Promoting Health in Premature Infants – with special focus on skin-to-skin contact and development of valid pain assessment

av

Emma Olsson

Akademisk avhandling

Avhandling för medicine doktorsexamen i medicinsk vetenskap med inriktning mot medicin som kommer att försvaras offentligt fredagen den 7 April 2016 kl. 09.00, Hörsal C3 (HSC3) Campus USÖ, Örebro Universitet

Opponent: docent Carina Sparud Lundin
Institutionen för Vårdvetenskap och Hälsa Sahlgrenska Akademin, Göteborgs Universitet

Örebro universitet
Institutionen för medicinska vetenskaper
70182 ÖREBRO
Abstract


Premature infants are at greater risk for both short- and long-term negative outcomes than infants born at full term. Premature infants have an immature nervous system and are not developmentally prepared to process the often excessive stimuli and frequent painful procedures of intensive care. Skin-to-skin contact between the infant and the parent is beneficial for both infant and parents and can also humanize the intense environment of the neonatal intensive care unit. The aim of the thesis, to promote health in premature infants had two parts: (1) to investigate aspects of skin-to-skin contact (SSC) within neonatal care, and (2) to contribute to the development of a valid method for pain assessment in premature infants. In Study I, questionnaires about the implementation of SSC and staff’s attitudes toward the method were sent to all neonatal units in the Nordic countries. SSC was offered in all 87% of the units that responded, but to different extents in different countries. Medical risks and the physical environment were considered barriers to SSC, and the infant’s general development was considered the primary benefit. In Study II, 20 fathers of premature infants were interviewed about their experiences with SSC. The fathers’ overall experiences were positive and SSC made them feel involved in their infant’s care. They also described the environment as an obstacle, but the experience as both gratifying and challenging. In Study III, SSC with their mothers was shown to have a pain-relieving effect on premature infants undergoing a blood test. This effect was examined through near-infrared spectroscopy (NIRS) over the somatosensory cortex. In Study IV the Premature Infant Pain Profile - Revised was translated and culturally adapted into Finnish, Icelandic, Norwegian and Swedish. In summary, SSC was used to various degrees in the Nordic countries, fathers seemed to appreciate the method, which made them feel more involved, and SSC provided pain relief during a blood test.

Keywords: Near-infrared spectroscopy, Neonatal intensive care, Pain assessment, Premature infant, Skin-to-skin contact

Emma Olsson, School of Health Sciences
Örebro University, SE-701 82 Örebro, Sweden