ORIGINAL ARTICLE

CLINICAL AND EPIDEMIOLOGICAL PROFILE IN THE FIRST YEAR OF LIFE*

PERFIL CLÍNICO E EPIDEMIOLÓGICO NO PRIMEIRO ANO DE VIDA

PERFIL CLÍNICO Y EPIDEMIOLÓGICO EN EL PRIMER AÑO DE VIDA

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ABSTRACT

Objective: to know the clinical and epidemiological profile of child health during the first year of life. **Method:** this is a quantitative, descriptive, cross-sectional and analytical study, analyzing 61 medical records of children of both sexes, residing in the Family Health Strategy area. Data was analyzed by descriptive statistics. **Results:** it was found that 57% of the children attended were female and 43% male; 24% of children were exclusively breastfed, while 29% included supplementary feeding before the 6th month of life; it was observed that 12.12% of the children had their first consultation within fifteen days of life. **Conclusion:** It was concluded that the most prevalent clinical manifestations in the population younger than one year contribute to a possible direction of strategic planning. Through the epidemiological profile, contributions are provided to the professional nurse to develop actions that highlight the importance of exclusive breastfeeding and, consequently, the reduction of diarrhea cases in this population. **Descriptors:** Child Health; Child Care; Health Profile; Family Health Strategy; Comprehensive Health Care; Nursing.

RESUMO

Objetivo: conhecer o perfil clínico e epidemiológico da saúde infantil durante o primeiro ano de vida. **Método:** trata-se de um estudo quantitativo, descritivo, transversal e analítico, com a análise de 61 prontuários de crianças, de ambos os sexos, residentes na área da Estratégia de Saúde da Família. Analisaram-se os dados por estatística descritiva. **Resultados:** constatou-se que 57% das crianças atendidas eram do sexo feminino e 43%, do sexo masculino; 24% das crianças realizaram aleitamento materno exclusivo, enquanto 29% incluíram alimentação suplementar antes do 6º mês de vida; observou-se que 12,12% das crianças tiveram a primeira consulta em até quinze dias de vida. **Conclusão:** concluiu-se que as manifestações clínicas mais prevalentes na população menor de um ano são contribuintes para um possível direcionamento do planejamento estratégico. Fornecem-se, pelo perfil epidemiológico, contribuições para o profissional enfermeiro desenvolver ações que evidenciem a importância do aleitamento materno exclusivo e, consequentemente, a redução dos casos de diarreia nessa população. **Descritores:** Saúde da Criança; Puericultura; Perfil de Saúde; Estratégia Saúde da Família; Assistência Integral à Saúde; Enfermagem.

RESUMEN

Objetivo: conocer el perfil clínico y epidemiológico de la salud infantil durante el primer año de vida. **Método:** este es un estudio cuantitativo, descriptivo, transversal y analítico, que analiza 61 registros médicos de niños de ambos sexos, que residen en el área de la Estrategia de Salud Familiar. Los datos fueron analizados por estadística descriptiva. **Resultados:** se comprobó que el 57% de los niños atendidos eran mujeres y el 43% hombres; el 24% de los niños fueron amamantados exclusivamente, mientras que el 29% incluyó alimentación suplementaria antes del sexto mes de vida; se observó que el 12,12% de los niños tuvieron su primera consulta dentro de los quince días de vida. **Conclusión:** se concluyó que las manifestaciones clínicas más prevalentes en la población menor de un año contribuyen a una posible dirección de planificación estratégica. A través del perfil epidemiológico, se proporcionan contribuciones al enfermero profesional para desarrollar acciones que resalten la importancia de la lactancia materna exclusiva y, en consecuencia, la reducción de los casos de diarrea en esta población. **Descriptor:** Salud del Niño; Cuidado del Niño; Perfil de Salud; Estrategia de Salud Familiar; Atención Integral de Salud; Enfermería.

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INTRODUCTION

Against the backdrop of high rates of child morbidity and mortality in the 1990s, actions to combat childhood comorbidities, called Integrated Attention to Prevalent Childhood Diseases (IMCI), to provide comprehensive health care for children with quality and reduced under-five mortality.¹

Children are monitored in Brazil on the principles of health promotion, prevention, early diagnosis and recovery from childhood disorders, associated with programmed monitoring of growth and development. These actions are complemented by activities to control childhood diseases of children up to five years old through the implementation of the IMCI, as well as the basic actions to stimulate breastfeeding, feeding orientation and immunizations.²

Child development is understood as a dynamic process involving an expansion of physical, cognitive, psychological, sociological and emotional skills. It is emphasized the accompaniment of the growth and development (C/D) in the childhood as an indispensable element for the longitudinal assistance of prevention and health promotion, being necessary a good structure and the availability of equipments and inputs to provide a quality childcare.³

Among the most frequent morbidities in children under one year of age, acute respiratory infections, common colds, tonsillitis, otitis, sinusitis and pneumonia, which may be of viral origin, stand out, which occurs in most cases or bacterial, which makes them one of the main causes of seeking consultations and hospitalizations in this age group.⁴

It is evidenced that the deterioration in quality of life, school absenteeism, in addition to the high costs with hospitalizations have a relevant negative impact on public health, and these conditions, linked to environmental factors, such as particulate contamination, are responsible for the prevalence of Acute Infections of the Respiratory Tract (ARF) in the most susceptible and vulnerable infants younger than one year.⁵

Developing, with full attention to health and the fight against diseases as the main mission of health professionals, by the Ministry of Health (MH), the Family Health Strategy (FHS) in the national territory as one of the preferred points of insertion and community linkage to health services. It is the articulator of the multidisciplinary team of nurses, developing community education actions to programs in Primary Care, such as child growth and development.⁶

OBJECTIVE

- To know the clinical and epidemiological profile of child health during the first year of life.

METHOD

This is a quantitative, descriptive, cross-sectional and analytical study conducted in a Family Health Strategy (FHS) of an administrative district of Belém-PA. Data was collected during the months of September to October 2017. The study population consisted of 84 registered children, under one year old, born from January 2015 to September 2016. The value of n (sample) used in this research was calculated according to the formula cited by Fontelles.⁷

The initial sample of the medical records of 69 children was totaled and the (n) sample calculation was performed assuming a confidence level of 95% and a sampling error of 5%. After tabulation, insufficient data were found, reaching the final sample of 61 medical records.

The initial sample included the records of children who had at least one consultation during the first year of life, of both sexes, residing in micro areas covered by the research FHS, accompanied by a community health agent (CHA) and attended from January 2015 to September 2016. Medical records of children no longer residing in the territory were excluded.

Data was plotted by analyzing the main occurrences of children in the population under one year in the FHS, including variables such as: gender; birth weight; body mass index; exclusive breastfeeding; date of first consultation; number of medical and nursing consultations performed. The clinical epidemiological profile was indicated by standardized data collection techniques, with quantitative approach, characterized by absolute, relative, dispersion and position measurements, and the results were summarized by statistical data.

For data analysis, descriptive statistics were chosen, in which the collected data were tabulated, interpreted, processed, and computational resources were used through processing in the Microsoft Excel system.

Ethical principles were followed in accordance with resolution 466/2012, which provides for research involving human beings, respecting the principle of participant autonomy by signing the Informed Consent Form by the person responsible for the research. After acceptance, data of interest were collected from medical records.

This study was approved by the Research Ethics Committee (REC) of the Metropolitan Faculty of Amazonia under opinion no. 2,325,058.

RESULTS

The aim was to outline the profile of child health and to systematize the characteristics of the population studied below, presenting the results regarding health occurrences and

the comparison between previously established variables.

It was evidenced that 294 consultations were made, 124 medical consultations and 170 Nursing consultations, and the average per child was five consultations. It is reported that there were cases of children who had nine consultations and cases of children with only one consultation (Nursing consultation).

It was found that 57% of the children attended were female and 43% male. Figure 1 represents

the number of occurrences found during the first year of life of the FHS consultations. It is noteworthy that the vast majority of reported occurrences were routine consultations (Childcare) and cough, and were also common occurrences of fever, scabies, diarrhea, dermatitis and vomiting. It is noteworthy that some complications occurred simultaneously in the same child.

Figure 1. Occurrences found during the first year of life in the FHS. Belem (PA), Brazil, 2017.

The sex of the child and the recorded occurrence were related, represented in graph 2.

Figure 2. Relationship between occurrences during the first year of life by sex. Belem (PA), Brazil, 2017.

The study emphasizes the relationship between clinical manifestations and mean birth weight, with the average weight of female children being 3,226 grams, while that of male children was

3,083 grams; The highest weight observed was 4,750 grams (one female child), while the lowest was 2,270 grams (one male child). It is noted that no child was born weighing less than 2,000 grams and only two children were born weighing more than 4,000 grams.

It was observed that 12.12% of the children had their first appointment within 15 days, with 33.34% between 16 and 30 days; 21% between 31 and 60 days; 9.09% between 61 and 120 days, and no child analyzed had the first consultation after 120 days.

It was revealed that 31% of the children had their first visit between 31 and 120 days to monitor the growth and development program, but two children in this same time interval were diagnosed with symptoms of diarrhea, dermatitis,

influenza and scabies. There was a lack of registration in 24% of children on the date of the first consultation.

Regarding the variable Body Mass Index (BMI), it was noticed that 51% of the sample represented adequate weight, and 9% were underweight, followed by 5% with very low weight, alternating 3% to Child overweight, however, 32% of the sample had insufficient data to calculate.

In relation to statistics, it is shown that only 24% of children had breastfeeding, while 29% included supplementary feeding before the 6th month of life, and 47% of children could not be informed.

Figure 3. Relationship between occurrences and exclusive breastfeeding. Belem (PA), Brazil, 2017.

DISCUSSION

It was evident in this research that the researched population, especially the female population, had a higher demand for treatment of influenza and associated signs and symptoms, however, contrasting this reality, even under the strong influence of the determinants, a significant portion of children did not complain and went to the unit to follow up the childcare program.

It is described that in the age group under one year, regardless of gender, the most common causes of health services demand occur within the perinatal period, followed by respiratory diseases caused by pollution of materials in the atmosphere.⁴

It is pointed out that the highest weight found was in a female child, while the lowest weight was in a male child. The relationship between birth weight and clinical manifestations is considered, low weight (BP), ie weight below 2,500 grams, and prematurity are considered important risk factors

for child health and infant morbidity and mortality in the pre-term and postnatal.⁸

Despite advances in health care and early intervention programs, it is believed that the prevalence of children with weight deficiency due to pregnancy-related multifactorial causes remains high, generating disorders in neurological, mental and child development. It is inferred, therefore, that the causes of disparities in child health may be associated with the consequences of exposure to stressful life events in the pre- and post-conception period or arising from older pregnancies that corroborate the increased risk of infants with low birth weight.⁹⁻¹⁰

It was found from the study that only 8% of the population had incidence of BP, which contributes to the quality of life, but when observed the pattern of clinical manifestations that afflict the infant population, there was a slight predominance contact diseases such as diaper dermatitis, popularly known as "diaper rash", and scabies.

It is noteworthy that monitoring the growth and development of children is a strategy for the prevention of child morbidity and mortality, and is a guiding basis for primary health actions. The nurse needs to know and consider the socioeconomic, cultural and environmental spheres to provide comprehensive health care to the child.¹¹

It is understood that the foods with which the child has contact in childhood may be determinants of their nutritional status due to non-adherence to breastfeeding, both in terms of duration and exclusivity. It is known that the introduction of inadequate foods early may result in the onset of diseases in adulthood, including Diabetes Mellitus, hypertension, bone diseases, among others.¹²

It was found in the study that the population is primarily of adequate weight, but underreporting is a redundant finding, given the need for screening of overweight and, especially, child malnutrition.

It is understood that the anthropometric variables weight and height (length), classified by the Z-score in percentiles > 85 overweight and <3 for malnutrition, in the body mass index (BMI) analysis, when exceeding in the first 4-6 months of age increase the risk of obesity in the future.¹³

It was found in the sample that the number of consultations was below the recommended, without any visit in the first week of life, however, 11% of children had the first consultation until the fifteenth day of life.

The main and stimulating factor for mothers to return to service is the establishment of a bond between nurse and user. Nurses are essential in the anthropometric assessment, being responsible for elaborating and executing actions ranging from promotion to the improvement of already installed situations.¹¹

It is recommended that seven routine consultations be performed in the first year of life, divided between the first week of life, the 1st, 2nd, 4th, 6th, 9th and 12th months, two consultations with two years of life, on the 18th and 24 months, and from the second year of life onwards, annual consultations should be performed, however, the number of consultations may increase for at-risk children.¹⁴

In this study, only one child in EBF showed diarrhea, compared to 19% who started early supplementation, and there were no cases of anemia, ARF (acute respiratory failure) and AI (airway infections) in children in EBF.

It is noteworthy that breastfeeding promotes, for the infant, several benefits, including all the nutrients necessary for healthy growth and development, as well as able to meet all nutritional needs of this child up to six months of age, it is still very important to continue

breastfeeding combined with complementary feeding until two years of life.¹⁵

The short- and long-term benefits of breastfeeding in child health are understood to include reducing the incidence of childhood illnesses such as otitis, severe lower respiratory tract infections, asthma, constipation, gastrointestinal infection and eczema, and In addition, it is an affordable and affordable preventive measure for childhood diseases.¹⁶

CONCLUSION

The analysis of the most prevalent clinical manifestations in the population under one year of age was observed as a contributor to a possible direction of strategic planning aimed at reducing cases of influenza and associated symptoms, such as diarrhea, dermatitis and scabies, in addition to encouraging and establishing link as a determining factor for the demand for services offered by the FHS. Therefore, it is identified, by knowing the occurrences, the weaknesses of care, providing outline care plans in the development of effective actions for health.

The results obtained are expected to contribute to the development of focal actions in relation to EBF and the importance of the first consultation to be held by the fifteenth day of life. The goals of the FHS team for health promotion and follow-up on aspects that guide child integral development are described. However, the observed results show the demand for routine health services, without advances of treatable diseases, with satisfactory and adequate growth.

The lack of registration in the medical records regarding EBF, date of first consultation, birth weight and insufficient data to calculate BMI were highlighted, constituting a factor that hindered the collection of more information.

Through the epidemiological profile through the occurrences in the health of the child described in this research, contributions to the professional nurse, primary care manager, are provided to develop actions that highlight the importance of EBF and, consequently, the reduction of diarrhea cases in this population.

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