

Abstract

Title: First Aid during Mass Casualty Incident on the Railway

Objectives: The main aim of this work was to assess the first aid knowledge of railway carrier employees working as passenger train crew in relation to mass casualty incidents on the railway.

Another aim was to find out how many mass casualty incidents occurred on the regional and the national railway between 2010 and 2020 in the Czech Republic.

Methods: In order to assess the first aid knowledge, a quantitative method of anonymous questionnaire with 90 respondents was used. The number of mass casualty incidents was found by a statistical analysis of raw data of railway accidents provided by The Rail Safety Inspection Office. These data were processed by MS Excel 2010 software. In order to test the stated hypotheses, the Student's t-test for Two Independent Samples was used.

Results: It was found out that four respondents (4.4 %) of the study had encountered a mass casualty incident at work and provided first aid during that event. The questionnaire and the subsequent hypotheses testing using Student's t-test revealed that the respondent's length of service, participation in health training, and the experience of authentic first aid provided during their work did not have a statistically significant impact on their level of first aid knowledge. The overall success rate of the study population in the knowledge part of the questionnaire was, satisfactorily, 64.49 %. According to our results, 12 mass casualty incidents occurred in the Czech Republic between 2010 and 2020.

Keywords: railway, train crew, first aid, mass casualty incident