The Impact Of The Covid-19 Pandemic On Patient Safety Culture: Are We Prepared?

Karthikayini Krishnasamy,
Nursing Department UMMC,

ABSTRACT

The coronavirus disease 2019 (COVID-19) pandemic has led to unprecedented challenges on healthcare systems globally, raising concerns that poor morale and burnout could adversely affect patient safety culture. We, therefore, evaluated the safety culture among staff at a teaching hospital to determine the effects of the COVID-19 pandemic on patient safety culture. In addition, changes in safety culture were also evaluated across occupational groups and COVID-19 experience**.** The Safety Attitudes Questionnaire (SAQ) was used to investigate safety culture domains, which was administered electronically in the English and Malay language using the GoogleformTM platform for the intra-pandemic (2021) wave. Staff members were invited to participate through a pop-up window upon login to the electronic staff portal. Comparisons were made to responses in the pre-pandemic (2018) staff survey which also used the SAQ.

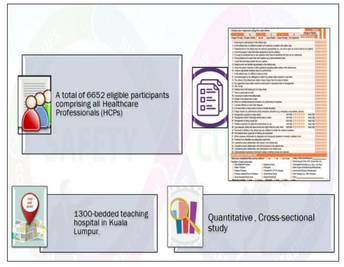
CONTACT

Karthikayini Krishnasamy
Universiti Malaya Medical Centre
karthikayini@ummc.edu.my
+60162231623

INTRODUCTION

Patient safety is increasingly recognized as a global health concern because of a staggering number of healthcare related injuries and deaths. It is difficult to measure patient safety parameters in healthcare due to LACK of standardized definitions and systematic data collection and the reliance on self-reporting. Organizations with a positive safety culture are known for their awareness of risk, communications founded on mutual trust, by shared perceptions of the importance of safety and by confidence in the efficacy of preventive measures, and willingness to support improvement activities. The aim of this project is to identify potential changes in patient safety culture during the COVID-19 Pandemic. Safety culture was assessed using Safety Attitude Questionnaire (SAQ) with 36 likert questions.

METHODS AND MATERIALS











RESULTS

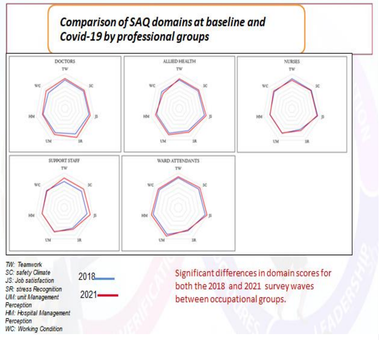
6562 potential respondents, 3175 (48.4%) completed the questionnaire. 1465 (46.8%) had needed to self-isolate for close contact, 225 (7.1%) were infected, 1000 (31.5%) were redeployed and 3042 (95.8%) were vaccinated. 1860 individuals had answered both 2018 and 2021 surveys. Differences existed in occupational groups, for close contact, infection, redeployment, and vaccination. Gender and years of experience were also different for redeployment. A similar percentage agreement was obtained for all SAQ domains overall for 2018 and 2021. Visible improvements were observed in SAQ scores for doctors and support staff in 2021 compared to 2018. Poorer SAQ scores were observed in those who had close contact or infection, but better SAQ scores were observed in those who were redeployed.
Comparisons were made between 2018 pre-pandemic domain scores for all 5274 respondents with 2021 intra-pandemic domain scores for all 3175 respondents for individual domains of the SAQ. Additional comparisons were also made according to occupational groups. Percentage agreement scores were highest overall for job satisfaction 72.3% and 71.3%, followed by teamwork, 67.0%, and 66.5% for both 2018 and 2021. Perception of unit management (64.2 vs 64.3%), perception of hospital management (63.9 vs 63.7%), working conditions (62.9 vs 61.2%), and stress recognition (58.4 vs 59.0%) comprised the domains with the lowest domain scores in both 2018 and 2021. Stress recognition consistently scored below the acceptable agreement level of 60% for both survey waves.

GRAPHS AND TABLES

Respondent Characteristics

Category	Baseline survey 2018 (n=5274) n (%)	Covid-19 Survey 2021 (n=3175) n (%)
Role		
Doctors	907(17.2)	440(13.9)
Nurses	2263(43)	1223(38.5)
Allied health	927(17.5)	258(8.1)
Ward attendants	843(16)	396(12.5)
Support staffs	334(6.3)	858(27)
Sex		
Male	1344 (25.5%)	855 (26.9%)
Female	3930 (74.5%)	2320 (73.1%)
Years of experience		
< 1 year	502 (9.5%)	267 (8.4%)
1 to 5 years	1503 (28.2%)	638 (20.1%)
6 to 10 years	1812 (34.3%)	1131 (35.6%)
>11 years	1457 (28%)	1139 (35.9%)

Comparison of SAQ domains at baseline and Covid-19 by professional groups



DISCUSSION

During Covid-19 pandemic, with numerous stressors, which were expected to affect HCWs morale & high level of burnout. However, despite these challenges, there were no reduction in patient safety attitude. Hence, well-planned strategies & policy makers need to embark on more research on simulations on major disasters in future.
Produced **Novelty** in measuring and analyzing safety culture in a healthcare setting among staffs and academicians especially during Covid-19 pandemic.
Despite COVID-19 posing major challenges to our healthcare system, this did not have a negative effect on safety attitudes in a tertiary hospital. However, improvements in SAQ domain scores improved in doctors and support staff and not in among nursing staff. Further, those who had close contact or COVID-19 infection had poorer SAQ scores, while those redeployed had markedly better SAQ scores.
Our findings should inform future policies in disaster management across healthcare settings as well as identified potential strategies to improve safety attitude among HCW.

CONCLUSIONS

All SAQ domains scores remained above satisfactory levels in 2021 apart from stress recognition which remained unsatisfactory since 2018. The improvement in SAQ scores in doctors and support staff and with redeployment may reflect the use of pandemic exposure as a tool to improve the safety culture.

REFERENCES

1. Ulrich B, Kear T. Patient safety and patient safety culture: Foundations of excellent health care delivery. Nephrology Nursing Journal. 2014 Sep 1; 41(5):447-56.
2. Farokhzadian J, Dehghan Nayeri N, Borhani F. The long way ahead to achieve an effective patient safety culture: challenges perceived by nurses. BMC health services research. 2018 Dec;18(1):1-3.
3. Leite H, Lindsay C, Kumar M. COVID-19 outbreak: Implications on healthcare operations. The TQM Journal. 2020 Jul 18.
4. Krishnasamy K, Tan MP, Zakaria MI. Interdisciplinary differences in patient safety culture within a teaching hospital in Southeast Asia. International Journal of Clinical Practice. 2021 Aug;75(8):e14333.