

16 - EPIDEMIOLOGICAL PROFILE OF THE LIVE BIRTH IN A TOWN OF THE NORTH OF PARANÁ STATE, 2010

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INTRODUCTION

The Department of the Health implanted in 1990 the System of Information about Live Birth (Sistema de Informações sobre Nascidos Vivos - SINASC) aiming to unify the epidemiological information of the births nationally informed in both private and public sectors of health as well as in domiciles. The SINASC represents a source of prominent information for the research and evaluation in maternal and infant health area and its main instrument is the Declaration of Live Birth (DLB) (RODRIGUES, 2010).

To DLB brings information such as the age and school level of the mother, as well as the prenatal diagnosis, the number of appointments; weeks of pregnancy; it also brings information about the newborn, such as the Apgar and its weight (BRAZIL, 2001). The analysis of this data allows learning socioeconomic, health care and vitality aspects of the NB (MELO; MATHIAS, 2010).

In the year of 2009, 2.881.581 infants were born in Brazil. The South region, in the same year, presented 12.7% of the births of the country. Out of the states located in South, the Paraná State recorded 40.7% and the researched town, 0.3% of the births occurred in Paraná (BRAZIL¹, 2011).

To learn the characteristics of the live birth is necessary to enable health indicators in its economic, politician-social, and epidemiological aspects, and may represent the reality of a locality (COLD et al., 2010).

Before these aspects, this study aimed to describe the epidemiological profile of the live birth of a town located in the north of Paraná State in the year of 2010.

MATERIAL AND METHODS

This research was had a retrospective, descriptive and quantitative character.

The researched town has a population of 32,182 inhabitants, 28,282 are of which living in urban zone and 3,800 in the rural zone (BRAZIL², 2010).

The sources utilized were the SINASC and the DLBs, disposed by the Municipal Office of Health of the town studied.

The selection of the variables was defined in three axes: Characteristics of the pregnant women, characteristics of prenatal diagnosis and characteristics of the newborn. The first axis considered: maternal age - 10 to the 19 years, 20 to the 35 and over 35; school level - 1 to the 3 years; 4 to the 7, 8 to the 11 and over 12. The second one: number of gestation – multiparae and primiparae; type of pregnancy – unique and double; prenatal diagnosis and number of medical appointments: less than 7 and more than 7. The third axis contemplates: type of birth – vaginal or caesarean; gestational age: pre term - less than 37 weeks, to term - of 37 to 41 weeks; birth weight - less than 2,500 g, of 2,500 g to 4,000 g and more than 4,000 g; Apgar in the first and fifth minutes of life – less than 7 and higher than 7; gender of the newborn - male and female; race/color – white and not white.

The present study was submitted to the Committee of Ethics and Research of the Nursing School of UENP/CLM and initiated after its approval (opinion number 031/2010).

The data was inserted in Microsoft Excel® and is presented by tables.

RESULTS

The study was developed with the data obtained from the 438 DLBs, i.e. 100% of the births in the year of 2010. It is needed to say that there were only 434 pregnant women, because four gestations were of twins.

The table 1 shows the information regarding the pregnant women. It is able to say that 74% of them were between 20 to the 35 years and that 19.0% were adolescents. Regarding the school level, 51.0% had had 8 to 11 years of study.

Table 1 – Distribution of the pregnant women according to age group and school level, in a town of the north of Paraná State, 2010.

Variables	N	%
Age group		
10 to 19 years old	80	19,0
20 to 35 years old	323	74,0
> 36 years old	31	7,0
School level		
1 à 3 years	13	3,0
4 à 7 years	123	28,0
8 à 11 years	221	51,0
> 12 years	77	18,0
Total	434	100

Source: DLB – Municipal Office of Health of Bandeirantes- PR, 2010.

The table 2 refers to the information of prenatal diagnosis and shows that 54.0% of the women were multiparae, that 99.0% had unique gestations, that 98.6% of them had prenatal diagnosis and 65.0% went to 7 or more medical appointments.

Table 2 – Distribution of the characteristics of the gestation and of prenatal diagnosis in a town of the north of Paraná State, 2010.

Variables	N	%
Number of gestations		
Multiparae	235	54,0
Primiparae	199	46,0
Type of Preganancy		
Unique	430	99,0
Double	4	1,0
Prenatal diagnosis		
Yes	428	98,6
No	6	1,4
Number of medical appointments		
< 7	154	35,0
> = 7	280	65,0
Total	434	100

Source: DLB – Municipal Office of Health of Bandeirantes- PR, 2010.

Regarding the type of birth, there was an elevated number of surgical births, representing 56,0%. The Table 3 shows the proportion of these births. It is possible to observe that 94.0% of the pregnant women had the babies at term, meaning, between 37 to 41 weeks. The weight of 86.0% of the NB was between 2.500g to the 4.000g. The variable of Apgar in the first and fifth minutes presented a frequency of 98.0% and 99.5% respectively with values ≥ 7 . Regarding the distribution of the births according to gender, there was a predominance of males compared to females; considering the variable race/color only 13.0% were not white in the town studied (Table 3).

Table 3 – Distribution of the newborn according to type of birth, gestational age and birth weight, apgar, gender and race in a town of the north of Paraná State, 2010.

Variables	N	%
Type of birth		
Caesarean	247	56,0
Vaginal	191	44,0
Gestational age		
Pre-term	25	6,0
At term	413	94,0
Weight of the NB		
< 2.500g	23	5,0
de 2.500g à 4.000g	378	86,0
> 4.000g	37	9,0
Apgar 1º minute		
< 7	8	2,0
> = 7	430	98,0
Apgar 5º minute		
< 7	2	0,5
> = 7	436	99,5
Gender		
Male	241	55,0
Female	195	44,5
Ignored	2	0,5
Race/Color		
White	381	87,0
Brown	51	11,6
Black	03	0,7
Yellow	03	0,7
Total	438	100

Source: DLB – Municipal Office of Health of Bandeirantes- PR, 2010.

DEBATE

The average of births was of 36 live birth at a month. In the months of March and December 43 births occurred, the highest indices over the year. In November, however, there was the lowest index, with only 28 births.

Through this study it is able to observe that the adolescent pregnant women index was 19% and the pregnant women with 36 years or more years old were 7%. These age groups are considered of greater as for the baby as for the mother. In Brazil and in others countries the index of pregnancy in adolescence is growing. This represents a social and a public health problem due to the social, psychological, and physical repercussions that the pregnancy causes in this age group (WOULD DO; ZANETTA, 2008). Women that had children in the adolescence are more likely to abandon school, to have repeated pregnancies, divorces and greater chances of poverty. Meanwhile, for women over 35 years old, the general concept of a greater risk is due as to the obstetric risk as to the ovarian senescence, as well as to the increase of chronic illnesses such as diabetes and hypertension (AZEVEDO et Al., 2000).

Beyond the age, the school level is also considered an important variable connection to the gestation. It is possible to say that a low maternal school level is associated with situations that amplify the risks of the gestation and at the moment of the labor; besides, these women are less likely to initiate prenatal diagnosis in the correct time or go through it at all; there is also a bigger numbers of gestations in a smaller period of time, risking their and their babies' lives (HAIDER et Al., 2001). The school level of the mother also influences the practice and the duration of the maternal breast-feeding, especially regarding colostrums

offer (DAMIÃO, 2002).

The theme pregnancy quickly brings the prenatal diagnosis as an important tool for the good development ...of the gestation until the birth. All pregnant woman should be oriented and stimulated to make it; however it is known that even with all the available information, it is still unnoticed for some pregnant women and also for the health team; this can be shown in this study, in which 1.4% of the women did not carry out the accompaniment; Although the reasons that pregnant woman have not to adhere to the prenatal diagnosis were not investigated, it is possible to point the concealment of the pregnancy, the prejudice with the public service, the disinterest of the user, the fear, the domestic violence and the lack of affinity with the health team.

For a good accompaniment of prenatal diagnosis and for the effectiveness of health care, it is recommended that at least six consultations occur in pregnant women without risk factors (COIMBRA, 2003). Shimizu and Lima (2009) relate that the benefits of the prenatal accompaniment over the health of the pregnant woman and of the newborn contribute for the reduction of the maternal mortality, low birth weight and perinatal mortality. They still discuss that the number of prenatal consultations is deficient, with inequality between the regions of the country: North 26,55%, Northeast 34,9%, Southeast 60,54%, South 61,05%, Center West 55.85%, what totals up to 49.14% in the country. They finish concluding that:

"these facts indicate that it is needed to think of ways to expand the access of pregnant women to health care, as well as to improve the quality of the consultations, especially the welcoming, in order to guarantee the adhesion to the prenatal program".

In a general way, Brazil presents caesarean rates over the limits pointed by the Department of the Health (BRAZIL³, 2006) which are of 40.0% for high risk and 25.0% for low risk pregnancies. The result of this research was not different and showed 56% of caesareans. The elevated number can be related to the scarcity of orientation in the prenatal period, moment in which the woman has the opportunity to know and obtain information about the vaginal birth. The caesarean is a resource that should be utilized when the normal birth presents some kind of risk for the mother, the fetus or both. As all surgical procedure, the caesarean is not exempt of risks, being associated to a bigger childlike and maternal morbimortality. Besides that, the caesarean birth implies in a greater time of recuperation for the postpartum woman, which also can interfere in the relation mother-son in the postpartum and in the early beginning of the breastfeeding period (D'ORSI; OAK, 1998).

The gestational age and weight of neonates is an important assessment tool, and the relationship between the two situations may explain the low weight, but this is not only determined by gestational age, but also by the rate of fetal growth (RUDGE, 2005).

The World Health Organization (WHO) recommends that the proportion of births with adequate weight, that is 2.500g to 4.000g should be at least 85% (Carniel et al, 2008). In the city's survey found that 86% of births are within this parameter.

Another important tool to evaluate the neonate along with the gestational age and weight, is the index of apgar which is taken in the 1° and 5° minutes of life; it evaluates the situation of health through five variables, scoring the health chart of the NB (BRASIL4, 2003). In this research, the index of apgar was satisfactory.

Regarding the gender of the NB, data of the National Health System (BRAZIL¹, 2011) shows that in the state of Paraná, from the years of 2005 to 2008, the male population of live birth was higher than the female, the town studied showed the same rhythm, showing that, in the year of 2010, more boys were born.

As it regards to the variable race/color, the town of study presented a percentage of 13.0% of non-white babies (11.6% of brown and 0.7% of black and yellow). In the State of the Paraná, black people represent 24% of the population, what confers to the State the greater black population of the South of the country (BRASIL5, 2011). According to Melo and Mathias, 2010:

"It is necessary to remember that even with changes of concept and racial prejudices, in Brazil there are still outstanding the differentiations in the quality of life of the black population and, even in the Paraná, with average percentages below the national one, the accumulation of the inequalities suffered by the black people indicates bigger vulnerability, in special of the infants, that are more inclined to 'iniquities'".

CONCLUSION

Regarding the vital events, the knowledge of not only of the totality, but also of the conditions of the live birth is indispensable to sustain the planning of actions in the maternal-infant area.

The SINASC contributes for the planning of the actions of health care of the populations enabling the characterization of the births, supplying subsidies for analysis, judgment and decision-making. It is important to emphasize the importance of filling the DLBs correctly because this data supply subsidies for the health politics elaboration and decision-making.

The results presented show that the epidemiological profile of the live birth of the town of Bandeirantes is satisfactory, however some factors can be improved, such as the number of caesareans, the gestations in adolescence, the premature birth and 100% of adhesion to prenatal diagnosis. Therefore, it is important the roll of Nursing and of a multidisciplinary health team in an efficient and effective work, promoting family planning, orientation regarding to the prenatal diagnosis, birth and postpartum, resulting in mothers prepared and healthy births.

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EPIDEMIOLOGICAL PROFILE OF THE LIVE BIRTH IN A TOWN OF THE NORTH OF PARANÁ STATE, 2010

ABSTRACT

To find out the number of the live birth is necessary to enable health indicators in its economic, politician-social, and epidemiological aspects, and may represent the reality of a locality. This work aimed to learn the characteristics of the live birth in the year of 2010, in a town located in the North of Paraná State. It was a retrospective, descriptive, and quantitative research, developed by the variables contained in the declaration of live birth (DLBs). 438 (100%) DLB's were analyzed, verifying the following variables: gender, race, age of mother, prenatal diagnosis, number of medical appointments, previous gestations, index of apgar, type of birth, type of pregnancy, education level of the pregnant women, gestational age and weight of the newborn. With the study, it was able to observe that out of the 438 births, 55% were males, 87% white, the newborn predominant weight was from 2500 to 4000 kilograms in 86% of them. Regarding the type of birth, caesarean section represented 56% of the total. The predominant age was between 20 to 35 years (74%), however 19% were adolescents; the education level from 8 to 11 years of studies represented 51%. As it regards to prenatal diagnosis, 98% of the women had it and 65% went to 7 or more appointments; 54% of the pregnant women were multiparae. According to the results, it is able to say that the epidemiological profile of the live birth in the city of Bandeirantes is satisfactory, although some of the factors can be improved, such as the number of caesareans, the gestations in the adolescence, the premature birth and 100% of adhesion to prenatal diagnosis.

KEYWORDS: Live birth; pregnant women; prenatal.

LE PROFIL EPIDEMIOLOGIQUE DES NOUVEAU-NÉS DANS UNE VILLE DANS LE NORD DE L'ETAT DU PARANA, 2010.

RESUME

La connaissance du chiffre des nouveau-nés est indispensable pour l'élaboration d'indicateurs de santé, dans les aspects épidémiologiques, socio-politique et économique, pouvant représenter la réalité d'une ville. Cette étude vise à signaler les caractéristiques des nouveau-nés en 2010, d'une ville dans le nord du Paraná. L'étude quantitative, descriptive et rétrospective a été menée à partir des variables contenues dans les déclarations de naissances vivantes (DNVs). Nous avons analysé 438 (100%) des DNVs où l'on a vérifié les variables suivantes : le sexe, la race, l'âge de la mère, les soins prénataux, le nombre de visites chez le médecin, les grossesses précédentes, le chiffre d'Apgar, le type d'accouchement, le type de grossesse, le niveau d'éducation les femmes enceintes, l'âge gestationnel et le poids de naissance. Dans l'étude, on remarque que des 438 naissances, 55% étaient du sexe masculin, 87% avaient la peau claire, le poids de naissance prédominant était de 2500 à 4000 kg avec 86% des naissances vivantes. En ce qui concerne le type d'accouchement, celui par césarienne a été le plus effectué avec 56%. L'âge prédominant était entre 20 et 35 ans (74%), mais 19% étaient des adolescentes, et le niveau d'éducation de 8 à 11 ans représentant 51%. En ce qui concerne le prénatal, 98% des enceintes ont fait les visites et 65% sont allées à sept visites environ, 54% des enceintes étaient multipares. Etant données les résultats présentés, on remarque que le profil épidémiologique de naissances vivantes dans la municipalité de Bandeirantes est satisfaisant, mais il y a des facteurs qui peuvent être améliorés, comme le nombre de césariennes, grossesses précoces, l'accouchement prématuré et 100% à l'adhésion au prénatal.

MOTS-CLÉS: naissances vivantes, les femmes enceintes, les soins prénataux.

PERFIL EPIDEMIOLOGICO DE NACIDOS VIVOS EN UN MUNICIPIO DEL NORTE DEL PARANÁ, 2010

RESUMEN

El conocimiento del número de nacidos vivos es indispensable para la elaboración de indicadores de salud, en sus aspectos epidemiológicos, político-sociales y económicos, y pueden representar la realidad de una localidad. Este trabajo tuvo como objetivo levantar las características de los nacidos vivos del año de 2010 de un municipio del norte del Paraná. Pesquisa de carácter cuantitativo, descriptivo y retrospectivo, realizada a través de variables contenidas en las declaraciones de nacidos vivos (DNVs). Fueran analizadas 438 (100%) DNVs, verificándose las siguientes variables, sexo, raza, edad de la madre realización del prenatal, número de consultas, gestaciones anteriores, índice de apgar, tipo de parto, tipo de gravidez, nivel de escolaridad de las gestantes, edad gestacional y peso al nacer. En el estudio se puede observar que de los 438 nacimientos,

55% fueran del sexo masculino, 87% fueron de la raza blanca, el peso al nacer predominó de 2500 hasta 4000 quilogramos en 86% de los nacidos vivos. En relación al tipo de parto las cesáreas fueran la opción más realizada con 56%. La edad predominante fue entre 20 a 35 años (74%), pero 19% eran adolescentes, el grado de escolaridad de 8 a 11 años de estudios representó 51%. Cuanto al prenatal 98% realizaron y 65% comparecieron a 7 o más consultas, 54% de las gestantes eran multíparas. Delante de los resultados presentados se observa que el perfil epidemiológico de los nacidos vivos del municipio de Bandeirantes es satisfactorio, pero existen factores que pueden ser mejorados, como el número de cesáreas, las gestaciones en la adolescencia, el parto prematuro y 100% de adhesión al prenatal.

PALABRAS CLAVE: Nacidos vivos; gestantes; prenatal.

PERFIL EPIDEMIOLÓGICO DE NASCIDOS VIVOS EM UM MUNICÍPIO DO NORTE DO PARANÁ, 2010

RESUMO

O conhecimento do número de nascidos vivos é indispensável para a elaboração de indicadores de saúde, em seus aspectos epidemiológicos, político-sociais e econômicos, e podem representar a realidade de uma localidade. Este trabalho teve como objetivo levantar as características dos nascidos vivos do ano de 2010 de um município do norte do Paraná. Pesquisa de caráter quantitativo, descritivo e retrospectivo, realizada através de variáveis contidas nas declarações de nascidos vivos (DNVs). Foram analisadas 438 (100%) DNVs, verificando as seguintes variáveis, sexo, raça, idade da mãe, realização do pré-natal, número de consultas, gestações anteriores, índice de apgar, tipo de parto, tipo de gravidez, nível de escolaridade das gestantes, idade gestacional e peso ao nascer. No estudo pode-se observar que dos 438 nascimentos, 55% foram do sexo masculino, 87% foram da raça branca, o peso ao nascer predominou de 2500 à 4000 quilogramas em 86% dos nascidos vivos. Em relação ao tipo de parto as cesáreas foram a opção mais realizada com 56%. A idade predominante foi entre 20 a 35 anos (74%), porém 19% eram adolescentes, o grau de escolaridade de 8 a 11 anos de estudos representou 51%. Quanto ao pré-natal 98% realizaram e 65% compareceram a 7 ou mais consultas, 54% das gestantes eram multíparas. Diante dos resultados apresentados observa-se que o perfil epidemiológico dos nascidos vivos do município de Bandeirantes é satisfatório, porém existem fatores que podem ser melhorados, como o número de cesáreas, as gestações na adolescência, o parto prematuro e 100% da adesão ao pré-natal.

PALAVRAS-CHAVE: Nacidos vivos; gestantes; pré-natal.