



R³: Research, Read & Review

Literature dissemination by the NIDCAP and Science Sub-Committee

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Title	Facilitators and barriers to developmentally supportive care for preterm infants in low and middle-income countries: A scoping review
Reference	Klutse K D, Hillan E M, Wright A L, Johnston L. Journal of Neonatal Nursing, 2022, ISSN1355-1841, https://doi.org/10.1016/j.jnn.2021.12.004 .
What is known about this topic?	<ul style="list-style-type: none"> • Global neonatal mortality rate is higher in low and middle-income countries (LMICs) making chances of survival within first 28 days of life in LMICs ten times lesser than high income countries (HICs). • Prematurity is a major cause of newborn deaths worldwide most of which occurs in LMICs out of which those who survive may live with life-long motor and cognitive impairments. • Previous research suggests that implementation of existing cost-effective and feasible developmentally supportive care (DSC) interventions can enhance preterm survival and reduce neonatal mortality by 41-72%. • DSC interventions are not widely implemented in LMICs due to individual and organizational barriers specific to their context.
What does this paper add?	The review explores barriers to and facilitators of, Kangaroo Mother Care (KMC), positioning (nesting and swaddling), and control of the external neonatal intensive care environment in LMICs.
A summary	<p>DSC interventions included in this review were: KMC, positioning (nesting and swaddling), and light and noise control in the NICU. Study sources selected from Ovid-Medline, Psych-Info, EMBASE, Latin American and Caribbean Health Sciences Literature (LILACS), Africa-Wide Information and CINAHL between 2000 and 2020. A detailed description of the data search process is included in the Method section of the article.</p> <p>A total of 15853 articles were identified; 7528 articles remained after de-duplication process. After reviewers screening and further exclusion, 32 studies were included in the review. The papers included 20 primary studies and 12 secondary studies carried out in various LMICs. The vast majority of identified studies (30) focused on</p>

	<p>KMC, with just two studies addressing noise reduction in the NICU. None of the studies addressed infant positioning or light control. Final analysis was done based on three identified themes: knowledge, cultural norms and health care systems.</p> <p>Knowledge - Lack of knowledge on the importance of KMC, method of implementing KMC as well as a perception that KMC increases workload were identified as primary barriers for both health care workers and family caregivers. Structured training sessions, extending training to health care assistants and community health workers; using behaviour modification techniques for the NICU daily practice as well as increasing acceptance of KMC through feedback from mothers practicing KMC, were seen as the facilitators for KMC implementation.</p> <p>Cultural Norms - Cultural practices such as mothers lack of decision making power, gender role on child care practices and shift from norms in carrying infants were seen as primary barriers in implementing DSC. Community education by health care workers through media and visual aids, increasing community support and addressing mothers' fears while increasing confidence in mothers, were seen as facilitators.</p> <p>Health Care Systems - Lack of local or national policies, unclear guidelines, lack of national commitment in identifying individuals as well as groups interested in implementing DSC, hospital policy of restricted access to the NICU for family caregivers, lack of designated place for KMC ensuring privacy, unequal distribution of health care staff between urban-rural facilities, chronic shortage of staff leading to lack of supervision among family caregivers, failure to integrate evidence into practice and lack of studies addressing the components of a DSC bundle, were seen as primary barriers. Providing health facility infrastructure focusing on comfort for both family caregivers and infant; providing support services like food for family caregivers, cloths, slings, delegating specific tasks from higher to lower skilled workers and having health facility managers to ensure DSC practice, were identified as facilitators.</p>
<p>What is the relevance to NIDCAP?</p>	<p>The review by Klutse et al. provides valuable insights into the difficulties and facilitators in the implementation of developmentally supportive care in LMICs. The analysis presented in the article resonates with the NIDCAP philosophy of being mindful about the importance of individualized care in a context of respect to the cultural norms prevailing in each community. Integrating the review's findings with the NIDCAP philosophy of care would help us in understanding gaps and formulating training approaches and programs specific to resource-constrained regions, for a better global outreach of the NFI vision and mission.</p>