

Burns First Aid Knowledge: Healthcare Worker versus Non-Healthcare Worker.

Lisa Jordan (speaker)^a, Adrian McArdle^b, Jack Kelly^b, Sean T O'Sullivan^a

^a Department of Plastic and Reconstructive Surgery, Cork University Hospital

^b Department of Plastic and Reconstructive Surgery, University Hospital Galway

Introduction: Burn injuries can be the most devastating of injuries, affecting an estimated 11 million people globally each year. Immediate and adequate first aid is associated with more favourable outcomes, limiting tissue damage and subsequent morbidity and mortality. Cool running water at a temperature of between 10–15°C for 20 minutes is considered adequate burns first aid.

Aim: To determine the knowledge of burns first aid among healthcare workers (HCW) and to compare this with that of non-healthcare workers (nHCW) in Cork, Ireland.

Method: A purpose-designed questionnaire using convenience sampling was designed in University College Cork (UCC). It contained a number of common sample burn scenarios including; scald, contact burn, ignited clothing, and chemical burn. The survey was distributed on social media websites and sent to UCC students to target nHCW. It was also sent to all Cork University Hospital staff, the Royal College of Physicians, and Royal College of Surgeons to target HCW.

Results: 946 participants completed the survey (612 HCW and 334 nHCW). 27% of all respondents correctly identified 20 minutes as the appropriate length of time for cold running water (29% HCW, 22% nHCW [$p=0.0173$]). 31% of participants incorrectly selected ice as an appropriate treatment for burns (28% HCW, 38% nHCW [$p=0.0021$]). HCW performed better than the nHCW in three out of the four common scenarios (Q9: 52% - 40% [$p=0.0005$], Q11: 31% - 22% [$p=0.003$], Q12: 32% - 20% [$p<0.0001$]). nHCW performed better in the ignited clothing question (Q10: 67% - 73% [$p=0.564$]).

Conclusion: Although HCW performed significantly better than the nHCW, the survey highlights a substantial knowledge gap in both groups. It suggests the need for better education with respect to burns first aid, for both HCW and the general population.