



## SHORT COMMUNICATION

# Patient Safety Culture amongst Nurses in Qatar

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### Abstract

The vitality of developing a safety culture in healthcare settings has become increasingly emphasized following international investigations that highlighted failures in health care delivery. Weak patient safety culture has been identified as one of the major contributing factors to adverse events. This study used the English version of the Hospital Survey on Patient Safety Culture (HSOPSC [1]) to collect responses from nurses working in Qatar to determine their perceptions of patient safety culture. The highest rated culture dimensions were organizational learning, continuous improvement and teamwork within hospital units. The lowest rated dimensions were non-punitive responses to error and staffing issues.

### Keywords

Patient safety, Quality improvement, Culture, Hospital, Healthcare, Nurses, Qatar

### Abbreviations

HHQI: Hamad Healthcare Quality Institute; HMC: Hamad Medical Corporation; HSOPSC: Hospital Survey on Patient Safety Culture; IHI: Institute for Healthcare Improvement; ME: Middle East; MEF: Middle East Forum for Quality and Safety; NHS: National Health Strategy; QCHP: Qatar Council for Healthcare Practitioners; WHO: World Health Organization; WISH: World Innovation Summit for Health

## Introduction

Medical errors are one of the leading causes of death in the medical field [2]. Patient death occurring due to a preventable medical accident, while receiving health care, is estimated to be 1 in 300 [source WHO August 2019]. In fact, other figures published by the World Health Organization (WHO) show that 1 in 10 patients experience some sort of harm in a healthcare setting [3]. Therefore, undoubtedly patient safety has become integral to healthcare quality measures and as a result

has become one of the most widely discussed as well as monitored parameters for quality improvement by all healthcare organizations around the world.

The culture of patient safety is evolving worldwide. Largely, this culture is centered on the maintenance of patient safety and the prevention of medical harm and error. Patient safety culture is the ultimate outcome of multi-factorial interactions that include attitudes, skills, values and behaviors. Therefore, an effective implementation of patient safety culture requires a multitude of crucial interplaying factors such as effective/open communication, suitable policies, procedures compliance, appropriate staffing, environmental safety and security, supportive leadership, organization culture, and training and orientation [3].

Nurses, being at the frontline of healthcare, play a vital role in promoting patient safety and maintaining safety standards by being active in reducing medical errors. This study investigated the different perceptions around patient safety culture and the factors considered of utmost importance to the development and maintenance of this culture among nurses in Qatar.

## Materials and Methods

### Setting and context

Based on key findings from the 2015 WISH patient safety report [*Transforming Patient Safety: a Sector-Wide Approach, 2015*], which highlighted the global gaps and barriers to achieving the goal of zero patient harm, the WISH research team associates conducted a survey as part of their full participation in the Middle East Forum for Quality and Safety in 2018 (MEF 2018). Typically, the MEF is hosted by Hamad Medical Corpo-

ration (HMC), Doha, Qatar, in collaboration with the Institute for Healthcare Improvement (IHI), Boston, MA, USA. The MEF is the region's most successful and well established healthcare conference focused on healthcare quality improvement. The MEF is regularly attended by more than 3000 healthcare leaders and practitioners from around the globe. Nurses working in Qatar in attendance of the MEF 2108 conference between 23-25 March 2018 were surveyed and asked different questions on their personal experiences and perceptions of patient safety culture.

## Design

A descriptive, cross-sectional design using self-report questionnaires was used.

## Sample

The conference delegates were comprised mostly of healthcare practitioners and frontline workers such as physicians, nurses, midwives and other healthcare professionals, advocates, policymakers and leaders in the field. Nurses visiting the WISH booth during the conference were invited to participate in the survey. Participation was completely voluntary and anonymous.

## Technique

The survey was conducted in paper form and included both quantitative and open ended, qualitative questions. Respondents used a Likert scale questionnaire when answering items. This scale is the most broadly used method for scaling responses in survey studies. The survey questions ask the person to indicate their level of agreement; from strongly agree to strongly disagree, in order to obtain a holistic view of people's opinions and their level of agreement. A total of 167 surveys were collected and analyzed using STATA, a general-purpose software package for statistics and data science commonly used in public health research.

## Instrument

The HSOPSC was used to assess patient safety culture among nurses. While this is a tool that was originally used to assess patient safety among nurses in the USA, it has since been used internationally (including the Middle East [4,5]). The HSOPSC has 12 different dimensions to measure perceptions on patient safety culture. These include: Communication openness, feedback about errors, transitions and handoffs, management support for patient safety, non-punitive response to error, organizational learning and continuous improvement, staffing, supervisor/manager expectations, teamwork across units, teamwork within units, overall perceptions of safety and frequency of events reported.

## Results and Discussion

Nurses, being at the frontline of healthcare, play a vital role in promoting patient safety and maintaining safety standards by being active in reducing medical er-

rors. This study investigated the different perceptions around patient safety culture and the factors considered of utmost importance to the development and maintenance of this culture among nurses in Qatar.

Overall, vast improvements in the area of patient safety and quality of healthcare services over the past years with an increased emphasis on patient safety issues and quality of care delivered. Examples comprise i) Patient and family involvement in care, ii) Improving medication safety, iii) Reducing healthcare associated infections, iv) Preventing falls and pressure ulcers (bed sores), and v) Improving reporting systems [from presentation at the 4<sup>th</sup> International Conference on Patient Safety (ICPS 2019), Islamabad, Pakistan].

An earlier investigation in 2016 conducted a voting survey on what are the elements and barriers most critical to improving patient safety culture in the Middle East region. The results of the survey showed that leadership commitment was the most critical element to improving patient safety whilst fear of legal punishment was considered the greatest barrier to improvement (unpublished data, presented at Apollo 8<sup>th</sup> International Patient Safety Conference 2019, Hyderabad, India). In our continued effort to assess patient safety culture in Qatar this short study provides further insight. The responses were categorized based on the different measurable composites mentioned above. Results are summarized and presented in [Figure 1](#). Some composites measured very positively such as organizational learning and continuous improvement scoring the highest rate (89% positive responses), this was followed by team work within a unit scoring 88% then management support for patient safety scoring 73%. While others measured negatively such as non-punitive response to error (scoring only 28%). This was the composite with the least positive responses, thus, emphasizing the view that nurses often feel that their mistakes are held against them and recorded in their personnel file. The second least scoring composites were adequate staffing/staffing challenges with a score of 35% followed by case handoffs and transitions of shifts reporting 41% ([Figure 1](#)). These results present opportunities not only for patient safety/healthcare quality improvements but also have implication for framing future policies. For instance, the non-punitive response error finding could be a key policy target to foster a just, safe culture amongst first-line healthcare workers. Additionally, capitalizing on team camaraderie finding to resolve issues surrounding handoffs and transitions by implementing policy procedures that enhance information and communication flow. Interestingly, communication openness composite score was only 51% indicating room for required improvement.

## The successful strides of Qatar in the patient safety area have been largely driven by the following:

**Leadership:** Qatari healthcare leaders exhibited the

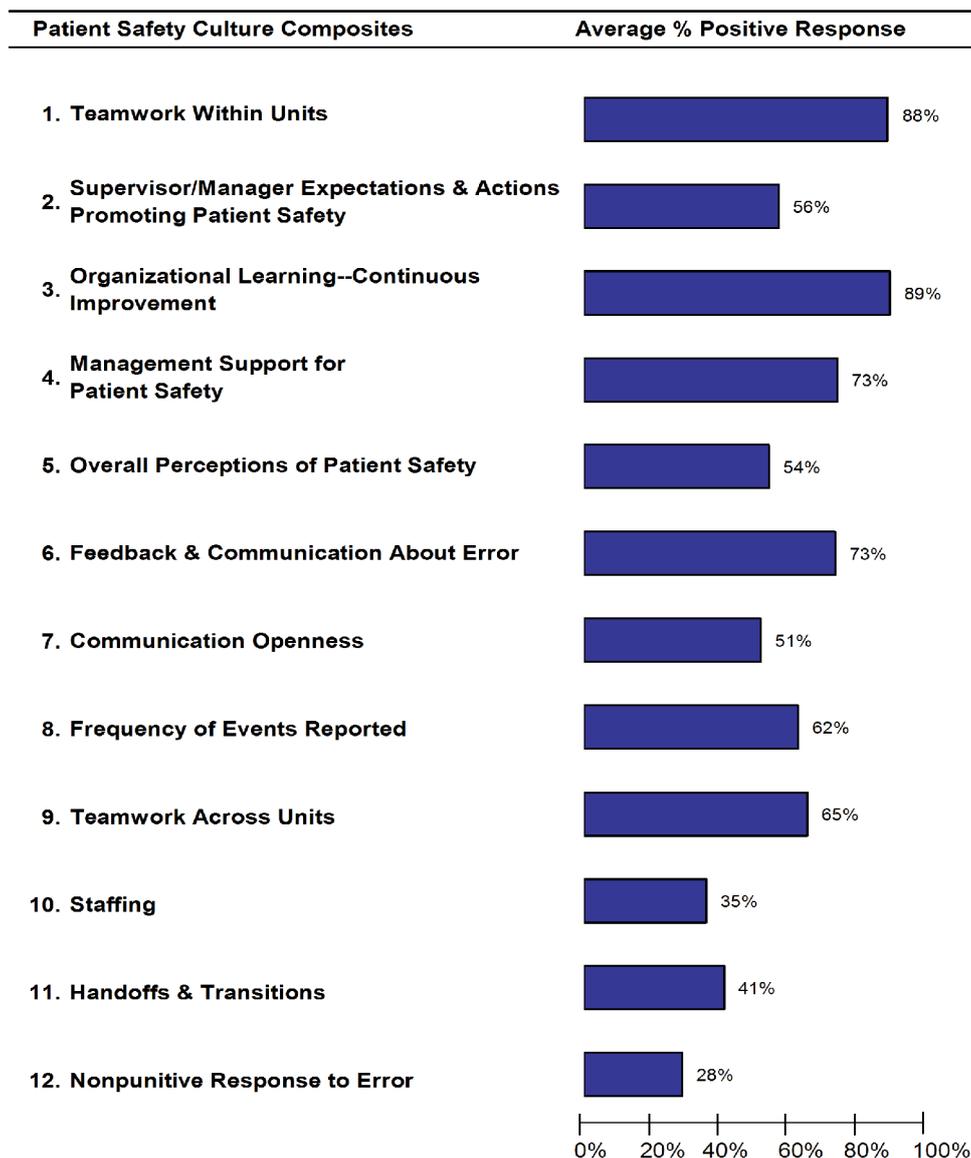


Figure 1: Patient safety culture composites and survey outcomes.

strongest commitment to patient safety nationally. Patient safety has been incorporated into the National Health Strategy (NHS) 2018-2022. Furthermore, leadership acting to strengthen and expand existing programs like infection prevention and control, and working to enhance other relevant national programs. Finally, they effectively empowered patients and their families to put them at the heart of health services so that they are able to derive the maximum benefits from it. That is, patients can be equal partners in their healthcare decisions.

**System improvement via collaboration:** The leadership and regulatory bodies initiating a national patient safety collaborative with Hamad Healthcare Quality Institute (HHQI) aimed at building a learning network to encourage healthcare systems improvement across the board. Core focus areas have been sepsis mortality reduction, venous thromboembolism (VTE) reduction and patient flow and access improvement.

**Regulations and policies:** The Ministry of Public Health in Qatar issues guidelines and plays a regulato-

ry role. The Qatar Council for Healthcare Practitioners (QCHP) and the Healthcare Facility Licensing and Accreditation Department oversees registration and licensing, accreditations and determining fitness to practice [presentation at the Apollo 8<sup>th</sup> International Patient Safety Conference 2019, Hyderabad, India]. These agencies strive to formulate guidelines and policies that are patient safety centric.

Future directions in patient safety and nurses' involvement should embrace the following:

- Engage nurses during Qatar National Patient Safety Week in September of every year.
- Continue hosting the Middle East Forum for Quality and Safety making it a premier learning event for front-line healthcare workers.
- Provide professional development and hospital-based training for nurses on patient safety.
- Encourage research collaborations on patient safety.
- Develop pan-policy on patient safety.

## Conclusion

This study provides a general overview of the perceived safety culture among nurses in Qatar. Our results show that while patient safety culture is generally well executed, with overall positive responses to the different measured composites, safety culture is yet to be fully developed in Qatar. Initiatives are needed to improve staffing, handoffs and transitions, as well as non-punitive responses to medical errors. Similar to global trends, error reporting should be viewed as a strategy to learn from mistakes and an initial step to create patient safety culture.

## Acknowledgements

The author wishes to acknowledge the Qatar Foundation WISH research associates for their study input, conducting the survey and helping with investigation logistics. The author also acknowledges the contribution of Dr. Manar Elhassan, Associate Professor of Biostatistics and Epidemiology at Qatar University for her assistance with data analysis for this project. The author wants to thank his previous institution for continued support.

## Conflict of Interest

None. The author declares he has no financial interest. There are no other conflicts existing or competing interests.

## Declarations

### Ethics approval and consent to participate

None applicable.

### Consent for publication

None Applicable.

## References

1. Westat R, Sorra J, Gray L, Streagle S, Famolaro T, et al. (2016) AHRQ Hospital Survey on Patient Safety Culture: User's Guide. Contract No. HHS290201300003C, AHRQ Publication No. 150049--EF (Replaces 040041-), Agency for Healthcare Research and Quality, Rockville, MD.
2. Kohn LT, Corrigan JM, Donaldson MS (2000) To Err is Human: Building a Safer Health System. Institute of Medicine, Washington, DC.
3. World Health Organization (2012) WHO Western Pacific Region. Patient Safety Fact Sheet.
4. (2012) The Joint Commission on the Accreditation of Healthcare Organizations: Sentinel Event Data - root causes by event type 2012.
5. Ammouri AA, Tailakh AK, Muliira JK, Geethakrishnan R, Al Kindi SN (2015) Patient safety culture among nurses. *Int Nurs Rev* 62: 102-110.