HEALTH CONDITION OF LATE AND MODERATE PREMATURE BABIES IN THE FIRST YEAR OF LIFE

CONDICIÓN DE SALUD DE PREMATUROS TARDÍOS E MODERADOS NO PRIMEIRO ANO DE VIDA

ABSTRACT

Objective: to analyze the health conditions of moderate and late preterm infants (MLPMTI) in the first year of life. Method: a study with a mixed approach using the conceptual framework of health care networks and referral of chronic and acute childhood conditions. A quantitative approach - longitudinal analytical study and qualitative approach - descriptive study. It is estimated that a population of 200 MLPMTI, were living in the municipality of Santa Maria - RS, from May 2016 to May 2017. Participants will be monitored quarterly in the first year of life through four telephone contacts (quantitative) and home visits for the semistructured interview (qualitative step). The collection will be done by means of instruments constructed for this purpose and the data, analyzed through statistical programs (quantitative) and Thematic Content Analysis (qualitative). Expected results: it is expected to describe and discuss the MLPMTI health condition and its demands for care, as well as the construction of health care networks. Descritores: Pediatric Nursing; Health Care (Public Health); Premature; Epidemiologic Factors; Health Systems; Longitudinal Studies.

RESUMEN

Objetivo: analizar las condiciones de salud de prematuros moderados y tardíos (PMTMT) en el primer año de vida. Método: estudio de abordagem mista utilizando o marco conceitual de redes de asistencia da saúde e referencial de condición crónica e aguda infantil. Abordagem quantitativa - estudio longitudinal analítico e abordagem qualitativa - estudio descritivo. Estima-se a população de 200 PMTMT, residentes no município de Santa Maria - RS, no período de maio 2016 a maio de 2017. Os participantes serão acompanhados de forma trimestral, no primeiro ano de vida, por meio de quatro contatos telefônicos (quantitativa) e visita domiciliar para a entrevista semiestruturada (etapa qualitativa). A coleta será realizada por meio de instrumentos construídos para este fim e os dados, analisados por meio de programas estatísticos (quantitativo) e Análise de Conteúdo Temática (qualitativos). Resultados esperados: espera-se descrever e discutir a condição de saúde do PMTMT e suas demandas de cuidado, bem como a construção de redes de atenção à saúde. Descritores: Enfermagem Pediátrica; Atenção à Saúde; Prematuro; Fatores Epidemiológicos; Sistemas de Saúde; Estudos Longitudinais.

RESUMEN

Objetivo: analizar las condiciones de salud de los prematuros moderados y tardíos (PMTMT) en el primer año de vida. Método: estudio de enfoque mixto, utilizando el marco conceptual: de redes de asistencia de salud y referencial de condición crónica y aguda infantil. Enfoque cuantitativo - estudio longitudinal analítico; y el enfoque cualitativo - estudio descriptivo. Se estima la población de 200 PMTMT, residentes en el municipio de Santa María-RS, en el periodo de mayo 2016 a mayo de 2017. Los participantes serán acompañados de forma trimestral, en el primer año de vida, por medio de cuatro contactos telefónicos (cuantitativa) y visita domiciliar para entrevista semiestructurada (etapa cualitativa). La recolección se realizará por medio de instrumentos construidos para este fin y los datos, analizados por medio de programas estadísticos (cuantitativo) y Análisis de Contenido Temático (qualitativos). Resultados esperados: se espera describir y discutir la condición de salud de PMTMT y sus demandas de cuidado, así como la construcción de redes de atención a la salud. Descritores: Enfermería Pediátrica; Atención a la Salud; Prematuro; Factores Epidemiológicos; Sistemas de salud; Estudios Longitudinales.
INTRODUCTION

The increase in the survival of premature newborns (PMTNB) in the last decades is undeniable. This is due to the qualification in the field of neonatology and the health care of the newborn in the health services. Premature infants are considered to be newborns with a Gestational Age (GA) of less than 37 weeks, resulting in a heterogeneous group of children close to the term or those considered extreme or very premature.1,2

Moderate preterm infants - GA ranging from 32 weeks to 33 weeks and six days - represent about 18% of preterm births, are closely associated with early neonatal changes, especially respiratory and metabolic changes, and present high survival rates. Thus, late premature infants (GA), in the range of 33 weeks to 36 weeks and 6 days, whose survival is close to the total, account for about 70% of premature births and often do not present important immediate clinical changes, and, are then considered premature "almost to terms".3,4

The characteristics of psychosomatic and developmental morbitmortality, of late and moderate preterm infants, concern the acute and chronic health conditions of these children. In addition, they also persist in relation to the necessary support of care networks for this population, since many are discharged early and have no follow-up after discharge. This is due to the fact that moderate and late premature infants, as they are not in the range of extreme prematurity (target population), are not referred to specialized outpatient care.3

With the increase in the survival of these preterm infants, a group of children is born who carry with them the chronic condition of prematurity and the acute conditions that this provides, and thus accompany them throughout their lives altering their health conditions.4

Health conditions are defined as circumstances in the health of people who present themselves in a more (chronic) or less (acute) persistent way and that "[...] requires a reactive or proactive social response, occasional or continuous and fragmented or integrated health systems".5,25 Inherent in the definition of health conditions are presented classifications that add value and classify health determinants according to the form and frequency with which they affect the normal health condition. They are classified as acute or chronic conditions and the frequency and intensity that the condition interferes in the health.5

In an acute health condition, changes in normality begin suddenly, present a simple cause and are easy to diagnose, are always of short duration and respond well to therapy. They pertain to a simple cycle of “feeling ill for some time and, if treated, it gets better” (p.22).6 Concerning the chronic condition, it usually develops from a chronic disease, slowly it can be multicausal and permeate throughout life and has, as a characteristic, the loss of functional capacity and presents a greater number of symptoms than the acute conditions.6

In evaluations of health conditions in childhood, the child's first year of life becomes the most critical, since these children carry with them a past of biological conditioning factors and experiences of care and exposures to risks, which have been in effect since the perinatal period, which result in a certain degree of vulnerability to severe illness and death, as well as an increase in children's hospitalizations during this period, when compared to the other age groups.7 This justification is magnified considering that, besides age as a vulnerable factor - first year of life - preterm birth may also exacerbate factors that may be related to the acute and chronic conditions of this population, as well as requiring a differentiated organization in the care of health services.

Prematurity has repercussions on chronic and acute health conditions in childhood since it proposes circumstances in the health of the egresses, who remain for long periods and require social responses from the family and services, given the complexity of these conditions. To this end, with the increase in the survival of these Moderate and Late Premature Babies.4

In this direction, the following as a research question is used: how does the health condition of moderate and late preterm infants develop in the first year of life? An as an objective: to analyze the health conditions of moderate and late preterm infants in the first year of life.

METHOD

A mixed approach study will be conducted. Quantitative approach - longitudinal analytical study related to chronic and acute health conditions and qualitative approach - descriptive study that provides the description and organization of attention networks.

The use of a mixed technique, as a methodological approach, is part of the object studied and has, as a methodological reference, a concomitant nested strategy. The concomitant nested strategy is characterized
when both quantitative and qualitative data are collected simultaneously. This type of membership also requires a dominant approach to be the quantitative approach in this study and thus characterizes the “embedded” method (qualitative) addresses a different issue. This interpretation can be given to the measure that considers the different looks from the adopted reference.

The population will include all the MLPMTI born at the Santa Maria University Hospital and residents of the municipality of Santa Maria during one year of data collection (May 15, 2016 to May 14, 2017). The follow-up of the participants will take place in the first year of life (May 15, 2016 to May 14, 2018). The period of one year of data collection was established due to the seasonality and thermal variation in the study scenario, which may influence the health condition of the children.

The initial selection of the participants will be carried out through a daily visit to the field of data collection and verification of births through the book of live births of the service. The Capurro do NB will be verified (for the definition of prematurity and classification as moderate or late) performed at the time of delivery and confirming the prematurity in the evaluation in 24 hours by the health team (collection in medical records and registers).

The participation of 200 children in the study is estimated in view of the period of one year of data collection. The estimate was constructed from a temporal analysis of the number of moderate and late preterm births in the study hospital, in the year 2016-2017, residing in Santa Maria / RS.

In order to maintain the selection criteria, still within the hospital service, the invitation to participate in the study, as well as participation guidelines, the signing of the FICT and the collection of data regarding Neonatal and Obstetric variables (medical record), demographic data and socioeconomic variables, as well as information for maintaining post-discharge contact such as telephone number and home address.

Participants will be accompanied in the first year of life through four telephone contacts (third, sixth, ninth and 12th months of age). The follow-up happens in the period from September 15, 2016 to June 14, 2018.

In order to collect data on the Acute Health Condition, the instrument “Quality of Life Assessment in Children from 8 months to 5 years of age” is translated, adapted and validated for Brazil in 2010, by Tompson. The clipping of the instrument contemplates the acute health conditions that interfere in the quality of life. The instrument is Likert type: identifies and intensifies the frequency with which the child presented the health condition in the last three months.

For the analysis of the chronic condition, the Screener - Screening of Children with Special Health Needs - American instrument translated by Arrué is used, dismembering the three questions, referring to the three domains, highlighted by the conceptual framework adopted. This instrument is summarized in the development of a chronic condition, as a categorical dichotomous variable (yes or no), and is considered an outcome in the analysis. In order to have developed the chronic condition, it should have been answered in at least one of the domains, which is recommended by the authors of the instrument.

At the qualitative stage, the data will be produced by a semi-structured interview composed of issues related to the health demands and the service network of these children based on the concept of care networks and the attributes of Primary Health Care. The selection of participants will be by with the selection of participants who developed chronic and acute health conditions. It is estimated that 20 to 30 interviews will be performed and the theoretical density will be used for the definition.

The quantitative data will be entered in Excel spreadsheets and analyzed through statistical programs (SPSS version 20.0). For the analysis of dependent and independent variables, binary logistic regression will be used to evaluate the relationship between dichotomous dependent variables (develop acute and chronic condition [yes or no]) with independent variables (obstetric and neonatal, socioeconomic and demographic). The qualitative data will be submitted to the Bardin’s Thematic Content Analysis.

Ethical aspects are respected in accordance with Resolution 466/2012. The project is approved by the Research Ethics Committee of the Federal University of Santa Maria under the number of CAAE: 5398916.9.0000.5346 and opinion 1,511,201.

**EXPECTED RESULTS**

Analyzing the health condition of MLPMTI allows for the knowledge of the demands of care and, thus, to enable the construction of health care networks for these premature infants, considering that prematurity may present as a determinant of health for life. It is hoped to contribute to the
achievement of integrality in the health care of these children.

REFERENCES


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