Resilience: A Protective Factor Against Burnout During the COVID-19 Pandemic

Farzad Rahmani [1], Shiva Salmasi [1, *] and Sepideh Zarei [1]

[1]Emergency Medicine Research Team, Tabriz University of Medical Sciences, Tabriz, Iran

*Corresponding author: Emergency Medicine Research Team, Tabriz University of Medical Sciences, Tabriz, Iran. Tel: +98-9143094938, Email: salmasi.shiva@gmail.com

Dear Editor,

Maslach burnout is a syndrome that is caused by chronic work stress, and it is one of the threats to human resources (1). Emergency personnel provide services in disasters and accidents; as a result, they are highly susceptible to develop burnout (2). Also, direct and continuous communication with patients is a key factor in burnout development (3).

Resilience is one of the main abilities of humans for effective adoption in risks, also a means of flexible response to the pressure caused by everyday life (4). According to the studies, there is a significant negative relationship between resilience and Maslach burnout (5). Different studies have shown that resilience is a crucial factor in controlling work stress, and it has an important preventive effect on the development of various psychological issues (6).

In this cross-sectional study, 173 healthcare workers from prehospital and hospital Emergency Medicine Department of Tabriz University of Medical Sciences participated. During the pandemic, participants in this study provided prehospital emergency care as well as emergency department care for all types of patients, including COVID-19 patients. The instruments used were the Maslach Burnout Inventory (MBI) 1986 and Conner-Davidson Resilience Scale (CD-RIS).

Maslach Burnout Inventory measures three dimensions of burnout, including emotional exhaustion, depersonalization, and personal accomplishment. There are score ranges that define low, moderate, and high levels of each component/scale (7). The validity and reliability of the Persian translation of this inventory have been confirmed in Iranian studies (8-11).

The CD-RIS measures personal competence, trust in one's instincts and tolerance of negative affect, positive acceptance of change and secure relationships, control, and spiritual influences (4). Psychometric properties of this scale and its Persian version have been confirmed in previous studies (12-14).

The mean age of the studied emergency department personnel was 32.12 ($\pm$ 7.55). In terms of gender, 74 subjects (42.8% of the study population) were female, and they showed statistically significant more burnout (P < 0.001). In general, emotional exhaustion and depersonalization were more evident in females in comparison to males (P < 0.001).

Maslach burnout was recorded in 54.71% of the study population. The results of this study have shown that 20.2% of emergency department healthcare workers suffered from high emotional exhaustion, and 52.6% had low emotional exhaustion. In terms of depersonalization, 52.6% and 47.4% had moderate and low depersonalization scores, respectively. Only 2.3% of the study group had high personal accomplishments.

The mean score of resilience was 64.66 ($\pm$ 15.56). The scores in dimensions of personal competence, trust in one's instincts, positive acceptance of change, control, and spiritual influences were 14.54 ($\pm$ 3.5), 18.09 ($\pm$ 4.6), 21.95 ($\pm$ 5.9), 5.24 ($\pm$ 1.9), and 8.16 ($\pm$ 2.7), respectively. Additionally, there was no statistically significant difference in resilience between females and males. Statistically, resilience was significantly higher in married personnel. Regarding the positions in the emergency department, resilience had higher scores among nurses as opposed to general physicians, whose score for resilience was the lowest. Additionally, general physicians had higher scores in Maslach burnout (the higher educational level, the higher burnout scores, which is not true for resilience). Finally, the results of the study have shown that resilience, with a correlation coefficient of 0.397, affects the rate of burnout. It was

identified to be significant that burnout decreases with increased resilience.

In the study by Moukarzel, burnout syndrome was seen in 34.6% of emergency department staff, which was correlated to job pressure and low mental component score; especially, emergency department physicians were prone to burnout syndrome ([15]). Some studies have shown that physicians with high resilience have experienced far less burnout syndrome ([16]). The results of the study by Edward have revealed that burnout syndrome was less experienced by nurses who had training in resilience boosting techniques ([17]). Likewise, in the study by Hamdan, emergency department nurses had lower scores of emotional exhaustion in comparison to emergency department physicians ([18]).

This study has shown that more than half of emergency department staff have shown depersonalization, and almost 20% of them had high scores in emotional exhaustion. The prevalence of burnout syndrome was higher in females and single staff. Also, general physicians had a higher rate of burnout syndrome. One of the main risk factors for Maslach burnout is making sensitive choices and managing critically ill patients, which is usually done by emergency medicine physicians, and it puts them under extreme stress and mental pressure.

One of the limitations of this study was the length of the questionnaires. As a result of time limitation and increased number of patients in the emergency department during the COVID-19 pandemic, in some cases, the study participants could not complete the questionnaire carefully. These cases were carefully assessed and excluded from the study.

We conclude that resilience had a statistically significant relationship with age and gender, with resilience increasing with age. In addition, resilience was higher in married participants. Therefore, by increasing the resilience skills of healthcare workers (in the form of training workshops) and subsequently reducing their Maslach burnout, the quality of their work-lives and the services they deliver to patients improves.

Footnotes

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