Investigating unsafe behaviors and Work-related factors among EMS staff in Iran: a cross-sectional study

Reza Asadi-JabehDar
Department of Emergency Nursing, School of Nursing and Midwifery, Ardabil University of Medical Sciences, Ardabil, Iran.

Aghil Habibi Soola
Department of Nursing, School of Nursing and Midwifery, Ardabil University of Medical Sciences, Ardabil, Iran

Abstract

Objective: Emergency Medical Services (EMS) staff often encounter safety incidents. Work-related factors can lead to unsafe behaviors and safety incidents. This study assessed unsafe behaviors and work-related factors among EMS staff.

Methods: This descriptive-correlational study used a census sampling method to select 284 EMS staff in Ardabil Province, northwest of Iran, from April to June 2023. The data collection tools were demographic and occupational information form, Mearns Unsafe Behavior Scale, Cohen Perceived Stress Scale, Michielsen Fatigue Scale, and Patterson Teamwork Scale. The data were analyzed using the SPSS, Independent-Samples t-test, ANOVA, Pearson correlation, and multiple linear regression

Results: The mean of unsafe behavior, perceived stress, fatigue, non-conflict of teamwork, and conflict of teamwork were 15.8 (±4.77), 16.1 (±6.13), 20.57 (±6.2), 3.57 (±0.52), and 3.38 (±0.79), respectively. Multiple linear regression analysis showed that "physical fatigue," (P=0.009) and "partner trust and shared mental models (PTSMM)," (P=0.001) were predictors of unsafe behaviors EMS staff.

Conclusion: The results of this study showed that unsafe behaviors in pre-hospital emergency workers were low and "physical fatigue," and "partner trust and shared mental models (PTSMM)," were predictors of unsafe behaviors EMS staff. Developing specific guidelines for addressing unsafe behaviors, and arranging shifts so that novice staff work with experienced staff during their first year can improve partner trust, foster positive shared mental models, and help reduce these behaviors among EMS staff.

Keywords: "Unsafe behavior", "Stress, "Fatigue", "Teamwork", "Emergency medical services".