Action-Research for the development of Care Technology: Protocol for the Management of Pain and Stress of the Newborn in Intensive Care

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Research has shown the number of painful and stressful procedures which newborns are exposed to during the hospitalization period (Carbajal et al., 2008; Cruz, Fernandes & Oliveira, 2016; Sposito, 2016) as well as the short, medium and long term impairments that these can cause (Brummelte et al., 2012; Valeri, Holsti & Linhares, 2015). However, globally there is still a knowledge gap among professionals in relation to the pain management of newborns and its day-to-day practical details (Ozawa & Yokoo, 2013; Britto et al., 2014; Costa et al., 2016). Participative development of a Protocol was proposed for the management of Pain and Stress in Intensive Therapy Neonatal Units, based on scientific evidence, in a public children’s hospital, of Paraná, Brazil. The objective of the Protocol is to minimize the dichotomy between theory and practice exposed in several studies (Lago et al., 2013; Carbajal et al., 2008; Johnston et al., 2011). Therefore, as a reference for undertaking this intervention research, the theoretical-methodology of Michell Thiollent (2011) was used, is a type of social research, with an empirical base, it materializes through action to solve a collective problem, which affects participants and researcher, resulting in improvement in the professional practice and the quality of care. Following approval by the Ethics Committee, the research was undertaken with a multi-professional team (n=65: physiotherapists, doctors, assistant nurses and nurses; according to inclusion criteria). The 12 phases suggested by Thiollent were organized in three stages as follows: I: Description of the knowledge and practice of the multi-professional team for the management of neonatal pain (1. Exploratory phase; 2. Research theme; 3. Problem placement; 7. Field of observation, samples and qualitative representation; 8. Data collection); II: Theory and communication as strategies to base the práxis (4. The place of theory; 5. Hypothesis; 6. Workshops; 9. Learning; 10. Formal and informal knowledge); III: Elaboration of the Protocol and implementation of the steps (11. Plan of action; 12. External disclosure). For the study of these theory based results, with emphasis on the State of the Art Management of Neonatal Pain, a unifying review was presented. Data from Stage I was transferred to an Excel sheet and analyzed statistically, using a 5% significance level. Stages II and III, arising from the workshop theories and discussions compose the Protocol for the Management of Pain and Stress in newborn children. Each workshop had the participation of all the professional categories in differing numbers. They were all documented and developed from the starting point of the team’s own questions in the questionnaire (Stage I). The research had some limitations such as: fluctuation in participant numbers, with less doctor participation. The multi-professional Protocol for the Management of Pain and Stress in neonatal ICUs was developed, and will be validated. The discussions pointed to a deficit in evidence based scientific knowledge, creating uncertainty in relation to its management. The development of Action-Research caused a positive movement of reflective interaction within the team, with a view to it being used for the qualification of neonatal care.
**Keywords:** Qualitative Research; Neonatal Nursing; Stakeholder Participation; Pain Measurement; Pain Management.

**References**


