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Analysis on psychological stress and its affecting factors to mine rescue personnel

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Abstract

Objectives: To investigate psychological stress and influence factors on the mine emergency rescue personnel.

Method: 564 mine emergency rescue personnel from a rescue group were select as subjects, and 60 designers from a steel design institute were as controls. Self-made questionnaire and general job stress questionnaire were used to investigate the basic information, rescue history, psychosomatic symptoms, depression symptoms, daily job stress and negative emotions of emergency rescue personnel. SPSS17.0 software was used to analysis the psychological stress on the mine rescue personnel and its influence factors.

Results: The detection rate (41.94%) of depression symptoms in rescue team was higher than that of controls (24.90%). The score of daily job stress was higher than that of logistical support. The older age group with higher negative emotional and daily job stress than the younger. The highest negative emotion was in age group of more than 40 years old. The highest score of daily job stress was in ≤30 years old. The score of depression and psychosomatic symptoms were higher than those of the college and the above. The scores of depression in group of duration of rescue <10 years was higher than that of duration≥10 years. The score of daily job stress is the lowest in rescue for 1 to 2 times per year and the highest in group of simulation training once a month. The score of daily job stress and depressive symptoms were getting higher with the extension of combat duty time. This study did not find the impact of life events on psychological stress of the rescue crew.

Conclusions: Mine rescue team has more psychological stress than controls. The psychological stress of the mine crew is related to the different types of work, age, educational level, duration of rescue, times of rescue, training and combat readiness duty time.

Keywords: Mine emergency rescue personnel; Psychological stress; Depression

Biography

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