

OBSTETRIC INTERCORRENCES OCCURRING DURING PREGNANCY IN ADOLESCENCE

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ABSTRACT

This study aimed to describe the sociodemographic profile and the main complications during pregnancy in adolescence. This is a quantitative, descriptive study, conducted with 559 puerperal adolescents at three obstetric units of teaching hospitals in Rio Grande do Sul, Santa Catarina and Paraíba. Data collection was performed by means of an interview with the application of a structured instrument for characterization of adolescents and identification of complications during pregnancy. There were complications during pregnancy in 56% of the puerperal women from Rio Grande do Sul, 55% of the Paraíba and 49% of Santa Catarina. The problems identified were urinary tract infections, anemia and hypertension/eclampsia. Regarding the reasons that led to hospitalization of pregnant adolescents, factors had several causes, such as arterial hypertension/eclampsia, hypotension, pain, allergies and seizures. With this, knowing these adolescents' profile and their most common complications allows health care professional to provide a more effective prenatal follow-up focused on the specificities of this population.

Keywords: Adolescent. Pregnancy in adolescence. Pregnant women. Risk factors.

INTRODUCTION

Adolescent pregnancy is a major public health problem both in Brazil as in many other countries around the world⁽¹⁻³⁾. Data from the National System of Live Births (SINASC - Sistema Nacional de Nascidos Vivos) indicate decreased birth rates, but relative increased births of mothers aged less than 20 years. Statistics relating to the year 2016 show that approximately 477 thousand newborns in Brazil have mothers aged between 15 and 19 years old, being 54 thousand from the south region and 158 thousand from the northeast region⁽⁴⁾.

The early initiation of sexual activity, allied to the misinformation regarding the proper use of contraceptives and the deficiency of programs of assistance for adolescents are some factors responsible for increasing pregnancy, abortions and sexually transmitted diseases in adolescence. Moreover, the increasingly early onset of puberty, which has been anticipating over the years, presents itself as an important contributing factor in early pregnancies⁽⁵⁾.

In addition to menarche and early sexarch, which contribute to the high rates of teenage pregnancy⁽⁶⁾, low education and socioeconomic level, conflicting family relations, non-use of contraceptive methods and even the willingness of adolescents to experience motherhood perceived as a "passport" for adulthood are also related to those rates⁽²⁻³⁾. A cohort study conducted in Rio Grande do Sul confirmed that the low schooling and family income are associated to maternity and paternity in adolescence⁽⁷⁾.

Furthermore, pregnancy in adolescence can result in early school dropout, and few adolescents resume those studies^(1-3,8). Moreover, pregnancy in adolescence generates late consequences, for both the adolescent as the newborn, such as growth, development, emotional, behavioral, social, educational and learning problems⁽²⁻³⁾; in addition to a higher risk of complications during pregnancy and delivery⁽⁹⁾.

A problem linked to pregnancy in adolescence is the adolescent's physical and mental immaturity to have a child^(3,9), which ends up being the main cause

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of mortality for girls aged between 15 and 19 years, approximately 70 thousand deaths every year⁽¹⁰⁾. The worst complications occur in very young girls (aged under 15 years), who have a mortality rate 60% higher when compared to women above 20 years⁽⁹⁾.

Although pregnant adolescents are more exposed to risks, they receive less attention from health services, which contributes to such high rates⁽¹¹⁾. Due to this problem, knowing the profile of pregnant adolescents attended at health services, as well as identifying the major complications that can affect this population during the gestational period can contribute to a more qualified care and prevention of diseases and complications to which the pregnant adolescent and her fetus are exposed.

Thus, the objective of this article was to describe the sociodemographic profile of puerperal adolescents and the main complications during pregnancy.

METHOD

This is a quantitative, descriptive, cross-sectional study, conducted at three obstetric units of teaching hospitals in the states of Rio Grande do Sul, Santa Catarina and Paraíba. These hospitals have, respectively, 162 beds and 22 obstetric beds, 181 beds and 20 obstetric bed and, finally, the hospital of Paraíba has? beds and? obstetric beds.

The study fields were selected because, in addition to teaching hospitals, they are also a reference center in high-risk care to pregnant women, considering the adolescence phase, which is the focus of the study. Moreover, they are located in different regions of Brazil, which allows identifying differences in the studied population.

This study is part of a multicenter study entitled "Social Support Networks to paternity in adolescence (RAPAD - Redes Sociais de Apoio à Paternidade na Adolescência)", funded by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq – National Council for Scientific and Technological Development) and which aimed to investigate the networks of support to paternity in adolescence. The sample consisted of 559 adolescents, being 181 puerperal women from Rio Grande do Sul (Pelotas), 292 from Santa Catarina (Florianópolis) and 86 from Paraíba (João Pessoa) that had their deliveries in the period from December 2008 to December 2009.

The inclusion criteria were: puerperal adolescents aged less than 20 years, who gave birth at the study hospital during this period. The exclusion criteria were: severe maternal diseases that interfere in the communication, hampering puerperal women to respond the questionnaire and when there was fetal death.

After selection, the interview was performed with the application of a structured instrument, containing the following variables: demographic, socioeconomic data; data on gynecological and obstetrical history; data on pregnancy, prenatal, delivery and newborn. Data were stored in a structured database in the software EPI INFO 6.04, being performed a review of instruments and dual typing, which eliminated possible biases in the study. After the final editing of the database, it was converted to the statistical package SPSS 13.0 (SPSS Inc., Chicago, USA), in which the descriptive analysis of the variables was performed by means of relative and absolute frequencies.

This research observed Resolution 466/12, which deals with researches involving human beings. The Informed Assent Form was used for adolescents and Informed Consent Form was used for those emancipated or aged 18 years or more, ensuring the confidentiality of information, voluntariness and anonymity. Furthermore, the research was approved by the Ethics Committee of the Dentistry College of Federal University of Pelotas, with Opinion n. 007/2008.

RESULTS

In relation to sociodemographic characteristics, most surveyed puerperal adolescents were in the age range from 15 to 19 years (95.9%), and the predominant skin color was white, almost half of the puerperal adolescents (49.3%). Regarding marital status, 78.7% were married or lived with a partner at the time of the interview, and most of them were not studying at the moment of the interview (73.9%), as shown in Table 1.

Regarding schooling, there was predominance of 42% with incomplete primary education. In relation to work, only 12.5% of the puerperal adolescents reported working, and most of them come from low-income families, because 63% lived with income up to two minimum wages (Table 1).

Table 1. Sample description of puerperal adolescents according to sociodemographic characteristics, (N=559), 2010.

Variable	N	%
Age		
12 - 14 years	23	4.1
15 - 19 years	536	95.9
Skin color		
White	276	49.3
Parda/Dark skinned	210	37.6
Black	66	11.8
Ignored	07	1.3
Marital status		
Single / without a partner	119	21.3
Married / with partner	440	78.7
Study		
No	413	73.9
Yes	146	26.1
Education		
Illiterate	01	0.2
Incomplete Elem. School	235	42.0
Complete Elem. School	125	22.4
Incomplete High School	129	23.1
Complete High School	68	12.1
Incomplete College	01	0.2
Work		
No	489	87.5
Yes	70	12.5
Family income*		
Up to 1 minimum wage**	114	23.2
From 1,1 to 2 minimum wages	196	39.8
2,1 or more minimum wages	182	37.0

SOURCE: RAPAD Research, 2008-10. POPULATION: adolescents aged 10 – 19 years, Pelotas (RS), Florianópolis (SC), João Pessoa (PB).

* 67 puerperal adolescents could not inform their family income.

** Minimum wage in force: R\$465,00. Law 11.944/2009, 29 May, 2009.

The results also showed that the complications during pregnancy in adolescence are high, maintaining higher indexes in the city of Pelotas, Rio

Grande do Sul) (56%), followed by João Pessoa (Paraíba) (55%) and Florianópolis (Santa Catarina) (49%), according to Figure 1.

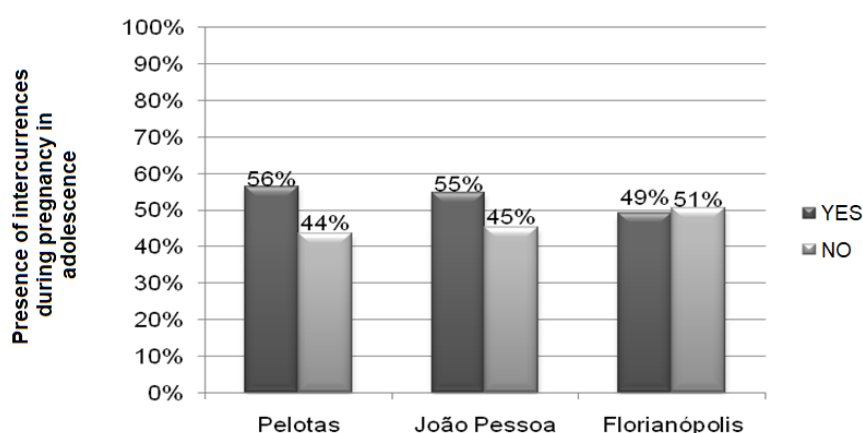


Figure 1. Presence of intercorrences during pregnancy in adolescence of the RAPAD research - Pelotas (RS), Florianópolis (SC), João Pessoa (PB), 2008-10.

In this context, urinary tract infections (UTI) showed higher prevalence in the three surveyed states

(Figure 2), being more common in the cities of Florianópolis (65%) and Pelotas (64%).

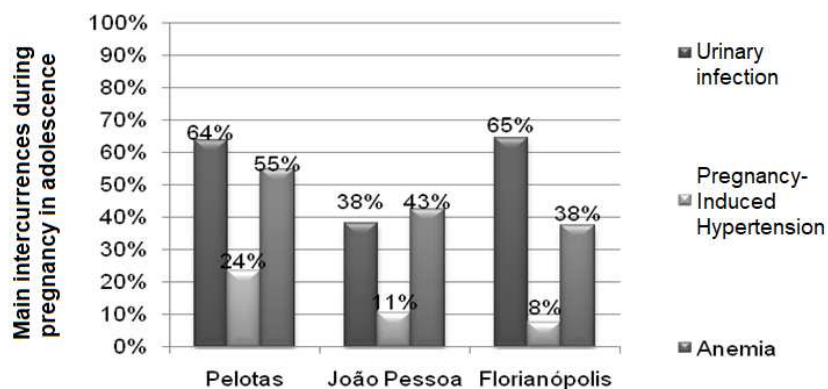


Figure 2. Main intercurrents during pregnancy in adolescence. RAPAD Research - Pelotas (RS), Florianópolis (SC), João Pessoa (PB), 2008-10.

Furthermore, the prevalence of pregnant adolescents hospitalized for any type of intercurrent was not significant, totaling 15% in Pelotas, (Rio

Grande do Sul) and lower rates in other study fields, as presented in figure 3.

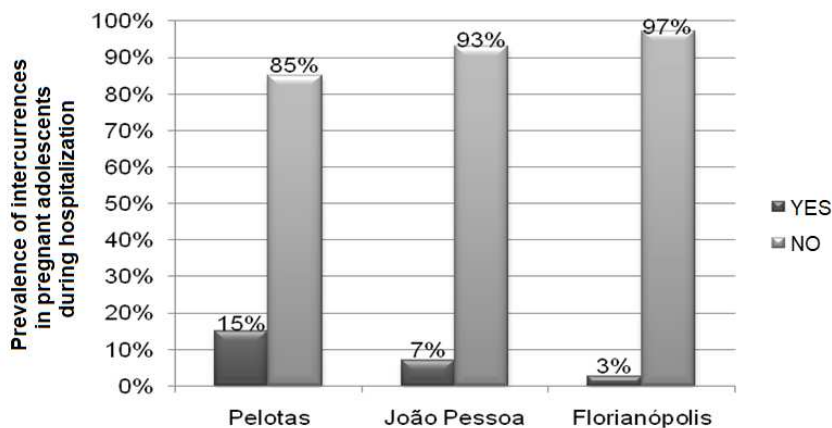


Figure 3. Prevalence of intercurrents in pregnant adolescents during hospitalization. RAPAD Research - Pelotas (RS), Florianópolis (SC), João Pessoa (PB), 2008-10.

The intercurrents that most affected the pregnant adolescents during hospitalization, as described in Figure 4, were hypertension/eclampsia, hypotension,

broken water and other intercurrents in smaller proportion (grouped to facilitate data analysis).

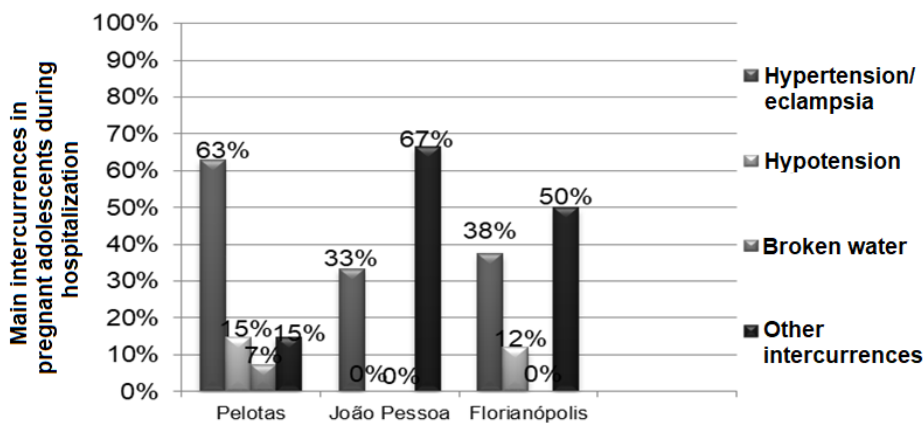


Figure 4. Main intercurrents in pregnant adolescents during hospitalization. RAPAD Research - Pelotas (RS), Florianópolis (SC), João Pessoa (PB), 2008-10.

In addition to the aforementioned intercorrences, the puerperal adolescents reported other problems that led to the hospitalization, such as gestational diabetes, fainting, strong pain, seizures, allergies, heart problems, among other reasons. These data were grouped by presenting relatively low numbers (figure 4).

DISCUSSION

Considering the results, pregnancy in very young adolescents presents higher risks for the mother and the child, thus, the parity in this group should be monitored^(7,9). In addition, since most of them had a companion, as another study⁽¹²⁾, it is essential to include the companion in care, since many pregnant adolescents indicate the lack of a support network during pregnancy⁽³⁾.

Education and motherhood have close relationship in Brazil^(2-3,8), according to the profile of the surveyed puerperal adolescents. The incomplete basic education presented by the majority may be a factor that may restrict access to information, guidelines, the ability to care, assistance and difficulty exercising their rights and their citizenship⁽⁸⁾.

Another important issue is that few puerperas reported working, and most of them have low income (up to two minimum wages). In this context, the occurrence of health problems for both the adolescent as the child may also be related to the financial situation in which the family lives^(9,10).

In social terms, the implications, in the long term, of this profile of pregnant adolescents can lead to dependence on government support programs⁽⁹⁾, in addition to the disqualification for the job, fewer opportunities of life, discouragement to follow idealized projects and increased family dependence⁽³⁾.

Moreover, complications relating to pregnancy in adolescence increase when they are associated with unfavorable socioeconomic conditions, fragile family structure and difficulties in access to basic services⁽⁸⁾. Thus, the study shows that poverty can be a significant factor that may be contributing to the increased prevalence of complications, which are considered high in the three surveyed states.

There is evidence that adolescents can suffer more complications during pregnancy and in the postpartum period than pregnant women in other age groups due to physiological and psychological characteristics peculiar to the age itself^(2-3,9). Thus, UTI stands out as the main complication of these

puerperas and that can affect pregnancy, childbirth and the puerperium for the woman and her child.

Some perinatal complications of the UTI are labor and premature delivery, low birth weight of newborns, premature rupture of amniotic membranes, intrauterine growth restriction, cerebral palsy, mental retardation and perinatal death⁽¹³⁻¹⁴⁾.

Any UTI during pregnancy should be considered as complicated and needs to be addressed as such⁽¹³⁾. A similar study found that 20% of the pregnant adolescents presented urinary tract infection⁽¹⁴⁾, which allows indicating that, in the present study, the incidence of puerperal adolescents who presented UTI was extremely high (up to 65%).

Furthermore, other frequent disorders are related to pregnancy in adolescents such as anemia, hypertension/preeclampsia, malnutrition, toxemia, uterine dysfunctions, sexually transmitted diseases, urinary tract infections, complications in delivery, hemorrhage in the puerperal period and maternal mortality^(1-2, 12,14). In addition to these, other maternal complications such as low weight gain, prolonged labor, contracted pelvis, cerebrospinal-pelvic disproportion and postpartum depression are also assigned to early motherhood^(2-3, 8-9).

Despite these complications, if they receive an adequate service during prenatal, delivery and puerperium from a qualified health professional, both adolescent mothers as their babies may face fewer complications⁽¹⁵⁻¹⁶⁾. For this reason, health professionals have a fundamental role in attention to the pregnant adolescent, who presents different characteristics from pregnant adults⁽³⁾.

However, some pregnant adolescents do not perform prenatal because they feel alone or embarrassed due to abandonment by the partner or family⁽⁶⁾. The lack of prenatal care is associated with an increased risk of low birth weight, premature births and maternal and infant mortality^(8,12), very common in pregnancy that occurs during adolescence.

In addition, another study shows that adolescents attend less prenatal consultations, when compared to older mothers⁽¹¹⁾. This low adherence to prenatal care may be associated with low schooling and, consequently, less understanding of the need for special care during pregnancy⁽⁸⁾, because the sooner they begin the prenatal, the smaller the maternal and newborn complications⁽¹⁾.

In this sense, once it is considered a risky pregnancy, it is crucial that this pregnant adolescent is

accompanied by a specialized and multiprofessional team with doctor, nurse, psychologist, nutritionist, social worker, among other health professionals⁽³⁾. Thus, it is important to identify and treat early any type of complications during prenatal care, avoiding the evolution of treatable pathologies' to more serious cases and, with this, bring serious complications in pregnancy, delivery and puerperium.

CONCLUSION

The analyzed data show that pregnancy in adolescence occurred predominantly in mothers aged from 15 to 19 years, with low socioeconomic level, with obvious low family income, without a job and low schooling. The most frequent complications during pregnancy in adolescence were, consecutively, urinary tract infections, anemia and hypertension/eclampsia, in all study fields. Regarding the reasons that led to the hospitalization of pregnant

adolescents, the factors had several causes, highlighting hypertension/eclampsia, hypotension, broken water, pain, allergies and seizures.

Pregnancy in adolescence itself already presents risks and, when associated to other diseases, injuries increase for both mother as fetus. Therefore, knowing these adolescents' profile and their most common complications allows health care professional to provide a more effective prenatal follow-up focused on the specificities of this population.

Therefore, in-depth instruction regarding this theme is extremely necessary, not only with respect to the characteristics of adolescents, as well as the clinical factors that may interfere with the gestational process. As a limitation of the study, there is the need for comparison of the variables between the different fields of data collection, using other statistical analyses, as well as with puerperal women who are not teenagers.

INTERCORRÊNCIAS OBSTÉTRICAS QUE OCORREM DURANTE A GRAVIDEZ NA ADOLESCÊNCIA

RESUMO

Objetivou-se descrever o perfil sociodemográfico e as principais intercorrências presentes durante a gravidez na adolescência. Trata-se de um estudo quantitativo, descritivo, realizado com 559 puérperas adolescentes em três unidades obstétricas de hospitais de ensino no Rio Grande do Sul, Santa Catarina e Paraíba. A coleta de dados foi realizada por meio de entrevista com a aplicação de um instrumento estruturado para caracterização das adolescentes e identificação das intercorrências ocorridas na gestação. Apresentaram intercorrências na gestação 56% das puérperas do Rio Grande do Sul, 55% da Paraíba e 49% de Santa Catarina. As intercorrências apontadas foram infecções do trato urinário, anemia e hipertensão/eclampsia. Quanto aos motivos que levaram à internação da gestante adolescente, os fatores foram multicausais, entre os quais se destacam hipertensão/eclampsia, hipotensão, bolsa rota, dor, alergias e convulsões. Com isso, conhecer o perfil dessas adolescentes e quais intercorrências comumente as acomete, permite ao profissional de saúde um acompanhamento de pré-natal mais eficaz e resolutivo voltado às especificidades dessa população.

Palavras-chave: Adolescente. Gravidez na adolescência. Gestantes. Fatores de risco.

COMPLICACIONES OBSTÉTRICAS QUE OCURREN DURANTE EL EMBARAZO EN LA ADOLESCENCIA

RESUMEN

Esta investigación tuvo el objetivo de describir el perfil sociodemográfico y las principales complicaciones presentes durante el embarazo en la adolescencia. Se trata de un estudio cuantitativo, descriptivo, realizado con 559 puérperas adolescentes en tres unidades obstétricas de hospitales escuela en Rio Grande do Sul, Santa Catarina y Paraíba-Brasil. La recolección de datos fue realizada por medio de entrevista con la aplicación de un instrumento estructurado para caracterización de las adolescentes e identificación de las complicaciones ocurridas en el embarazo. Presentaron complicaciones en el embarazo 56% de las puérperas de Rio Grande do Sul, 55% de Paraíba y 49% de Santa Catarina. Las complicaciones señaladas fueron infecciones del tracto urinario, anemia e hipertensión/eclampsia. En cuanto a los motivos que llevaron a la internación de la gestante adolescente, los factores fueron multicausales, entre ellos se destacan hipertensión/eclampsia, hipotensión, bolsa rota, dolor, alergias y convulsiones. Con ello, conocer el perfil de estas adolescentes y cuáles complicaciones comúnmente las acomete, permite al profesional de salud un acompañamiento de prenatal más eficaz y resolutivo dirigido a las especificidades de esta población.

Palabras clave: Adolescente. Embarazo en la adolescencia. Embarazadas. Factores de riesgo.

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