

Pain and trauma

280

DISTRACTION THERAPY FOR PAIN AND ANXIETY IN PAEDIATRIC PATIENTS IN THE PREHOSPITAL SETTING, A SYSTEMATIC REVIEW

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Background Distraction therapies are widely used to manage pain and anxiety in paediatric emergency departments (ED). Paediatric patients also comprise up to 13% of some ambulance services workloads¹ yet only a single study exists outlining the ad-hoc use of paramedic-initiated distraction therapy.² Building rapport with frightened, unwell children is challenging for paramedics, but is essential to facilitate rapid assessment and care.^{1,3} This review aims to identify effective ED distraction techniques potentially suitable for use in paediatric patients in the prehospital setting.

Method Databases and grey literature sources including Ovid Medline, EMBASE and CINAHL and Google Scholar were searched from their beginning to October 2021. English language interventional or observational studies were included if they reported on distraction techniques suitable for use in the prehospital setting, paediatric ED presentations, and pain and/or anxiety.

Results Of the 4,054 records screened, 27 met the eligibility criteria. Twenty randomised trials and seven interventional studies involved children aged three months to 18 years. Distraction techniques were digital, non-digital and environmental adaptations and included virtual-reality, cartoons, music, vibration devices, bubble-blowing and ambient lighting. Ten studies reported significant reductions in self-reported pain and seven for self-reported anxiety. Some reported reduced pharmacological administration and improved patient cooperation, and parent and/or healthcare provider satisfaction when using distraction. Studies were highly heterogeneous with 17 distractors and 21 pain and/or anxiety measurement tools used.

Conclusion A range of effective distraction techniques exist in paediatric EDs that may be suitable for the prehospital setting to manage pain and/or anxiety and improve patient outcomes.

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Cardiac arrest

287

CITIZEN RESPONDERS ARE AN IMPORTANT SUPPORTIVE RESOURCE FOR RELATIVES TO CARDIAC ARREST PATIENTS DURING RESUSCITATION

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Background In Denmark, a volunteer responder (VR) system was implemented in 2017¹. This study explored how volunteer responders provide emotional support for relatives to out-of-hospital cardiac arrest (OHCA) patients and how their presence during resuscitation is experienced by the relatives.

Method In-depth, semi-structured interviews were conducted with thirteen participants (four relatives and nine VRs) and analysed using thematic analysis. The analysis of data was an inductive process inspired by a hermeneutical interpretative approach. We indexed our data through the application of codes generated to draw out meaning from the text. Themes were created following the analytical guide suggested by Braun and Clarke.

Results Eight themes emerged from the interviews: 'Acting to help – an inner calling', 'Citizen responders' cooperation and capability of organizing tasks', 'Taking care of relatives – a task equal with the resuscitation effort', 'Thoughts in the aftermath of the event', 'The feeling of being part of another family's history', 'The immediate relief when citizen responders arrive', 'mutual trust' and 'Citizen responders are strangers, yet rescue heroes'.

Relatives experienced VRs as competent and skilled, and described a relationship based on mutual trust and confidence. VRs considered provision of emotional support for relatives as a natural calling equally significant with providing cardio-pulmonary resuscitation.

Conclusion Relatives to OHCA patients highly value volunteer responders' provision of emotional support during resuscitation. Volunteer responders consider provision of psychological support to relatives of equal importance to providing cardio-pulmonary resuscitation when dispatched to OHCA.

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