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Thesis Approval

Assessment of Patient Safety Culture in Makassed Hospital; A tool for improving patient safety

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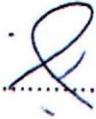
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Abstract

The study was held at Makassed Islamic Charitable hospital during March – May 2010.

The purpose of the study was to assess the patient safety culture among health professionals at Makassed Islamic Charitable Hospital in Jerusalem.

A sample of 300 health care professionals was selected using proportional stratified random sampling method. 251 completed surveys were returned back making a response rate of (83.7%). The Hospital Survey of Patient Safety Culture (HSOPSC), a self-administered structural questionnaire was used. The survey consists of 14 dimensions including 10 safety culture dimensions, and 4 outcome variables. This survey was developed by Agency of Healthcare Research and Quality (AHRQ). Data were analyzed using SPSS version 16.0.

The study results showed the strength areas at the unit/department level which were teamwork within unit and organizational learning –continuous improvement and the areas of potential improvement were staffing and non-punitive response for errors.

At the hospital level the hospital handoffs and transition was considered as an area for potential; improvement. The professional staff perception and grading of the safety level in their working area were satisfactory but the frequency of event reporting and the number of event report was considered a potential area for improvement. there were statistically significant differences in patient safety perception among nurses and physicians related to eight patient safety dimensions; supervisors/managers expectations & actions promoting patient safety, organizational learning-continuous improvement , hospital management support for patient safety feedback & communication about error, frequency of events reported , staffing ,handoffs and transitions and patient safety grade. There was a consensus upon the other dimensions among the health professional with no significant differences in their perceptions toward teamwork within units, overall perceptions of safety, communication

openness, teamwork across hospital, units non-punitive response to errors and number of events reported.

The results of this study emphasizes that more comprehensive reporting on adverse events should be developed, in a blame-free manner. Leaders must focus on building a “just” culture. A just culture is one that supports the discussion of errors so that lessons can be learned from them. Leaders can facilitate a culture of trust that encourages communication across clinical disciplines about such issues as the causes of medical errors and non-punitive approaches to reporting. Effective reporting system will attribute in monitoring and controlling patient safety, and also will provide data on the effectiveness of implemented measures for the purpose of learning and continuous improvement.

The study results recommend reviewing the hospital staffing and its adequacy to the workload and type of services provided in the hospital .It is also recommended to have a standardized approach for handoffs and transition during patient transferring.

It is also important to have an active Patient Safety Committee that meets regularly. An effective committee must be comprehensive leadership-level action committee that reviews all safety issues across the organization.

ملخص الدراسة

أجريت هذه الدراسة بين شهر آذار وشهر أيار من العام 2010 ، حيث تم اختيار عينه طبقية مكونه من 300 طبيب وممرض ومهن طبية مساندة و تم استخدام استبيان تم تطويره لهذا الغرض عام 2005 من قبل "وكالة أبحاث وجودة الرعاية الصحية " في أمريكا .

إن الهدف من هذه الدراسة هي تقييم ثقافة سلامة المريض بين العاملين في المجال الصحي من أطباء وممرضين، فنيين في مستشفى المقاصد الخيرية الإسلامية في القدس.

بلغت نسبة الاستجابة 83.7% وتم استخدام برنامج الإحصائي للعلوم الاجتماعية SPSS وبرنامج خاص لتحليل هذا النوع من المعطيات Microsoft Excel Data Tool .

أظهرت النتائج عناصر القوة وكذلك العناصر التي بحاجة إلى تحسين وتطوير في ثقافة سلامة المرضى بين العاملين على مستوى الأقسام ومستوى المستشفى.

على مستوى الأقسام، فقد كانت العناصر التالية عناصر قوة وهي العمل بروح الفريق في القسم والتعليم المؤسسي للتحسين المستمر وكان العنصرين المتعلقين بالتوظيف وبعدم الرد العقابي عند حدوث الأخطاء عنصران بحاجة إلى تحسين.

أما على مستوى المستشفى فقد كان الاتصال وتسليم المرضى بين مقدمي الرعاية الصحية، و عدد المرات التي يتم التبليغ فيها عن حدوث أخطاء عناصر ضعف و بحاجة إلى تحسين.

أظهرت الدراسة وجود تشابه في الإجابات بالنسبة لتصوير العاملين للعناصر الخاصة “ العمل بروح الفريق في القسم، النظرة الإجمالية لسلامة المريض في الأقسام، الانفتاح في الاتصال ، الرد غير العقابي على الأخطاء وعدد الأخطاء الطبية التي يتم التبليغ عنها. كذلك كان هنالك اختلاف ذو دلالة إحصائية بين الأطباء والتمريض في نظرتهم نحو دور المدراء والمشرفين في تعزيز ودعم سلامة المريض، والتعليم المؤسسي للتحسين المستمر، دعم الإدارة للاتصال والملاحظات حول الأخطاء وتكرارية التبليغ عن الأخطاء والتوظيف والاتصال ونقل المعلومات عن تسليم المرضى بين مقدمي الخدمة .

خلصت هذه الدراسة إلى عدة توصيات منها ضرورة وجود نظام للتبليغ عن الأخطاء الطبية داخل المؤسسة ، بهدف جمع المعلومات وتحليلها واستخلاص العبر منها لتحسين نظام الرعاية الصحية ، وهذا النظام بحاجة إلى دعم الإدارة وبيئة مبنية على العدالة التي تدعم المناقشة والحديث عن الأخطاء الطبية في جو منفتح، تؤكد فيه الإدارة أن الهدف من نظام التبليغ عن الأخطاء هو التعليم المستمر لغاية التحسين والتطوير للنظام الصحي وليس معاقبة الأفراد على الأخطاء .

توصي هذه الدراسة أيضا على مراجعة سياسات التوظيف والتأكد من ملائمتها لحجم العمل في المستشفى وتعزيز روح عمل الفريق بين الأقسام لتحسين الاتصال الفعال بين مقدمي الرعاية الصحية لضمان سلامة المريض .

توصي هذه الدراسة أيضا بتبني منهجية موحدة لتسليم المرضى ومعلوماتهم الطبية بين الأقسام أو بين المناوبات لتقليل الأخطاء التي قد تنتج عن عملية نقل المريض أو نقل معلوماته، وتوصي هذه الدراسة أيضا على ضرورة وجود لجنة فعالة على مستوى الإدارة العليا للمستشفى تعنى بكل القضايا ذات العلاقة بسلامة المريض لمتابعة الأوليات وتوفير المصادر الضرورية لعملها بصورة فعالة .

Table of Contents

CHAPTER ONE	XIII
Overview	1
1.1 Introduction	1
1.2 Problem Statement	3
1.3 Justification of the study	4
1.4 Context of the study	6
1.5 Aim of the study	8
1.6 Study objectives	9
1.7 Study limitation	9
1.8 Study assumptions	9
1.9 Summary	10
CHAPTER TWO	11
Literature Review	11
2.1 Introduction	11
2.2 International patient safety organizations	13
2.3 Literature review	18
2.4 Global studies in patient safety assessment	22
2.5 Summary	25
CHAPTER THREE	26
Conceptual Framework	26
3.1 Introduction	26
3.2 Concepts and definitions	27
3.3 Measurement of patient safety	29
3.4 Safety Culture Dimensions Measured in the Survey	30
3.5 Summary	37
CHAPTER FOUR	38

Methodology	38
4.1 Introduction	38
4.2 Study Design	38
4.3 Instrument	38
4.4 Psychometric of the survey:	40
4.5 Sampling Methodology	42
4.6 Data Analysis	44
4.7 Ethical consideration	45
4.8 Summary	45
CHAPTER FIVE	46
Results	46
5.1 Introduction	46
5.2 Characteristics of Respondents	46
5.3 Patient safety culture dimensions	49
5.4 Overall Results:	51
CHAPTER SIX	73
Discussion	73
6.1 Participants characteristics	73
6.2 Results Summary	75
6.3 Unit –level aspects of patient safety	76
6.4 Hospital –level aspects of patient safety	81
6.5 Patient safety culture outcomes	82
6.6 Comparison with AHRQ database 2010	82
6.7 Conclusion	84
6.8 Recommendations	86
6.9 Areas for future research	88
References	89
Annexes	95

Chapter One

Overview

1.1 Introduction

When entering a health care facility, whether it be an ambulatory surgery center, a hospital, a long term care facility, or a rehabilitation center, a patient hopes, if not expects, to receive an appropriate care in a safe environment.

Everyday people entrust their health to the care provided in a health care organization. In return, these facilities have an obligation to provide the safest care, treatment and service possible. It is this dedication that should compel healthcare organizations to continuously improve their services and processes to provide even better and safer care in response to the changing needs of their population served and the changing environment of the healthcare industry.

Many view quality health care as the overarching umbrella under which patient safety resides. The Institute of Medicine (IOM) in America considers patient safety “indistinguishable from the delivery of quality health care”. IOM indentify the components of quality care for the 21st century: quality care is safe, effective, and patient- centered, timely efficient and equitable. Thus safety is the foundation upon which all other aspects of quality care are built (<http://www.ARHO.org/qual/sixerror.htm>).

Patient safety was defined by the (IOM) as “the prevention of harm to patients”. Emphases is placed on the system of care delivery that (1) prevents errors; (2) learns from the errors that do occur; and (3) is built on a culture of safety that involves health care professionals, organization, and patient(Kohn et al., 2000).

The Agency for Healthcare Research and quality (AHRQ, 2003) expanded upon the definition of prevention of harm “freedom from accidental or preventable injuries produced by medical care”.

Since the (IOM) report “To Err Is Human”, many health care organizations have focused on reducing medical errors and enhancing the safety of patients. Despite this focus, the number of medical errors occurring in USA has not appreciably changed, and little progress in patient safety worldwide was achieved (<http://www.ARHQ.org/qual/sixerror.htm>).

The primary reason for the lack of progress is that organizations are not addressing the roots of the safety problems. Organizations must commit to designing reliable process that prevent or mitigate the effects of human error and establish a culture where team work thrives people talk about mistakes, and everyone is committed to learning and improvement, then patient safety become a property or characteristic of the organization and, by the definition, the organization starts to reduce errors (Madden et al., 2008).

Despite the improvement in clinical training and guidelines, information technology, process redesign, and industry regulations, one of key root causes of safety related problems remains the culture of the organization.

Before organizational culture can be transformed, it must first be understood and confronted. The starting point for changes is a safety culture assessment, that helps us to understand and measure the staff’s perspective on safety culture in our organization, and how that culture affects the provision of safe patient care. Once opportunities for improvement are identified, strategies for change can be developed and implemented.

1.2 Problem Statement

The following phrases summarize the problem issues in patient safety:

Patient safety emerged as a major health policy issue in late 1999 with the release of the Institute of Medicine's (IOM) report "To Err Is Human". The IOM report concluded that preventable medical errors are the fifth-leading cause of deaths in the US and cause as many as 98,000 deaths each year and increasing the total national costs of health between \$17 Billion and \$29 Billion. IOM called on all parties to make improving patient safety a national health policy priority (Spath, 2000).

The World Health Organization (WHO, 2002) estimates show that in developed countries as many as one in 10 patients is harmed while receiving hospital care. The harm can be caused by a range of errors or adverse events. In developing countries, the probability of patients being harmed in hospitals is higher than industrialized nations. The risk of health care-associated infection is much as 20 times higher than in developed countries.

(http://www.who.int/features/factfiles/patient_safety/en/index.html)

We are all aware that the costs of health care are rising, in part because of the costs associated with medical errors, thus we must invest in making our organizations safe for patients and providers and in making them economically sustainable (Youngber, 2004).

Safety is one of nine critical dimensions, efficiency, appropriateness, availability, timeliness, effectiveness, continuity, safety and respect and caring that define the performance of organizations (Kohn et al., 2000).

The patient safety is critical in improving quality and considered as the first domain of quality, refers to "freedom from accidental injury". The second domain refers to the provision of services in a manner that is consistent with current medical knowledge and best practice. The third domain exemplifies the ability to meet customer- specific values and preferences and customization of care (Spath, 2000).

was only (54%) ,and there is a big difference in the staff perception between USA hospitals and Makassed hospital in their perception about the management support for patient safety.

The lowest positive responses in both Makassed Hospital and in USA hospitals was for “*Nonpunitive Response to Error*”, and “*Staffing*” was the second lowest positive response in Makassed Hospital , while “ *Hospital Handoffs & Transitions*” was the second lowest positive response in USA hospitals .

Makassed Hospital was better than USA hospitals in three dimensions; “*Organizational Learning--Continuous Improvement*”, “*Feedback & Communication about Error*” and “*Hospital Handoffs and Transitions*”. This shows that communication between staff about errors or in transferring patient information is better in Makassed hospital than USA hospitals.

6.7 Conclusion

Patient safety culture assessments are a recognized tool in patient safety improvement, these assessments should be viewed as a starting point in the development of patient safety improvement interventions. This study permitted assessment of health professional perceptions of hospital patient safety culture dimensions. In particular, it allowed us to have a clear understanding of strengths and weaknesses of the current prevailing culture regarding patient safety at the hospital. This is an important exercise at the time when the hospital is introducing the JCI accreditation system at the hospital, where patient safety is in the core of the system.

The data demonstrated the urgent need of the hospital for formulating safety- oriented strategies and acquiring senior management support for safety actions in order to strengthen positive culture across hospital. A culture of safety, in which everyone accepts responsibility for patient safety is necessary before other patient safety practices are introduced, otherwise individuals expected to implement the safety initiatives are unable to effectively communicate or work together. This study indicated that, lack of an established system to report events

inhibited the hospital to review events systematically; this finding highlights the importance of developing a reporting system as a priority for this hospital. Staff general perception about an existing a punitive response to events is a main barrier facing any safety improving initiative. This study highlighted the importance of cultural change prior to any safety initiative.

Results show that there is statistically significant differences among nurses and physicians in their perception of eight patient safety dimension; Supervisors/Managers expectations & actions promoting patient safety ,Organizational learning-continuous improvement , Hospital Management Support for Patient Safety, Feedback & Communication About Errors, Frequency of Events Reported, Staffing, Patient safety grade and Patient safety overall perception. These Patient safety dimensions were more positively perceived by nurses than physicians except for two dimensions Handoffs and transitions and Patient safety grade.

The area for potential improvement at the unit/department level was the reporting system in the organization. Staff feels that their mistakes and event reports are held against them, and that mistakes are kept in their personnel files. This leads to underreported adverse events and errors and (77%) of the participants reported no or from one to two incident reports during the last 12 months any only (49%) of the participants frequently report these incidents. There is an urgent need to an effective reporting system that has leadership support and be easy to access. Often referred to as incident reports, these descriptions of harm to patients and “near misses” are critical to continuous learning about how to prevent errors within the organization. In a culture of safety, staff members are aware of safety issues and are free to report conditions that could lead to near misses or actual adverse events. This open exchange of information requires the management to have a non-punitive response philosophy that rewards reporting of safety issues and events and does not punish staff members involved in errors or adverse events related to system failures. The overall perception of patient safety as perceived by the participants was only (54%) answered positively and this result should be considered as a potential area for improvement by the hospital management.

Patient safety is dependent on many factors, including: an adequate level of resources; sufficient financing; an appropriate number of well-trained staff; appropriate buildings; use of high-quality material, technical equipment and medicines; the establishment of standard diagnostic and therapeutic procedures (clinical practice guidelines); a clear division of tasks and responsibilities; appropriate and smooth connections between processes; proper information systems; accurate documentation and good communication between health-care professionals and teams, patients and informal caregivers. The creation of suitable working conditions and atmosphere through: correct work organization, the reduction of stress and tension; the provision of good, safe, social and health conditions for health-service workers; and increased motivation reduces the role of the “human-factor” issues in patient-safety incidents. It includes prevention of causes contributing to (near) incidents and errors, such as: time-pressure on health-care providers (leading to insufficient time to communicate properly among professionals and with patients and other informal caregivers); frequent “handing over” of patients from one health-care professional to another (which leads to poor communication and errors related to poor transfer of information); shortage of staff; pressure on health-care professionals to quickly discharge a patient from hospital; intrusion of commercial elements in health care and side-effects of competing commercial insurance companies.

6.8 Recommendations:

⊖ Patient safety should be a top strategic priority for policy makers, managers, leaders and frontline staff. An organization can improve upon safety only when leaders are visibly committed to change and when they enable staff to openly share safety information. When an organization does not have such a culture, staff members are often unwilling to report adverse events and unsafe conditions because they fear reprisal or believe reporting won't result in any change.

The commitment to quality and patient safety should be articulated at the highest level of the health-care system and translated into policies and political support of public-health and

patient safety issues. Senior leaders should drive the culture change by demonstrating their own commitment to patient safety and providing the needed resources to achieve results. Their message about safety must be consistent and sustained, as it takes a long time for culture to change.

These recommendations are targeted to affect and promote patient safety in Makassed Islamic Hospital including:

- Defining the existing culture of the organization. The organization should introduce systems allowing it to regularly conduct safety-culture assessments and learn from them. It is recommended to repeat performing patient safety culture assessment periodically as a mean of tracking changes, possible improvements or degradations.
- Developing a safety culture in the organization through strong leadership and careful planning and monitoring. It also requires changes and commitment to safety at all levels of the organization, from the governance ,senior leaders to clinical teams and supporting staff;
- Improving Communication between individuals and teams and across organizational levels Communication must be frequent, cordial, constructive and problem-oriented. Organizational management must be kept informed about and involved in the improvement of patient safety.
- Standardizing an approach to hand-over between staff, change of shift and between different communication patient care units in the course of a patient transfer.
- Reporting of incidents should be promoted. At all levels, actual patient-safety incidents, problems and errors should be properly reported when they occur. Staff should be comprehensively trained in clinical and administrative procedures for responding to a serious error. At all levels, problems and errors should be treated openly and fairly in a non-punitive atmosphere. The response to a problem must not exclude individual responsibility, but should focus on improving organizational performance rather than on individual blame.
- Reviewing and investigating incidents thoroughly, transparently and fairly, free from hindsight bias. Problem analysis should focus on organizational performance and

continuous learning .All staff should be trained in teamwork-based problem solving and encouraged to use root-cause analysis to learn how and why incidents happen.

- Leaders need to pay attention to the impact of staffing numbers and workload that is adequate and have impact on the quality of patients' outcomes. Adequate health professional staffing is a key to improve the quality of patient care.
- Establishing a hospital Patient Safety Committee that meets regularly to review incidents and safety matters across the organization and recommend actions. The committee should include senior managers as well professional groups.

Although no single activity can offer the solution, the combination of activities proposed offers a roadmap towards a safer health care organization. With adequate leadership, attention and resources, improvements can be made. It may be part of human nature to err, but it is also part of human nature to create solution, find better alternatives and meet the challenges ahead.

6.9 Areas for future research

The results of this study have elucidated some avenues for further research:

- The relationship between patient safety culture and patient outcomes (mortality and morbidity).
- An in-depth assessment of the relationship between each patient safety dimension on patient safety indicators.
- Future research should not stop at the level of hospital wards, out-patient clinics, and ERs, but collect and analyze data on the micro-systems within them: nurse teams, doctor-nurse teams, operating teams etc.
- A comparative study on patient safety culture among EJH, governmental and private hospitals.
- Building and promoting an event reporting system within the Makassed hospital context.