Patient Safety Culture among Healthcare Providers in an Accredited and Non-Accredited Hospital in Cairo: A Comparative Study

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Abstract

Good clinical practice means providing care that is safe and effective without doing harm. This requires proper identification and acceptance of errors through sound safety culture. Although accreditation is on the rise, little is known on its impact on patient safety culture. Our aim is to study the impact of accreditation on patient safety culture and identify factors affecting safety culture. The study was carried out in two matched hospitals; an accredited hospital and a non-accredited one. A total of 312 health care providers answered an Arabic version of the hospital survey on patient safety culture. It was found that accreditation had a significant positive effect on all aspects of patient safety culture except staffing and event reporting. Also it was the only independent factor to affect patient safety culture among the studied factors with the accredited hospital having odds of 3.83 higher than the non-accredited one to have 50% or more total score of safety culture (95% CI 2.1-6.9). More than 75% of respondents from the accredited hospital scored ≥50% total safety culture versus only 43.8% from the non-accredited hospital, with difference of 32.2% ($p<0.001$).

Contents

List of Abbreviations

ACSNI	Advisory Committee on Safety of Nuclear Installations
AHRQ	Agency for Healthcare Research and Quality
APSA	Alexandria patient safety alliance
APSF	Anesthesia Patient Safety Foundation
ASU	Ain Shams University
CARF	Commission on Accreditation of Rehabilitation Facilities
CHSRF	Canadian Health Service Research Foundation
ECA	Executive Committee of Accreditation
EMRO	Eastern Mediterranean Regional Office
FDA	Food and Drug Administration
GAIN	Global Aviation Safety Network
GD	General Directorate
H1N1	Swine Flu
HSOPSC	Hospital Survey on Patient Safety Culture.
ICU	Intensive Care Unit
IOM	Institute of Medicine
IPSG	International Patient Safety Goals
ISQUa	International Society for Quality in Health Care
JCI	Joint Commission International

MOHP	Ministry of Health and Population
NPSF	National Patient Safety Foundation
PSFHI	Patient Safety Friendly Hospital Initiative
SOP	Standardized Operating Protocols
SPSS	Statistical Package for the Social Sciences
USA	United States of America
WHO	World Health organization

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Introduction

Medical interventions are, by their nature, risky interventions. Recent researches suggests that levels of harm range from 3 – 25% in acute care ***(Health Foundation, 2011 A)*** and the number of patient deaths associated with hospital care is more than 400,000 a year in developed countries ***(James, 2013)*****.** The toll is estimated to be much higher in developing countries **(*Wilson et al., 2012).*** Patient safety is the cornerstone of high-quality health care. The World Health Organization defines patient safety as "the prevention of errors and adverse effects to patients associated with healthcare" ***(WHO, 2014 A).*** Many efforts were carried out to improve patient safety worldwide and many entities are dedicated to that purpose.

In seeking to improve safety, one of the most frustrating aspects for patients and professionals alike is the apparent failure of health-care systems to learn from their mistakes. As consequence, the same mistakes occur repeatedly in many settings and patients continue to be harmed by preventable errors. One solution to this problem is reporting of adverse events: Internally within the healthcare organization, or externally through a system-wide, regional, or national reporting system ***(WHO, 2005).*** Reporting can help to identify hazards and risks, and provide information as to where the system is breaking

down. This, in turn, helps in targeting improvement efforts and systems changes to reduce the likelihood of injury to future patients. However, reporting of errors is usually hindered by the lack of sound safety culture ***(Canadian Patient Safety Institute, 2012).***

Too frequently, the current response to adverse events focuses on identifying, punishing and blaming health care providers ***(Canadian Patient Safety Institute, 2012).*** No blame culture is a phrase used to describe the tolerance of mistakes within an organization providing that people learn from these mistakes. It is usually associated with empowerment of learning within organizations ***(Oxford Dictionary of Human Resources Management, 2013).*** No blame culture is the corner stone to ensure patient safety and achieve patient safety culture in any health organization. However, recently it was replaced by the concept of just culture which balances between No blame and individual accountability ***(AHRQ, 2014 D).***

The safety culture of an organization is defined as the product of individual and group values, attitudes, perceptions, competencies and patterns of behavior that determine the commitment to, and the style and proficiency of an organization's health and safety management ***(ACSNI, 1993).*** Safety culture has become a significant issue for healthcare organizations striving to improve

patient safety ***(Kennedy, 2001)*** and some safety investigations have indicated that organizations need to change their culture to make it 'easy to do the right thing, and hard to do the wrong thing' for patient care ***(WHO, 2009 B).***

The concept of safety culture originated in risky industries where the large-scale technological disasters led to the development of the system approach for safer workplaces and safer cultures. James Reason took lessons from these industrial accidents and came up with the system approach through his famous Swiss Cheese Model to create a safer health care culture ***(WHO, 2009 C).***

Reason, 1998 identified four components for safety culture, these are: just culture, reporting culture, flexibility culture, learning culture. Many surveys were designed to assess patient safety culture in healthcare organizations for example: Hospital Survey on Patient Safety Culture (HSOPSC) and Safety Attitudes Questionnaire ***(Croner, 2012).***

Several studies conducted in Egypt highlighted the need to improve the patient safety culture among health-care providers ***(WHO, 2008; Abbas et al., 2008; Ahmed et al., 2011; Aboul-Fotouh et al., 2012; Abdelhai et al., 2012; Zein El Din and Abd El Aal, 2013; Gadallah et al, 2014).***

Accreditation is defined by Joint Commission International (JCI) as "a process in which an entity, separate and distinct from the healthcare organization, usually non-governmental, assesses the healthcare organization to determine if it meets a set of standards requirements designed to improve quality of care" ***(JCI, 2011).***

Accreditation is a voluntary approach used by many health care and social services organizations ***(Accreditation Canada, 2013).*** It is a learning and continuous quality improvement process, also accreditation program may play an educative, consultative and informative role and provides a platform for continued dialogue among various stakeholders ***(Nandraj et al., 2001).***

Although accreditation is on the rise ***(Cerqueira, 2006),*** little is known on its impact on quality of patient care and patient safety ***(Al Awa et al., 2011).*** Does accreditation improve patient safety culture? Studies suggest that accreditation has appositive effect on safety culture ***(Pomey et al., 2004; El Jardali et al, 2010; Greenfield et al., 2011; Hinchcliff et al., 2013***). However, none of these studies focused on the impact of accreditation on patient safety culture directly.