Title: Exploring the Use of Visual Learning Tools in Neonatal Resuscitation Education: A Scoping Review

Abstract

Neonatal deaths account for a majority of deaths in children under the age of 5 globally and improving healthcare workers' (HCWs) access to quality neonatal resuscitation education and training has been a strategic goal of stakeholders in HIC and LMIC. The introduction of visual learning tools (VLTs) as an adjunct to traditional, text-based educational materials has become increasingly popular, but there is very little comprehensive information regarding the types of visual tools used, the stages of education in which these tools are implemented, and the impact of these tools on HCWs knowledge and skills or the clinical environment and neonatal outcomes. This scoping review explores VLTs from the simplest illustrations to complex virtual reality games and highlights pertinent data collected regarding the impact of VLTs on educational and clinical outcomes. Across global contexts, HCWs welcomed the use of VLTs in their education and clinical practice. There is promising evidence that VLTs could lead to increased long-term retention of resuscitation knowledge and skills, though these results were not consistent across every clinical scenario. Improving transparency in the design process and data collection when implementing VLTs is essential to determine which tools will be the most effective and beneficial for HCW and patient outcomes and how these tools can be incorporated in a sustainable manner.