

Residents' Awareness about International Patient Safety Goals, Cross Sectional Study

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Abstract

Background: Patients' safety in health care organization is the most important goal that needs to be achieved and monitored in regular basis.

Objectives: To assess the awareness of the residents and understanding of the six International Patient Safety Goals (IPSGs) as per Joint Commission International Accreditation (JCIA) standards.

Methods: Cross sectional study, conducted in the form of a self-administered questionnaire. Closed ended questions have been distributed to 100 residents of different levels of training and different specialties at King Fahad Medical City (KFMC).

Results: Up to 90% of the residents are aware of the IPSGs with different scoring in each goal.

Conclusion: The results indicate that most of KFMC residents are aware of the IPSGs and its elements. Further work needed to close the gap and ensure best care delivery in safety organization.

Keywords: IPSGs; Patients Safety; Quality; Residents

Introduction

It is known internationally the importance of quality and safety of patients care which reflects the strength of healthcare institutions [1-2]. Putting in mind that, the residents who're positioned near the bottom of the hierarchy in medicine with their large amount of direct patient care, most importantly, the future nation's leaders, where is the need of sociocultural aspects of patient's quality and safety is to be raised.

Organizations culture defined as overall beliefs and behaviors that invade on the psychosocial environments of it [3]. KFMC, which is considered one of the big tertiary hospital that accept cases from whole kingdom of Saudi Arabia, and, consider a teaching hospital that are accredited in two consecutive evaluations by the JCIA, with that in mind, it has been pushed towards further

effort to improve the concept of patient safety and quality among young physicians.

While there is, more direction thought about the perception of patient safety and quality care internationally among residents it is still considered underdeveloped and most of the literature consists of study surveys of piloted curricula [4-6]. A Recent study reflected the need to improve overall content, structure, and integration of patient safety [7]. It has been approved that the efficacy of safety educations improving the costs, outcomes, and safety of patients [5-8]. However, there have been other studies examined the health care providers and trainees on patient safety and quality cultures [10-14]. The significance of the current research is based on the necessity of conducting a more precise analysis of patient's quality and safety from the standpoint of physicians prospective. The aim is represented by exploration of resident's perceptions about quality and safety in patient care based on IPSGs (Table 1). its

objectives are a determination of the prevalence of residents by application of quality and safety of patients based on IPSGs and exploration of factors which have directed effect on the level of resident and application quality and safety in patient care.

Sex	%
Male : Female	64:36:00
Levels	%
R1 : 2 : 3 : 4	30: 25: 25: 20
Susceptibility	%
Anesthesia	4
ENT	4
ER	13
Medicine	14
Neuro-medicine	6
OBY/ GYN	10
Orthopedics	5
Pediatrics	17
Pathology	6
Rehabilitations	5
Neurosurgery	5
Surgery	11

Table 1: Demographic characteristics of participant.

Methods

Subjects of the Study

The subjects of this study were the Saudi residents of KFMC who match with the following inclusion criteria: ranges from Residents level 1 to 4, different specialists within medical care, graduates from medical establishments, and hospitals. Exclusion criteria were graduation from the medical schools outside Saudi Arabia and engagement in primary health care systems. Total number of participants is 100. They were representatives of various units of KFMC (Table 2).

Names	IPSG Elements
1	Identify Patients Correctly
2	To Improve Effective Communications

3	Improve the safety of high alerts medication
4	Ensure right-site, right-patients, right-procedure Surgery
5	Reduce the risk of health care associated infection
6	Reduce the risk of patient harm from falls

Table 2: Elements of IPSGs based on JCIA19.

Design of the Research

This cross-sectional, IRB approved, is descriptive study conducted in the form of a self-administered questionnaire that built by the researcher based on the IPSGs elements in 20 composed close-ended questions. Each element considered in 2-3 questions that is applicable to psychosocial environments of KFMC. No any specific program has been used for data analysis. This method with these particular questions have not been used in above mentioned literature.

Procedure

The study has been performed according to the special procedure that consisted from the following phases: preparatory, implementation, and final. Preparatory phase included writing the proposal, development the questionnaire, and taking of the approved-choosing sample. During the next phase, the researcher collected data and sample and prepared the first progress report. Final phase incorporated statistical analysis of results, commencement manuscript writing and publication, and preparation of the final report. Duration of each phase was 2 months. Thus, the whole research took 6 months.

Results

There are major and supporting results which are presented in the logical manner from most to least important. The major results are directly related with the topic of safety and quality of rendering health care services in chosen medical institution and have the aim to identify the prevalence of residents by application of quality and safety of patients based on IPSGs refer to (Table 3). A 77% of the participants were found to be familiar with the IPSGs and the rest were not. Greatest part of examined providers (96%) understanding that the approved body, JCIA, certifies their facility. A 75% (70% of R1, 68% of R2, 96% of R3 & 65% of R4) of them chosen the correct numbers of IPSGs where the 25% are not.

10	IPSG 1	IPSG 2	IPSG 3	IPSG 4	IPSG 5	IPSG 6	Net % awareness of IPSGs
R1	53.3	53.8	64.9	56.7	88.3	55	62
R2	63	59.4	80	62.3	93.3	70	71.3
R3	50	61.3	84.1	66.9	98.6	72	72.1
R4	64	67.3	86.3	76.5	95	73	77
Total							70.6
Anesthesia	100	50	100	58.3	100	62.5	78.4
ENT	62	50	100	66.6	100	75	75.6
ER	76.9	84.6	87.1	69.2	100	61.5	79.8
Medicine	50	64.3	80.9	71.4	92.85	78.5	72.9
Neuro-medicine	41.6	50	77.8	55.5	88.8	75	64.7
Neurosurgery	70	60	93.3	73.3	100	50	74.4
OBY/GYN	35	45	93.3	66.6	90	75	67.4
Orthopedics	20	30	73.3	53.3	100	70	57.7
Pathology	58.3	75	55.5	55.5	77.7	58.3	63.3
Pediatrics	73.5	94.1	68.6	78.4	96	76.4	81.1
Rehabilitation	40	50	53.3	66.6	93.3	60	60.5
Surgery	63.6	72.2	63.6	72.7	87.87	68.1	71.3
Total							70.6

Table 3: The percentage of awareness per Level of the residents and per subspecialty.

On the other hand, the minor results showed that 86% acknowledge the way of accessing the policy and procedures that implemented on KFMC (73.3% of R1, 92% of R2, 96% of R3 and 80% of R4). A 31% of the residents agree that the best way of get familiar to the IPSGs is through implantation of it on medical curricula while 29% through Notebooks, 27% prefer the workshops, and 13% asked for lectures.

Discussion

Up to our knowledge, this study considers the first study that assess the perceptive of postgraduate trainees based on a well-known reference worldwide (JCIA). Although, there is a current orientation by a US health care systems based on an organized criterion of quality to measure the safety acknowledgment among the postgraduate's health care provider' [20-24]. The major findings of the current study reflect that medical personnel of KFMC have sufficient knowledge in safe and high-quality treatment of patients. The evidence given in this study shows that participants have a good knowledge about the inner procedures of their medical institution and their relevant role in the assurance of high quality prevention and safety of patients, because they clearly recognize that they can reduce the risk of patients' infection which consider the most common complication of hospitalized patients. However, this knowledge is variable in many aspects, like the risk of fall and prevention, and procedure of conducting surgery on qualified safe manner. Moreover, they have no any joint and clear vision

concerning appropriate communication with patients either by identification nor the interaction, which should be avoided. This research also showed that the acknowledge of the importance of patient's safety increased by year of practice, although it's not consider the insufficient to near graduate year. On the other hand, pediatrician, emergency, and anesthesiologist reflect the highest attitude towards patient's safety. Also, it determined the methods which are currently used and can be used by health care providers for obtaining information about IPSGs in the future and considered to be convenient: KFMC intranet, medical curricula, notebook, and workshop. Obtained results are consistent to the analyzed literature. In support to findings of Arora et al., insufficient treatment quality and safety are interconnected with failures in communication [25]. Improving the use medications one of major requirement in medicine, since it is considered one of the major injuries in practice [26]. Although, it is not expected from graduate trainees the competence in conducting high qualified procedures, but still demonstrating their understanding is crucial [27]. In a Cochrane review it show that education of nursing providers, as intervention, play role in preventing the risk of falls [28] but we cannot find the involvement of physician on that. Concurrent with high score by KFMC pediatrician, it seems that they have high attention on enrolling their residents on the safety of patients which is parallel to multiple studies published on that [13]. The literature supports that the confidence towards patient's safety is improved by the year of training [7]. The results of the study also

align with the research performed by Wong et al. who emphasized on the significant role of curricula in providing of awareness of practitioners concerning quality and safety improvement [17].

Moreover, these findings support the assumption of lack of practical support of theoretical knowledge of health care providers discussed by Torre D et al. and De Bunt [16-18]. and its trending worldwide to implement patient's safety among the under- and post-graduate healthcare providers to improve the expected outcome of care [29-35].

This research is rather relevant because its outcomes show that health care providers in the chosen medical institution has significant desire to assure safe and high-quality treatment, understanding of IPSGs but difficult to identify the gap in theoretical knowledge and skills and how to realize intends. Precisely developed questionnaire enabled to identify specific fields of patients' treatment awareness in which should be improved: communication, dealing with medication and electrolytes, surgery, and fall risks. These outcomes can be used for development a quality projects directed on the addressing of this issue and improvement of knowledge of health care providers in the most convenient manner to them. The theoretical implication of the current work can be represented by use of its outcomes for further studies of quality and safety in other medical facilities of Saudi Arabia.

The major limitation of this study is that the research was conducted only in one medical institution. The weaknesses are represented by the fact that the participants unequally represent various units of King Fahad Medical City and not similar sex distribution.

In summary, the current work reveals reasonable understanding of IPSGs elements in tertiary care setting, further work is needed to enhance quality and patient safety especially in the effective communication domain.

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