ORIGINAL ARTICLE

PROFILE OF POSTPARTUM ADOLESCENTS AND THEIR NEWBORNS ATTENDED AT THE REFERENCE MATERNITY IN ABREU E LIMA, PERNAMBUCO

PERFIL DAS PUÉRPERAS ADOLESCENTES E SEUS CONCEPTOS ATENDIDOS NA MATERNIDADE DE REFERÊNCIA EM ABREU E LIMA, PERNAMBUCO

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ABSTRACT

Purpose: To describe the characteristics of adolescent mothers and their concepts attended in public maternity in Abreu e Lima - Pernambuco. **Methods:** Exploratory and analytical study. The sample was census in the year 2017. The parameters of the quantitative variables were expressed by their means and standard deviations and median. The parameters of the qualitative variables were expressed by their frequencies. T-test was used to verify differences between means. The correlation test was used between the parameters of the maternal and newborn variables. $p \leq 0.05$ was considered for rejection of the null hypothesis. The project was approved by the Human Research Ethics Committee. **Results:** The mean age of pregnant adolescents was 17.3±1.4 years. There was a predominance of the: brown color, condition of being single and domestic. Seventy-six (23.5%) had leukorrhea, 13 (4.0%) were serological positive for syphilis and five (1.5%) had systemic arterial hypertension. The mean gestational age of these adolescents at the end of gestation was 39.2 ± 1.5 weeks. The majority of the concepts was sent to the joint accommodation. There was no correlation between the characteristics of pregnant women and their concepts. **Conclusions:** The profile of pregnant adolescents enrolled in the investigation was 12 to 19 year old, with a predominance of 15 to 19 year old, mostly single, low schooling, brown, with a high prevalence of leukorrhea and syphilis. No relationship was found between the characteristics of adolescents and characteristics of their concepts.

Keywords: Teenage pregnancy. Adolescent health. Newborn. Pernambuco. Brazil

RESUMO

Objetivo: Descrever as características das mães adolescentes e seus conceptos atendidos em maternidade pública de Abreu e Lima, em Pernambuco. **Métodos:** Estudo analítico. A amostra foi censitária no ano de 2017. Os parâmetros das variáveis quantitativas foram expressos por suas médias, desvios-padrão e medianas. Os parâmetros das variáveis qualitativas foram expressos por suas frequências. Foram utilizados teste para verificação de diferenças entre médias e teste de correlação entre os parâmetros das variáveis maternas e dos recém-nascidos. Foi considerado $p \leq 0,05$ para rejeição da hipótese de nulidade. O projeto foi aprovado pelo Comitê de Ética de Pesquisa em Seres Humanos. **Resultados:** A média das idades das adolescentes gestantes foi de 17,3 ± 1,4 anos. Houve predomínio da cor parda, do estado civil solteira e da condição de ser "do lar". Setenta e seis delas (23,5%) apresentavam leucorreia, 13 (4,0%) eram portadoras sorológicas de sífilis e 5 (1,5%) apresentavam hipertensão arterial sistêmica. A média das idades gestacionais dessas adolescentes no término da gestação foi de 39,2 ± 1,5 semanas. A maioria dos conceptos foi encaminhada para o alojamento conjunto. Não foi observada correlação entre as características das gestantes e dos seus conceptos. **Conclusões:** O perfil das adolescentes grávidas atendidas é de jovens de 12 a 19 anos, predominantemente as de 15 a 19 anos, na sua maioria solteira, baixa escolaridade, parda, do lar, com prevalência importante de leucorreia e sífilis. Não foi observada relação entre as características das adolescentes e as dos seus conceptos.

Palavras-Chave: Gravidez na adolescência; Saúde da adolescente; Recém-nascido; Pernambuco

INTRODUCTION

Adolescent pregnancy occurs abruptly, is often unexpected, modifies the family environment[1-2], and is most observed among less educated and poorer populations[3]. These young women face conflicts and need global and compassionate understanding. Concerning family structure and social context, the challenges involved with pregnancy in adolescence are not commonly considered[4].

In Brazil, the prevalence of pregnancy among adolescents is about 19%, despite educational campaigns designed with clear and accessible language to enhance reproductive health. However, family stressors, limited opportunities, low educational level, inadequate use of contraceptive methods, and significant hormonal changes often drive young women to seek independence, which may manifest in the pursuit of consensual partners, culminating in early pregnancy[2,5-16].

Recurrent pregnancy generates problems that may affect the mother and newborn, including increased morbidity, mortality, and hinder the entry of the adolescent into the job market[3]. Furthermore, the shorter stature of adolescents from socioeconomically disadvantaged settings is associated with lower mean height in newborns. Conversely, newborns from adolescents in less structured societies experience a greater impact on their health status[7].

The influence of maternal age and related anthropometric and socioeconomic factors has been studied. However, the relationship between maternal age-related variables and neonatal outcomes (e.g., prematurity, low birth weight, and Apgar scores) has not been frequently investigated in Brazilian adolescent mothers[6].

This study aimed to describe the characteristics of postpartum adolescents and their newborns receiving care at a public referral maternity hospital in the city of Abreu e Lima, Pernambuco.

METHODS

The present study is an exploratory study, conducted at the public referral maternity hospital in the city of Abreu e Lima, Pernambuco, and at the Faculdade de Medicina de Olinda. The study included postpartum adolescents with normal-risk pregnancies who delivered at this facility. Those unable to complete the required data for additional analysis were excluded.

The postpartum adolescents were allocated into group I (12 to 14 years) and group II (15 to 19 years). The participants were assessed regarding ethnicity, marital status, occupation, comorbidities (systemic arterial hypertension, diabetes mellitus, sexually transmitted infections, and physical or psychological violence), and type of delivery. For the newborns, the following variables were recorded: birth weight, length, gestational age, Apgar score, head circumference, and hospital outcomes. All data (mothers and newborns) constituted the analytical component of the study.

The sample was census-based for the year 2017. Quantitative variables were expressed as means, standard deviations, and medians. Qualitative variables were expressed as absolute and relative frequencies. Student's t-test was used to verify differences between means. Pearson's correlation coefficient was used to analyze relationships between maternal and neonatal variables. A significance level of $p \leq 0.05$ was adopted for rejection of the null hypothesis.

The study was approved by the research ethics committee on human subjects and authorized by the director of the public maternity hospital in Abreu e Lima, Pernambuco, and by the General Director of the Faculdade de Medicina de Olinda.

RESULTS

In 2017, 1,492 pregnant women were admitted to the maternity unit where the study was conducted; 361 (24.2%) were aged between 12 and 19 years, 1,002 were between 20 and 34 years, and 139 were 35 or older. Of the 361 pregnant adolescents, 324 were eligible for inclusion in the study. Reasons for exclusion included complete or incomplete miscarriage (n = 23), presence of cystocele (n = 1), myomectomy procedure (n = 1), and incomplete medical records (n = 12).

Table 1 presents the absolute and relative frequencies of maternal sociodemographic characteristics. The mean gestational age at delivery among the adolescents was 39.2 ± 1.5 weeks, with a median of 39 weeks and a range from 30 to 42 weeks. The data did not meet the criteria for normality.

Table 2 presents the mean birth weights, lengths, head circumferences, Apgar scores (at one and five minutes), and neonatal outcomes.

The mean birth weight of newborns in group I was 3.134 ± 0.442 kg, and in group II was 3.260 ±

0.397 kg (p = 0.2466).

No strong correlations were observed between maternal age, marital status, comorbidities, and gestational age with the neonatal birth weight (r = 0.09; r = 0.06; r = 0.01; r = 0.01; and r = 0.28, respectively), neonatal length (r = 0.08; r = 0.02; r = 0.08; r = 0.02; and r = 0.28, respectively) or head circumference (maternal age: r = 0.10; marital status: r = 0.12; comorbidities: r = 0.01; gestational age: r = 0.023, respectively).

DISCUSSION

The assessment of adolescent characteristics in a small maternity hospital located in the metropolitan area of Recife is relevant because it has not been previously described and may reflect features representative of other localities within this region. However, these findings do not represent the characteristics of postpartum adolescents assisted in the larger maternity hospitals of Recife, which provide care within the Brazilian Unified Health System, because the former do not admit high-risk pregnant adolescents. In this sense, large maternity hospitals, by admitting younger and higher-risk pregnant adolescents, are more likely to generate newborns with lower birth weights, higher comorbidity rates, and increased morbidity and mortality. In Fortaleza[6], in Northeastern Brazil, this information has not yet been evaluated.

The exclusion of 12 postpartum adolescents due to incomplete medical records may reflect difficulties in completing medical documentation properly within the institution where the study was conducted. The lower frequency of admissions among adolescents aged 13 to 15 years may account for the reduced occurrence of low-birth-weight newborns, small-for-gestational-age infants, and fewer morbidities. Regarding the variable younger maternal age, the proportion was lower than observed in Fortaleza[6]. The mean age of the adolescents included in the present study was similar to that reported in a larger study conducted at a nationally recognized referral institution in the South of Brazil[5,17]. However, in the present study, the representation of brown adolescents with low educational attainment and unemployment was more significant.

A high prevalence of single mothers (± 95%) was observed. In Fortaleza, this prevalence corresponds to the combined prevalences of single and consensual unions[6], information that was not available in the medical records of postpartum adolescents from our study.

The prevalence of syphilis among adolescents in this study was considerably higher than the reported prevalence among postpartum women in Brazil[15], which may be associated with the higher levels of poverty in the Northeast compared with the South and Southeast regions[5,6,10,17].

The frequency of vaginal delivery was higher than that of other adolescents assisted in Brazil[5,10,17] and abroad[3,9,12,16], probably because the public health policy promoted by the Brazilian Ministry of Health encourages it.

The absence of a correlation may explain the lack of association between the characteristics of postpartum adolescents and newborns. Also, this finding may be attributed to the limitation of the sample to older adolescents and exclusion of high-risk pregnancies, which might have required admission to a neonatal intensive care unit, an unavailable resource at the institution where the study took place.

Table 1. Characteristics of postpartum adolescents attended at the maternity hospital of Abreu e Lima, Pernambuco, 2017.

Variables	Absolute frequency (n)	Relative frequency (%)
Age (years)		
12 to 14	15	4.6
15 to 19	309	95.4
Ethnicity		
White	30	9.3
Brow	290	89.5
Black	4	1.2
Marital status		
Single	308	95.1
Married	12	3.7
Divorced	4	1.2
Occupation		
Housewife	226	69.7
Student	86	26.5
Self-employed	12	3.7
Comorbities		
Systemic arterial hypertension	5	1.5
leukorrhea	76	23.5
STI- Syphilis	13	4
Type of delivery		
Vaginal delivery	292	90.1
Cesarean section	32	9.9
Forceps-assisted vaginal delivery	1	0.3

Caption: n: number of adolescents.

Table 2. Characteristics of adolescent mothers and their newborns at the Abreu e Lima Maternity Hospital – PE, in 2017.

	Mean +/- SD	Median	Variation (minimum/ maximum)	Frequency	
				Absolute (n)	Relative (%)
Birth weight (grams)	3,255±399	3,240	1,980 a 4,650		
Length (cm)	48.7±2.0	49	40 a 56		
Head circumference (cm)	34.3±1.3	34	31 a 38		
Apgar					
1º minute	8.3±1.2	9	3 a 10		
5º minute	9.5±0.8	10	5 a 10		
Destination of the NB					
Romming-in				314	96.4
High-risk nursery				10	3.1

Legend: n: number of concepts. RN: newborn.

CONCLUSION

The profile of postpartum adolescents assisted at the Abreu e Lima Maternity Hospital aged 12 to 19 years, predominantly between 15 and 19 years, mostly single, with low educational level, brown, homemakers, and with an important prevalence of leukorrhea and syphilis. No association was found between the characteristics of postpartum adolescents and their newborns.

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