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Nursing diagnoses in newborns using an epicutaneous catheter: a cross-sectional study

Nanete Caroline da Costa Prado[1], Dhyanine Morais de Lima[1], Rebecca Stefany da Costa Santos[1], Dayane Damásio Silva[1], Cinthia Santa Rosa de Lima[1], Richardson Augusto Rosendo da Silva[1]

1 Federal University of Rio Grande do Norte

ABSTRACT

Objective: To identify the profile of the NANDA International nursing diagnoses in newborns with a Peripherally Inserted Central Catheter (PICC) in a Neonatal Intensive Care Unit (NICU), as well as the association with its components, sociodemographic and clinical-epidemiological characteristics. **Method:** This is a cross-sectional study with a quantitative approach. For data collection, a form containing data regarding the PICC, physical examination and consultation of medical records will be used. The data will be analyzed using the chi-square and Fisher's exact tests.

Descriptors: Nursing Process; Neonatal Nursing; Neonatal Intensive Care; Peripheral catheterization.

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CONTEXTUALIZATION OF THE THEME AND RESEARCH PROBLEM

The Peripherally Inserted Central Catheter (PICC) is an essential technological resource for the survival of newborns and children in intensive care, as it allows intravenous therapy to be performed. The main benefits of PICC are: decreased number of venopunctures and, consequently, reduced pain caused by invasive procedures; reduced risk of infection when compared to other types of central venous catheters; and maintenance of treatment for long periods[1].

In this context, the role of nurses is essential to ensure quality harm-free care. And so that the care of the newborn using a PICC is carried out, the nurse needs to direct care by following the Systematization of Nursing Care (SAE) and the Nursing Process (NP).

The NP consists of five stages: data collection/Nursing history, Nursing Diagnosis (ND), planning, implementation and evaluation of Nursing interventions. Considering that the need for physical protection and safety of newborns with PICC in the Neonatal ICU is essential, the identification of the real risk diagnoses to which newborns using PICC are submitted allows the nurse to plan safer nursing care safer and, consequently, obtain the desired results, ensuring the well-being of newborns.

In addition, the interpretation of these diagnoses allows nurses to plan care in order to enrich opportunities for the prevention of complications and safety of these newborns in the hospital environment. The care that meets the needs of physical protection and security, as well as supportive relationships, involves offering protective and safe environments, in addition to affectionate and empathic interactions, so that the newborn feels protected ([2]).

OBJECTIVE

Identify the profile of the NANDA International nursing diagnoses for newborns with a Peripherally Inserted Central Catheter (PICC) in a Neonatal Intensive Care Unit (NICU), as well as its association with its components, sociodemographic and clinical-epidemiological characteristics.

METHOD

A cross-sectional research, with a quantitative approach will be carried out in a high-risk maternity hospital in Northeastern Brazil. Data collection will take place in the Neonatal Intensive Care Unit, with newborns using a Peripherally Inserted Central Catheter.

A form containing data regarding the PICC, physical examination and medical records will be used for data collection. Version 2018-2020 of the NANDA International will be used for the identification of the ND.

The diagnostic inference process will consist of two phases: analysis (categorization of data and identification of gaps) and synthesis (grouping, comparison, identification and list of causative factors).

Subsequently, a database will be built using the Microsoft Excel® software, in which the data of the collection, the nursing diagnoses, the related or risk factors and the defining characteristics found will be recorded.

The descriptive analysis will occur from the absolute and percentage frequencies and a 95% confidence interval. To analyze the association of nominal data, statistical tests

will be used, namely: Pearson's Chi-square and Fisher's Exact Test. Association tests will only be applied to nursing diagnoses that present a frequency greater than 50%. The analysis will be based on the reading of the descriptive statistics, as well as on the analysis of the p-value found, with their respective comments. A level of 5% will be adopted for statistical significance.

The research is relevant and innovative in view of the scarcity of Brazilian production regarding nursing diagnoses in neonates using PICC. Such information was supported by a bibliographic survey conducted in July 2019, in the following databases: Pubmed, Lilacs, Scopus, web of science, Embase, Cochrane and Cinahl, using the following descriptors in Health Sciences: peripherally inserted central catheter AND Intensive Care, Neonatal AND Nursing care, and no articles were found that addressed nursing diagnoses in this population.

The project was approved by the Research Ethics Committee with human beings of the Federal University of Rio Grande do Norte under the number 1,259,309.

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AUTHOR PARTICIPATION IN RESEARCH:

PRADO NCC and SILVA RAR contributed to the conception, construction of the project and writing of the article; LIMA DM, SANTOS RS, SILVA DD AND LIMA CSR collaborated in writing the article.

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