



OBSTETRIC COMPLICATIONS IN ADOLESCENTS FROM A MATERNITY HOSPITAL COMPLICAÇÕES OBSTÉTRICAS EM ADOLESCENTES DE UMA MATERNIDADE

COMPLICACIONES OBSTÉTRICAS EN ADOLESCENTES DE UNA MATERNIDAD

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ABSTRACT

Objective: to identify obstetric complications in adolescents assisted at a maternity hospital. **Method:** this is a documentary, retrospective, study carried out through the collection of 45 medical records from the statistical and medical archive service (SAME) of Hospital Regional de Cajazeiras, in March and April 2011. Data were analyzed with a focus on the quantitative method, which tends to emphasize deductive reasoning, the rules of logic, and measurable attributes of human experience. The study was approved by the Research Ethics Committee of Faculdade Santa Maria (FSM), under the CAAE 43102/2010. **Results:** 31.1% of adolescents presented babies with low birth weight; 22.2% with pre-eclampsia; 20% with prematurity; 13.3% with rupture of the cervix; and 8.8% with urogenital infections and eclampsia. **Conclusion:** in face of the findings, there's a need for better performance of health professionals and managers, since adolescence is a challenge for parents, educators, and health professionals and, thus, it demands support, understanding, participation, and dialogue. **Descriptors:** Adolescence; Complications; Pregnancy.

RESUMO

Objetivo: identificar as complicações obstétricas em adolescentes atendidas em uma maternidade. **Método:** trata-se de estudo documental, retrospectivo, realizado a partir da coleta de 45 prontuários do serviço de arquivo médico e estatístico (Same) do Hospital Regional de Cajazeiras, em março e abril de 2011. Os dados foram analisados com enfoque no método quantitativo, o qual tende a enfatizar o raciocínio dedutivo, as regras da lógica e atributos mensuráveis de experiência humana. A pesquisa foi aprovada pelo Comitê de Ética em Pesquisa da Faculdade Santa Maria (FSM), sob o CAAE n. 43102/2010. **Resultados:** 31,1% das adolescentes apresentaram bebês com baixo peso ao nascer; 22,2% com pré-eclampsia; 20% com prematuridade; 13,3% com ruptura do colo do útero; e 8,8% com infecções urogenitais e eclampsia. **Conclusão:** diante dos achados, faz-se necessária uma melhor atuação dos profissionais e gestores de saúde, pois a adolescência é um desafio para pais, educadores e profissionais da saúde e demanda, assim, apoio, compreensão, participação e diálogo. **Descritores:** Adolescência; Complicações; Gravidez.

RESUMEN

Objetivo: identificar las complicaciones obstétricas en adolescentes atendidas en una maternidad. **Método:** esto es un estudio documental, retrospectivo, realizado desde la recogida de 45 prontuarios del servicio de archivo médico y estadístico (Same) del Hospital Regional Cajazeiras, en marzo y abril de 2011. Los datos fueron analizados con enfoque en el método cuantitativo, que tiende a enfatizar el raciocinio deductivo, las reglas de la lógica y atributos mensurables de experiencia humana. La investigación fue aprobada por el Comité de Ética en Investigación de la Faculdade Santa Maria (FSM), bajo el CAAE 43102/2010. **Resultados:** 31,1% de las adolescentes presentaron bebés con bajo peso al nacer; 22,2% con pre-eclampsia; 20% con prematuridad; 13,3% con rotura del cuello del útero; y 8,8% con infecciones urogenitales y eclampsia. **Conclusión:** delante de los hallazgos, se torna necesaria una mejor actuación de los profesionales y los gestores de salud, ya que la adolescencia es un desafío para padres, educadores y profesionales de la salud y demanda, así, apoyo, comprensión, participación y diálogo. **Descriptores:** Adolescencia; Complicaciones; Embarazo.

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INTRODUCTION

Pregnancy is a normal physiological phenomenon which causes maternal modifications involving all body systems. Being a mother comprises the ability and responsibility to conceive and provide life conditions to a new human being, bringing on new adaptations to the woman, in order to face something unknown. The course of pregnancy, the delivery, and the care for children require a lot from women, both physically and emotionally.¹

In adolescence, pregnancy becomes a problem which has proved to be a difficult phenomenon to address, either by lack of information, bringing up their taboos, myths, or even their own context, with changes and consequences. In Brazil, it has been translated into a major challenge for the whole society, also becoming a public health problem – something which requires planning strategies aimed at adolescents.²

Pregnancy is a social, family, and personal event of the utmost importance for those involved. One can't forget this, even when working with pregnant women on a daily basis. Although the pregnancy diagnosis isn't equal to that of a disease, usually, it brings strong emotions. The professional should keep in mind that she/he deals with people in very important situations for them. Thus, she/he must search for the sources of support to young pregnant women, with their sociocultural determination, and prepare strategies focusing on more vulnerable groups, with full attention to sexual and reproductive health. There's a need for learning to understand these adolescents to promote their well-being and quality of life.³

From the standpoint of obstetrics, pregnancy in adolescence is regarded as high risk, due to the high rate of fetal morbidity. There's a higher incidence of anemias, toxins (pre-eclampsia), urinary tract infection, low maternal weight gain, prematurity, low Apgar scores, and early weaning, besides the poor antenatal coverage. Pregnancy brings many negative social effects, such as: loss of education and job opportunities, as well as decreased chances of having a happy marriage, with limitation of voluntary choices. One also observes psychological effects associated to emotional and education conflict in the face of maternity seduction.⁴

In this context, this paper aims to identify obstetric complications in adolescents assisted at a maternity hospital in the town of Cajazeiras, Paraiba, Brazil, within the period from January 2010 to January 2011.

METHODOLOGY

This is a retrospective documentary research, with a quantitative approach. The population and the study sample were constituted from 45 medical records of adolescent parturients with obstetric complications assisted at the maternity ward of Hospital Regional de Cajazeiras (HRC), within the period from January 2010 to January 2011.

For collecting the data, one used a script prepared by the authors. There was a previous contact with the board of HRC and the professional in charge of the statistical and medical archive service (SAME), asking for their permission to conduct the research. They provided the needed data for the study. So, the researchers applied the scripts in March and April 2011.

The data obtained were analyzed with a focus on the quantitative method, which tends to emphasize deductive reasoning, the rules of logic, and measurable attributes of human experience.⁵

The study was approved by the Research Ethics Committee of Faculdade Santa Maria (FSM), under the CAAE 43102/2010. For conducting this study one observed the assumptions of Resolution 196/96, from the National Health Council (CNS) of the Ministry of Health (MoH), which provides for research with human beings.⁶

RESULTS AND DISCUSSION

• Characterization of study participants

This study analyzed 45 medical records of adolescent parturients, where age ranged from 14 to 16 years in 20 participants (44.4%) and from 17 to 19 years in 25 participants (55.6%). Regarding education, one found out that 26 participants (57.8%) had incomplete Primary Education and concerning marital status there was a considerable prevalence of single adolescents, 32 (71.1%), when compared to married women, 8 (17.7%). In terms of occupation, 13 (24.5%) were students, 11 (28.9%) were housewives, 1 (2.2%) was freelancer, and 10 (22.2%) were unemployed or had no occupation defined.

Pregnancy among adolescents has become a matter of concern, since this phase is often related to a context of social disadvantage; its occurrence may restrict opportunities, since this is a phase in which one looks for identity and, at the same time, responses to family and social pressures.

Corroborating this claim, studies indicate that adolescent mothers have a constant

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presence in daily nursing care. This is a period of deep changes, both physical and psychological, thus, working with adolescents demands an understanding of their customs, beliefs, and difficulties, and indecisions.⁷

Within the gestational period, father's participation is extremely important, since the adolescent needs the presence of a companion to provide an affective support to face the various changes arising from this phase; she tends to become more sensitive.

One observes that the finding of pregnancy usually creates various kinds of emotion, such as: surprise, joy, and, sometimes, fear. Factors such as personal planning and, especially, the woman's wish with regard to motherhood, contribute to the predominance of positive feelings, however, when the opposite occurs, overall the lack of support from partner or family, one observes lack of confidence and loneliness.⁸

The low education level is related to the lack of family support, adolescents drop out of school at an increasingly early age as a result of early pregnancy. The relationship between low education, female poverty, and early motherhood is noticeable. The experience of pregnancy between 12 and 19 years can cause damage to the studies of these girls, since they go through a complicated period, full of transformations, doubts, fears, and suspicions: adolescence, when one looks for an identity and the confirmation of personality. Assuming a pregnancy, also full of changes and alterations, this period may be harmful to the education development of these girls, who often end up discouraged and drop out of school due to the responsibility of pregnancy.⁹

One also observes that a large number of adolescents don't work outside home, restricting themselves to housework. Perhaps, this fact is linked to a lack of family planning and, hence, the emergence of an unexpected pregnancy, which changes the whole course of a woman's life, resulting in confinement to household chores due to lack of qualification and time.

Although pregnancy is responsible for changing the course of these girls' lives, this doesn't provide them with maturity enough to enable them to enter the labor market. Having a child represents having to find a place to leave the child to look for a job or strive to fulfill service hours, starting a race for the scarce vacancy in public daycare facilities or asking for relatives who are able to help. Despite so many difficulties in the correlation between pregnancy and adolescence, statistical surveys point out a

significant number of pregnant adolescents.¹⁰

Given the findings on obstetric history, one observed that 32 (71.1%) out of the 45 pregnant adolescents were undergoing their first pregnancy, whereas 9 (20%) were undergoing their second pregnancy, 4 (8.8%) were undergoing the third pregnancy, and 7 (15.6%) have already had an abortion, something which leads us to infer that adolescents are getting pregnant sooner. This exposes them to many complications arising from the anatomical and physiological immaturity of their body.

Thus, one can infer that pregnancy entails risks to adolescents due to their physical and psychological immaturity; there's also the possibility of gestational complications, lack of prenatal care, and lack of a social and financial support system. The pregnant adolescent can't complete her studies, something which ends up affecting her quality of life, job opportunities, and progress in her financial stability.¹¹

Gestational risk isn't associated only to the pathologies arising from pregnancy, adolescents also need a specialized care, since they're vulnerable to the complications that can arise not only from organic immaturity, but from the impulses which are due to this phase.

Studies emphasize that prenatal care comprises a set of activities aimed at promoting the pregnant woman and the fetus' health, as well as the identification and prevention of risks for both of them, through an appropriate and timely monitoring. Its absence and disability, therefore, are associated to the rates of neonatal mortality, prematurity, low birth weight, intrauterine growth retardation, and maternal mortality.^{12,13}

• Data concerning the study purpose

In face of the data obtained through the analysis of medical records on the prevalent obstetric complications in adolescents, one can list: prematurity, eclampsia, low birth weight, pre-eclampsia, rupture of the cervix, and urogenital infections.

Concerning prematurity, 9 participants (20%) had a diagnosis of this complication, and it's extremely important to detect patients at risk of premature delivery, making prevention measures more effective.

The prevalence of preterm birth has been significant, something which requires more attention to proper obstetric procedures; prematurity constitutes the main cause of neonatal death.

Despite the advances in perinatology in

recent years, prematurity keeps being the main cause of neonatal morbidity and mortality, representing a major challenge for the current obstetrics. The incidence of prematurity has increased, and it's quite variable among the various population groups, regardless of the presence of risk factors. Although one observes a multifactorial etiology and difficulty for the primary prevention of spontaneous premature delivery, the measures adopted for secondary prevention seem to have contributed to control its incidence in some countries. On the other hand, the rate of elective premature delivery has increased, even in places where the prevalence of spontaneous premature delivery has remained constant or it has decreased.¹⁴

One found out that 14 adolescents (31.1%) gave birth to babies with low birth weight. One regards as underweight newborn infant every child born alive weighing less than or equal to 2,500 g.

The epidemiology of low birth weight is complex, since many factors seem to influence on birth weight, including maternal characteristics prior to pregnancy, such as age, parity, and body size, and characteristics of the pregnancy evolution, such as weight gain, smoking, presence of intercurrent diseases, and prenatal care.¹⁵

Low birth weight is a major risk factor related to birth, since numerous factors are directly involved, such as low education level, lack of a partner, age less than 19 years old, weighing less than 50 kg during pregnancy, smoking, and inadequate prenatal care, among others.

According to the research findings, 10 (22.2%) adolescents presented pre-eclampsia, which is the most common clinical complication of pregnancy and it's associated to a significant increase in perinatal complications.

The chronic arterial hypertension (CAH) affects about 5% of pregnancies, and it's regarded as a risk factor for pre-eclampsia. Severe gestational/pre-eclampsia hypertension is that potentially presenting the worst maternal/fetal prognosis. Fetuses of mothers with pre-eclampsia have higher risks of prematurity, occurrence of delivery of fetuses which are small for gestational age (SGA), need for neonatal intensive care unit (NICU), and need for ventilatory support, besides a higher incidence of perinatal mortality, when compared to fetuses of normotensive mothers.¹⁶

Arterial hypertension in pregnant women is

defined by the presence of blood pressure greater than or equal to 140/90 mmHg and, in order to detect it, 2 measurements must be performed within a 4-hour interval, the patient must be seated, in order to prevent compression of the vena cava by the gravid uterus. The presence of diastolic blood pressure at 90 mmHg or over in 2 measurements within a 4-hour interval, or the presence of diastolic blood pressure at 110 mmHg in a single measure characterizes arterial hypertension. During pregnancy, the increased blood pressure criterion is critical, as there're frequent cases of pregnant women whose pre-gravidic pressure levels are usually low (80/50 mmHg); during pregnancy, they present an increase in blood pressure to 115/70 mmHg after the 20th week. This increase must be regarded as a disease sign. That is, if from the 20th week the pregnant woman presents a 30 mmHg increase in systolic pressure and/or 15 mmHg in diastolic pressure.¹⁴⁻⁶

Another complication listed in the medical records was eclampsia, with 4 participants (8.8%) affected by the hypertensive disease unique to pregnancy, which emerges in the second half of the gestational cycle and it mainly affects primigravidae. Eclampsia is a major cause of maternal death worldwide, and it's characterized by the sudden increase in blood pressure and the emergence of edema.

Eclampsia is one of the most usual complications and it has a major maternal and perinatal mortality, ranking first among the characteristic illnesses of the gravidic-puerperal cycle. Pre-eclampsia and eclampsia refer to the same problem, and eclampsia is the most severe form of the disease. Occasionally, seizures occur even when there's no hypertension, only proteinuria.¹⁵

It was established that pre-eclampsia and eclampsia constitute symptomatic modalities with the same nature, something which defines eclampsia as the development of generalized seizures, with no anesthetic or pharmacologic neurological causes, as well as metabolic complications, one of the most serious complications of the gravidic-puerperal cycle and a major cause of maternal mortality.¹

Another complication is rupture of the cervix, 6 adolescents (13.3%) presented this complication. The rupture of the cervix is defined as rupture of the ovular membranes, resulting in spontaneous outflow of amniotic fluid through the cervix and the vaginal cavity, reaching the vulva and the external environment before the onset of labor.³

The rupture of the cervix is an obstetrical complication whose incidence varies according to the population studied and the risk factors, presenting high incidence within the pre-term period. Premature rupture of membranes causes several immediate maternal and fetal complications, such as prematurity, infection, pulmonary hypoplasia, intrapartum fetal distress, endometritis, and neonatal infection. In cases where labor occurs before the 34th week of pregnancy, the incidence of perinatal morbidity and mortality increases, due to respiratory distress, intraventricular hemorrhage, retinopathy, and cerebral palsy.¹⁷

Rupture of the uterine cervix is an uncommon complication, however, potentially severe, of vaginal delivery subsequently to the cesarean. It's related to many complications, such as intrapartum stillbirth, hypoxic-ischemic encephalopathy, neonatal death, low Apgar score at the 5th minute, hysterectomy, blood transfusions, and even maternal death. The diagnosis of uterine rupture is clinical and late, with no clinical signs predicting its occurrence.^{3,18}

Therefore, the conducts which should be taken in patients with rupture of the cervix must necessarily include a careful fetal evaluation, in order to decrease the development of these potential complications and indicate the anticipation of delivery before they occur.

Regarding urogenital infections, 4 participants (8.8%) presented some kind of infection. The vast majority of them are caused by three key agents: *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, and *Mycoplasma hominis*. *Chlamydia trachomatis* belongs to the class of chlamydia responsible for some human infections, it compromises systems such as the eyes (trachoma and inclusion conjunctivitis in the newborn infant), the genital tract (lymphogranuloma venereum, non-gonococcal urethritis, and pelvic inflammatory disease) and the respiratory tract (pneumonitis). Chlamydia is one of the most frequent sexually transmitted diseases, with about 90 million new cases per year worldwide, and it's related to sterility in a very significant number of women.¹⁸⁻⁹

FINAL REMARKS

The current reality of society requires a reconsideration of attitudes from the current systems with regard to early pregnancy. Early sexual initiation and lack of access on the part of young people to programs which accordingly address their guidance enable the permanence of factors such as increasing

rates of pregnant adolescents.

Throughout the whole developmental process, adolescence is the most disturbed and decisive period. The child adapted to family life is surprised by a sequence of transformations in her/his body, along with psychological instability. All this will cause an imbalance and a transformation of her/his entire being. The individual realizes her/himself leaving the comfortable child condition and entering the adult world, without feeling prepared for it, yet. Therefore, one concludes that pregnancy in adolescence represents an indisputable reality, it becomes urgent and needed that the society offer to the pregnant adolescent the most effective attention as possible, promoting policies to this end; this way, psychosocial and physical disorders in the mother and child will be prevented.

One hopes that this theme will contribute to a better performance of health professionals and managers, since it's a responsibility of the whole society to report problems and look for solutions involving this young population. Nowadays, adolescence constitutes a challenge for parents, educators, and health professionals and, thus, it requires support, understanding, participation, and dialogue.

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