

Patient Safety Culture among Health Care Professionals in Saudi Arabia Hospital: Review of the Literature

Mohammed Fayez J Alhrbi, Soh Kim Lam

Abstract--- Many advanced countries, like the United States of America, United Kingdom as well as Australia have dedicated the past few decades to the safety of lives by increasing the quality of research in the health sector, especially in-patient safety culture as a means towards achieving an improved health sector. Many people believe that Saudi Arabia's health care system is among the best and safest medical care system in the world, but little research has been dedicated to unravel the practice of a safety culture existing within the care of health professionals in the hospital of the Saudi Arabia, as such, this research review the culture of safety literature within Saudi Arabia's hospital setting.

Keywords--- Patient Safety Culture, Health Care Professionals, Health Sector, Medical Care System.

I. INTRODUCTION

Literature review in several studies has revealed the fact that before the 2009 rankings, mortality became the only phenomenal that was been employed to measure health care rankings determinant, thus becomes a worthy outcome. Furthermore, studies showed that there exist other adverse events which may befall patients in hospitals that may not result in death^{1,2}. Patient safety culture is a newly emerging term in a medical care system. As explain by (AHRQ) which is the Agency for Healthcare Research and Quality, it is "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"³.

There exist several practices of the patient safety, ranging from the use of simulators, barcoding, crew resource management, as well as computerised physician order entry, that have been considered as possible strategies to avoid the error of the patient safety, in order to improve health care processes.⁴

Research from various health care settings has revealed the fact that medical errors have led to many death than from automobile accidents, breast cancer, based one the review of the Institute of Medicine (IOM, 2000). Constantly, a lot of issues related to patient safety are reported weekly in newspaper articles, as well as radio, television and medical literatures all over the globe.

II. RELATED WORKS

In the field of health care, the very first study regarding safety culture framework could be said to be credited to Parker and Hudson and was used by⁵, as a theoretical basis in order to equip the health care staffs with knowledge that has to do with safety culture at the ambit of primary health care organisations. Afterwards,⁶ employed it to

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assess NHS organisations. They adopted the model as it was based on extended empirical research, thus employing similar approach as well as adopting past successful methodology in a high-risk industry might as well be better for the safety culture assessment in a healthcare organisation.

Similarly, a different conceptual framework regarding safety culture was proposed as well for better understanding by ⁷. This model was made in three levels safety culture similar to the layers of an onion. A basic assumptions' was made in the first level and was implicit, unconscious, shared, and taken for granted over the entire organisation. For instance, if written rulle are crital in an organizational setting, therefore the safety rules will as well be regarded as critical. The attitudes of the members of an organisation was labelled as the next layer ⁷ as 'espoused values' which are in practice inform of those attitudes that are specific to safety rather than general organisational factors.

Generally, the above conceptual frameworks as explained were seen as useful for gaining an understanding of the assessment of safety culture. Contemporarily, a further clarification was made via the five-level framework of ⁸ for the present health care situation, thus, hospital can employed it to examine its safety culture. More importantly, safety culture is complex as well affected by several issues⁷. Hence, the need of gaining a deeper understanding and conducting qualitative study as the present research.

III. MATERIALS AND METHODOLOGY

This research used a case study method to depict the perception of in-patient involvement in patient safety culture in the hospitals of Saudi Arabia. The case study method was chosen because it can provide a rich understanding of the phenomenon under study.

3.1 Data Collection

Documentation Protocol

Because of the thorough nature of Interview protocol and to avoid reflexivity and being partial. Especially, response bias from the nurses in carrying out this research, much emphasis is devoted to the documentation protocol. A critical review carried out was on secondary data gathered from many sources, ranging from databases, books, government documents, reports, articles, and earlier studies carried out in this regard.

IV. RESULTS AND FINDINGS

We focused more to the identified characteristics of a safety culture practice as declared in the AHRQ ³. Hence, the characteristics as identified during the review were organised into **FOUR** major subcultures as:

1. Saudi Nurse working force: staff to patient ratio and working hours
2. Competencies
3. Management
4. Communication and Teamwork

4.1 Saudi Nurse Working Force: Staff to Patient Ratio and Working Hours

The most important subculture which carries almost 100% of the study throughout the review is patient to staff

working ratio, which later determines the patterns and attitudes of behaviour that measure the commitment to patient safety culture. As such, we classified Saudi Nurse working force as the most important subculture and characteristics of patient safety culture. In the last decade, the Saudi nursing profession has recorded a huge shortage setbacks, similarly to global occurrence. As a result, health organisations as well as Ministry of Health (MOH) dependently completed study on expatriate nurses ⁹. According to research carried out by ¹⁰ in their study, as it can be seen from the Table 1 below, it shows the question ‘we have enough staff to handle the workload’, which was answered with ‘fair’, and shows low level of staffing which returns to overwork and later reduces nurses’ productivity towards in-patient.

Table 1: Illustration of Dimension Employed for Safety Perceptions (n=255) ¹⁰

Measurement of patient safety	SD	Mean	Interpretaion
Aspect 1. Work area/unit			
In this unit, people treat each other with respect	1.07	3.75	Good
People support one another in this unit	1.03	3.71	Good
We use more agency/temporaray staff than is best for patient care	0.77	3.11	Moderate
Satff feel like their mistake are held against them	0.97	3.45	Good
We have enough staff to handle the work load	0.86	2.49	Fair
Staff in this unit work longer hours than is best for patient care	0.96	3.38	Moderate
When a lot of work needs to be done quickly, we work together as a team to get the work done	0.91	3.46	Good
We are actively doing things to improve patient safety	0.98	3.76	Good
Mistakes have led to positive change here	0.92	3.40	Moderate
It is just by chance that more serious mistakes don't happen	0.89	3.29	Moderate

Based on their research findings, factors ranging from staff to patient ratio, acceptable working hours, as well as the use of permanent staff were suggested to be considered as predisposing factors to an effective patient safety culture. Meanwhile, there was complain from most of the participants of a high patient to staff ratio, thereby make them to operate in ‘crisis mode’ which rquires more effort than as expected normally. As a result, a lot of efforts is been exhibited by the staffs in order to offset the shortages. Findings show that the respondent that required to work were approximately 61%, at the standard of 40h per week. In light of this, there is need for the allocation of sufficient work hours in order to ensure the best care is been receive by the patient.

4.2 Competencies

No doubt, it becomes a challenge to truly determine the factual components that makes a good characteristics of a healthcare organisation. Competency in terms of the educational and professional qualification of the staff, carried 70% of the study throughout the review of the literature. Therefore, we classified competencies as the second most important subculture and characteristics of patient safety culture. According to ¹¹, three major problems (social, educational, and organisational) existed as regard to the workforce of nurses in Saudi Arabia. The aspect of the education involve a lot of nursing personnel not possessing a B.SC in Nursing. Hence, there exist few hindrances for patients to receive a high quality nursing care, most especially those who requires an advanced level of nursing. Organisational issues makes the second aspect of the problem, and it involve nursing regulations as well as policies, coupled with retention and turnover rate of the nurses. The third aspect has to do with social issues, which involve

the working environment, such as job dissatisfaction, gender ratio, long working hours, as well as low wages which are all seen to be the cause of the high turnover rate. In view of the foregoing, there exist the need to address these issues in workforce planning in order to enhance the Saudi nursing sector. This is because one of the most crucial sectors in Saudi happens to be the health sector¹². Thus, the need for the present study review.

4.3 Management

The management has the overall authority and is fully in charge of staff welfare, thereby ensuring staff motivation and compelling them to work along with the mission of the hospital. According to¹³, the main motivations for the Saudi to consider in enhancing her health care professionals could be idealistic, ranging from caring for others, altruism, as well as wanting to help others. Additionally, a different motivation would be pragmatic, to focus on issues like flexibility, job security, as well as career advancement. This is because the main factors responsible for a large number of nurses considering leaving the profession shortly, are opportunities for promotion, working hours, and the desire to study further.

Based on this,¹⁴ concluded in their study that nurses have shown low perception towards management, thus recommended that the management of the hospital should utilise the high job satisfaction of nurses in order to increase their perception of management. As such, there can be a dynamic implementation towards patient safety culture by moving from a culture of blame to a safety one¹⁵.

4.4 Communication and Teamwork

The right to speak up by the staff, either for themselves or on behalf of a patient must not be taken away from hospital environment. Also, there must exist a spirit of collegiality of staffs and independent practitioners as well as cooperation among executives. Furthermore, the need to respect relationships which must be flexible and safe is as well important. Based on the study of¹⁶, highest positive scores were derived for safety culture composites, as well as feedback, teamwork within units, communication about the error, organisational learning, continuous improvement, management expectations, actions promoting and patient safety. Similarly, there was positive score of 75% features or more as an area of strength. The remaining areas were negatively ranked as aspects for probable development, as a result of the lowest scores derived for non-punitive reaction to error, transition, communication openness, staffing, hospital management support and handoff for patient safety.

Table 2: Communication Aspect¹⁰

In this unit, we discuss ways to prevent errors from happening again	0.91	3.91	Good
Staff will freely speak up if they see something that may negatively affect patient care	0.81	3.49	Good
We are given feedback about changes put into place based on event report	0.76	3.20	Moderate
We are informed about errors that happen in this unit	0.90	3.60	Good
Staff are afraid to ask questions when something does not seem right	1.01	2.89	Moderate
We feel free to question the decisions or actions of those with more authority	1.17	3.20	Moderate
Overall Aspect 3	0.52	3.38	Moderate

The Table 2 above was deduced from study carried out by ¹⁰. As it can be seen from the Table 2 above, and under aspect 3 Communication, most of the related question yielded a moderate answer which later result to the overall aspect to be 'moderate'. As such, there is a need to improve and strengthen further the aspect of communication as proposed by the previous study. Teamwork, on the other hand, proved to be good over the years as it was also reported in ¹⁰ study as shown in the Table 3 below.

The government's efforts to attract and retain more Saudis in the nursing profession encounter obstacles such as unappealing working conditions, limited options for balancing work and family responsibilities, and the perception of the role of nursing and the poor image attached to it. The main reasons for not choosing to nurse as a profession among Saudi women is to do with cultural values, family disagreement, gender desegregation, the low image of nursing and the night shift.[7] It is, thus, not generally viewed as a suitable profession for women. The government's efforts to attract and retain more Saudis in the nursing profession encounter obstacles such as unappealing working conditions, limited options for balancing work and family responsibilities, and the perception of the role of nursing and the poor image attached to it. The main reasons for not choosing to nurse as a profession among Saudi women are to do with cultural values, family disagreement, gender desegregation, the low image of nursing and the night shift.[7] It is, thus, not generally viewed as a suitable profession for women.

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Table 3: Illustration of Dimension of Patient Safety Perceptions (n=255) ¹⁰

Measurement of patient safety	SD	Mean	Interpretation
Aspect 1. Work area/unit			
We are actively doing things to improve patient safety	0.98	3.76	Good
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Mistakes have led to positive change here	0.92	3.40	Moderate
When a lot of work needs to be done quickly, we work together as a team to get the work done	0.91	3.46	Good

4.5 Discussion

The literature study above confirmed the fact that Patient safety culture like other settings also exhibits an organisational culture characterised by group values, attitudes, perceptions, competencies, and patterns of behaviour that determine the commitment to, and the style and proficiency of an organisation's health as well as safety management ³. However, this review has successfully classified the current challenges facing the patient safety culture existing within health care professionals in Saudi Arabia into four major subcultures: (i) Saudi working force: staff to patient ratio and working hours, (ii) Competencies, (iii) Management, and (iv) Communication and Teamwork. Therefore, in order to assist the hospital management, nurses, health care professionals, individual, researchers, and the government of Saudi Arabia, there is need to know the current challenges facing the positive characteristics of patient safety culture and thus directly addressed as well as improve on those challenges.

V. CONCLUSION

Patient safety culture is a complex phenomenon couple with many challenges. However, the present review has revealed many characteristics and current challenges facing the patient safety culture existing within health care professionals in the hospital of the Saudi Arabia. As such, in order to consider any hospital among those providing a safe environment for its patients, an improvement in all ramifications to the identified challenges must be put in place. This may rather be considered as a mere response from the nurses during the interviewing, which may reflect response bias as discovered in the previous study.

Lastly, the present review can also be seen as an effort made by the author's doctoral research in reviewing all the current study of patient safety culture in Saudi Arabia's hospital. As such, this research work gives an explicit role in further collection of experimental data in doing case studies.

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