
10. Recognized by insurers and other third parties
11. Provides a framework for organizational structure and management
12. May fulfill regulatory requirements in select states
13. Provides practical tools to strengthen or maintain performance excellence
14. Aligns health care organizations with one of the most respected names in health care.
Chapter Three

Methodology

3.1 Introduction

This chapter describes the methodology used by the researcher in the study, which includes study design, study area, sampling, population, study tool, definition of positive, neutral and negative perception and data collection. This helped the researcher analyzing the data and identifying nurses’ perception toward the impact of JCIA on quality of care and patient safety.

3.2 Study Design

The researcher used quantitative study; it was descriptive, non-experimental, cross sectional and analytic study. Descriptive studies enable the researcher to examine the impact of the JCIA on the quality of care and patient safety, non-experimental because the researcher did not do any manipulation or intervention on the researched population and in this study describe the situation as it exists in its current state, and a cross sectional study where the researcher collected data at one specific time. Analytic study because it used observation that aimed to gain knowledge on the quality and the amount of influence that JCIA had on the quality care and patient safety at AMICSH.

3.3 Study Area

The study took place at Al-Makassed Islamic Charitable Society Hospital. AMICSH a general surgical hospital in East Jerusalem that provides care for Palestinians from West Bank, Gaza Strip and East Jerusalem residents, the majority of patients come from West
Bank and Gaza Strip. It is referral hospital. Hospital has 20 departments; they are Neuro ICU, labor ward, surgical, medical, O.R, neurosurgery, pediatrics, gastroscopy, outpatient Clinics, and maternity, CCU, neonate, normal nursery, ER, AICU, AOH, POH, orthopedic, PICU and C.Cath. Totally the hospital has (250) bed, and has 386 nurses at the time of the study. The hospital accredited since 28th February 2014 (JCI, 2016). Hospital reaccredited again in October 2017. However, until now there has been only one locally published study to assess the effect of this accreditation on patient’s safety and how nurses perceive its effects of their performance. The study included nurses working at AVH.

3.4 Study Population and Sampling Technique

3.4.1 Study population

This study was conducted at AMICSH, with total of (386) nurses, during the study 28 nurses were not available at the hospital, either they were in annual leaves, sick leaves or they were prevented from entering East Jerusalem due to political issues, which means the total population was 358 nurses.

3.4.2 Sampling technique

The sample in the study was stratified, consisted of 192 nurses. Sample size calculated according to Yamane method in choosing sample size $n=\frac{N}{1+n^2(e)}$

$n= Sample size, N= total population , e= acceptable sampling error, acceptable sample error is between 4%-8% with confidence interval 95% (Ajay & Micah, 2014)$

I choose $e=4.92\%$

$n=\frac{358}{1+358(0.0492)^2} \approx 191.7$

The researcher considered sample size as 192 nurses.
Table 3.1 Sample Size

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<th>Department</th>
<th>Sample Size</th>
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</thead>
<tbody>
<tr>
<td>Neuro ICU</td>
<td>6</td>
</tr>
<tr>
<td>Labor</td>
<td>9</td>
</tr>
<tr>
<td>Surgical</td>
<td>10</td>
</tr>
<tr>
<td>Medical</td>
<td>8</td>
</tr>
<tr>
<td>O.R</td>
<td>20</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>7</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>12</td>
</tr>
<tr>
<td>Gastroscopy</td>
<td>2</td>
</tr>
<tr>
<td>Outpatient Clinics</td>
<td>6</td>
</tr>
<tr>
<td>Maternity Ward</td>
<td>11</td>
</tr>
<tr>
<td>CCU</td>
<td>10</td>
</tr>
<tr>
<td>Neonate</td>
<td>16</td>
</tr>
<tr>
<td>Normal Nursery</td>
<td>7</td>
</tr>
<tr>
<td>ER</td>
<td>12</td>
</tr>
<tr>
<td>AICU</td>
<td>9</td>
</tr>
<tr>
<td>AOH</td>
<td>6</td>
</tr>
<tr>
<td>POH</td>
<td>15</td>
</tr>
<tr>
<td>Supervisor</td>
<td>2</td>
</tr>
<tr>
<td>orthopedic</td>
<td>9</td>
</tr>
<tr>
<td>PICU</td>
<td>10</td>
</tr>
<tr>
<td>C.Cath</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>192</td>
</tr>
</tbody>
</table>

A list was obtained from the hospital contains all working nurses and their departments, total population was 386 nurses, nut during the study 28 nurses were not available at the hospital sue to sick leaves, annual leaves or prevented from entering East Jerusalem due to political issues, so the actual total population at the study was 358 nurses. They stratified according to the departments, by calculation every department given a sample size proportion (table 3.1) then every nurse at the department given a Wight, after that randomly the proportion of the every department was obtained.
3.5 Eligibility Criteria

3.5.1 Inclusion Criteria:

All the nurses working currently at AMICSH.

3.5.2 Exclusion Criteria:

Doctors, lap technicians, blood lab technicians, X-Ray technicians, physiotherapists’ secretaries, admission department personnel, financial department personnel, managers were excluded. And nurses, who were not available at hospital due to annual leave, sick leaves or prevented from getting to hospital, due to political issues.

3.6 The study Tool

The researcher used a previous designed tool developed earlier to measure nurses’ point of view toward the impact of JCIA on the quality of care and patient safety AMICSH, this tool was used frequently in earlier studies related to JCI, quality of care and patient safety, it was used in (Abolfotouh et al., 2014; Al-gahtani et al., 2017; Al-Masabi & Thomas, 2017; Diab, 2011; El-Jardali et al., 2008; Khair, 2015; Yildiz & Kaya 2014). The questionnaire was modified by Khair (2015) and his permission of using the questionnaire was obtained.

The questionnaire consisted of 54 questions and divided into two parts. The first part was about the personal and demographic information, while the second part consisted of eight subparts; quality part with five questions, patient safety part with eight questions, leadership commitment and support consisted of nine questions, strategic quality plaining with six questions, human resource part included six questions, quality management included five questions, how data used in the hospital had five questions, and the last part
was about JCIA with ten questions. The questionnaire was a 5 Likert scale, ranged from strongly disagree weighted (1) to strongly agree weighted (5).

### 3.6.1 Definition of positive, neutral and negative point of view of nurses

Positive point of view: is the percent of responses that were answered (Agree/Strongly agree) for positively worded items and considered as an area of strength when the percent is above 70%.

Neutral point of view: is the percent of responses that were answered neutral for all items or when the percent is between 50% and 70%.

Negative point of view: is the percent of responses that were answered (Disagree or strongly disagree) for positively worded items and considered as an area for potential improvement when the result is below 50%.

**Observation checklist:** In current study the researcher designed observational checklist to ensure if specific standards of JCIA were applied by nurses. It aimed to support and compare quantitative results. It consisted of 27 questions using Yes and No format. (see annex1)

### 3.7 Questionnaire Validity

The researcher Khair (2015) assessed the validity of the questionnaire by using a panel of experts who experienced in the field of quality and patient safety and three of them examined the items to judge the questionnaire. Comments were given by experts and Khair modified it. Tool was used in 2015.
3.7.1 Factor Analysis

A principal component analysis was conducted on the 54 items with orthogonal rotation (varimax) the analysis was conducted separately at each subscale. The Kaiser–Meyer–Olkin(KMO) measure verified the sampling adequacy for the analysis all subscales except for human resource utilization (KMO=0.435), for all other subscales the KMO excide (0.5), KMO value acceptable limit (0.5) (Field, 2009). An initial analysis was run to obtain eigenvalues for each component in the data table (3.2). In the quality results subscale two components had eigenvalues with (70.274%) of the variance. In the patient safety results subscale two components had eigenvalues with (71.214%) of the variance. In the leadership commitment and support subscale three components had eigenvalues with (77.257%) of the variance. In the strategic quality planning subscale two components had eigenvalues with (69.662%) of the variance. In the human resources utilization subscale two components had eigenvalues with (73.849%) of the variance. In the quality management subscale one component had eigenvalues with (71.435%) of the variance. In the use of data subscale two components had eigenvalues with (79.48%) of the variance. In the JCI accreditation subscale was three components have eigenvalues with (79.735%) of the variance. The scree plot for each subscale verifies the result of the initial analysis to obtain the eigenvalues for all subscales as seen in below table (3.2).

Table 3.2 Factor Analysis

<table>
<thead>
<tr>
<th>No.</th>
<th>Subscale</th>
<th>Number of eigenvalues</th>
<th>Sum of eigenvalues of variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quality Results</td>
<td>Two components</td>
<td>70.274%</td>
</tr>
<tr>
<td>2</td>
<td>Patient Safety Results</td>
<td>Two components</td>
<td>71.214 %</td>
</tr>
<tr>
<td>3</td>
<td>Leadership Commitment and Support</td>
<td>Three components</td>
<td>77.257%</td>
</tr>
<tr>
<td>4</td>
<td>Strategic Quality Planning</td>
<td>Two components</td>
<td>69.662%</td>
</tr>
<tr>
<td>5</td>
<td>Human Recourse Utilization</td>
<td>Two components</td>
<td>73.849%</td>
</tr>
<tr>
<td>6</td>
<td>Quality Management</td>
<td>One components</td>
<td>71.435 %</td>
</tr>
<tr>
<td>7</td>
<td>Use of Data</td>
<td>Two components</td>
<td>79.48 %</td>
</tr>
<tr>
<td>8</td>
<td>JCI Accreditation</td>
<td>Three components</td>
<td>79.735 %</td>
</tr>
</tbody>
</table>
3.8 Questionnaire Reliability

The Cronbach alpha was used to be sure that the tool will measure perception of nurses, reliability was maintained by conducting Cronbach alpha and it was (0.915).

3.9 Pilot Study

Pilot study was conducted at Red Crescent Hospital at East Jerusalem, the study was conducted on 20 nurses at the hospital, and ethical approval was obtained prior performing the pilot study. Pilot study sample should be (10%) of the sample projected for the larger part study (Connelly, 2008). Red Crescent Hospital was chosen to conduct the pilot study because the hospital gained JCIA at the same period when AMICSH gained it. Ethical approval was taken from the head of the Red Crescent Hospital before conducting the pilot study.

The Cronbach alpha was conducted and the result showed (α=0.915) which consider acceptable.

Table (3.3) shows the reliability co-efficient of the study tool. The subscale quality results had relatively low Cronbach's (α=0.681), for the patient safety results subscale Cronbach's (α=0.885), leadership commitment and support Cronbach's (α=0.876), for the subscale strategic quality planning the Cronbach's (α=0.805), for the human recourse utilization subscale Cronbach's (α=0.769), for quality management subscale Cronbach's (α=0.894), for use of data subscale Cronbach's (α=0.760) and for JCIA subscale Cronbach's (α=0.882).
Table 3.3 Reliability co-efficient of the study tool.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Number of items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality results</td>
<td>5</td>
<td>0.681</td>
</tr>
<tr>
<td>Patient safety results</td>
<td>8</td>
<td>0.885</td>
</tr>
<tr>
<td>Leadership Commitment and Support</td>
<td>9</td>
<td>0.876</td>
</tr>
<tr>
<td>Strategic Quality Planning</td>
<td>6</td>
<td>0.805</td>
</tr>
<tr>
<td>Human Recourse Utilization</td>
<td>6</td>
<td>0.769</td>
</tr>
<tr>
<td>Quality Management</td>
<td>5</td>
<td>0.894</td>
</tr>
<tr>
<td>Use of Data</td>
<td>5</td>
<td>0.760</td>
</tr>
<tr>
<td>JCI Accreditation</td>
<td>10</td>
<td>0.882</td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>0.915</td>
</tr>
</tbody>
</table>

3.10 Data Collection and Recruitment Strategy

Data was collected in 2017 through structural questionnaire.

3.10.1 Data collection Protocol

1. The ethical approval had been gained from the institutional review board (IRB) at Al-Quds University prior starting the study (see annex No3).
2. A letter was sent to the hospital from the university to allow the researcher to conduct the study (see annex No 4).
3. The approval to conduct the study was sought from the manager of AMICSH.
4. A list of all employees was taken from the hospital after the approval.
5. 192 participants were recruited after the stratification of the sample was done.
6. Informed consent was obtained from the participant about the participation, the consent was at the page cover of the questionnaire (see annex No 2).
7. Verified to the participant that the information will be used for scientific purpose only, no personal information will be included, and they can terminate their participation at any time.

8. Collected the survey back by putting an envelope in each department, and asked the participant's to return back the survey inside it.

3.11 Permissions and Ethical Considerations

1. Permission was taken from the institutional review board (IRB) for the study.

2. Ethical approval from the AMICSH manager was obtained.

3. Participant received an explanation about the aim of the study at the cover page of tool that was used to collect data.

4. The participants in this study were informed that their participation is voluntary.

5. The cover page of the tool included an explanation about the objectives of the study, with clarification the information, will be confidential, and will be used only for scientific research (annex No 3).

3.12 Data Analysis

Statistical Package for the Social Sciences (SPSS) version 20 used to analysis the data, frequencies, percentages, mean (M), percentage of mean (PMS), standard deviation (SD), One-Way ANOVA and Pearson correlation were used to identify the association between different variables.

3.13 Summary

This chapter provides an overview of the methodology that was used in this study, describing study design, population and sampling method, the tool, the validity and reliability, data collection, and ethical consideration.
Chapter Four

Results, Discussion and Recommendation

4.1 Introduction

This chapter presents the analysis of data collected in this study, discussing the results and some recommendations.

4.2 Study Results

4.2.1 Socio-demographic Characteristics

Figure (4.1) shows that the male respondents constituted (41.8%) and the female respondents were (58.2%) of the total.

![Figure 4.1 Distribution of Participants by Gender](image-url)

Figure 4.1 Distribution of Participants by Gender
Figure (4.2) shows that (61%) of the respondents aged less than 30 years, (23.9%) of the respondents aged 30 to 40 years, and the percentage of the respondents who were more than 40 years comprised (15.1%) of the total. This shows that more nurses working at the hospital age less than 30 years, and this due to nursing profession need youth to handle the workload and the hard work.

![Figure 4.2 Distribution of Participants by Age](image)

**Figure 4.2 Distribution of Participants by Age**

Figure (4.3) shows that (9.7%) of respondents were working at operating room (O.R), (9.1%) were working at pediatric open heart ward (POH), (7.3%) of respondents were working at pediatric ward, (6.7%) of respondents were working at neonate ward. The percentage of maternity ward, emergency room (ER) and pediatric intensive care unit (PICU) were (6.1%) for each. Surgical ward nurses participants were (5.5%), adult intensive care unit (AICU), cardiac care unit (CCU) and labor represented (4.8%) for each, neurosurgery participants represented (4.2%) of respondents, medical and normal nursery represented (3.6%) of respondents, neurosurgery intensive care unit (Neuro ICU), outpatient clinics and orthopedic respondents were (3%) for each, cardiac catheterization.
unit (C.Cath) and adult open heart unit (AOH) respondents were (2.4%), and gastroscopy and supervisor represented (1.2%) of respondents for each.

Figure 4.3 Distribution of Participants by Department

Figure (4.4) shows that most of respondents (55.4%) with less than 5 years of experience, (20.4%) of respondents had more than 15 years of experience, the respondents who had 5-10 years of experience represented (19.7%) and the respondents who had 11-15 years of experience represented (4.5%). This shows that most of working nurses at the hospital are novices.
Figure 4.4 Distribution of Participants by Experience

Figure (4.5) shows that most of respondents held bachelor's degree (74.5%), while (14.5%) of respondents held master degree, and (6.7%) of respondents held diploma degree. In addition, (4.2%) of nurses held higher diploma.

Figure 4.5 Distribution of Participants by Educational Level
Figure (4.6) shows that staff nurses represented (82.4%) of respondents, practical nurses and head nurses represented (6.7%) of respondents for each, (3%) of respondents were staff midwives and only (1.2%) of respondents were supervisors.

![Figure 4.6 Distribution of Participants by Occupational Category](image)

Figure 4.6 Distribution of Participants by Occupational Category

Figure (4.7) shows that most of the respondents (60%) had received previous training in quality of patient care; which showed that the hospital provided continuous education for their staff especially in the quality field. However, (39.4%) of respondents did not receive any training related to quality of patient care.
Figure 4.7 Distribution of Participants by their Participation in Training Related to the Quality of Patient Care

Figure (4.8) shows that most of the respondents (41.4%) had more than 3 weeks of training related to quality of care. (34.3%) respondents had less than one week of training related to the quality of patient care. Lastly, (24.2%) of respondents had 1 to 3 weeks of training related to quality of patient care.

Figure 4.8 Distribution of Participants by Training Duration
Regarding the question “If the answer to question 'Did you have training related to the quality of patient care?' is yes. What was the training about?” figure (4.9) shows that most of respondents (24.6%) who answered the question with yes had JCIA related training, followed by (23.8%) of respondents who had received patient safety training, then (19.8%) of respondents who answered the question with yes had infection control related training, afterward (13.3%) of respondents who answered the question with yes had leadership and change management training, then (12.1%) of respondents who answered question with yes had team building and team work training and lastly (6.5%) of respondents who answered the question with yes had ISO related training.

![Figure 4.9 Distribution of Participants by Training Type]

**4.2.2 Quality from the Point of view of Participated Nurses**

Table (4.1) shows that total mean score of quality result domain is (3.51) and the total percentage of mean (PMS) is (70.3%) which indicate that nurses at AMICSH had positive view related to the impact of JCIA on quality of care. Figure (4.10) shows that the highest PMS was (73%) the respondents agreed that the hospital had shown steady, measurable
improvements in the quality of care provided to patients. Followed by (71.4%) of respondents agreed that the hospital had shown steady, measurable improvements in the quality of services provided by clinical support departments such as laboratory, pharmacy and radiology. Moreover, (71.3%) of respondents agreed that the hospital had shown steady, measurable improvements in the quality of customer satisfaction. In contrast, (68%) of respondents agreed that the hospital had maintained high quality health services utilizing the available financial constraints, this indicates that the hospital should improve the financial status for it. Further the lowest PMS (67.6%) was regarding the statement that the hospital has shown steady, measurable improvements in the quality of services provided to the administration (finance, human resources, etc.). Interestingly, around third of the staff answered neutrally to all items about impact of accreditation on quality of care. Which may be due to lack of interest of some nurses in the quality of care at the hospital, or the nurses cannot feel the changes that take place at the hospital, so the hospital should pay more efforts to make nurses notice the differences that they make.

Improving quality of care and patient safety should be strategic priority for all health care providers, health administrators, managers, leaders and policy makers (Khair, 2015). Recently quality of care has been increased worldwide, and this interest can be noticed in Palestine. Many hospitals gained ISO, other hospitals gained JCIA and some of hospitals that don’t have JCIA are preparing to have JCI certificate. For example, Al-Najah National hospital is preparing to gain JCIA. According to the current study findings, nurses at AMICSH had positive view related to the impact of JCIA on quality of care. The result revealed that nurses view JCIA as a way to improve the quality of care at the hospital, this is a significant result to policy makers and hospital administrations who pursue to gain JCIA to their hospitals. Based on observation data, AMICSH administrators recently paid more effort in implementing quality improvement measures. Quality department at the
hospital regularly holds meetings with departments’ representative in quality field, the aim of these meetings is to identify how they can improve the quality at the hospital. This might explain the positive point of view nurses held about quality measures at their hospital. These results are in line with the studies that were conducted by Yildiz & Kaya (2014), Al-Awa et al. (2011), Al-gahtani et al. (2017), Jaber (2014), El-Jardali et al. (2008) and Khair (2015). All mentioned studies found that nurses generally have positive opinion related to the impact of JCIA on quality of care. But in a study conducted by Abolfotouh et al. (2014), they found that nurses perceived level of quality of health care in average (neutral) level. Therefore, those studies argued that accreditation improved quality but in average level. In this study, it is interesting to note that about third of the participants have neutral responses toward the impact of JCIA and all related domains which may indicate that those nurses may have limited information about the accreditation program or they may less incline to express their opinion. This should be kept in mind by mangers in order to enhance their staff collaboration. Based on observation data, the nurses knew that the hospital was perusing toward quality improvement but few changes were actually noticed by nurses. Therefore, the hospital should conduct meetings in order to inform nurses and other staff about main accomplishments and success that were achieved as a result of implementing JCIA standards.

Even though nurses’ point of view was positive regarding quality of care but observation data showed that the changes in quality measures took place only before the time of JCIA survey, and less changes happened after the end of the survey. For example, it was noticed that admission and discharge process were long and attenuated unnecessary delays. Unnecessary awaiting time can influence the delivery of health services and patient care and consequently affects quality improvement initiatives in the hospital (Ortiga et al., 2012). According to observation data, the workload of nurses at the time of JCIA visit is
reduced to show that the hospital is in its best performance. But once the hospital is reaccredited, the hospital returns back to its usual routine and heavy duties. It is the same regarding the awaiting time for different procedures such as x-rays, laboratory tests, and surgery. The more the patient waits for a service the more he/she will be dissatisfied, so it is important to the hospital to shorten the waiting time, because this will increase the quality of provided care to patients and patient satisfaction. Xie & Or (2017) found that patients who actually spent longer periods of time receiving care services did not perceive that they had spent more time in those activities, and they were no more satisfied with the service they received than those who spent less time receiving such services. This observation about actual circumstances that faced nurses at the time of JCIA team visits and after, might explain the neutral responses of nurses in all items. This data may indicate nurses’ dissatisfaction not lack of knowledge about JCIA guidelines as presumed previously. This warrants high consideration within the hospital’s management team.

It is recommended to the hospital to have more quality department personnel, their responsibility is to distribute the workload over the week for example so the quality of care will be notably increase, moreover another duty is to make staff follow the JCIA standards by educating the staff, and guiding them properly in how to apply the standards that guarantee best quality.

The Palestinian universities also have a role to improve the quality of care at AMICSH as well as other hospitals, so it is recommended to integrated quality related subjects in nursing curriculum in the universities in order to graduate nurses qualified in quality improvement field.
Table 4.1 Impact of accreditation on quality of care

<table>
<thead>
<tr>
<th>Quality Results</th>
<th>M</th>
<th>PMS</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over the past 2 years the hospital has shown</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1. Steady, measurable improvements in the quality of customer satisfaction.</td>
<td>3.56</td>
<td>71.3%</td>
<td>1.01</td>
</tr>
<tr>
<td>B2. Steady, measurable improvements in the quality of services provided to the</td>
<td>3.38</td>
<td>67.6%</td>
<td>1.03</td>
</tr>
<tr>
<td>administration (finance, human resources, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B3. Steady, measurable improvements in the quality of care provided to patients.</td>
<td>3.65</td>
<td>73.0%</td>
<td>1.00</td>
</tr>
<tr>
<td>B4. Steady, measurable improvements in the quality of services provided by</td>
<td>3.57</td>
<td>71.4%</td>
<td>1.11</td>
</tr>
<tr>
<td>clinical support departments such as laboratory, pharmacy and radiology.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B5. Maintained a high quality health services utilizing the available financial</td>
<td>3.40</td>
<td>68.0%</td>
<td>1.10</td>
</tr>
<tr>
<td>constraints.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3.51</td>
<td>70.3%</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Figure 4.10 Quality of Care Domain Results

4.2.3 Safety results as Perceived by Participated Nurses

Table (4.2) shows that the total mean score of patient’s safety result domain is (3.75) and total PMS is (75%) this indicates that the nurses at AMICSH had positive point of view related to the impact of JCIA on patient safety. Figure (4.11) shows that the Majority of respondents (77.1%) agreed that after accreditation rate of hand hygiene compliance
among hospital staff increased. Followed by (77%) of respondents agreed that accreditation significantly decreased the incidents of falling down among patients. Moreover, (76.2%) of respondents agreed that medication use was improved after accreditation. Furthermore, (76%) of respondents agreed that medication errors\incidents reduced after accreditation. Also, (74.3%) of respondents agreed that accreditation enables the improvement of patient safety at the hospital. (73.9%) of respondents agreed that accreditation notably lowered the rate of blood transfusion reactions. And, (73.7%) of the respondents agreed that the rate of successful code blue performance within the hospital departments was increased after accreditation. While (71.4%) of respondents agreed that the rate of hospital acquired infections has significantly reduced after accreditation.

One of the goals of implementing accreditation process is to help in protecting patients and their safety. A study of 89 hospitals in different European countries suggested that hospitals which were accredited scored higher on quality and safety process and outcomes than hospitals that had neither form of external assessment (MATRIX knowledge group (2010) as cited in Shaw et al., 2014). According to the current study findings most of nurses at AMICSH had positive point of view related to the impact of JCIA on patient’s safety. This indicates that the hospital has a strong safety culture within its environment, so the patient’s safety at the hospital will be increased by time as the awareness of nurses will positively impact on their attitude as suggested by (Gozlu & Kaya, 2016). Gozlu & Kaya, (2016) emphasized that accreditation contribute to the creation of patient safety culture. The results are consistence with the results of many studies that were conducted in Arabian countries (Shammari et al. (2015); Khair (2015) and Al-Awa et al. (2011) who found that nurses had positive perception related to the impact of JCIA on patient’s safety. Miller et al. (2005) found contradictory results as they reported no significant relationship between accreditation scores and patient’s safety indicators. Patient’s safety at the hospital should
be a priority for hospital manager, so in order to keep the patient safety culture and improve it by time; the managers should pay attention to their staff in how they perceived patient safety. The managers of the hospital can increase nurses’ attitude on the patient safety by designing educational programs in patient safety field, conducting intensive on job training to increase the patient safety.

Based on observation data, AMICSH recently has introduced infectious disease doctor, his responsibility is to control the infection at the hospital and to decrease the use of antibiotic, and his work can be recognized at the hospital, the usage of antibiotic is controlled and only the better treatment is given to the patient. This can increase the safety of patient at the hospital. Moreover, the hospital have a clear policy to control the infection rate at the hospital, infectious disease doctor is one, handwashing another one, isolations rooms, and infection control representative at the departments. According to Al-Shammari et al. (2015) accreditation has shown highly positive level of the impact on patient safety related to nursing clinical documentation, medication information and healthcare association infection. Also, the hospital after last JCIA inspection introduced new fall risk assessment to monitor the patient who could be injured due to falling down, the new form is better to point out the patient capable to fall down. In this ways the safety of patient can be improved at the hospital.

The hospital follows a clear policy in identifying patient correctly, failing to identify them by staff will lead employee to disciplinary actions, so it is obvious from observation data that the hospital initiate a clear process to identify patient correctly, and this is one of the important standers that JCIA required from the hospital to be accredited. When patients recognized well, they will be safe, and this one of the aims of JCIA. Another way ensure patients’ safety at the hospital is to identify the high alert medications, they are high concentration medications, preparing them need two staff to check that it is the needed
medication concentration. So every department at the hospital has its responsibility to keep those medications separated, safe and in secure place, by this the patient safety will be maintained. Which were confirmed by observation data.

The universities are not separated from any society and they play an important role in changing how people think, they are the place where the care giver are prepared well to provide patients with safe care. So it is recommended to them to establish postgraduate programs in quality field, since hospitals needs more specialized nurses in patients’ safety field and how to improve safety in health care. Those programs are needed in order to provide an understanding of the techniques that sustain and measure system change.

**Table 4.2 Impact of accreditation on patient safety**

<table>
<thead>
<tr>
<th>Patient Safety</th>
<th>M</th>
<th>PMS</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1. Accreditation enables the improvement of patient safety at the hospital.</td>
<td>3.72</td>
<td>74.3%</td>
<td>0.87</td>
</tr>
<tr>
<td>C2. After accreditation the rate of hospital acquired infections has significantly reduced.</td>
<td>3.57</td>
<td>71.4%</td>
<td>0.91</td>
</tr>
<tr>
<td>C3. Accreditation improved medication use.</td>
<td>3.81</td>
<td>76.2%</td>
<td>1.02</td>
</tr>
<tr>
<td>C4. Accreditation reduced medication errors/uncidents.</td>
<td>3.80</td>
<td>76.0%</td>
<td>1.14</td>
</tr>
<tr>
<td>C5. Accreditation notably lowered the rate of blood transfusion reactions.</td>
<td>3.70</td>
<td>73.9%</td>
<td>1.21</td>
</tr>
<tr>
<td>C6. Accreditation increases the rate of successful code blue performance within the hospital departments.</td>
<td>3.68</td>
<td>73.7%</td>
<td>1.26</td>
</tr>
<tr>
<td>C7. There is an increase rate of hand hygiene compliance among hospital staff after accreditation.</td>
<td>3.85</td>
<td>77.1%</td>
<td>1.13</td>
</tr>
<tr>
<td>C8. Accreditation significantly decreased the incidents of falling dawn among patients.</td>
<td>3.85</td>
<td>77.0%</td>
<td>1.21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3.75</td>
<td>75%</td>
<td>1.09</td>
</tr>
</tbody>
</table>
4.2.4 Organizational Factors Results

4.2.4.1 Leadership Commitment and Support Domain Results

Table (4.3) shows that the total mean score of nurses’ point of view related to leadership commitment and is (3.58) and the total PMS is (71.5%) these results indicate that nurses had positive perception related to the leadership commitment and support at AMICSH. Figure (4.12) shows that most of nurses (74.2%) agreed that senior hospital executives had articulated a clear vision for improving the quality of care and services. Followed by (72.6%) of the respondents agreed that senior hospital executives consistently participated in activities to improve the quality of care and services. In addition, (72.2%) of respondents agreed that senior hospital executives established confidence that efforts to improve quality will succeed. Besides, (71.6%) of respondents agreed that senior hospital executives had demonstrated an ability to manage the changes (e.g. technological) needed to improve the quality of care and services. Moreover, (71.4%) of respondents agreed that
the top management is a primary driving force behind quality improvement efforts. Furthermore, (71.2%) of respondents agreed that senior hospital executives allocate available hospital resources (finances, staff, time & equipment's) to improve quality. Then, (70.5%) agreed that the hospital management/leadership provides a work climate that promotes quality improvement and patient safety as a top priority. Also, (70.4%) agreed that senior hospital executives provide highly visible leadership in maintaining an environment that supports quality improvement. Lastly, the lowest PMS score (69.7%) nurses agreed that the senior executives had a thorough understanding of how to improve the quality of care and services, and this indicate the nurses had neutral perception toward this domain. It is interesting to find that around third of the staff answered neutrally to all items about their perceptions toward leadership’s commitment and support to quality of care and safety. This may indicate that those nurses view the managers at the hospital had not deriving forces for quality improvement.

El-Jardali et al. (2008) emphasize that senior hospital management has direct effects on quality improvement and reported that leadership, commitment, support, and quality management were predictors of quality improvement during and after the accreditation process. In the current study, nurses had positive point of view related to the leadership commitment and support at AMICSH. This showed that leaders at the hospital took the first step in the change that happened because of the accreditation process, which enhanced their employees to implement the accreditation guidelines. This finding is consistence with the result of a study conducted by Diab (2011) who found that both doctors and nurses had apperception about the standard of accreditations related to the management and leadership. Furthermore, Al-Masabi & Thomas (2017) and Khair (2015) found that nurses had positive perception related to leadership and their participation in quality improvement. On other hand Abolfotouh et al. (2014) found in their study that the level of
perception of nursing related to leadership commitment and support was neutral. It seems that leaders should start any change in quality improvement themselves because nurses see them as role models for this change, and by participating in change better result will be derived in quality for the hospital (Weber & Joshi, 2000).

By observation the leaders of the hospital at the preparing time for the JCIA survey participated widely in the process, they made rounds to be sure that the arrangement was going as planned. But after reaccreditation they rarely conducted rounds at the hospital. The inconsistency role and involvement of the leaders that were observed might jeopardize the trust of nurses on their efforts to apply JCIA standards and leaders’ commitment to sustain change. It also might lead to feeling of role conflict and ambiguity among nurses. Previous studies about implementing changes initiative inside hospitals stressed that nurse who view their roles as ambiguous have lower job commitment ((IOM, 2004);(Castro-Sánchez & Holmes, 2015). Therefore, continual efforts by all parties and continuous quality improvement measures are needed to secure long lasting success and consequently to sustain changes inside AMICSH. Also leaders at the hospital should be in the front line of quality improvement activates within the hospital.

Safety culture at the hospital is one of the important issues that the leaders are concerned of. For instance, the hospital encouraged staffs to report any incident directly if happened, and guaranteed non-punitive responses to errors. Educating staff and facilitating discussion about patient safety culture in their own practice leads to increased reporting of incidents. It is beneficial to invest in a team-wise effort to improve patient safety (Verbakel et al., 2015). According to the observed data, AMICSH high concentration medications culture at the hospital proactive one not reactive one, and to ensure the patient safety which mean that the hospital has control and well prepared over the medication concentration.
40% of nurses agreed that the senior hospital executives allocate available hospital resources (finances, staff, time & equipment's) to improving quality. However, 40% of nurses answered neutrally to this questions which should be interpreted cautiously as they did not possess the necessary information or they declined to answer. As observed in the current study, AMICSH is facing financial problems, employee salaries sometime being late or delayed, hospital managers try to make the resources needed to provide care to patients available at the hospital but sometimes some equipment's and medications are not available at the hospital, so some of procedures are not perform to the patient and this considered to be a serious shortfall. Considering the effect of having sufficient financial resources on quality of care, it is recommended to the managers at the hospital to work harder to make the resources available and to find more ways to finance the hospital.

The policy makers at Palestine may seek the managers of hospital opinion in sitting a national wide policy, and since the interest in accreditation programs increases, it recommended for policy makers at ministry of health to consider establishing a local accreditation program in Palestine that aims at standardized the care proved to the patient to increase the quality of care and patient’s safety at the Palestinian hospitals.

**Table 4.3 leadership commitment and support on quality of care and patient safety**

<table>
<thead>
<tr>
<th>Leadership Commitment and Support</th>
<th>M</th>
<th>PMS</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1. The Hospital management\leadership provides a work climate that promotes quality improvement &amp; patient safety as a top priority.</td>
<td>3.53</td>
<td>70.5%</td>
<td>1.15</td>
</tr>
<tr>
<td>D2. Senior hospital executives provide highly visible leadership in maintaining an environment that supports quality improvement.</td>
<td>3.52</td>
<td>70.4%</td>
<td>1.10</td>
</tr>
<tr>
<td>D3. The top management is a primary driving force behind quality improvement efforts.</td>
<td>3.57</td>
<td>71.4%</td>
<td>1.11</td>
</tr>
<tr>
<td>D4. Senior hospital executives allocate available hospital resources (finances, staff, time &amp; equipment's) to improving quality.</td>
<td>3.56</td>
<td>71.2%</td>
<td>1.19</td>
</tr>
<tr>
<td>D5. Senior hospital executives consistently participate in activities to improve the quality of care and services.</td>
<td>3.63</td>
<td>72.6%</td>
<td>1.06</td>
</tr>
<tr>
<td>D6. Senior hospital executives have articulated a clear vision for improve the quality</td>
<td>3.71</td>
<td>74.2%</td>
<td>1.05</td>
</tr>
</tbody>
</table>
Figure 4.12 Leadership Commitment and Support Results

4.2.4.2 Strategic Quality Planning

Table (4.4) shows that the total mean score of the nurses’ perception of strategic quality planning is (3.68) and the total PMS is (73.7%) this indicates that nurses had positive point of view related to the strategic quality planning at AMICSH. Figure (4.13) shows that the majority of respondents (76%) agreed that middle managers (nursing supervisors and head nurses) play a key role in setting priorities for quality improvement. Further, (75.4%) of respondents agreed that the hospitals quality improvement goals are known throughout the organization. With same PMS (75.4%) of respondents agreed that nurses are involved in
developing plans for improving quality. Then, (74.5%) of respondents agreed that patients' expectations about quality play a key role in setting priorities for quality improvement. Furthermore, (73.1%) of respondents agreed that each department and work group within the hospital maintains specific goals to improve quality. While the lowest (67.6%) of respondents agreed that nurses are given adequate time to plan for improvements and test results. Interestingly, around third of the staff answered neutrally to all items about their awareness toward quality planning. This could be an indication that nurses may have high work load at the hospital, so they don’t have enough time to participate in the strategic planning and implementation of the plans or it may indicate that nurses had no idea about those strategic strategies. The hospital administrators need to give nurses adequate time to plan for improvements and test results.

Hospital should systematically set long-term plans to improve the quality, and know what resources need to achieve the strategic plans. According to the current study findings nurses had positive point of view related to the strategic quality planning at AMICSH. This can be related to hospital regularly published their plans in quality and quality related meetings take place at the hospital every while. This finding is in line with two studies finding, Abolfotouh et al. (2014) and Al-Masabi & Thomas (2017) found that nurses had positive perception related to strategic quality planning. Further, Diab (2011) found that both doctors and nurses had apperception about the standard of accreditations related to the strategic planning for quality, this result is in the line with the current study. Otherwise, Khair (2015) in his study found that the perception of nurses was neutral regarding strategic quality planning, and the result explained that nurses work in units that are heavily work loaded according to nurses view. The result of current study suggests that, the hospital mangers should use this positive awareness toward strategic quality planning and
allow the nurses participating in strategic planning to help the hospital, with creative plans which could raise the level of quality at the hospital.

It is noticed that even the hospital published the strategic plans but nurses participated in setting them diminished by time because workload at the hospital is increased. So the hospital should introduce a new way to make nurses participating in plans settings.

Table 4.4 The nurses’ point of view of strategic quality planning on quality of care and patient safety

<table>
<thead>
<tr>
<th>Strategic Quality Planning</th>
<th>M</th>
<th>PMS</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1. Nurses are given adequate time to plan for improvements and test results.</td>
<td>3.38</td>
<td>67.6%</td>
<td>1.12</td>
</tr>
<tr>
<td>E2. Each department and work group Within the hospital maintains specific goals to improve quality.</td>
<td>3.65</td>
<td>73.1%</td>
<td>0.98</td>
</tr>
<tr>
<td>E3. The hospitals quality improvement goals are known throughout the organization.</td>
<td>3.77</td>
<td>75.4%</td>
<td>1.03</td>
</tr>
<tr>
<td>E4. Nurses are involved in developing plans for improving quality.</td>
<td>3.77</td>
<td>75.4%</td>
<td>1.10</td>
</tr>
<tr>
<td>E5. Middle managers (Nursing Supervisors and Head Nurses) play a key role in setting priorities for quality improvement.</td>
<td>3.80</td>
<td>76.0%</td>
<td>1.05</td>
</tr>
<tr>
<td>E6. Patients’ expectations about quality play a key role in setting priorities for quality improvement.</td>
<td>3.73</td>
<td>74.5%</td>
<td>1.00</td>
</tr>
<tr>
<td>Total</td>
<td>3.68</td>
<td>73.7%</td>
<td>1.05</td>
</tr>
</tbody>
</table>
4.2.4.3 Human Resources Utilization

Table (4.5) shows that total mean score of the nurses point of view related to human resources utilization is (3.43) and the total PMS is (68.6%) this indicates that nurses had neutral opinion toward human resources utilization at AMICSH. Figure (4.14) shows that the majority of nurses (71.2%) agreed that inter-departmental cooperation to improve the quality of services is supported and encouraged. Moreover (70.8%) of respondent nurses believed that hospital had an effective system for make suggestions to management on how to improve quality. Furthermore, nurses had neutral view related to improvement of job skills and performance throw the needed education and training the PMS is (69.7%). Also, (69.5%) for respondents had neutral view that nurses were given education and training in how to identify and act on quality improvement opportunities. Moreover (32.1%) of respondents had neutral opinion that nurses are given continuous education and training in methods that support quality improvement. On the other hand, the lowest PMS score (61.6%) agreed that nurses are rewarded and recognized (e.g. financially and/or otherwise) for improving quality, this may be related to the financial issue that the hospital faces.
during last years and currently. It is clearly that nurses at the hospital think that human resource utilization at the hospital need improvement, human resource department at the hospital should pay more effort in continuous education and training for nurses because the responsibility of human resource department is taking care of the nurses at the hospital. Human resource utilization is an important element of any organization depending on human resource work, so the hospital should utilize its staff to the maximum, and this can be achieved by training programs and continuous education. According to the current study findings nurses had neutral awareness toward human resources utilization at AMICSH. This finding is consistence with Abolfotouh et al. (2014) and Khair (2015) they found that nurses had neutral perception regarding human resource utilization. But Diab (2011) results showed that doctors and nurses have a positive attitude regarding their point of view regarding accreditation standards toward human resources utilization. Accreditation ensure the development, growth and satisfaction of its employees thereby enabling retention and stability of the organization which is very essential in the present era of intensive comparative market (Hyder et al., 2010). So as to alter nurses’ view concerning human resource utilization, hospital ought to pay additional effort in coming up with educational and training programs. Additionally the hospital ought to activate the role of continuous education department, as this department plays an important role to alter the nurses’ perception about human resource utilization; this department ought to use a tool to look at nurses’ needs in educational and training field. Recently the hospital initiate a system for the employee of the month and the best department, in order to motivate employees to work hard which will be good reword for their work, but the hospital used this way for few months only and it was suspended, so a clear and good motivation system should be reapplied at the hospital. The hospital can success by investing in its employees, so the
hospital managers should take this result on their consideration, in order to achieve their goals.

Based on observation data, nurses’ neutral awareness regarding human resource utilization may be a result of limiting training and specialized training to only novice nurses. Although that the hospital regularly holds training and educational programs at the hospital to improve their staff but actually these programs were short and provided only to new employees as a part of the orientation period. Furthermore, hospital leaders designed and conducted educational and training programs to specific specialty areas. For example, recently neonatal and pediatric high diploma was conducted to nurses but unfortunately, areas related to quality of care were not included in the training. Training programs should be satisfactory to all nurses and lead to the desired goal. Most organizations attribute their success to their employees and hence consider the workforce as of paramount importance. Because the staff members of any organization are a real asset, they are essential to achieve organizational objectives (Al-Attal, 2009). So it is recommended to plan well for these in-service programs and to be followed by evaluation measures to assess the effectiveness of the in-service and educational programs. Furthermore, this evaluation will help in facilitating selection of new training programs which will have better effects on staffs.

Based on observation data, nurses with higher educational level such as master degree showed better understanding of JCIA process, quality care and patient safety concepts. Therefore, continuous education department at the hospital should have a clear vision to upgrade some of staff to have higher degree in quality and patient safety by coordinating with specialized educational institutes. Since educational and in-service training programs will develop the staff which will enable them to deliver high quality health care to the public. Moreover, policy makers at Palestine can use their authority to develop national training programs for health care human resources to enable them to deliver high quality
health care to the public, and make all health workers from different areas to participate so they will benefit from other experience.

Table 4.5 The nurses’ point of view of human resources utilization on quality of care and patient safety

<table>
<thead>
<tr>
<th>Human Resources Utilization</th>
<th>M</th>
<th>PMS</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1. Nurses are given education and training in how to identify and act on quality improvement opportunities.</td>
<td>3.47</td>
<td>69.5%</td>
<td>0.99</td>
</tr>
<tr>
<td>F2. Nurses are given continuous education and training in methods that support quality improvement.</td>
<td>3.45</td>
<td>69.0%</td>
<td>1.00</td>
</tr>
<tr>
<td>F3. Nurses are given the needed education and training (through nursing education Programs) to improve job skills and performance.</td>
<td>3.48</td>
<td>69.7%</td>
<td>1.21</td>
</tr>
<tr>
<td>F4. Nurses are rewarded and recognized (e.g. financially and/or otherwise) for improving quality.</td>
<td>3.08</td>
<td>61.6%</td>
<td>1.38</td>
</tr>
<tr>
<td>F5. Inter-departmental cooperation to improve the quality of services is supported and encouraged.</td>
<td>3.56</td>
<td>71.2%</td>
<td>1.26</td>
</tr>
<tr>
<td>F6. The hospital has an effective system for make suggestions to management on how to improve quality.</td>
<td>3.54</td>
<td>70.8%</td>
<td>1.26</td>
</tr>
<tr>
<td>Total</td>
<td>3.43</td>
<td>68.6%</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Figure 4.14 Human Resources Utilization Domain Results
4.2.4.4 Quality Management

Table (4.6) shows that the total mean score of the nurses point of view related to quality management is (3.72) and the total PMS is (74.3%) this indicate that most nurses had positive point of view related the impact of JCIA on quality management at AMICSH. Figure (4.15) shows that the majority of respondents (76.1%) agreed that the hospital encourages nurses to keep records of quality problems through documentation. Then followed by (75.3%) of respondent agreed that the hospital has effective policies and procedures to support improving the quality of care and services. Further, (74.8%) of respondents agreed that the hospital regularly checks equipment and supplies to make sure they meet quality requirements. Then, (74.1%) of respondents agreed that the services that the hospital provides are thoroughly tested for quality before they are implemented. The lowest PMS is (71.4%) the respondents agreed that hospital views quality improvement as a continuing search for ways to improve. The results showed that the hospital pay attention in the quality management field, since it is crucial to be sure that the equipment at the hospital are ready to be used in an effective, efficient and safe manner, moreover, the procedures that take place at the hospital also safe.

Provided services are consistently considered important to patients. Quality management activities aim to ensure that services provided to them are consistence with quality. According to the current study findings, nurses had positive perception related the impact of JCIA on quality management at AMICSH. The positive perception of quality management result is in line with Abolfotouh et al. (2014) and Khair (2015) where nurses had positive perception on the quality management. Moreover Diab (2011) found that both doctors and nurses had apperception about the standard of accreditations related to the quality management. Quality management activities leading to better quality outcome, minimize the cost and increase the benefits. This indicates that the hospital pays effort on
quality control and management; they take the proper measurements that improve the quality at the hospital.

As a part of hospital’s readiness to provide safe and effective care, it is required to check the equipment and monitor them regularly. By observing the instruments’ checking process at the hospital, it found that stickers that are usually used to show the time of checking of the instrument were changed without any test. Moreover, a head nurses support this view as he reported that no one reviews the equipment regularly unless something wrong happens to the devices. Healthcare organizations work to provide safe, functional and supportive facilities for patients, families, staff and visitors. To reach this goal, the physical facilities, medical and other equipment and people must be effectively managed (Al-Attal, 2009). Therefore it is recommended to the hospital to strictly initiate a clear policy to regularly check the equipment at the hospital since it is crucial for patient safety. Patient safety improvements have been linked to high-reliability safety interventions, including double checking.

AMICSH has its own policy and procedure book to provide safe and quality services, it was used widely at the hospital and is available to nurses. However, the observation data showed that new nurses did not know about the presence of policy book at the hospital. So it is recommended to hospital to introduce the book to new nurses in the orientation period. Moreover, as recommended by JCIA, the hospital designed a new checklist for minor procedure to be sure that these procedures are offered to patient in a safe way. Also, it aimed to establish a clear plan in improving the total quality at the hospital. Since this will help staffs participating to implement the plan. And the hospital ought to provide more time and effort on quality management at the hospital which will lead to high quality outcomes and a better delivery of patient care.
Table 4.6 The nurses’ point of view of quality management on quality of care and patient safety

<table>
<thead>
<tr>
<th>Quality Management</th>
<th>M</th>
<th>PMS</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1. The hospital regularly checks equipment and supplies to make sure they meet</td>
<td>3.74</td>
<td>74.8%</td>
<td>1.17</td>
</tr>
<tr>
<td>quality requirements.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2. The hospital has effective policies &amp; procedures to support improving the</td>
<td>3.76</td>
<td>75.3%</td>
<td>1.14</td>
</tr>
<tr>
<td>quality of care and services.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G3. The services that the hospital provides are thoroughly tested for quality</td>
<td>3.70</td>
<td>74.1%</td>
<td>1.18</td>
</tr>
<tr>
<td>before they are implemented.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4. The hospital views quality improvement as a continuing search for ways to</td>
<td>3.57</td>
<td>71.4%</td>
<td>1.22</td>
</tr>
<tr>
<td>improve.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G5. The hospital encourages nurses to keep records of quality problems through</td>
<td>3.81</td>
<td>76.1%</td>
<td>1.16</td>
</tr>
<tr>
<td>documentation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3.72</td>
<td>74.3%</td>
<td>1.17</td>
</tr>
</tbody>
</table>

Figure 4.15 Quality Management Domain Results
4.2.4.5 Use of Data

Table (4.7) shows that total mean score of the nurses perception of use of data is (3.46) and total PMS is (69.2%) this indicate that nurses had neutral point of view related to the use data at AMICSH. Figure (4.16) shows that the majority of respondents (70.8%) agreed that patients' complaints are studied to identify patterns and learn from them to prevent the same problems from recurring. Followed by (70.4%) the respondents agreed that the hospital does a good job of assessing current and future patient needs and expectation. Then, (69.7%) of the respondents agreed that the hospital uses data on patient expectations and/or satisfaction when designing new services. Furthermore, (69.1%) of the respondents agreed that the hospital uses data from patients to improve services. And the lowest PMS (65.9%) of respondents agreed that data on patient satisfaction are widely communicated to hospital staff; this is questionable because the quality department at the hospital published the data regarding patient satisfaction every 6 months at the quality folder at the health information system. This shows that nurses at the hospital had neutral point of view related the use of data, so the hospital should publish the data that gathered and inform the staff with the data, what is the important of this data and how to handle it.

Collecting data and using them is crucial for improving quality, hospital should regularly collect data from patients and family to improve the quality of services provided to them. Using collected data may help in introducing new services, change existing one, or finishing improper services. According to the current study findings nurses had neutral perception related to the use data at AMICSH. The hospital introduces a form to measure patients’ satisfaction, this form is filled up with the patient or patient’s relatives, every patient is given this paper before the discharge, and the form does not include patient’s identity. The form is one way of data collection. Abolfotouh et al. (2014) found in their study that accreditation perception was significantly associated with the use of data as a
domain of quality of care. But Khair (2015) found that there was a positive perception related the use of data at AVH. Nurse at current study had neutral point of view toward data use despite of publishing data regarding patients satisfaction regularly by the hospital managers AMICSH which may be explained by lacking of knowledge on interest for nurses about published reports, or they may don’t have the interest to know this data. Therefore, hospital should introduce a new way in disseminating their report to their employees to enhance their knowledge and cooperation.

Even though quality department usually shares the collected data from patients but staffs have difficulty in accessing this data. Based on observation data, data on patient satisfaction and expectations were not disseminated regularly to nurses. Moreover, the collected information was only used for statistics but not for driving improvement of the services inside the hospital. For example, patient complaints about the process of admission, discharge and the financial matters were taking longer time and getting complicated, so the complaints by patients were not taking seriously or handled properly, efficiently or quickly. The capability of the hospital to use data to improve quality may have direct effect on improving quality results and when lacking this may influence negatively quality improvement initiatives (Hughes, 2008). It is recommended to the hospital to successfully managed patients complaints in order to improve quality of care and to minimize their impact.

Table 4.7 The nurses’ point of view of use of data on quality of care and patient safety at AMICSH

<table>
<thead>
<tr>
<th>Use of Data</th>
<th>M</th>
<th>PMS (%)</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1. The hospital does a good job of assessing current &amp; future patient needs and expectation.</td>
<td>3.52</td>
<td>70.4%</td>
<td>1.31</td>
</tr>
<tr>
<td>H2. Patients’ complaints are studied to identify patterns and learn from them to prevent the same problems from recurring.</td>
<td>3.54</td>
<td>70.8%</td>
<td>1.28</td>
</tr>
<tr>
<td>H3. The hospital uses data from patients to improve services.</td>
<td>3.45</td>
<td>69.1%</td>
<td>1.13</td>
</tr>
</tbody>
</table>
### Table 4.8

<table>
<thead>
<tr>
<th>H4. Data on patient satisfaction are widely communicated to hospital staff.</th>
<th>3.30</th>
<th>65.9%</th>
<th>1.12</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5. The hospital uses data on patient expectations and/or satisfaction when designing new services.</td>
<td>3.48</td>
<td>69.7%</td>
<td>1.12</td>
</tr>
<tr>
<td>Total</td>
<td>3.46</td>
<td>69.2%</td>
<td>1.19</td>
</tr>
</tbody>
</table>

**Figure 4.16 Use of Data Domain Results**

**4.2.4.6 Staff Involvement**

Table (4.8) shows that total mean score of staff involvement is (3.85) and PMS is (77.1%) this indicate that nurses had positive point of view related to staff involvement at AMICSH. Figure (4.17) shows that the majority of respondents (79.5%) agreed that important changes were implemented at the hospital during the preparation for the JCI accreditation. Followed by (77.1%) of respondents agreed that they learned of the recommendations made to the hospital since the last survey (JCI inspection). Moreover, (76.5%) of respondents agreed that they participated in the implementation of the resulted from accreditation recommendations changes. The lowest PMS (75.3%) of respondents...
agreed that they participated in the changes that resulted from accreditation recommendations. These results indicate that nurses at the hospital involve widely in the process of accreditation, and participated in the change that result from the accreditation. This may be related to nurses’ initiation of change, and may be related to the empowerment of the hospital to their staff.

Studies found that involvement of staff is crucial in reducing resistance to change and particularly when implementing new initiatives in an organization (Seren & Baykal (2007) as cited in Abolfotouh et al., 2014). Significantly, the current study found that nurses had positive point of view related to staff involvement AMICSH. This finding is in line with some studies such as Al-Masabi & Thomas (2017), Khair (2015) and Al-gahtani et al. (2017) who found that nurses had a positive perception related to their involvement in the process of preparation and implantation of the JCI. In contrast Abolfotouh et al. (2014) found that staff involvement had neutral perception as perceived by nurses. Seren & Baykal (2007) argue that receiving quality certificate is a change and in their study found that the attitude of employees toward change was positive.

Involvement of the staff at the hospital quality activities will yield more benefits it will facilitate the quality change at the hospital and decrease the resistance, since the employees resist don’t like to change and like to maintain the same state. Staff involvement at all stages including recognition can be beneficial to achieving the ultimate goals of organization (Montagu D, (2003) as cited in Abolfotouh et al., 2014). So when the hospital involves the staff in its quality improvement activities staff will feel safe, moreover, staff belonging to hospital will increase, and this belonging will positively impact at the hospital financially (Parand et al., 2014).
The meetings that the hospital held with staff considered to be one way to involve them, as noticed. Quality department and safety officer at the hospital meet with staffs from every department at the hospital weekly, the aim of these meetings are to share some data about hospital, introduce new recommendation to department, those staff participating at the meeting carry the recommendations to all employees at the hospital, in this way nurses are being involved in the changes happened from accreditation. It is recommended to the hospital to change nurses who are participating in the meetings from each department regularly in order to include all staff in the process of change and improvement. Healthy work environments are sustained through fostering collaborative communication within the team inside hospitals (Hughes, 2008). Laschinger et al. (1997) found that the empowerment of staff nurses increased with greater responsibilities associated with their ability to participate in organizational decision-making. Work environment factors influence the perceptions of nurses as being supported in their work, having a sense of accomplishment, which would empower them to manage collaboratively effectively with their team (Hughes, 2008). This will make nurses practice nursing in “optimal” conditions.

It was noticed that the care provided to the patient was facilitated by the clear policies that applied at the hospital during and after the accreditation, and was facilitated by all staff at the hospital since all of them knew their responsibility and how to care patient in the better way, even so, it is recommended from the hospital to confirm that best treatment to the patients. Also the hospital supposed to involve staff in planning and take decisions regarding quality improvement activities at the hospital, so the nurses will effectively participate in the applying the related decisions. Which will increase the belongingness of staff.
Table 4.8 The nurses’ point of view of staff involvement to quality of care and patient safety

<table>
<thead>
<tr>
<th>Staff Involvement</th>
<th>M</th>
<th>PMS</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I1. During the preparation for the JCI accreditation, important changes were</td>
<td>3.98</td>
<td>79.5%</td>
<td>0.93</td>
</tr>
<tr>
<td>implemented at the hospital.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I2. You participated in the implementation of these changes.</td>
<td>3.82</td>
<td>76.5%</td>
<td>1.14</td>
</tr>
<tr>
<td>I3. You learned of the recommendations made to your hospital since the last survey</td>
<td>3.85</td>
<td>77.1%</td>
<td>0.98</td>
</tr>
<tr>
<td>(JCI inspection).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I4. You participated in the changes that resulted from accreditation recommendations.</td>
<td>3.76</td>
<td>75.3%</td>
<td>1.06</td>
</tr>
<tr>
<td>Total</td>
<td>3.85</td>
<td>77.1%</td>
<td>1.02</td>
</tr>
</tbody>
</table>

Figure 4.17 Staff Involvement Domain Results

4.2.4.7 Benefits of Accreditation

Table (4.9) shows that total score mean of benefits of accreditation is (3.87) and total PMS is (77.5%) indicate that nurses had positive point of view related to the benefits of accreditation on the AMICSH. Figure (4.18) shows that the majority of respondents (78.9%) agreed that accreditation enables the improvement of patient care. Followed by (78.5%) of respondent agreed that accreditation enables the development of values shared
by all professionals at the hospital. Furthermore, (78.1%) agreed that accreditation enables the hospital to be more responsive when changes are to be implemented. Then, (77.2%) agreed that accreditation enables the motivation of staff and encourages teamwork and collaboration. Also, (76.6%) of respondents agreed that accreditation enables the hospital to better respond to populations needs. And the lowest PMS (76%) the respondents agreed that accreditation enables the hospital to better use its internal resources (e.g. finances, people, time, and equipment). The results indicate that nurses view the accreditation as a useful method to improve quality.

Al-gahtani et al. (2017) argued that healthcare workers are amenable to participate in the accreditation process because of its apparent benefits, this may due to accreditation benefits to the hospital, continuous improvement of quality is one of the most important benefits which leads to continuous improvement that can be achieve by directed educational programs to staff. According to the current study findings nurses had positive point of view related to the benefits of accreditation on the AMICSH. This result is supported by Khair (2015) and Abolfotouh et al. (2014) who found that nurses had a positive perception related to benefits of JCI accreditation. Further, Al-Masabi & Thomas (2017) found that benefits of accreditation had highest mean. Moreover, Yildiz & Kaya (2014) found that nurses had generally high perception for the items concerning the benefits of accreditation. And Diab (2011) found that doctors and nurses had appreciation about the standard of accreditations related to the accreditation process and implementation. Health professionals can be motivated to engage positively in their organizations’ accreditation activities when working on a collaborative and supportive context. In doing so, their contribution can become a self-reinforcing loop whereby collectively they can support, validate and contribute to each other's’ learning and their organizations’ accreditation outcomes (Greenfield et al., 2011). Gaining the accreditation
will provide the hospital with many benefits, safety procedures will be provided to patients since the workers will follow a clear protocol, moreover, communication between staff improved, introduce educational programs to staff this can lead to staff development, and increase patient satisfaction (Gabriel et al. (2017)).

The results showed that the benefits of accreditation is noticeable, as some nurses stated that the care of patient at the hospital improved during and after accreditation, and this is observable since the care of patients follow a clear process. Moreover, buildings maintenance at the hospital continued for last 3 years. But another benefit of accreditation at the hospital is staff motivation, it is clearly at the hospital that even the salary which consider not a motivation is sometimes being late or postpone to another month so how to create a motivational climate if the basic isn’t available all the time. So it is recommended to the hospital to activate the motivational system that was suspended, the system could be simple. For instance a compliment paper from the manger to an employee will be a good motivator. Moreover, the hospital should create well known motivation system which will increase the production of the staff, will increase the competition between the employees so all of them will give the best at the caring of the patient which and the quality of care and patient safety. Diab (2011) argued that in order to put accreditation standards into practice the staff should be motivated all the time.

Hospital published that they revised the working procedures of different possess and act, this can be obvious since some of procedures are changed, for example, the preparation and administration of specific medications were changed to be more developed in order to comply with advanced care management models because some of these measures were inappropriate, Al-Masabi & Thomas (2017) noticed that even that some improvement in procedures occur due to accreditation but this improvement was not associated with better quality.
Table 4.9 The nurses’ point of view of benefits of accreditation to quality of care and patient safety at AMICSH

<table>
<thead>
<tr>
<th>Benefits of Accreditation</th>
<th>M</th>
<th>PMS</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Accreditation enables the improvement of patient care.</td>
<td>3.95</td>
<td>78.9%</td>
<td>1.09</td>
</tr>
<tr>
<td>16. Accreditation enables the motivation of staff and encourages teamwork and collaboration.</td>
<td>3.86</td>
<td>77.2%</td>
<td>1.15</td>
</tr>
<tr>
<td>17. Accreditation enables the development of values shared by all professionals at the hospital.</td>
<td>3.93</td>
<td>78.5%</td>
<td>1.13</td>
</tr>
<tr>
<td>18. Accreditation enables the hospital to better use its internal resources (e.g. finances, people, time, and equipment).</td>
<td>3.80</td>
<td>76.0%</td>
<td>1.08</td>
</tr>
<tr>
<td>19. Accreditation enables the hospital to better respond to populations needs.</td>
<td>3.83</td>
<td>76.6%</td>
<td>0.96</td>
</tr>
<tr>
<td>20. Accreditation enables the hospital to be more responsive when changes are to be implemented.</td>
<td>3.90</td>
<td>78.1%</td>
<td>0.91</td>
</tr>
<tr>
<td>Total</td>
<td>3.87</td>
<td>77.5%</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Table (4.10) shows that total mean score for organizational factor is (3.62) and the total PMS is (72.4%), total PMS is more than (70%) this shows that in total nurses point of view
regarding organization factor is positive. In conclusion, these factors can affect nurses’ point of view regarding application of JCIA standards therefore it is important to strengthen these factors at the hospital in order to facilitate the introduction of the JCIA standards.

Table 4.10 The nurses’ point of view of organizational factors on to quality of care and patient safety at AMICSH

<table>
<thead>
<tr>
<th>#</th>
<th>Organizational Factor</th>
<th>PMS</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leadership Commitment and Support</td>
<td>71.5%</td>
<td>3.58</td>
</tr>
<tr>
<td>2</td>
<td>Strategic Quality Planning</td>
<td>73.7%</td>
<td>3.68</td>
</tr>
<tr>
<td>3</td>
<td>Human Resources Utilization</td>
<td>68.6%</td>
<td>3.43</td>
</tr>
<tr>
<td>4</td>
<td>Quality Management</td>
<td>74.3%</td>
<td>3.72</td>
</tr>
<tr>
<td>5</td>
<td>Use of Data</td>
<td>69.2%</td>
<td>3.46</td>
</tr>
<tr>
<td>6</td>
<td>Staff Involvement</td>
<td>77.1%</td>
<td>3.85</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>72.4%</td>
<td>3.62</td>
</tr>
</tbody>
</table>

Organizational Factors PMS:

1. Leadership Commitment and Support: (71.5%)
2. Strategic Quality Planning: (73.7%)
3. Human Resources Utilization: (68.6%).
4. Quality Management: (74.3%).
5. Use of Data: (69.2%).
6. Staff Involvement: (77.1%).

Figure 4.19 Total Results
4.3 The Association between Quality of Care and Patient Safety with the Demographic Variables

To identify whether the differences between quality of care and patient safety with demographic variables (gender, age, department, years of experience, educational level, occupational category) were significant, ANOVA test was performed to assess if there are significant differences between nurses’ point of view toward the impact of JCIA in the quality of care and patient’s safety and the demographic variables.

The effect of demographic variables on nursing perception

Gender

To identify whether the differences were statistically significant between quality of care and patient safety and gender, independent samples test was used. Table (4.12) shows that there are no significance differences between males and females mean in relation to quality of care (P=0.365) and patient’s safety (P=0.396).
Table 4.11 Relationship between gender and nurses’ point of view related to quality of care and patient’s safety

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>Male</td>
<td>69</td>
<td>16.8986</td>
<td>3.4263</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>92</td>
<td>17.3478</td>
<td>2.83787</td>
</tr>
<tr>
<td>Safety</td>
<td>Male</td>
<td>66</td>
<td>25.1212</td>
<td>4.22270</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>91</td>
<td>25.6593</td>
<td>3.66733</td>
</tr>
</tbody>
</table>

Table 4.12 Independent Two Samples t Test

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Quality</td>
<td>Equal variances assumed</td>
<td>3.502</td>
<td>.063</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>-4.885-</td>
<td>-130.216</td>
</tr>
<tr>
<td>Safety</td>
<td>Equal variances assumed</td>
<td>.404</td>
<td>.526</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>-8.32-</td>
<td>-127.920</td>
</tr>
</tbody>
</table>

Statistically significance $P \leq 0.05$

Demographic variables (age, department, years of experience, educational level and occupational category)

To identify whether the differences were statistically significant between quality of care and patient’s safety with the demographic variables (age, department, years of experience, educational level and occupational category), one-way ANOVA was performed and showed no statistically significant relationships between the selected demographic data and nurses’ point of view toward the impact of JCIA on the quality of care (table 4.13).
To identify which specific years of experience was statistically significant, Tukey test was utilized. It showed statistically significant differences between less than 5 years and 5-10 years for the favor of level group 5-10 years and statistically significant differences between less than 5 years and 11-15 years for the favor of 11-15 years group (table 5-15). This result indicated that nurses who had 5-10 years of experience and 11-15 years of experience had higher view toward patient’ safety compared to nurses with less than 5 years of experience. It was also found no statistically significant relationship between the demographic data (gender, age, department, years of experience, educational level, occupational category) and nurses’ point of view toward the impact of JCIA on the patient’s safety (table 4.14).

Senior staffs the hospital participated widely in the preparation and application of JCIA standards, this can positively impact the attitude of senior nurses who were experienced comparing with less experienced nurses. (55.4%) of nurses were with less than 5 years of experience. So it is recommended to the hospital to deepen the understanding of less experienced staff about JCIA as they constituted a large portion inside the hospital. the observation data showed that less experienced nurses were unaware of the main concepts of JCIA and therefore hospital administrators have to design structured and targeted training that aim to emerge new nurses in the process of accreditation. Although qualitative results showed lack of relationships between education and quality of care and patient’s safety, the observation data showed that nurses with higher education level had better understanding of the concepts related to JCIA accreditation. The observation data also showed that novice nurses had limited knowledge about procedural book about safety measures and policies. Therefore, it is recommended that hospital administrators have to find more practical ways to make all nurses at the hospital aware of the process, policies, and standards elements of JCIA.
Table 4.13 Association between quality of care and patient’s safety with demographic variables (age, department, years of experience, educational level and occupational category)

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality Between Groups</td>
<td>10.443</td>
<td>2</td>
<td>5.222</td>
<td>.554</td>
<td>.576</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1432.292</td>
<td>152</td>
<td>9.423</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1442.735</td>
<td>154</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety Between Groups</td>
<td>10.022</td>
<td>2</td>
<td>5.011</td>
<td>.324</td>
<td>.724</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2306.189</td>
<td>149</td>
<td>15.478</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2316.211</td>
<td>151</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality Between Groups</td>
<td>240.305</td>
<td>20</td>
<td>12.015</td>
<td>1.295</td>
<td>.192</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1280.035</td>
<td>138</td>
<td>9.276</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1520.340</td>
<td>158</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety Between Groups</td>
<td>296.672</td>
<td>20</td>
<td>14.834</td>
<td>.964</td>
<td>.510</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2077.918</td>
<td>135</td>
<td>15.392</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2374.590</td>
<td>155</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Years of experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality Between Groups</td>
<td>125.052</td>
<td>3</td>
<td>41.684</td>
<td>4.791</td>
<td>0.003</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1296.451</td>
<td>149</td>
<td>8.701</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1421.503</td>
<td>152</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety Between Groups</td>
<td>83.599</td>
<td>3</td>
<td>27.866</td>
<td>1.907</td>
<td>.131</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2133.841</td>
<td>146</td>
<td>14.615</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2217.440</td>
<td>149</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality Between Groups</td>
<td>4.270</td>
<td>3</td>
<td>1.423</td>
<td>.146</td>
<td>.932</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1534.848</td>
<td>157</td>
<td>9.776</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1539.118</td>
<td>160</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety Between Groups</td>
<td>6.141</td>
<td>3</td>
<td>2.047</td>
<td>.132</td>
<td>.941</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2374.407</td>
<td>153</td>
<td>15.519</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2380.548</td>
<td>156</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Occupational category</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality Between Groups</td>
<td>15.485</td>
<td>4</td>
<td>3.871</td>
<td>.396</td>
<td>.811</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1523.633</td>
<td>156</td>
<td>9.767</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1539.118</td>
<td>160</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety Between Groups</td>
<td>22.203</td>
<td>4</td>
<td>5.551</td>
<td>.358</td>
<td>.838</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2358.345</td>
<td>152</td>
<td>15.515</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2380.548</td>
<td>156</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statistically significance P ≤ 0.05
Table 4.14 Tukey test for association between quality of care and years of experience

<table>
<thead>
<tr>
<th>Experience-category</th>
<th>Experience-category</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Confidence Bound</th>
<th>Confidence Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 5 years</td>
<td>5-10 years</td>
<td>-1.87843*</td>
<td>.62642</td>
<td>.017</td>
<td>-3.5060-</td>
<td>-.2508</td>
<td>-.2508</td>
</tr>
<tr>
<td></td>
<td>11-15 years</td>
<td>-3.12605*</td>
<td>1.15990</td>
<td>.039</td>
<td>-6.1398-</td>
<td>-.1123</td>
<td>-.1123</td>
</tr>
</tbody>
</table>

Statistically significance $P \leq 0.05$

4.3.1 Association between Quality of Care and Demographical Variables

The current study findings showed that there were no significant differences between the selected demographic data (gender, age, department, educational level, occupational category) and nurses’ point of view toward the impact of JCIA on the quality of care. But nurses with experience more than 5 years had positive point of view toward JCIA implementation. Interestingly Abolfotouh et al. (2014) has contradictory findings, they found that nurses with longer experience were less positive to quality of health care. The result indicated that experienced nurses have more positive perception related to quality of care comparing with less experienced nurses this can be related to involving senior nurses in the process of accreditation from the beginning which empowered them to implement JCIA. Moreover, the experienced nurses may feel that they are more educated comparing with novice nurses, so they may have positive perception. While Khair (2015) found that there were no statistically significant relationships between the demographic variables and nurses’ perception toward the impact of JCIA on the quality of care, he discussed that the educational programs about JCI and quality was introduced at the hospital and directed to all nurses, that why no significant differences was found in this domain. Therefore, this study can suggest that mobilizing all nurses whatever their age, gender, occupational category will be beneficial to seek their adherence to JCIA guidelines regarding quality of
care. However, further measures should be adopted by managers to encourage new staff’s willingness to implement quality of care measures by sharing information and keep all details about accreditation available to everyone else at all times.

4.3.2 Association between Patient Safety and Demographical Variables

The findings showed that there were no significant differences between the demographic data and nurses’ point of view toward the impact of JCIA on the patient’s safety. Which is in line with Khair (2015), that found that there were no statistically relationship between demographic variables and nurses’ perception toward the impact of JCI accreditation on patient safety, furthermore Jaber (2014) as cited in Khair (2015) found that there was no significant relationship amongst the nurses in Saudi Arabian accredited hospitals, on the basis of demographic data. This indicates that nurses perceived patient safety as an important element at the hospital. This is a significant finding to managers and leaders because it reflects a strong safety culture within the hospital, which may be related to that nurse’s major role.

4.4 Impact of Organizational Factors on Nursing Point of View

The association between dependent and independent variables was tested by using Pearson correlation analysis. Table (4.15) Shows that there is a positive correlation between quality of care and organizational factors: leadership commitment and support, strategic quality planning, human resources utilization, quality management, use of data, staff involvement and benefits of accreditation (P=0.001).
Table 4.15 Association between organizational factor and quality of care as perceived by nurse.

<table>
<thead>
<tr>
<th>#</th>
<th>Organizational Factor</th>
<th>Person Correlation(r)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leadership Commitment and Support</td>
<td>0.657</td>
<td>0.001</td>
</tr>
<tr>
<td>2</td>
<td>Strategic Quality Planning</td>
<td>0.518</td>
<td>0.001</td>
</tr>
<tr>
<td>3</td>
<td>Human Resources Utilization</td>
<td>0.321</td>
<td>0.001</td>
</tr>
<tr>
<td>4</td>
<td>Quality Management</td>
<td>0.428</td>
<td>0.001</td>
</tr>
<tr>
<td>5</td>
<td>Use of Data</td>
<td>0.301</td>
<td>0.001</td>
</tr>
<tr>
<td>6</td>
<td>Staff Involvement</td>
<td>0.478</td>
<td>0.001</td>
</tr>
<tr>
<td>7</td>
<td>Benefits of Accreditation</td>
<td>0.509</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Statistically significance P ≤ 0.05

Table (4.16) Shows that there is a positive correlation between patient’s safety and organizational factors (leadership commitment and support, strategic quality planning, human resources utilization, quality management, use of data, staff involvement and benefits of accreditation) (P=0.001).

Table 4.16 Association between organizational factor and patient’s safety as perceived by nurse.

<table>
<thead>
<tr>
<th>#</th>
<th>Organizational Factor</th>
<th>Person Correlation(r)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leadership Commitment and Support</td>
<td>0.635</td>
<td>0.001</td>
</tr>
<tr>
<td>2</td>
<td>Strategic Quality Planning</td>
<td>0.545</td>
<td>0.001</td>
</tr>
<tr>
<td>3</td>
<td>Human Resources Utilization</td>
<td>0.405</td>
<td>0.001</td>
</tr>
<tr>
<td>4</td>
<td>Quality Management</td>
<td>0.519</td>
<td>0.001</td>
</tr>
<tr>
<td>5</td>
<td>Use of Data</td>
<td>0.367</td>
<td>0.001</td>
</tr>
<tr>
<td>6</td>
<td>Staff Involvement</td>
<td>0.611</td>
<td>0.001</td>
</tr>
<tr>
<td>7</td>
<td>Benefits of Accreditation</td>
<td>0.584</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Statistically significance P ≤ 0.05

4.4.1 Association between Organizational Factors

The current study showed that there were statistically significant relationships in nurses’ point of view related to organizational factor (leadership commitment and support, strategic quality planning, human resources utilization, quality management, use of data and staff involvement) so the null hypotheses that there is no significance relationship
between organizational factors and nurses perception toward the impact of JCIA on quality of care and patient safety was rejected.

### 4.4.1.1 Association between Nurses’ Point of view and Leadership Commitment and Support

The current study findings showed that leadership commitment and support was significantly correlated with nursing point of view toward the impact of JCIA on quality of care and patient safety at AMICSH. This finding is in line with studies in Arabic country, Al-Masabi & Thomas (2017), Khair (2015) and El-Jardali et al. (2008) they found that leadership commitment and support were correlated with the nursing perception towards improvement in the quality of care and patient safety. Leaders at the hospital should be a role model for staff, leaders should initiate the change so the staff will follow them, and this will positively impact the view of nurses about leadership commitment and support in change (Parand et al., 2014). Therefore, this result highlighted the significant role that leaders’ commitment play in motivating staff to adopt changes inside their institutions. The result of current study showed that leadership commitment and support are important elements of quality improvement at the hospital, and their contributions at the quality improvement positively affect nurses’ perception.

Moreover, leaders should be supportive to the staff, in many means, either personally or financially to achieve the desired goals of the hospital.

### 4.4.1.2 Association between Nurses’ Point of View and Strategic Quality Planning

The current study findings showed that strategic quality planning was significant correlated with nursing point of view toward the impact of JCIA on quality of care and patient safety at AMICSH. This finding is in line with Al-Masabi & Thomas (2017) where leadership was a statistically significant positive correlation between strategic planning and quality
results. Moreover, Khair (2015) in his study found that quality planning was correlated with the nursing perception towards improvement in the quality of care and patient safety. This result argued that when hospital sets good planning, their staff and particularly nurses will be more positive toward implementing accreditation guidelines. Thus in order to increase the perception of nurses, strategic quality planning should be published to the nurses and should be clear and what resources need to reach the planned goals.

4.4.1.3 Association between Nurses’ Point of View and Human Resources Utilization

This study found that human resources utilization was significant correlated with positive nursing point of view toward the impact of JCI accreditation on quality of care and patient safety at AMICSH. This result is in line with Khair (2015) he found that human resources utilization was correlated with the nursing perception towards improvement in the quality of care and patient safety. High-quality outputs require high-quality inputs such as equipment's (Mosadeghrad 2014). Working with low quality or limited material and limited financial resources decreases employees’ productivity, increase job stress which in turn affects the employee quality of care.

By administering educational and training programs to nurses, hospital will grantee that safe and high quality services will be offered to the patients. Kabene et al. (2006) emphasized that a properly trained and competent workforce is essential to any successful health care system. Therefore, this study can assume that educational and in-service training programs will develop the staff and human resources which will enable them to deliver high quality health care to the public.

4.4.1.3 Association between Nurses’ Point of view and Quality Management

The current study findings showed that quality management was significant correlated with nursing point of view toward the impact of JCIA on quality of care and patient safety at
AMICSH. This result is in line with Khair (2015) the researcher found that quality management was correlated with the nursing perception towards improvement in the quality of care and patient’s safety. Moreover, El-Jardali et al. (2008) emphasized that quality management domain was a predictor for better quality results. Furthermore, Paccioni et al. (2008) found in their study that accreditation may foster better quality management practices. Therefore, this study argued that having positive point of view about JCI accreditation will improve quality management domain such as having more control on quality planning, and offer safe and reliable services to patient.

4.4.1.5 Association between Nurses’ Point of view and Use of Data

The current study findings showed that use of data were significant correlated with nursing point of view toward the impact of JCIA on quality of care and patient safety at AMICSH. This results in line with studies, Khair (2015), Abolfotouh et al. (2014) and El-Jardali et al. (2008) they found use of data domain was correlated with the nursing perception towards improvement in the quality of care and patient safety. Even though nurses at the hospital perceived use of data at neutral point of view, using of data at the hospital in improving quality of care and patient safety will positively impact on the nurse’s point of view. So the hospital should introduce a clear policy to use the data and benefits from them in improving the quality of services provided to patient and increase the level of patient safety.

4.4.1.6 Association between Nurses’ Point of View and Staff Involvement

The current study findings showed that staff involvement during accreditation process was significantly correlated with nursing point of view toward the impact of JCIA on quality of care and patient safety at AMICSH. Which is in line with many studies that concluded that employee participation contributed to the implementation of the best clinical and
management practices that would provide for continuing quality assurance and improvement of services provided by the hospital (Al-Masabi & Thomas 2017; El-Jardali et al. (2008) Abolfotouh et al. (2014) Al-gahtani et al. (2017) Khair (2015); (Yildiz & Kaya 2014). This study argued that staff involvement is an important element of increasing quality of care and patient safety at the hospital. Accreditation confirms that hospital employees, following manager’s decision, are engaged in the process of changing the manner of working that ensure safe medical practices, in order to obtain the best results in terms of healthcare effectiveness and efficiency and to prevent occurrence of undesirable events.

4.4.1.7 Association between Nurses’ Point of View and Benefits of Accreditation

The current study findings showed that benefits of accreditation was significantly correlated with nurses’ point of view toward the impact of JCIA on quality of care and patient safety at AMICSH. This finding is in line with Al-Masabi & Thomas (2017), Al-gahtani et al. (2017), Yildiz & Kaya (2014) they found that there was a statically significant positive association between quality results and benefits of accreditation. The researcher argued that the clear benefits of accreditation are increasing positively nurse’s point of view about the JCI accreditation.

4.5 Summary

In this chapter results were presented, demographic data of respondents were tested related to the dependent variables, dependent and independents correlation was tested, and the hypotheses.
Chapter Five

Conclusion

5.1 Introduction

The study aimed to examine nurses’ point of view toward the impact of JCIA standard on quality of care and patient safety at AMICSH.

The study results showed that nurses at AMICSH had positive point of view related to the impact of JCI accreditation on quality of care and patient safety. Moreover, nurses had positive point of view related to the leadership commitment and support, strategic quality planning, quality management, staff involvement and benefits of accreditation at AMICSH. But nurses had neutral point of view toward human resources utilization and use of data at AMICSH. This study added to the body of literature in field of quality, and showed how nurses perceived the quality improvements programs which will encourage hospital managers to adopt JCIA in their hospitals.

This study suggested that organizational factors (leadership commitment and support, strategic quality planning, human resources utilization, quality management, use of data and staff involvement) are major contributors in improving the quality of care and patient safety, moreover, these factors when dressed well, the point of view of nurses will be increase which will positively impact the quality of care and patient safety. The context in which health care organizations function is critical for successful organizational change, Values, point of view and policies are integral parts of this context and when intertwined with financial uncertainty such as in AMICSH, it led to major difficulties and inconsistencies in implementing changing strategies. Sustained measures for regular checking of equipment's, follow-up of patients’ complaints, sufficient resources were not
applied or maintained. Economic difficulties played main role in the failure to secure long-lasting quality improvement measures.

It is clear from this study that leadership commitment and support was the highest factor that affected the quality of health services provided, and is an important element of quality improvement at the hospital, and their contributions at the quality improvement positively affect nurses’ point of view.

The challenges that faced implementation JCI were that less experienced nurses had fewer points of view toward quality of care. Therefore, this study can suggest that further measures should be adopted by managers to encourage new staff’s willingness to implement quality of care measures such as mobilizing all nurses in order to have their adherence to JCIA guidelines regarding quality of care. Another important challenge that faced accreditation process was that about third of nurses in the sample had neutral point of view toward human resources utilization and data use at AMICSH. Therefore, hospital administrates should motivate nurses to participate in implementing of the accreditation process through conducting more educational workshops and training which should focus on enhancing nurses’ knowledge, understanding and willingness to contribute to quality improvement program.

The hospital should integrate the staffs in all hospital's process. The employees are the first line to care with the patient and their involvement is an impartment element toward improving the quality of care and maintaining patient safety within the hospital. Moreover, strategic quality planning is a vital way to improve the provided services to the patient, therefore it is suggested to seek staff opinion regarding current and future plans, since they are the one who will apply the proposed change. The hospital administration evaluated periodically the health services to ensure the patients' satisfaction. Data that were collected
from patients aimed to improve the quality of the provided care and to minimize shortfalls. Therefore, it is necessary to publish the data to all staff at the hospital to make them well informed about major areas of dissatisfactions among patients. The accreditation is a change, any change has its own benefits, therefore it is important to benefits from this change, for the patients, they want to be safe, high quality services provided to them, for the employees they need to be motivated, to participate in the change improvement and to deliver high quality services. In conclusion it is obvious that the success of any organization depend on man, so it is impartment to take care of his own interest and point of view.

**Further recommendations:**

**Recommendations for Future Researches**

1. More researches in quality and accreditation field to be conducted by the researchers in Palestine to deeply understand the effect of the quality programs.

2. Additional comparative studies are needed to understand the differences of nurses’ point of view between accredited and non-accredited hospitals.

3. Additional studies are needed including all hospitals at Palestine that have JCI accreditation to examine nurses and other professionals’ point of view on the accreditation.

4. To work on further researches to clearly understand the benefits of accreditation programs, and to understand obstacles and factors that affect complying with accreditation by using qualitative research.

5. In order to fill the gap in accreditation literature, more studies related to accreditation should be initiated, for example the financial effect of the accreditation on the hospital should be conducted.
References


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46. Khair, J. (2015). *Nurses Perception Toward the Impact of JCI Accreditation on Quality of Care and Patients' Safety at Augusta Victoria Hospital*. (Master Degree), Al-Quds University, Jerusalem-Palestine.


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## Appendix

### Appendix (1)

**JCIA Checklist**

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Does the hospital initiate a process to identify patients correctly?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Do departments at the hospital have a secure place for high alert</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>medication? (High concentration medication).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Is there a clear policy at the hospital to decrease infection rate?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Does the waiting time for patients to do related intervention (X-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>rays, Surgeries, Laboratories) are reduced?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Do patient admission and discharge process have less time at the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>hospital?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Do managers at the hospital make the resources at the hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>available such as equipment, medications?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Are data collected from patient analyzed to improve patient care?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Do hospital managers identify and plan for availability of resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>to provide patient with safe treatment?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Does hospital leadership ensure that there are clear educational</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>programs to develop their staff?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Do hospital leaders initiate and support (patient's safety) culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>at the hospital?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Is there a well-defined process available at the hospital to ensure</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>staff knowledge and skills are good for patients?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Are regular meetings take place at the hospital with nurses to</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>improve quality at their departments?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Are reports related to patient disseminated to staff to have idea</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>about them and how to use them?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Do nurses participate in planning for hospital improvement activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Are there clear motivational and reward systems available at the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>hospital?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Is continuous monitoring regarding equipment available and noticed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Are there educational and training programs available to all nurses</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>at the hospital in a satisfied way?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Are data easily accessible by staff to benefits from them?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Do nurses at the hospital involve in changes from accreditation?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Does accreditation facilitate the provided care to patient?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Do nurses understand the meaning of joint commission</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Do nurses at the hospital aware of JCIA process?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Do nurses at the hospital aware of JCIA standards?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Do nurses at the hospital aware of JCIA standards elements (components)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Do hospital revises the working procedures of different processes and acts? As an improvement continuous process.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Do nurses at the hospital understand the goals of JCIA?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Do nurses at the hospital have good knowledge about JCIA?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix (2)

Questionnaire

Dear nurses,

My name is Saif H. Deirya. I am a master's degree candidate at Al-Quds University. The goal of this questionnaire is to assess nurses’ perception toward the impact of joint commission international accreditation on quality of care and patient safety at Al-Makassed Charitable Hospital.

All the answers provided will be confidential and will be used by the researcher only. The questionnaire is anonymous and you are not required to put your name or any other identifiable data.

This questionnaire will take less than 15 min to be completed.

Participation in this study is voluntary, and you therefore retain the right to withdrawal from the study.

However, I highly appreciate your participation as your input will add to the findings of the study.

If you have any question you can contact me at my email: saef_de_2008@hotmail.com, or at my mobile: 0528547733.

Thank you for your cooperation and time
Part one (Section-A). Please fill in the following

Personal and Demographic Information

1. Gender:  {  } Male  {  } Female
2. Age: ………
3. Department: ………………………………………
4. How long have you been working in the hospital? ……… In years
5. What is your highest educational degree?
   {  } Diploma Degree  {  } Bachelors of Science
   {  } Higher Diploma  {  } Master's Degree
   {  } Other, please specify. ———
6. What is your occupational category?
   {  } Practical Nurse  {  } Staff Nurse  {  } Head Nurse
   {  } Supervisor  {  } Others, please specify ———
7. From 1 to 10, how do you rate the workload in the unit you work in?

   Not work loaded ------------------------------------------------- Very work load
   1  2  3  4  5  6  7  8  9  10
8. Did you have training related to the quality of patient care?
   {  } Yes  {  } No
9. If the answer to the question 8 is yes. In total how long was the training?
   1. Less than one week.
   2. 1 to 3 weeks
   3. More than 3 weeks.
10. If the answer to question 8 is yes. What was the training about?
    {  } ISO  {  } JCIA
    {  } Patient safety  {  } Infection control
    {  } Team building and team work  {  } Leadership and change management

Part Two

Please indicate the extent to which you agree or disagree that the statement characteristics your hospital by circling the appropriate response (1= Strongly Disagree, 5= strongly agree).
## B. Quality Results

Over the past 2 years, the hospital has shown

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1. Steady, measurable improvements in the quality of customer satisfaction.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>B2. Steady, measurable improvements in the quality of services provided to the administration (finance, human resources, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>B3. Steady, measurable improvements in the quality of care provided to patients.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>B4. Steady, measurable improvements in the quality of services provided by clinical support departments such as laboratory, pharmacy and radiology.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>B5. Maintain a high quality health services utilizing the available financial constraints.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

## C. Patient Safety Results

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1. Accreditation enables the improvement of patient safety at your hospital.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>C2. After accreditation the rate of hospital acquired infections has significantly reduced.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>C3. Accreditation improved medication use.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>C4. Accreditation reduced medication errors/incidents.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>C5. Accreditation notably lowered the rate of blood transfusion reactions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>C6. Accreditation increases the rate of successful code blue performance within the hospital departments.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>C7. There is an increase rate of hand hygiene compliance among hospital staff after accreditation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>C8. Accreditation significantly decreased the incidents of falling down among patients.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

## D. Leadership commitment and Support

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1. The Hospital management/leadership provides a work climate that promotes quality improvement and patient safety as a top priority.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>D2. Senior hospital executives provide highly visible leadership in maintaining an environment that supports quality improvement.</td>
<td>1</td>
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</tr>
<tr>
<td>D3. The top management is a primary driving force behind quality improvement efforts.</td>
<td>1</td>
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</tr>
<tr>
<td>D4. Senior hospital executives allocate available hospital resources (finances, staff, time &amp; equipment's) to improving quality.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>D5. Senior hospital executives consistently participate in activities to improve the quality of care and services.</td>
<td>1</td>
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<tr>
<td>D6. Senior hospital executives have articulated a clear vision for improve the quality of care and services.</td>
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</tr>
</tbody>
</table>
D7. Senior hospital executives have demonstrated an ability to manage the changes (e.g. technological) needed to improve the quality of care and services.  

D8. The senior executives have a thorough understanding of how to improve the quality of care and services.  

D9. Senior hospital executives establish confidence that efforts to improve quality will succeed.  

<table>
<thead>
<tr>
<th>E. Strategic Quality Planning</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1. Nurses are given adequate time to plan for improvements and test results.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>E2. Each department and work group within the hospital maintains specific goals to improve quality.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>E3. The hospital’s quality improvement goals are known throughout the organization.</td>
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<td>2</td>
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</tr>
<tr>
<td>E4. Nurses are involved in developing plans for improving quality.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>E5. Middle managers (Nursing Supervisors and Head Nurses) play a key role in setting priorities for quality improvement.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>E6. Patients’ expectations about quality play a key role in setting priorities for quality improvement.</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F. Human resources utilization</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1. Nurses are given education and training in how to identify and act on quality improvement opportunities.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>F2. Nurses are given continuous education and training in methods that support quality improvement.</td>
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<td>2</td>
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</tr>
<tr>
<td>F3. Nurses are given the needed education and training (through nursing education programs) to improve job skills and performance.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>F4. Nurses are rewarded and recognized (e.g. financially and/or otherwise) for improving quality.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>F5. Inter-departmental cooperation to improve the quality of services is supported and encouraged.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>F6. The hospital has an effective system for making suggestions to management on how to improve quality.</td>
<td>1</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G. Quality management</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1. The hospital regularly checks equipment and supplies to make sure they meet quality requirements.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>G2. The hospital has effective policies &amp; procedures to support improving the quality of care and services.</td>
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</tr>
<tr>
<td>G3. The services that the hospital provides are thoroughly tested for quality before they are implemented.</td>
<td>1</td>
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</tbody>
</table>
G4. The hospital views quality improvement as a continuing search for ways to improve.  
G5. The hospital encourages nurses to keep records of quality problems through documentation.

### H. Use of Data

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1. The hospital does a good job of assessing current &amp; future patient needs and expectation.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>H2. Patients' complaints are studied to identify patterns and learn from them to prevent the same problems from recurring.</td>
<td>1</td>
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</tr>
<tr>
<td>H3. The hospital uses data from patients to improve services.</td>
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</tr>
<tr>
<td>H4. Data on patient satisfaction are widely communicated to hospital staff.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>H5. The hospital uses data on patient expectations and/or satisfaction when designing new services.</td>
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### I. JCI Accreditation

#### Staff Involvement

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<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
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<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I1. During the preparation for the JCI accreditation, important changes were implemented at the hospital.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>I2. You participated in the implementation of these changes.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>I3. You learned of the recommendations made to your hospital since the last survey (JCI inspection).</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>I4. You participated in the changes that resulted from accreditation recommendations.</td>
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#### Benefits of Accreditation

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<tr>
<th></th>
<th>Strongly Disagree</th>
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<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I5. Accreditation enables the improvement of patient care.</td>
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</tr>
<tr>
<td>I6. Accreditation enables the motivation of staff and encourages team work and collaboration.</td>
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<tr>
<td>I7. Accreditation enables the development of values shared by all professionals at the hospital.</td>
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<td>5</td>
</tr>
<tr>
<td>I8. Accreditation enables the hospital to better use its internal resources (e.g. finances, people, time, and equipment).</td>
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<tr>
<td>I9. Accreditation enables the hospital to better respond to populations needs.</td>
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</tr>
<tr>
<td>I10. Accreditation enables the hospital to be more responsive when changes are to be implemented.</td>
<td>1</td>
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</tbody>
</table>

Thank you for your cooperation
Appendix (3)

Date: 26/4/2017
Ref No: 10/REC/2017

Dear Dr. Salam Al-Khatib,

Thank you for submitting your application for research ethics approval. After reviewing your application entitled “Nurses perception toward the impact of joint commission international accreditation on quality of care and patient safety at Al-Makassed charitable hospital” the Research Ethics Committee confirms that it is in accordance with the research ethics guidelines at Al-Quds University.

Please inform us if there will be any changes in your research methodology, subjects, plan and we would appreciate receiving a copy of your final research report.

Thank you again and wish you productive research that serves the best interest of your subjects.

Dina M. Bitar PhD
Research Ethics Committee Chair

Cc. Prof. Imad Abu Kishek - President
Cc. Members of the committee
Cc. file
Appendix (4)

Al-Quds University
Faculty of Health Professions
Nursing Department
Jerusalem-Abu Dies

2017/4/22

His Excellency Mr. Tarek Almasry
Manager of the Accreditation Unit
Makassed Charitable Hospital

The topic: "Facilitating the Nurse's Role in Improving the Quality of Care and Patient Safety"

Please conduct the research as requested above.

Managed by Programs and Projects Department

Tel: 02 279 753
Fax: 02 279 1243