



Post-traumatic Stress Disorder in Emergency Medical Services Personnel in Iran: A Letter to the Editor

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Dear Editor,

Post-traumatic stress disorder (PTSD) is a complex physical, cognitive, emotional, behavioral, and psychological disorder that occurs as a result of an accident or life-threatening incident. It is related to disturbing thoughts, anxiety, sleep disturbance, and avoidance of a traumatic event that ultimately leads to social, occupational and interpersonal disorders (1-3). Emergency Medical Services personnel experience workplace events that are direct threats to their well-being; they are also faced with events that have severe injuries (4). The present study is a report of the result of a systematic review and meta-analysis. The study was conducted based on the preferred reporting items for systematic reviews and meta-analyses (PRISMA) protocol and the STROBE checklist was used to assess the quality of studies (5). We conducted a systematic search in Google Scholar, SID, Magiran, Scopus, MEDLINE (PubMed), and Web of Science. We used valid English and Persian keywords including post-traumatic stress disorder (PTSD), paramedic, Emergency Medical technicians, mental health disorder, Pre-Hospital Emergency staff, Iran, pre-Hospital Emergency personnel, and Emergency Medical Services (EMS) with operators (AND) and (OR) without time limit until April 2019. After applying the eligibility criteria and qualitative evaluation, finally, three studies with good quality were included in the meta-analysis (2, 4, 6). The prevalence of PTSD and sample size were extracted from each article and binomial distribution was used to calculate the variance of each study. The weighted average was used to combine the rates from different studies. Each study was weighted proportional to inverse variance. We explored the heterogeneity of studies using the I^2 index. A random-effects model was used in the meta-analysis.

In this study, 530 EMS personnel were considered and the prevalence of PTSD in them was 50.21% (95% CI = -2.49 - 102.91, $P < 0.001$, $I^2 = 99.7\%$). The prevalence rates of depression, physical and averbal workplace violence were 22%, 28%, and 74% among nurses in Iran, respectively (7).

Due to the effects of PTSD on EMS personnel respecting their personality, interpersonal life, and their interactions in the community after traumatic events, it is necessary to provide Pre-Hospital Emergency personnel with teaching early symptoms of PTSD, appropriate functional strategies, and positive coping styles. In the early stages, we can identify this disorder and prevent cognitive and functional disorders after trauma. Also, social support from the organization and the community and psychological interactions in practice will help improve their mental health.

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Footnotes

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