Profile of parturients and their newborn babies receiving care in a university hospital in northwestern Paraná

PERFIL DAS PARTURIENTES E SEUS RECÉM-NASCIDOS ATENDIDOS EM UM HOSPITAL-ESCOLA DO NOROESTE DO ESTADO DO PARANÁ

PERFIL DE LAS PARTURIENTAS Y SUS RECIÉN NACIDOS ATENDIDOS EN UN HOSPITAL ESCUELA DEL NOROESTE DEL ESTADO DE PARANÁ

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ABSTRACT

The study had the purpose to outline the profile of parturients and their newborn babies receiving care in a school hospital, based on the Live Birth Information System - *Sistema de Informações sobre Nascidos Vivos - SINASC.* For so, a descriptive, exploratory study was elaborated, identifying the characteristics of all the parturients and their newborns receiving care at Hospital Universitário de Maringá - HUM in 2006. It was observed that 27.1% of the parturients were adolescents, 68.4% had no partner, 59.3% lived outside Maringá, and 63.6% had seven or more pre-natal appointments. The ratio of cesarian sections was 50.4%. The newborns, mostly, had good vitality at birth, although 25.5% were preterms and 23.6% had low weight at birth. With the results, it was possible to outline the profile of the parturients and their newborns receiving care at the HUM, show the possibility of using the SINASC as an instrument of health evaluation in tertiary units and propose interventions capable of preventing maternal-child morbimortality.

KEY WORDS

Information systems.
Maternal and child health.
Health evaluation.

RESUMO

O estudo teve como objetivo traçar o perfil de parturientes e seus recém-nascidos atendidos em um hospital-escola, a partir do Sistema de Informações sobre Nascidos Vivos - SINASC. Para isso, foi realizado um estudo descritivo exploratório que identificou as características de todas parturientes e seus recém-nascidos atendidos no Hospital Universitário de Maringá - HUM no ano de 2006. Observou-se que 27,1% das parturientes eram adolescentes, 68,4% não tinham companheiro, 59,3% residiam fora de Maringá, 63,6% realizaram sete ou mais consultas de pré-natal. A proporção de parto cesárea foi de 50,4%. Os recém-nascidos, em sua maioria, apresentaram boa vitalidade ao nascer, embora 25,5% eram prétermos e 23,6% baixo peso ao nascer. Com os resultados, foi possível traçar o perfil das parturientes e seus recém-nascidos atendidos no HUM, demonstrar a possibilidade de utilização do SINASC como um dos instrumentos de avaliação em saúde em unidade terciária e propor intervenções capazes de prevenir a morbimortalidade materno-infantil.

DESCRITORES

Sistemas de informação.
Saúde materno-infantil.
Avaliação em saúde.

RESUMEN

El estudio tuvo como objetivo trazar el perfil de parturientes y sus recién nacidos atendidos en un hospital escuela, a partir del Sistema de Informaciones sobre Nacidos Vivos - SINASC. Para lo cual, fue realizado un estudio descriptivo y exploratorio que identificó las características de todas las parturientes y sus recién nacidos atendidos en el Hospital Universitario de Maringá - HUM en el año de 2006. Se observó que 27,1% de las parturientes eran adolescentes, 68,4% no tenían compañero, 59,3% residían fuera de Maringá, 63,6% realizaron siete o más consultas de prenatal. La pro-porción de parto cesárea fue de 50,4%. Los recién nacidos, en su mayoría, presentaron una buena vitalidad al nacer, a pesar de que 25,5% eran prematuros y 23,6% de bajo peso al nacer. Con los resultados, fue posible trazar el perfil de las parturientas y de sus recién nacidos, atendidos en el HUM, y demostrar la posibilidad de utilizar el SINASC como uno de los instrumentos de evaluación de la salud en una unidad terciaria y proponer intervenciones capaces de prevenir la morbimortalidad materno-infantil.

DESCRIPTORES

Sistemas de información.
Salud materno-infantil.
Evaluación en salud.

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INTRODUCTION

Knowledge of the characteristics of births at a given place and time is of fundamental importance in order to elaborate demographic and epidemiologic indicators that could represent the reality of the community, with a view to the planning and implementation of effective strategies to improve health conditions. Every year, approximately 3,100,000 children are born in Brazil. The southern region is responsible for 12% of births in Brazil; the state of Paraná had the highest count of births in the southern region, with 40.8%, and the city of Maringá accounted for 3.5% of births in the state[1].

In Brazil, there are several sources of information about the number of births, among them: Instituto Brasileiro de Estatística e Geografia – IBGE, with the demographic census, the national polls per household – *Pesquisas Nacionais por Amostra de Domicílios – PNAD* and the national system of live-borns – *Sistema de Informação sobre Nascidos Vivos - SINASC.* The existence of information systems is paramount to execute orientations and actions that are being or should be developed in healthcare services[2].

The health information systems – *Sistemas de Informação em Saúde – SIS*, in Brazil, and the decentralization of healthcare services were created as a strategy of the Single Health System – *Sistema Único de Saúde – SUS* to improve the health situation of the population. Among the SIS, SINASC is one of the tools most often used by cities and states as a source to calculate the rations of live-born children with low birth weight and live-born children from mothers with four or more / seven or more pre-natal consultations. It also allows for calculations involving cesarean deliveries, the coefficients of child, neonatal and late neonatal mortality, ratio of maternal mortality, among others that are part of the indicators to monitor and assess the Pact for Health, created to redefine the responsibilities of each manager in the search for social equity, considering the healthcare necessities of each population.

SINASC is a source of information about births, nationally implanted by the Ministry of Health in 1990 in response to the need for a database that would make available information on the number of births, characteristics of the mothers, gestation, birth and the newborn[3]. The implantation of the SINASC in Brazil occurred gradually; in Paraná, it started in November and December, 1993[2], and it has been expanded in the state, made available in the cities under the supervision of the state, which allowed for its utilization at local level. SINASC is currently implanted in all states and available on the website of *Departamento de Informação e Informática do SUS/Ministério da Saúde.*

SINASC uses the Declaration of Live-born Children – *Declaração de Nascidos Vivos – DNV*, a document that should be provided by the Civil Registry Notary Offices in the services where the child was delivered, and also in cases of home deliveries or other places where there was no assistance by healthcare professionals[3]. When the DNV is filled out, it is possible to obtain fundamental information to plan obstetric healthcare actions, so as to evaluate healthcare actions and to build demographic and health indicators in the maternal-child area.

The Brazilian population does not fit a single social and educational standard and, with the huge regional differences in healthcare service, the type of obstetric service provided by the institutions cannot be generalized. Depending on the region where the women's healthcare activities are found, there are specific characteristics that depend on the demographic, cultural, social and economic aspects that determine different behavioral standards of the female population[4].

When the reference institution that monitors high-risk pregnancies is considered, it is interesting to outline the profile of the clients receiving care there, in order to recognize their characteristics and identify risk factors and intercurrences that could be avoider or treated[5]. In view of these considerations, it is believed that studies that characterize the population receiving care in each institution are necessary. Also, that the universities have the function of elaborating healthcare models that could be reproduced on larger population scales according to the specifics of each group.

The universities have the function of elaborating healthcare models that could be reproduced on larger population scales.

With these data, it is fundamental to know who the parturients and their newborns receiving care are in the context of a teaching hospital. Mainly, it is expected that, with the profile of the parturients and their newborns, SINASC could be used as one assessment instrumentin tertiary units, intervening in actions that are capable of preventing morbidity and mortality.

In the context of the challenges and perspectives experienced by the university hospitals of Brazil, maybe the most important step to be taken is the strengthening of its organizational sustainability, including the development of systems of indicators for assessment and management, among others[6].

OBJECTIVE

The objective of this study was to outline the profile of parturients and their newborns who received care at a teaching hospital, demonstrating the potential for the utilization of SINASC as one assessment instrument in maternal-child healthcare at a tertiary unit.

METHOD

The study was descriptive and exploratory, using SINASC to identify the characteristics of all parturients and their RN who received care at a teaching hospital in 2006.

The teaching hospital in question was Hospital Universitário de Maringá – HUM, in the Northwest of Paraná state, a referral healthcare institution for high-risk pregnant women coming from all the 29 cities covered by the 15th regional healthcare division – RS. It also provides care to low- and high-risk pregnant women, covering four basic healthcare units in the city of Maringá. It is a teaching hospital with routines that are implanted and supported by the Ministry of Health regarding care for gestation and delivery. HUM started its activities in January, 1989, and its gynecology and obstetrics clinic started its own activities in 1993. It is registered in the SUS as a public healthcare institution, assigned as a teaching hospital and rated as a type-II hospital due to its operational capacity.

The profile of the parturients and their newborns was identified by means of sociodemographic variables (maternal age, marital status, education, occupation and city of residence), obstetric variables (number of live-born children, number of children dead at birth, gestational age, type of pregnancy, number of prenatal consultations, type of delivery) and variables of the newborn (gender, 1st minute Apgar, 5th minute Apgar, race/color, weight, birth defects/chromosome anomalies).

The term birth defects was used for the *birth defects/chromosome anomalies* variable; the *marital status* variable was named marital situation, as it indicates a more adequate term for the presence of economic support in a stable situation and the psychosocial support of having a partner. And for the *number of prenatal consultations* variable, a value = 7 was considered an adequate value, which, according to the instructions of the pact indicators, is specific for the cities where the ratio of liveborns from mothers who had four or more prenatal consultations was higher than 90% in the past year. This situation is indicated in this study, with 91.1% of liveborns from mothers who had four or more prenatal consultations.

The data were made available by the 15th RS with the Tabwin program. The data were tabbed and processed with Statistica 6.0 (STATSOFT) software. The data obtained are considered preliminary, since they were not available online for collection. However, we believe in their truthfulness, as they had already been checked by the municipal typing department and the number of births is compatible with the HUM logbook.

All DNV present in SINASC-2006 regarding children born in the HUM were analyzed, with the use of absolute and relative frequencies for all studied variables, making the results evident in tables and discussion of results, with data from the Ministry of Health and assorted references for thematic analyses. Multiple-correspondence multivariate analysis was used among the variables *mother's city of residence, type of delivery, number of prenatal consultations and weight at birth*, which are indicators of the Pact for Health, to visualize the association between the variables used as indicators.

The research project was approved by the Ethics Committee of Universidade Estadual de Maringá – UEM, according to the determinations of Resolution 196/96 of the National Research Council, file #008/2007. Since the study is based on secondary data, the authors were not requested to use a term of consent to perform this study.

RESULTS

The DNVs are usually filled out by nursing technicians of the obstetric sector at the HUM. After being filled out, the forms are collected by an employee of the municipal health secretariat, to be typed into the SINASC and sent to the state health secretariat – *Secretaria de Estado da Saúde – SESA* through the 15th regional healthcare division.

There were 760 liveborns at the HUM in 2006, which represented about 13% of the births occurred in the city of Maringá.

Few variables with no information were found in the forms, i.e. fields left blank or with information ignored, varying by 0.1% for the newborn's gender and 0.7% for the mother's occupation.

Table 1 displays the *sociodemographic* variables that refer to the parturients. Regarding age, the predominant age range observed was 20-34 with 63.5%; next, the age range > 20 years old with 27.1%. Regarding the marital situation, 68.4% had no partner, and most of them had little education, with 63.6% with 4-11 years, 27.0% with up to three years and only 9.4% with more than 12 years of education. Regarding the social condition of the parturients, we observed that only 33.8% had paid occupations, 62.7% were housewives and 3.5% were students. The analysis of the parturients according to the city of residence shows a higher percentage of households outside Maringá, with 59.3%, against 40.7% for residents in the city of Maringá. Of the parturients who do not reside in Maringá, most live in Sarandi (11%) and Paiçandu (6%). The other parturients live in other cities, representing values ranging from less than 1% up to 5%.

Table 1 - Sociodemographic profile of the parturients who received care at Hospital Universitário de Maringá - Maringá, PR - 2006

Variable	N	%
Age (years)		
< 20	206	27.1
20-34	483	63.5
≥ 35	71	9.4
Marital situation*		
With partner	239	31.6
Without partner	517	68.4
Education (years)*		
≤ 3	204	27.0
4-11	481	63.6
≥ 12	71	9.4
Occupation**		
Unpaid	499	66.2
Paid	255	33.8
City of residence		
Maringá	309	40.7
Other cities	451	59.3

* four cases with no information were excluded
** six cases with no information were excluded

Table 2 shows the obstetric variables related to the parturients. Regarding the number of live-born children in previous gestations, there was no significant difference between the primiparous (50.4%) or multiparous (49.6%) categories. For the number of children born dead in previous gestations, the category with no children born dead was expressive (91.0%). The gestational length showed that most (73.8%) occurred within 37 and 41 weeks, considered the most adequate length to favor the health conditions of the newborn[7]. Also, 25.5% of the gestations were observed not to come to term. The type of pregnancy was mostly single, with 93.2%. Most parturients had seven of more prenatal consultations (63.6%). The ratio of cesarean deliveries was 50.4%.

Table 2 - Obstetric profile of the parturients who received care at Hospital Universitário de Maringá - Maringá, PR - 2006

Variable	N	%
Live-born children		
Primiparae	383	50.4
Multiparae	377	49.6
Children born dead		
None	692	91.0
≥ 1	68	9.0
Length of gestation (weeks)		
< 37	194	25.5
37- 41	561	73.8
≥ 42	5	0.7
Type of pregnancy		
Single	708	93.2
Multiple	52	6.8
Number of prenatal consultations*		
< 7	275	36.4
≥7	480	63.6
Type of delivery		
Normal	377	49.6
Cesarean	383	50.4

* Five cases with no information were excluded

Table 3 shows data on live-born children. Most live-borns (51.5%) were male. Regarding the Apgar score, which contains the indicators to evaluate the birth conditions of the newborn, most of them had good vitality (Apgar ≥ 7)[7] in the 1st and 5th minutes, with 86.0% and 96.1%, respectively. Most newborns (76.4%) weighed 2,500 Kg or more, although 23.6% had low weight at birth. The results for race/color of the newborns yielded 76.7% white children and 23.3% children of other colors. Finally, 1.4% of the newborns had some type of birth defect.

Table 3 - Profile of the newborns who received care at Hospital Universitário de Maringá - Maringá, PR - 2006

Variable	N	%
Gender*		
Male	391	51.5
Female	368	48.5
Apgar at the 1st minute **		
< 7	106	14.0
≥ 7	652	86.0
Apgar at the 5th minute		
< 7	29	3.9
≥ 7	731	96.1
Race/color		
White	583	76.7
Black	7	0.9
Mixed ethnicity	167	22.0
Others	3	0.4
Weight		
< 2,500g	179	23.6
≥ 2,500g	581	76.4
Birth defects		
Yes	11	1.4
No	749	98.6

* One case with no information were excluded
** Two cases with no information were excluded

Figure 1 shows that the profile of the parturients and their newborns residing outside Maringá is associated to an inadequate number of prenatal consultations, low weight of the newborn at birth and cesarean deliveries. The profile of the mothers living in Maringá is associated to an adequate number of prenatal consultations, normal weight of the newborn and normal deliveries.

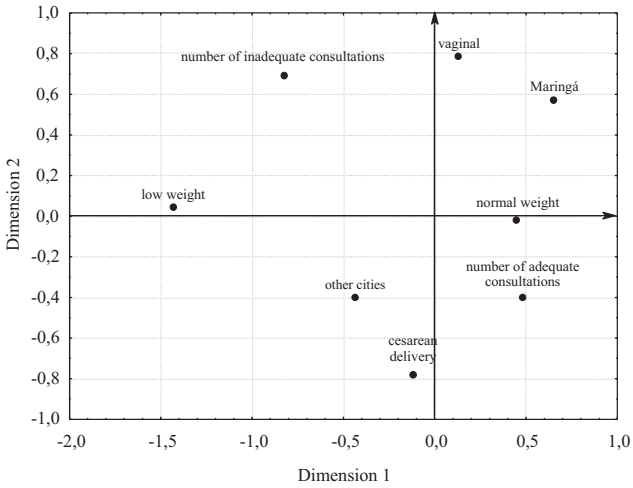

Figure 1 - Correspondence map between the variables mother's city of residence, type of delivery, weight at birth and number of prenatal consultations - Maringá, PR - 2006

DISCUSSION

The number of liveborns at the HUM in 2006 was close to the annual average number of liveborns in the past six years, which amounted to 727 liveborns/year. This result is suggested by the number of obstetric beds (three prepartum beds and nine puerperium beds) and because the hospital is a referral institution for high-risk gestations, restricting the number of births. One study in Belo Horizonte verified no significant difference in the profile of the liveborn children from 1992 to 1994 in other similar cities[8], i.e. the constant profile of the births in that study could indicate that there is no difference in the profile of the liveborn children at the HUM in the past years.

It should be observed that, after 14 years the implantation of SINASC in the city of Maringá, the filling of the DNVs at the Hospital Universitário de Maringá is excellent, being considered an adequate source of information for the study. The variables with no information for the whole city of Maringá in 1994[2] varied by 0.4% for each type of delivery, 3.2% for the education of the mother and 0.1% for the newborn's gender. The variable *mother's occupation* was not presented in the referred study, since it was not part of the DNV at the time. The adequate filling of the DNV may be due to having been used for a long time, with doubts about its completion being clarified over time, as well as the awareness of the healthcare services regarding the use of this instrument.

The percentages presented in the parturients' age range were close to the Belo Horizonte study[8]. Although most parturients were in the adequate range for gestation, the high percentage of adolescent mothers (27.1%) indicates the need for more family planning strategies for this age range. The result of gestation in adolescents was close to the one found in a study in São Luiz, state of Maranhão (1997-1998), with 29.4%[9]. However, it was higher than the values found for the state of Paraná in 2005, which amounted to 20.0%[1].

The condition of most parturients without a partner was also found in Campinas-2001, and this study complemented that adolescents without a partner faced higher risks for the pregnancy[10]. It is necessary to agree with the published study, which states that the current configuration of the DNV limits the real marital situation of the parturients, as this variable is categorized in (single, married, widowed and divorced), which imposes the classification of parturients in consensual stable unions as single instead of married, which would be more adequate. The importance of an adequate classification of this variable can be supported by the possible economic support of a stable situation and the psychosocial support of having a partner with whom to share this moment in life.

The education of the parturient can be seen as an indicator of social condition, as higher levels of instruction make access to jobs easier and offer the possibility of improving the socioeconomic position of the family. The percentage of only 9.4% women with 12 or more years of education is below the figures found for the state of Paraná in 2005[1], which was 16.9%. The percentage of near-illiterates, lower or equal to 3 years of education (27.0%), was higher than the figures for the state of Paraná and the city of Maringá[1], which were 9.5% and 1.9%, respectively. The concentration of low education level in the parturients presents the expected population of the SUS, therefore without other options for healthcare, living with the reality of long waiting lines.

The condition of only 33.5% of the mothers holding paid jobs complements the previous data, i.e. low education results in few socioeconomic options. It is worth noting that only 3.3% of the patients without paid occupations studied, i.e. an expressive amount of young women. This was the variable with the highest absence of information. The absence of information can be explained because the Brazilian Occupational Classification - *Classificação Brasileira de Ocupação – CBO* was not available at the services, since this variable was filled out in the DNV but outside the options of the CBO, being classified as *blank* in the SINASC database. Not filling out the *occupation* variable may interfere in socioeconomic studies. For this type of study, it is necessary that each referenced place have a copy of the CBO in order to fill out the DNV and avoid a number of cases filled out incorrectly. Another study, performed at Hospital Universitário de Gaffrée e Guinle (UNI-RIO), in the city of Rio de Janeiro, with women who received care at the obstetric outpatient clinic[5], found different results related to occupation: 62.7% held some type of paid job and only 37.2% held no paid jobs. However, like the present study, the UNI-RIO study showed that the mothers without a paid occupation were homemakers or students. The introduction of the option consensual union in the variable *marital status* may, in future studies involving the variable *occupation*, estimate the family income of the married mothers who do not hold paid jobs.

The fact that most of the studied population lives outside Maringá strengthens the characteristics of the clientele that seeks the hospital because it is a referral institution for several other cities, as a care provider for high-risk gestations and deliveries, which explains the great differences in the proportions of indicators of the hospital in relation to the city. Although the population that receives care at the HUM lives in different cities, the utilization of the HUM by neighboring cities was expressive, particularly Sarandi and Paiçandu.

For the variable *parity*, a study performed in Caxias do Sul, in the state of Rio Grande do Sul, showed a significant association between this variable and the quality of prenatal healthcare, indicating that the higher the number of children, the later the pregnant women started prenatal monitoring, with lower numbers of consultations[11]. With further statistical analyses, this result could be applied to the present study, which presented little difference between

primiparae (50.4%) and multiparae (49.6%) in the data description. Most of the women (63.6%) had seven or more prenatal consultations.

Regarding *not having children dead at birth*, it was verified in the Rio de Janeiro study that there were no previous children dead at birth among the younger ages. The adolescents had 2.6% more chance of not having children dead at birth when compared to the other women[12]. As such, the presence of 27.1% of adolescent parturients, in this study, could indicate the small results of not having children dead at birth. Considering that 50.4% of the parturients were primiparae and 27.1% were adolescents, effective activities by the healthcare team are needed at the time of delivery to reduce maternal, fetal and neonatal morbidity and mortality.

The gestational length in the city of Maringá, in 2004, was 93.3% term and only 4.4% preterms[2]. For 2006, the figures were 73.8% term and 25.5% preterm. The changes in these proportions may clarify the increase by 23.6% in low-weight newborns in 2006 since, in the aforementioned study, preterm newborns most often had low weight at birth (64.8%). According to the Ministry of Health, the occurrence of low weight at birth expresses restriction to intra-uterine growth or prematurity[13].

The number of prenatal consultations can support the quality of prenatal care since, among several factors that lead to prematurity, the number of liveborns with low weight at birth and deaths due to perinatal complications could be avoided with satisfactory prenatal monitoring[8,14]. Although this study found that 36.2% of the women had less than seven consultations, another study[15] showed that 41.2% did not even have the six prenatal consultations recommended by the Ministry of Health[13]. Although the number of prenatal consultations could be used to analyze the coverage of prenatal services, supporting the planning and assessment of prenatal care, it is limited because it does not cover women who had abortions or a child dead at birth, and does not reflect the quality of the service provided in the prenatal consultations.

The 63.2% percentage for the adequate number of prenatal consultations, reinforced by most parturients (59.3%) coming from other cities, seems to demonstrate that the neighboring cities have difficulties in providing care to pregnant women in general, especially those considered at risk. As such, they are sent to the HUM, which is a referral institution for high-risk pregnancies and deliveries and has both adult and neonatal intensive care units. Adequate prenatal care is a form of preventive medicine, as it makes adequate monitoring, exams, vaccines and specific orientations available to reduce the anxiety of the pregnant woman. It also allows for the early detection of pathologies that can be treated early, contributing to reduce maternal and child mortality.

As described in literature, overall, Brazil has cesarean delivery rates higher than those recommended by the Ministry of Health[13], which would be 40.0% for high risk and 25% for normal risk. The result of this study was no different, presenting 50.4% of cesarean deliveries, considering that this percentage is a regional reference at the HUM regarding high-risk pregnancies. However, the values are higher than those found at Instituto Materno Infantil no Estado de Pernambuco (35%)[16], a referral hospital in the SUS for risky pregnancies. The tendencies in cesarean deliveries reaffirms the abusive use of technology associated to the execution of unnecessary procedures, the precariousness of prenatal and childbirth care quality and the deficiencies in professional education and qualification.

At the HUM, in 1994[2], most newborns (54.4%) weighed 3.000 Kg or more, and the rate of low-weight newborns was 14.8%. The results pointed to the fact that the HUM was the only public hospital in the city, serving as a regional referral institution and concentrating high-risk gestations. In some studies[8,12-13,15] that investigate the prevalence of low weight, proportions varied from 9.8% to 18.7%. These data show that the HUM has a high incidence of low weight among newborns when compared with other Brazilian cities. The comparison of the number of low-weight newborns with other studies brings a reflection about the conditioning factors that result in having children with inadequate weight. It is possible that there are deficiencies in prenatal control, either in the coverage or the quality of care, or a relation with other risk factors like prematurity and the age of the mothers in the extreme groups of reproductive life[12,14].

The neighboring cities have difficulties in providing care to pregnant women in general, especially those considered at risk.

The results for the variables *type of pregnancy, gender, race/color and Apgar score of the newborn* in this study were compatible with other studies and the local reality of the city described next. Regarding the type of pregnancy, some studies[8,12] found that most cases (98.2%) were of single gestation. The prevalence for male babies was also found in the city of Maringá, the state of Paraná and Brazil in 1994[1-2]. The population of Paraná is predominantly white[1]. In 2005, most births (93.2%) were registered as white race/color, which is in agreement with most of the children born at the HUM. The Apgar score results in this study were close to those found in other studies[12,16-17].

The ratio of birth defects was higher than the usual 0.6% in Maringá and Paraná in 2005, which was expected since the hospital was a referral institution for high-risk gestations. With the high prevalence of birth defects, some degree of tracking has to be extended to the whole population of pregnant women[7]. The impact of birth defects in Brazil has been increasing steadily, climbing from the fifth to the second cause of death in children younger than one year old between 1980 and 2000, pointing to the need for specific strategies in healthcare policies[18].

The association among deliveries from mothers living in Maringá, adequate number of prenatal consultations, vaginal delivery and normal weight demonstrated that low-risk mothers seek the HUM, since it is a referral institution for the city. Deliveries by mothers living outside the city was associated to an inadequate number of prenatal consultations, cesarean deliveries and low weight, demonstrating that high-risk mothers seek the HUM, since it is a referral hospital for the other cities. The association between the variables showed that the HUM is an established referral institution among the cities, and it could also suggest the need for improvements in the pacts among the indicators in the cities outside Maringá, as these had the worst results for cesarean deliveries and low weight. For the number of prenatal consultations, the cities outside Maringá probably did not have a number of prenatal consultations ≥ 7, which, according to the instructions of the pact indicators, is specific for cities where the ratio of liveborns from mothers with four or more prenatal consultations was higher than 90% of the previous year. This situation was found at the HUM (91.1%), probably because of the mothers residing in Maringá.

CONCLUSION

The results of this study permitted comparing the reality of the profile of the parturients and their newborns receiving care at the HUM with other realities in Brazil. The result of the indicators found presented dangerous situations for the survival of the studied population group when compared with the city of Maringá and the state of Paraná, especially due to the high number of adolescent mothers, with low education, living outside the city where they received childbirth care, prematurity and low weight strengthening the reference for high-risk delivery care at this hospital and the profile of the mother-child binomial, the expected users of the SUS services.

The identification of dangerous situations in the survival of the newborns as the result of the healthcare system and differences in access and the quality of care are intimately related with the performance of the healthcare services. This summons healthcare managers to action, in the sense of promoting access to quality services for the population. Therefore, the regionalization and qualification of care and the universalization of access are shown to be priority actions and effective interventions to reduce the situations of danger in the survival of newborns in the 15th RS.

The possibility of using the SINASC as a maternal-child health assessment and planning instrument was confirmed. Therefore, studies aiming at improving the conditions of maternal-child health are feasible. However, it should be noted that, in order to supervise and control health indicators, it is necessary to invest in the improvement of information quality , both in filling out the DNVs and the truthfulness and reliability of the data. Periodic reviews with those responsible for filling the DNV and the SINASC are indispensable to verify difficulties for completion, and thus improve the truthfulness of the information according to reality.

The conditions of birth of the newborn could be related to the quality of care provided to the woman during pregnancy, labor and childbirth. The information obtained in this study could assure healthcare for delivery and birth in safe conditions of material infrastructure and human resources, interdisciplinary teamwork with trained professionals who are integrated to work with routine and emergency situations at the presented educational institution.

The fact that most parturients mentioned had more than seven prenatal consultations leads to reflection on a complementary study, due to the following questions: did they have the prenatal consultations due to an active search of the prenatal care services, or was it due to high-risk gestations, which needed more consultations?

Finally, it is believed that it is necessary for healthcare professionals to become more involved in the decentralization of healthcare services. With the regionalization of these services, it is possible to articulate and/or mobilize actions to improve the health of the population according to the specificity of each region, with the consequent promotion of effective interventions at the different service levels. And the improvement in the pacts of the indicators among the cities could influence the healthcare needs of each population.

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