



EDUCATIONAL INTERVENTION IN A NEONATAL INTENSIVE CARE UNIT IN THE MANAGEMENT OF PAIN

INTERVENÇÃO EDUCATIVA EM UMA UNIDADE DE TERAPIA INTENSIVA NEONATAL NO MANEJO DA DOR

INTERVENCIÓN EDUCATIVA EN UNA UNIDAD DE TERAPIA INTENSIVA NEONATAL EN EL MANEJO DE DOLOR

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ABSTRACT

Objectives: to promote educational intervention on the management of pain in the Neonatal Intensive Care Unit (NICU); to describe the process of implementation of the educational intervention; to evaluate the effectiveness of the intervention. **Method:** descriptive and exploratory study of qualitative approach, of type of intervention research. The subject will be nurses, nursing technicians, doctors and physiotherapists of the NICU of a maternity-School located in the city of Rio de Janeiro/RJ. Data collection will be carried out with the filming of learning tutorials and groups with a semi-structured questionnaire, applying three months after the completion of the group. The empirical data of filming will be transcribed and submitted to thematic analysis. The project was approved by the Research Ethics Committee, under the Protocol 11257012.2.0000.5275. **Expected results:** construction of collective knowledge on the management of pain in the Neonatal Unit with direct repercussion on quality of care. **Descriptors:** Education; Neonatal Intensive Care Units; Intervention.

RESUMO

Objetivos: promover intervenção educativa sobre o manejo da dor na Unidade de Terapia Intensiva Neonatal (UTIN); descrever o processo de implantação da intervenção educativa; avaliar a efetividade da intervenção. **Método:** estudo descritivo e exploratório de abordagem qualitativa, do tipo pesquisa de intervenção. Os sujeitos serão enfermeiros, técnicos de enfermagem, médicos e fisioterapeutas da UTIN de uma Maternidade-Escola situada na cidade do Rio de Janeiro/RJ. A coleta de dados será realizada com a filmagem de grupos tutoriais de aprendizagem e com um questionário semiestruturado, aplicado três meses após a realização do grupo. Os dados empíricos da filmagem serão transcritos e submetidos à análise temática. O projeto foi aprovado pelo Comitê de Ética em Pesquisa, sob o Protocolo nº 11257012.2.0000.5275. **Resultados esperados:** construção do conhecimento coletivo sobre o manejo da dor na Unidade Neonatal com repercussão direta na qualidade da assistência. **Descritores:** Educação; Unidades de Terapia Intensiva Neonatal; Intervenção.

RESUMEN

Objetivos: promover intervención educativa sobre el manejo del dolor en la Unión de Terapia Intensiva Neonatal (UTIN); describir el proceso de implantación de la intervención educativa; evaluar a efectividad de la intervención. **Método:** estudio descriptivo y exploratorio de abordaje cualitativo, del tipo investigación de intervención. Los sujetos serán enfermeros, técnicos de enfermería, médicos y fisioterapeutas de la UTIN de una Maternidad-Escuela situada en la ciudad de Rio de Janeiro/RJ. La colecta de resultados será realizada con la grabación de grupos tutoriales de aprendizaje y con un cuestionario semi-estructurado, aplicado tres meses después de la realización del grupo. Los datos empíricos de la grabación serán transcritos e sometidos al análisis de temática. El proyecto fue aprobado pelo Comité de Ética en Investigación, sobre el Protocolo nº 11257012.2.0000.5275. **Resultados esperados:** construcción del conocimiento colectivo sobre el manejo del dolor en la Unidad Neonatal con repercusión directa en la calidad de la asistencia. **Palabras clave:** Educación; Unidades de Terapia Intensiva Neonatal; Intervención.

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INTRODUCTION

According to data released by the World Health Organization (WHO), one of 10 children are born preterm worldwide, with approximately 1,000,000 of these children die each year from complications of premature birth. These complications often reflect low quality in women's health and, especially, on maternal pre-natal assistance. Despite this, many efforts have been developed to promote the survival of these children. It is estimated that in 2010, the number of live births in Brazil was 3,022,800, 9.2% of them being premature, having occurred approximately 12,000 deaths due to complications of prematurity.¹

In Brazil, the prematurity is defined as the leading cause of neonatal morbidity and mortality. Is associated to high rates of respiratory distress syndrome, broncodisplasia, hypoglycemia, restrictions on the supply and utilization of nutrients and other implications that keep these newborns in the Neonatal Intensive Care Unit (NICU) for an extended period of time.²⁻³

Recent advances in the area of neonatal intensive care unit made it possible to increase the survival of extremely premature child and/or seriously ill. On the other hand, the treatment of these children includes a large number of painful procedures.⁴ In this environment, these newborns are exposed to multiple stressful or painful events, resulting in physiological and behavioral disorganization and wearing their energy reserves which should be channeled to their growth and development.⁵

In Paris, a study was conducted with 430 newborns admitted to NICU, who were underwent to procedures and, among those who were considered painful, only 2.1% were undergoing pharmacological analgesia and 18.2% to non-pharmacological interventions. In this same study, every newborn has undergone daily to 16 daily procedures, being documented some nasal aspiration, tracheal aspiration, puncture of calcaneus, retired of adhesive, gastric polling, venous puncture, arterial puncture, intravenous cannula, IV catheter removal, wound care, intubation/extubation, central venous catheter insertion, puncture, umbilical venous catheter calcaneus, compression of the bladder for urine retention, thoracic drainage, respiratory physiotherapy.⁵

All this need for solving problems and therapeutic resources increment culminates, in most cases, in unnecessary and aggressive procedures. In exchange for increasing the

survival rate of these children, excess handling without care cause pain and can alter and disrupt all the organic system of the newborn (NB).⁶

There is a substantial body of evidence that can be used for the management of pain in the NICU. However, the creation of knowledge, as well as their distillation and dissemination are insufficient for their use in practice, which reflects the need for strategies to which such knowledge can benefit anyone who is on the other side, i.e. our customers.⁷⁻⁹ Educational Interventions are being used in research with the aim of solving problems from the very act of investigate; it comes to meet the permanent education Policy (PEP), which has proposed the insertion of this education in their own social context, and the health service, working the problems of practice in everyday life and organizations promoting a reflective and participative potential.¹⁰⁻¹¹

With humanistic approach of attention to newborn, it was an accomplished educational process with the health team of a neonatal unit about the potentialities of the Kangaroo Method, on assistance to the newborn and the family, from the fundamental methodological-theoretical referential. The authors have developed 12 workshops, aiming to provide the Group of professionals the opportunity to reflect on his reality and analyzing it critically, seeking to understand it and make it.¹²

The discussions of education for professional training should be focused on building knowledge, sensitizing somehow the team and waiting for a change in clinical practice. The results showed the need for the creation of spaces for reflections between the professionals of the neonatal team about its practice, enabling the transformation of existing assistencial model and favoring the integral care and individualized to newborns and their families pre-terms.¹²

In another study conducted in Ceará, in analyzing the educational practices carried out by nurses directed to domiciliary care to premature newborn, during the period of hospitalization in the Neonatal Unit of a referral hospital in neonatology, it was revealed that the lack of systematization in the educational activities carried out by nurses interfered so negative on understanding of mothers in relation to the care of newborns at home after discharge.¹³ There is also a shortage in the literature concerning management of neonatal pain, as well as the methods that can be used to minimize it. Its control is usually made of non-

standard form and based on individual conceptions or even empirically.¹⁴

The focus of the permanent education represents a change in the concept and in the practices of workers' training services, inverting the logic of the process, incorporating teaching and learning to everyday life of organizations and social and labor practices in the actual context in which they occur. Moreover, it has the purpose of modifying the educational strategies, questioning and putting people as reflexive actors practice and builders of knowledge and action alternatives, returning his focus to the team and not for the individual.¹¹ in this way, the trainings have to work for the formation of critical citizens, able to change their reality by adopting the learner-centered system and model of problem-based learning (APB or PBL); What can account for this process, translating organizational learning in class action lawsuit.¹¹

It was designed as an object of study of this project the educational intervention for health professionals related to the management of pain in newborns, intended to fill the gap between the scientific knowledge of clinical practice and offering participants the opportunity to build a collective knowledge applicable to the improvement of the quality of care. Given the previous considerations, it is proposed:

- To promote educational intervention on the management of pain in the Neonatal Intensive Care Unit (NICU).
- To describe the deployment process of the educational intervention.
- To assess the effectiveness of the intervention.

METHODOLOGY

Article elaborated from the dissertation project "educational intervention in a neonatal intensive care unit in the management of pain" developed in the program of graduate studies and research at the Federal University of Rio de Janeiro, nursing school Anna Nery (EEAN/UFRJ), with completion forecast in March 2014.

To reach the goals, it will be held a qualitative descriptive and exploratory research, intervention research type, which proposes an educational intervention based on active teaching and learning methodology, along the lines of Problem-Based Learning.

The study will be developed in the NICU of a maternity School located in the city of Rio de Janeiro. The subject will be nurses, nursing technicians, doctors and physical therapists

active in that unit and who accept to participate spontaneously from the study.

In a first moment, there will be a meeting with the leadership of the health teams working in the Neonatal Unit in order to inform the proposal of educational intervention and its stages. After this step, a research will be held, with the proposal to develop a logo that will be used on posters of disclosure of the encounters as a way to sensitize health professionals to the participation in educational interventions. This logo will be chosen by the workers themselves. The posters will be posted throughout the Neonatal Unit and on other key points of the institution, inviting professionals to participate in the meetings.

From the first meeting, the professionals will be presented to the study and the cohabitation contract, where they will receive information on the research proposal and how this will occur. During the meetings, some central themes will be discussed, such as: assessment, pharmacologic and non-pharmacologic management of pain, the pain data record in the chart and joint development of a standard operating Protocol (POP) on the management of pain in the Neonatal Unit.

The meetings will start with the reading of a text or presentation of a dynamic and, from there, the central theme will be discussed within the problem-based learning. The team will choose the best time for discussion, so that the majority can participate without interfering in the dynamics of the service and the availability of the subject. After the discussion with this group, which is participating in the program, it will be offered a snack.

The discussions developed during educational interventions will be documented through recordings by prior authorization of the participants, through informed consent term(TFCC), which facilitates the transcription and analysis of results of dynamic during the meetings. The recordings are performed with two cameras fixed tripod, situated at opposite ends of the room and controlled by the research assistants, as well as an MP4 device for voice recording.

At the end of the meetings, participants will be invited to assess the educational practice through a questionnaire and leave suggestions for future tutorials groups. After a period of three months of educational interventions, the researcher will enter again in the field, inviting those who participated in the intervention to fill out a questionnaire to identify whether this methodology was

effective and whether there were any related contribution for intervention in practice of these professionals and the healthcare changes.

The data produced in the discussions that will be transcribed and the replies in the questionnaire will be discussed in the light of the researchers who study the subject and analyzed from the thematic analysis of Minayo.

The present study it is a Dissertation Project of the Program of Post-graduate and Research of Nursing School Anna Nery (EEAN/UFRJ), with CAAE nº 11257012.2.0000.5275.

EXPECTED RESULTS

We hope that the educational intervention can serve as a tool for collective construction of knowledge on the subject of pain management in NICU, offering the subject the opportunity to participate actively in this process, with the transformation of the healthcare practice. Having the questioning as the main axis motion, we aim to a successful outcome in terms of improving the quality of life of the newborn and special attention to pain, providing mechanisms to diminish it and avoid it, aiming at a more humanized attention during painful procedures carried out, gleaming relieve the suffering and consequences for newborns admitted to the NICU.

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