Analysis of records of the prenatal information system in the state of Amapá

Análise dos registros do sistema de informação pré-natal no estado do Amapá

Análisis de registros del sistema de información prenatal en el estado de Amapá

RESUMO

Objetivo: identificar o perfil da atenção pré-natal no estado do Amapá. Método: pesquisa com abordagem quantitativa, descritiva, documental, retrospectiva, desenvolvida com dados secundários do Sistema de Informação Pré-natal, referentes ao período de janeiro a dezembro de 2017. Coleta de abril a junho de 2018, análise estatística descritiva e variáveis bem delimitadas. Resultados: Houve 7.591 cadastros, numa população de 19.091 gestantes estimadas, constatando-se uma baixa cobertura pré-natal no referido período. Detectou-se falhas em relação à captação precoce de gestantes, altos índices de gestação de risco relacionado à faixa etária de 10 a 14 anos e números elevados de gestantes que não concluíram o número mínimo de consultas preconizadas para o pré-natal. Conclusão: Espera-se que os dados possam contribuir para avaliação da qualidade pré-natal, bem como possa basilar futuros estudos sobre a temática.
DESCRITORES: Enfermagem obstétrica; Saúde materna; Cuidado pré-natal; Saúde na fronteira.

ABSTRACT

Objective: to identify the profile of prenatal care in the state of Amapá. Method: research with a quantitative, descriptive, documentary, retrospective approach, developed with secondary data from the Prenatal Information System, referring to the period from January to December 2017. Collection from April to June 2018, descriptive statistical analysis and well-defined variables . Results: There were 7,591 registrations, in a population of 19,091 estimated pregnant women, showing a low prenatal coverage in that period. Failures were detected in relation to the early identification of pregnant women, high risk pregnancy rates related to the age group of 10 to 14 years and high numbers of pregnant women who did not complete the minimum number of consultations recommended for prenatal care. Conclusion: It is expected that the data can contribute to the assessment of prenatal quality, as well as being the basis for future studies on the subject.
DESCRIPTORS: Obstetric nursing; Maternal health; Prenatal care; Border health.

RESUMEN

Objetivo: identificar el perfil de la atención prenatal en el estado de Amapá. Método: investigación con enfoque cuantitativo, descriptivo, documental, retrospectivo, desarrollada con datos secundarios del Sistema de Información Prenatal, referentes al período de enero a diciembre de 2017. Recolección de abril a junio de 2018, análisis estadístico descriptivo y variables bien definidas. Resultados: Se registraron 7.591 registros, en una población estimada de 19.091 gestantes, mostrando una cobertura prenatal baja en ese período. Se detectaron fallas en relación a la identificación temprana de gestantes, tasas de embarazo de alto riesgo en el grupo etario de 10 a 14 años y alto número de gestantes que no completaron el mínimo de consultas recomendadas para el control prenatal. Conclusión: Se espera que los datos puedan contribuir para la evaluación de la calidad prenatal, además de ser la base para futuros estudios sobre el tema.
DESCRIPTORES: Enfermería obstétrica; Salud maternal; Cuidado prenatal; Salud fronteriza.

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INTRODUCTION

Acess to prenatal care that provides qualified care during pregnancy is crucial for reducing maternal mortality, especially in countries characterized by high levels of poverty and social inequalities. [1] In Brazil, prenatal services are present in the scope of actions carried out free of charge by the Unified Health System (SUS). [2]

However, inadequacies in care persist, associated with social and regional inequalities and disparities. [3,4] This scenario is seen, mainly, in the North region of Brazil, which presented the same proportion of women without prenatal assistance, [3] in addition to observing lower coverage, [5] failures in the early detection of pregnant women, number of consultations less than six and high rates of maternal and perinatal morbidity and mortality. [6]

The proportion of home births is also greater in this region, which, when performed by unqualified professionals, are associated with a higher infant mortality rate. [7] This poorer performance in the region may be associated with geographical difficulties, great distances and barriers to access large centers for diagnosis and treatment, and the lack of qualified professionals. [3]

The Prenatal Monitoring System (SISPRENATAL) of the Prenatal and Birth Humanization Program (PHPN) allows monitoring pregnant women and monitoring prenatal and puerperal care provided by maternal health services, from the beginning of prenatal care at the health unit to high-risk hospital care, in addition to providing the calculation bases for the financial transfer transferred from the National Health Fund to the Municipal Health Fund. [2,8]

The indicators generated through the data contained in SISPRENATAL make it possible to analyze and formulate effective strategies for states and municipalities, since Brazil has a high degree of regional heterogeneity, due to numerous socioeconomic and cultural differences, in addition to difficulties in accessing health services, which also differ according to the region in which the Network is located. [9]

The limited availability of data on maternal and child care in the state of Amapá is an important obstacle to its evaluation and planning, in addition to making it impossible to implement effective and resolving measures for the high rates of maternal and infant mortality in the state. Thus, the objective was to identify the profile of prenatal care in the state of Amapá.

METHOD

Descriptive, documentary, retrospective study with a quantitative approach, developed with secondary data from the Prenatal Monitoring Information System (SISPRENATAL), in which we sought to identify the profile of prenatal care in the state of Amapá, from January to December 2017.

The studied population consisted of women who were pregnant in 2017, registered in the Family Health Strategy teams of the 16 municipalities in the state of Amapá. The research was census, which justifies the lack of sampling, and the entire universe was worked with

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the aim of achieving the proposed objective.

All records entered in the period from January 1 to December 31, 2017 were included in the analysis. Incomplete records, which made their analysis impossible, were excluded.

Secondary data were extracted from SISPRENATAL, during the month of April 2018. A data collection instrument was used, containing the following variables: Municipality managing information in SISPRENATAL; Number of UBS that provide prenatal care; Estimates of pregnant women by municipalities; Number of registered pregnant women; Number of pregnant women captured up to the 12th gestational week; Race/Color; Age group; Number of pregnant women followed up to the 40th week of pregnancy; number of prenatal consultations.

Data were collected and subjected to descriptive statistical analysis, presented through tables and figures, through absolute and relative frequency, processed and formatted by the Microsoft Excel 2019 program.

According to Resolution 510 of April 7, 2016 of the National Health Council (CNS), surveys involving data in the public domain and that do not identify the survey participants do not require registration or appreciation by the CEP-CONEP System.

RESULTS

It was verified through the estimation of pregnant women that there was low coverage of records, noting that most of the estimated pregnant women (11,500; 60.2%) were not registered. In the race/color variable, records of brown and black (6254; 82.4%) predominated, followed by white (697; 9.2%). Failures in early capture were observed, in which records after the 12th gestational week predominated (4,388; 57.8%) (Table 1).

With regard to the classification of pregnant women by age group, Table 2 shows that the state of Amapá registered pregnant women aged 10 to 14 years (87/1.1%) and pregnant women over 34 years (841/11, 1%), corresponding to high-risk prenatal care. Regarding the variable follow-up of pregnant women up to the 40th week of pregnancy, it can be seen in Table 2 that there was a predominance of pregnant women who followed the prenatal care up to the 40th week of pregnancy (5,894/77.6%).

Table 1. Prenatal care in the state of Amapá, according to: municipality managing the information, number of registered UBS, estimated number of pregnant women, race/color, in 2017. Macapá-AP, Brazil, 2017.

Managing municipality	UBS* N	Estimated pregnant women N	Registered pregnant women N (%)	Uptake until the 12th week N (%)	Race/Color N				
					Yellow	White	Indigenous	Brown/ Black	Unknown
Amapá	2	195	74 (37,9)	19 (25,7)	0	3	0	71	0
Calçoene	3	239	174 (72,8)	77 (44,3)	89	10	0	75	0
Oiapoque	4	568	212 (37,3)	120 (56,6)	8	37	3	164	0
Pracuúba	1	99	22 (22,2)	5 (22,7)	4	1	0	15	2
Tartarugalzinho	1	365	204 (55,9)	72 (35,3)	3	16	0	176	9
Cutias	1	103	29 (28,2)	12 (41,4)	0	0	0	29	0
Ferreira Gomes	4	232	93 (40,1)	42 (45,2)	8	12	0	71	2
Itaubal	1	160	99 (61,9)	33 (33,3)	11	1	0	79	8
Macapá	29	11.485	5.046 (43,9)	2.152 (42,6)	212	480	4	4249	101
Pedra Branca	2	295	87 (29,5)	41 (47,1)	26	5	1	50	5
Porto Grande	4	501	245 (48,9)	88 (35,9)	8	25	0	207	5
Serra do Navio	2	88	71 (80,7)	27 (38,0)	5	2	0	56	8
Laranjal do Jari	7	1.117	352 (31,5)	152 (43,2)	14	22	0	288	28
Mazagão	4	564	239 (42,4)	86 (36,0)	11	19	0	206	3
Santana	12	2.743	392 (14,3)	169 (43,1)	9	50	0	328	5
Vitória do Jari	5	337	252 (74,8)	108 (42,9)	47	14	0	190	1
Total	82	19.091	7.591 (39,8)	3.203 (42,2)	455	697	8	6254	177

* UBS- Basic Health Units that provide prenatal care.
Source: SISPRENATAL, 2017, data adapted by the authors.

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Table 2. Quantitative and percentage of pregnant women according to Municipality managing the information, Classification by age group and follow-up until the 40th week of pregnancy in 2017. Macapá-AP, Brazil. 2017.

Managing municipality	Age Group N (%)						Follow-up up to the 40th week
	10-14	15-19	20-24	25-29	30-34	>34	
Amapá	1 (1,1)	18 (1,0)	20 (27,0)	21 (28,4)	7 (9,5)	7 (9,5)	59 (79,7)
Calçoene	3 (3,4)	40 (2,3)	44 (25,3)	37 (21,3)	29 (16,7)	21 (12,1)	97 (55,7)
Oiapoque	3 (3,4)	41 (2,4)	62 (29,2)	48 (22,6)	34 (16,0)	24 (11,3)	172 (81,1)
Pracuúba	0 (0,0)	9 (0,5)	7 (31,8)	2 (9,1)	2 (9,1)	2 (9,1)	12 (54,5)
Tartarugalzinho	3 (3,4)	59 (3,4)	57 (27,9)	41 (20,1)	27 (13,2)	17 (8,3)	152 (74,5)
Cutias	1 (1,1)	6 (0,3)	11 (37,9)	7 (24,1)	2 (6,9)	2 (6,9)	25 (86,2)
Ferreira Gomes	2 (2,3)	29 (1,7)	24 (25,8)	18 (19,4)	10 (10,8)	10 (10,8)	81 (87,1)
Itaubal	0 (0,0)	29 (1,7)	28 (28,3)	19 (19,2)	14 (14,1)	9 (9,1)	73 (73,7)
Macapá	47 (54,0)	1077 (61,9)	1402 (27,8)	1103 (21,9)	805 (16,0)	612 (12,1)	3918 (77,6)
Pedra Branca	5 (5,7)	20 (1,1)	23 (26,4)	13 (14,9)	16 (18,4)	10 (11,5)	76 (87,4)
Porto Grande	5 (5,7)	69 (4,0)	66 (26,9)	49 (20,0)	32 (13,1)	24 (9,8)	188 (76,7)
Serra do Navio	1 (1,1)	18 (1,0)	21 (29,6)	17 (23,9)	8 (11,3)	6 (8,5)	48 (67,6)
Laranjal do Jari	4 (4,6)	105 (6,0)	99 (28,1)	69 (19,6)	49 (13,9)	26 (7,4)	309 (87,8)
Mazagão	6 (6,9)	61 (3,5)	55 (23,0)	61 (25,5)	33 (13,8)	23 (9,6)	208 (87,0)
Santana	4 (4,6)	79 (4,5)	118 (30,1)	91 (23,2)	67 (17,1)	33 (8,4)	330 (84,2)
Vitória do Jari	2 (2,3)	80 (4,6)	78 (31,0)	43 (17,1)	34 (13,5)	15 (6,0)	146 (57,9)
Total	87 (4,1)	1740 (22,9)	2115 (27,9)	1639 (21,6)	1169 (15,4)	841 (11,1)	5894 (77,6)

Source: SISPRENATAL, 2017, data adapted by the authors.

Data regarding the number of consultations could not be analyzed due to lack of data/failures in the records.

DISCUSSION

It is observed that the state of Amapá, as it is inserted in a region with specific characteristics of the Amazon watershed, which corresponds to a large number of rivers and streams, in which there are locations that access is only possible by boat, precarious road network, with unpaved sections, added to an extensive territory with low population density, showed absenteeism of women in prenatal consultations, since, in order to travel to urban centers, they often need to have indirect financial resources, such as transport costs or absence from informal work days, the family's only source of income, in addition to the provision of services, which are far away, slowness regarding the marking/scheduling system and has restrictions that require financial support by users. [10]

The worst rates of prenatal care in puerperal women in Brazil occurred in the North Region and the characteristics of these women are low education, without partners and a high number of pregnancies. It was also observed that the barriers encountered by these women to perform prenatal care are twice as high when compared to other regions of the country and are much more associated with access barriers than with individual factors of pregnant women. [7]

A study carried out in the state of Amapá found that the lack of prenatal consultations or their unsatisfactory performance were referred to as obstacles to safe assistance during labor and birth. [11] This absenteeism is reflected in the state's tragic maternal and child health indicators. The Maternal Mortality Ratio in the state of Amapá is much higher than the national average.

In 2018 it was 70.2 for every 100,000 Live Births (LB), [12] in the same year, the average MMR in Brazil was 59.1 deaths per 100,000/LB. [13] The infant mortality rate is the highest in the country, 22.9 deaths per thousand/LB, while the national average is 13.3 deaths per thousand/LB. [14]

Seeking prenatal care early is associated with better health outcomes for women and children. There is no consensus in the literature about which gestational week would be ideal for starting follow-up by health professionals. [15] The Ministry of Health (MS) of Brazil defined early uptake as that which refers to prenatal care initiated before the 12th gestational week, it was observed that pregnant women in the state start prenatal care late, this factor leads to a failure in coverage, as they no longer receive the recommended care, which includes examinations, rapid tests, immunization and health guidelines , as well

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as they were not classified as obstetric risk in a timely manner. [8]

With regard to the follow-up of pregnant women up to the 40th gestational week, the absence of this follow-up entails a loss in care, as the opportunity to encourage exclusive breastfeeding is lost, assessment of nutritional and vaccination status, signs of the prodromes of childbirth, care and guidance for the newborn, treatment and prevention of maternal and child infections, guidance related to women's health, sexuality, family planning, in addition to the opportunity to be linked to the place of delivery. [8,16]

As for the number of consultations, the Ministry of Health recommends that all pregnant women should attend prenatal consultations at least once a month until the seventh month of pregnancy, from the eighth month on, the intervals between appointments should be every fortnight and in the ninth month these appointments should occur weekly, which totals 12 to 14 consultations during the gestational period, recommending a minimum of six prenatal consultations for a low-risk pregnant woman. [8]

The incompleteness of the records makes it difficult to plan, organize and evaluate the services provided to pregnant women. A study carried out in a municipality in the Southeast showed poor and very poor quality of recording for most variables, mainly for the sociocultural conditions of the pregnant women, schooling, race/color and marital status, which, when properly completed, would allow for greater accuracy in the assessment of social vulnerability and maternal and neonatal risk factors. [17]

Regarding race and color vulnerability, a study carried out in the USA found that maternal mortality is higher among black women than whites and other ethnic groups, racial and ethnic disparities are also notable in access to prenatal care. [15] In Brazil, adequate prenatal care is more frequent among white women

who received prenatal care in the private network. [18] Despite the large number of indigenous ethnic groups present in the state, [19] this study verified that only eight indigenous people were registered in SISPRENATAL. However, pregnant women are registered in the Indigenous Health Care Information System (SIASI), a specific system for indigenous peoples, which is used for health monitoring, in which prenatal care for indigenous pregnant women is included. [20]

With regard to the age classification of these pregnant women, high-risk pregnancies are characterized as those that occur at the extremes of age, between women younger than 15 and older than 35. The relative frequency of pregnant women aged 10 to 14 years is higher than the national average in the same period (0.85%). [21] This is alarming data, as it highlights the need to investigate possible crimes of rape of vulnerable people.

Studies carried out in Amapá verified the fragility of the child and adolescent protection network regarding child sexual exploitation [22] and the social determinants of health (SDH) related to the mental suffering of children, one of which was sexual abuse. [23] The precarious labor relations inserted in the context of the frontier and clandestine mining in the Amazon make mothers and fathers leave their children and adolescents in the care of third parties, which weakens the surveillance of this public. [24]

As for the gestational impacts, adolescents are more likely to develop intercurrences, with greater probabilities of premature displacement of the placenta, premature birth, biopsychosocial changes, postpartum depression, among others. Maternal age less than 20 years has a higher possibility of neonatal mortality. [25] The literature also mentions that pregnant adolescents are the ones with the highest frequency of inadequate prenatal care, a lower number of consultations and non-attendance to prenatal care, in addition to a greater number of newborns with low bir-

th weight and premature births when compared to non-adolescent pregnant women. [5] The results of the study are linked to the completion of records in the system, which can lead to manual human failures, which make it impossible to carry out a qualified and reliable analysis of the cases. It was also verified that the analysis could be more robust in the evaluation of the sociocultural data, if it took into account the municipal records and not the state as a whole, through the regional specificities of each municipality. However, this is an important study for evaluating prenatal care in the state of Amapá.

There is a need to expand efforts for adherence and early uptake of prenatal care in the state. Children and adolescents should be prioritized in terms of sex education in order to prevent pregnancy during adolescence. Professionals need to be sensitized and trained to adequately record the care provided to the pregnant woman, requiring follow-up through constant supervision of the records made, so that failures in the path of data submission are detected.

CONCLUSION

There was low coverage of records and failures in early capture. The number of pregnant women aged 10 to 14 years was higher than the national average. There was a predominance of pregnant women who followed the prenatal care until the 40th gestational week. The data regarding the number of queries pointed to failures in the records. Prenatal consultations serve to monitor the pregnancy, provide guidance and identify situations of vulnerability specific to each pregnant woman, at an early stage, to prevent possible risk factors, intercurrences and preventable injuries. Professional training and structuring of the network to lead pregnant women is necessary. Surveys on adherence to prenatal care in the region are necessary to create effective health strategies for the region's singularities.

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