

Factors affecting knowledge and practices among public transport drivers on pre-hospital handling of spinal cord injury victims in Colombo District, Sri Lanka

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Spinal cord injuries (SCI) account for approximately 10% of global deaths annually. SCI has a lower mortality rate, but it often leads to permanent disability. Safe pre-hospital handling and immediate transport to the hospital play a crucial role in minimizing damage from SCI. This study aimed to assess factors affecting knowledge and practices of public transport drivers on safe pre-hospital handling of victims with suspected SCI in selected suburban areas in the Colombo District, Sri Lanka. A descriptive cross-sectional study was conducted in Nugegoda, Dehiwala-Mount Lavinia, and Homagama. Public transport drivers aged 20-60 years, possessing a valid driving license and at least one-year driving experience were recruited through convenience sampling (n=422), proportionally distributed across study areas. Data were collected using a newly developed, pre-tested and validated, interviewer-administered questionnaire comprising four sections including socio-demographics, knowledge (MCQs), attitudes (Likert scale), and practices (binary scale). A 50% threshold, based on prior literature, was used to categorize knowledge and practices. Data were analyzed using SPSS version 26.0. The response rate was 97.6%. The majority (86.9%, n=358) were male while 28.9% (n=119) of participants were in the 52-59 age category. Of the participants 38.6% (n=121) were educated up to O/L. The majority (98.1%, n=404) demonstrated good knowledge (Mean=76.54, SD=11.37), while 55.3% (n=228) had poor practice (Mean=52.72, SD=12.00) regarding pre-hospital handling of SCI. Level of knowledge was significantly associated with education level (p=0.036) and being first aid trained (p<0.001). Level of practice was significantly associated with language (p=0.002), education level (p=0.037), type of employment (p<0.001), and being first aid trained (p<0.001). The level of knowledge was not associated with the level of practice (p=0.129). This study highlights the significant gap between adequate knowledge and poor practice among public transport drivers in SCI handling. Key influencing factors are education, language, employment type, and being first aid trained. Targeted awareness programmes including first aid training should be established.

Keywords: *Knowledge, Practices, Pre-hospital handling, Spinal cord injuries*