

Awareness on burn injuries, first aid and associated factors among students of National Educational Colleges in the Northern Province of Sri Lanka

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Background and objective: Burn injuries are a global public health concern, and knowledge is vital for prevention and management. The objective of this study was to determine the awareness on burn injuries, first aid, and associated factors, among students of the two National Educational Colleges in the Northern Province of Sri Lanka.

Methods: This cross-sectional analytical study with an estimated sample size of 482 closely matched the total number of first-year students in both Colleges. Hence, all of them were recruited. Data were collected in Tamil language using an online questionnaire via Google form. The data in CSV were exported to and analyzed in IBM SPSS version 26. As there were no established cutoffs for determining awareness adequacy, mean scores were used to evaluate awareness.

Results: Response rate was 68.3% (329/482), with majority females (n=257, 78.1%). Awareness on burn injuries (mean 72.0%, SD 16.9) surpassed first aid (mean 58.5%, SD 12.3). Commonly identified causes of burn injuries included fire (n=300, 91.2%), hot liquid (n=262, 79.6%), hot objects (n=277, 69.0%) and steam (n=226, 68.7%). Although 59.6% (n=196) recognized fire-triangle, some stated carbon-dioxide (n=165, 50.2%) as a component. Common remedies suggested were toothpaste (n=259, 78.7%), oil (n=138, 41.9%), and turmeric (n=134, 40.7%). Only 118 (35.9%) knew running water must be applied for 20+ minutes. Many recognized the stop (n=251, 76.3%), drop (n=243, 73.9%), roll (n=277, 84.2%) technique. Some (n=112, 34%) suggested running during fire. In fire involving oil, respondents recommended either turning off the heat source (n=264, 80.2%), using sand (n=251, 76.3%), covering the pan with a lid (n=186, 56.5%), or applying water (n=132, 40.1%). Awareness on burn injuries was associated with A/L stream (p<0.001) and their current course (p=0.006). There was higher awareness among students in science-related subjects. Awareness on first aid was associated with current course (p<0.001), previous exposure (p=0.009) and province (p=0.035). Those who had no exposure and students from the Northern Province had higher awareness than others.

Conclusion and recommendation: Awareness on first aid was lower than that of burn injuries. Students in science-related studies showed the highest awareness. It is important to conduct further studies in the target populations to assess their practical knowledge. Addressing misconceptions will ensure appropriate responses during emergencies.

Keywords: Awareness, Burn, First aid, Teachers colleges, Northern province