

Awareness and Competence in Managing Common Medical Emergencies in a Dental Clinic by Dental Nurses at the University Dental Hospital, Peradeniya

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The role of a dental nurse is vital in managing unanticipated medical emergencies (MEs) that could arise in a dental clinic. This audit aimed to assess the basic competency standards (knowledge, skills, and confidence) in the management of MEs in dental practice among dental nurses. The study was conducted among all dental nurses at a University Dental Hospital (n=35), using a structured interviewer-administered questionnaire. Short video clips were used to demonstrate the possible emergencies while the skills were assessed using mannequins. Response rate was 57.14%. The mean age of the participants was 37.13 years (SD=19.75) and all were females. Although, excessive bleeding (by 95% of participants), angina (70%) and hypoglycaemia (65%) were known to them as MEs, out of the given list, only 15% selected angina as a common ME which could occur in a dental practice. All participants (100%) selected excessive bleeding followed by asthma (65%), seizures (60%), hypoglycaemia (50%), vasovagal syncope (50%) and anaphylaxis (40%) as common MEs. Yet, cardiac arrest/cerebrovascular accident were not selected by any. No participant was accurate in identifying all the signs and symptoms of vasovagal syncope, hypoglycaemia, and anaphylaxis. Regarding emergency management, participants scored low in managing a fainted patient (mean score =46.26±29.25) and seizures (mean score =33.75±30.65). Younger age group (≤35years) had significantly higher mean scores for the faint and seizure management (mean score=60±27.09, P=0.04; mean score=70.6±7.20, P=0.001) than those aged ≥35years. Approximately, 60% of the participants expressed very low confidence in performing Basic Life Support (BLS) during emergencies and only 40% demonstrated knowledge of normal vital measures. Notably, no participant accurately demonstrated BLS or manual blood pressure monitoring. Urgent attention is required to address the gaps in identifying possible emergencies, BLS and improving the basic competency levels in managing medical emergencies.

Keywords: Basic Life Support (BLS), Dental nurses, Medical emergencies, Vasovagal syncope