

The Relevance of Patient Safety Culture and Resilience during the COVID-19 Pandemic

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INTRODUCTION

During the COVID-19 pandemic in recent years, the pandemic has brought burdens and challenges to the medical system and medical staff, which may affect their ability to provide safe care and cause burnout. To cope with the increasing complexity and demand for medical services, we should focus on improving the resilience of medical staff. In addition to being patient-centered in terms of medical quality, we should also actively provide some positive care environments for medical staff.

AIM

There are few studies on the differences in patient safety culture during the COVID-19 pandemic. Therefore, this study aims to explore whether there are differences in the aspects of patient safety culture before and during the pandemic, which may help medical care managers pay more attention to medical staff during the pandemic, further reducing the occurrence of medical negligence.

RESULTS

The data indicated that all the scores of eight dimensions were significantly decreased from the pre-pandemic period to the pandemic period ($p < 0.05$). There were significant positive correlations between the scores among the eight dimensions ($p < 0.01$), except for the resilience and work-life balance negatively impact stress recognition ($p < 0.01$). The multiple linear regression model showed that resilience had a significantly positive impact on higher job satisfaction, perception of management, working condition, and work-life balance ($p < 0.01$), while resilience had a significantly negative impact on stress cognition ($p < 0.01$). These results were found both in the pre-pandemic and pandemic periods.

Table. Regression Analysis of Resilience and the Remaining Seven Constructs Before and During the Epidemic

Variable	The pre-pandemic period (2018+2019)	The pandemic period (2020+2021)
	Unstandardized Coefficient Beta	Unstandardized Coefficient Beta
Resilience		
Teamwork	0.043	0.030
Unit safety culture	0.017	0.021
Job Satisfaction	0.334***	0.34***
Stress	-0.061***	-0.129***
Perception of Management	0.063**	0.067**
Working Condition	0.195***	0.148***
Work-life Balance	0.328***	0.336***
R²	0.537	0.508
Adj R²	0.536	0.507

METHOD

We analyzed the Safety Attitudes Questionnaire (SAQ) data as the patient safety culture measurement in a medical center from 2018 to 2021. In addition to the original six dimensions (safety climate, teamwork climate, stress recognition, perception of management, working condition, and job satisfaction), two additional dimensions (resilience and work-life balance) were also evaluated. The research subjects were mainly medical staff (including doctors, nurses, medical technicians, pharmacists, and rehabilitation personnel), excluding non-medical personnel (such as administrative personnel). This study received IRB approval from Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan (KSVGH22-CT12-17).

CONCLUSIONS

Resilience has a significant impact on patient safety culture, no matter in the pre-pandemic or pandemic periods. This study also reveals the associations of resilience with patient safety culture among demographic variables. To improve patient safety and well-being, medical institutions should strengthen patient safety culture and provide appropriate support and improvement measures, while cultivating the resilience of medical staff to cope with challenges and stress. These findings provide an important reference for developing future interventions and strategies for promoting resilience within medical facilities to improve patient safety culture.

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