

## *Prevalence of depressive symptoms among pregnant adolescents*

### Prevalência de sintomas depressivos em gestantes adolescentes

#### *La prevalencia de síntomas depresivos en adolescentes embarazadas*

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#### ABSTRACT

**Objective:** to verify depressive symptoms in pregnant adolescents in the basic health unit. **Methods:** Fifty-five adolescents were interviewed. For collecting data, two instruments were used: one to obtain social and demographic data, obstetric data, familiar relations and violence events, and a questionnaire to assess depressive symptoms - Beck's Depression Inventory. **Results:** 10.9% of the interviewees had a previous history of depression or anxiety, and 3.6% had one of these problems at the time of the interview. Of all adolescents, 63.6% reported having undergone some stressful event in the last year; 49.1% showed depressive symptoms, varying from mild, moderate and serious. **Conclusions:** it is essential to identifying early depressive symptoms in pregnant women, so that they are directed to specialized service, or detect the presence of a mental health team in a health center, in order to assist depressed pregnant women, by providing qualified and humanized care and proper treatment.

**Descriptors:** Pregnant Women; Adolescent; Depression.

#### RESUMO

**Objetivo:** verificar sintomas depressivos em gestantes adolescentes em unidade básica de saúde. **Métodos:** Cinquenta e cinco adolescentes grávidas foram entrevistadas na unidade de saúde. Para a coleta de dados, foram utilizados dois instrumentos: um para dados sociais, demográficos, obstétricos, relações familiares e eventos de violência, e outro para avaliar os sintomas depressivos - Inventário de Depressão de Beck. **Resultados:** 10,9% das entrevistadas tinham história prévia de depressão ou ansiedade e 3,6% apresentavam um desses problemas no momento da entrevista. 63,6% das adolescentes relataram ter sofrido algum evento estressante no último ano. 49,1% das adolescentes grávidas apresentam sintomas depressivos variando entre leve, moderado e grave. **Conclusões:** é essencial identificar os primeiros sintomas depressivos em gestantes, para que elas sejam encaminhadas ao serviço especializado, ou detectar a presença de uma equipe de saúde mental em um centro de saúde, para prestar um tratamento adequado e um cuidado de qualidade e humanizado.

**Descritores:** Gestante; Adolescentes; Sintomas depressivos.

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## RESUMEN

**Objetivo:** verificar los síntomas depresivos en adolescentes embarazadas en la unidad básica de salud. **Métodos:** Cincuenta y cinco adolescentes embarazadas fueron entrevistadas en la unidad de salud. Se utilizaron dos instrumentos: uno para datos obstétricas, relaciones familiares, sociales y demográficos eventos de violencia y otro para evaluar los síntomas depresivos - Inventario de Depresión de Beck. **Resultados:** 10,9% de los encuestados tenía una historia previa de depresión o ansiedad. 3,6% tenía uno de estos problemas en el momento de la entrevista. 63,6% de los adolescentes reportó haber experimentado algún evento estresante del año pasado. 49,1% de las embarazadas tienen síntomas depresivos que van desde leve, moderada y grave. **Conclusiones:** es esencial para identificar los primeros síntomas depresivos en embarazadas, por lo que se les envía a un servicio especializado, o la presencia de un equipo de salud mental en un centro de salud, para proporcionar un tratamiento adecuado.

**Descriptores:** mujeres embarazadas; Adolescente; Depresión.

## INTRODUCTION

Depression is deemed a public health issue that reaches approximately 154 million people all over the world, being twice as common in women than as in men.<sup>1</sup>

Such difference between genders has been attributed to genetics, the role of the gender in the society and hormone differences, which may lead women to an increased risk of humoral instability during puberty, premenstrual phase, after birth, perimenopause, after a miscarriage and during pregnancy.<sup>2</sup>

It is estimated that prevalence of depression during pregnancy reaches approximately 15% among developed countries and 20% in developing countries.<sup>3</sup> However, other authors report higher rates - 40-50%.<sup>4</sup>

Depression during pregnancy may cause damages to the mother and to the baby development, such as prematurity, low birth weight and impaired development of the child, specially when dealing with pregnant adolescents.<sup>1</sup>

Research carried out with pregnant women from 14 to 18 years old in Piracicaba (SP) has identified

prevalences of 20.8% for depression. Another work that investigates pregnant and non-pregnant adolescents has shown pregnant adolescents have greater prevalence of depression symptoms (24.2%) when compared to non-pregnant youngsters (4.5%).<sup>5</sup>

It is acknowledged that a certain level of psychic suffering and low self-worth are features present in adolescence by reason of a number of changes that occur at this stage of life. However, emotional aspects seem to increase in the event of pregnancy and, therefore, trigger a case of depression.<sup>5</sup>

Within that scenario, it is important to perform the present study, once, as we know, there are few papers that approach the presence of depressive symptoms in pregnant adolescents in Brazil, being that most of them have been developed within hospital environments. In view of the above, the purpose of this research is verifying depressive symptoms in pregnant adolescents in the basic health unit.

## **MATERIAL AND METHODS**

*This is a quantitative research of descriptive nature. The study population are pregnant adolescents managed between August 2014 and June 2015, enrolled at SISPRENATAL in the city of Bandeirantes - PR. Based on a population of 75 pregnant adolescents enrolled in 2013, the minimum sample size calculated is of 55 adolescents, considering an expected frequency of depression of 15%, 5% sampling error and 95% confidence level.*

*Criteria for inclusion in the research are: pregnant women that appeared for prenatal appointment at the health center and having agreed to take part in the research. As exclusion criteria, we have: pregnant women that showed inability to understand or answer the questionnaire; pregnant adolescents that had no consent from the responsible person.*

*For collecting data, two instruments were used: one used for obtaining social and demographic data, obstetric data, familiar relations and violence events, and another, a questionnaire for assessing depressive symptoms - Beck's Depression Inventory - BDI. The BDI is composed of 21 items and a maximum score of 63, and is classified as: under 10 = no depression or minimum depression; from 10 to 18 = mild to moderate depression; from 19 to 29 = moderate to serious depression, and from 30 to 63 = serious depression. It was created by Beck and collaborators to assess the intensity of depression, being that the component items have been selected by means of clinical observation of depressed patients in psychotherapy and characteristic depression*

*symptoms. According to the authors, the BDI showed itself a highly reliable and valid instrument. It was translated into Portuguese in 1982 and validated in 1996 after being compared to other scales for assessment of depressive symptoms.<sup>6</sup>*

*Regarding ethical aspects of research, precepts of Resolution 466/2012 of the National Health Committee were followed. The project was approved by the Research Ethics Committee under the number 3425/2014.*

*Before each interview, the person responsible for the pregnant and the pregnant herself were informed about the study, and signed a Free and Informed Consent. The interview was individual, face to face, before the prenatal consultation at the basic health unit.*

*For the analysis of the descriptive data the program Microsoft Office Excel 2007 was used, in which it obtained the relative and absolute frequency of the data collected.*

## **RESULTS**

*A total of 55 pregnant women were interviewed of the 75 registered in SISPRENATAL.*

*Pregnant women that took part in the interview ranged from 13 to 19 years old, but the research showed a higher number of pregnant adolescents ranging from 17 to 19 years old (76.4%). Regarding education, 70.9% were out of school. Regarding marital status, 60% were married or stably living with their partners. The study showed that 65.4% did not want to get pregnant and*

29.1% thought about having an abortion. When informed about the pregnancy, 72.7% of families had a good reaction. It was detected that

9.1% of adolescents had suffered physical violence during some period of pregnancy (Table 1).

Table 1: Distribution of social and demographic data, family relations and violence in pregnant adolescents, Bandeirantes - PR, 2015

Variable	No.	%
<b>Education</b>		
Studying	16	29.1
Not Studying	39	70.9
<b>Marital Status</b>		
Married/Common-Law Marriage	33	60
Single or without a partner	22	40
<b>Reason for getting pregnant</b>		
Has not planned to get pregnant	36	65.4
Has planned to get pregnant	19	34.5
<b>Thoughts about having an abortion</b>		
Yes	16	29.1
No	39	70.9
<b>How did families react</b>		
Good	40	72.8
Regular	6	10.9
Bad	9	16.3
<b>Physical violence during pregnancy</b>		
No	50	90.9
Yes	5	9.1
<b>Total</b>	<b>55</b>	<b>100</b>

Table 2 shows that 10.9% of interviewees had a previous history of depression or anxiety, and that 3.6% had one of this problems at the time

of interview. It also shows that 63.6% of adolescents reported having undergone some stressful event in the last year.

Table 2: Pregnant adolescent data concerning history and current status of depression/anxiety, Bandeirantes, 2015

Depression/anxiety history	No.	%
No	49	89.1
Yes	6	10.9
<b>Current status of depression/anxiety</b>		
No	53	96.4
Yes	2	3.6
<b>Stressful events during the last year</b>		
Yes	35	63.6
No	20	36.4
<b>Total</b>	<b>55</b>	<b>100</b>

Table 3 shows that the result of the Beck's Inventory evidenced a rate of 49.1% of pregnant adolescents with

depressive symptoms, varying from mild, moderate to serious. With a higher prevalence (23.6%) of mild depression.

Table 3: Intensity of depression, according to Beck's questionnaire, in pregnant adolescents, Bandeirantes, 2015

Beck's Inventory Score	No.	%
< 10 (no depression)	28	50.9
10 to 18 (Mild to Moderate Depression)	13	23.6
19 to 29 (Moderate to Serious Depression)	9	16.4
30 to 63 (Serious Depression)	5	9.1
<b>Total</b>	<b>55</b>	<b>100</b>

## ARGUMENT

The present study shows that 70.9% of pregnant adolescents are no longer studying. Such high rate may be justified by the fact that most adolescents were within the range from 17 to 19 years old, an age where they have probably finished high school. A 30% school evasion rate was identified in another research after discovering pregnancy.<sup>7</sup> Early pregnancy becomes another important factor to school lag of youngsters, once the author considers that many adolescents leave school after becoming pregnant.<sup>8</sup>

Regarding marital status, 60% were married or stably living with their partners. Similar result has been found in a research performed in a teaching hospital located in Ceará, where 77.8% of adolescents reported being married or stably living with their partners.<sup>8</sup> According to the same author, early conjugal unions may put the young women in a more difficult social and economic situation, specially if their partners are also adolescents and/or unemployed. That makes them more vulnerable to other situations of social risk. Moreover, the marriage of adolescents may limit the young women to the role of mother and housewife, while school and remunerated work are postponed.

Regarding motivation to get pregnant, this work revealed that 65.4% of adolescents had not planned pregnancy. Study performed in a SUS health center located in the Northern area of Rio de Janeiro showed that 36% of adolescents had not planned their pregnancy and that the major problem faced was the lack of family planning.<sup>1</sup> In another research, authors have observed that 70% of adolescents had not planned pregnancy either and were not taking contraceptive pills.<sup>9</sup>

This study showed that most adolescents (50.9%) were happy with pregnancy. In a study whose purpose was assessing the maternity role in the constitution of subjectivity of a group of adolescents, it was observed that out of ten participants, six (60%) [sic] had the desire to become a mother and that even the women that stated preferring to become a mother later were happy with motherhood.<sup>10</sup>

Regarding the fact that pregnant adolescents had thoughts about having an abortion, the current study showed that 19.1% had that thought, but have never tried. Literature shows that there is a greater incidence of abortions among adolescents.<sup>11</sup> Research has revealed that about 3.2 million unsafe abortions occur among adolescents aged 15 to 19 years. Non-acceptance on the part of the family, incentive to abortion by the partner

and family, partner abandonment, social discrimination and isolation from the peer groups are factors that nourish the idea of interrupting a pregnancy.<sup>12</sup>

Regarding physical violence during pregnancy, 9.1% of adolescents in this study underwent some type of aggression, being that the mother of boyfriend were aggressors in 3.6% of cases. In 1.8% the aggressor was the cousin and 3.6% the adolescents did not report the aggressors. Research performed in a health center located in Rio de Janeiro detected that 7% of pregnant adolescents suffered physical violence.<sup>1</sup> The author stresses out that adolescents are major victims, due to the fact of being women and young, and that the partner is generally the aggressor.

When getting pregnant, the adolescent lives a series of expectations regarding pregnancy and the baby birth, and such expectations frequently cause fear and anxiety, which are mitigated and even overcome with family support.<sup>5</sup> In the present research, it was observed that 72.7% of families of adolescents had a good reaction with the pregnancy news. Family support has become a protective factor for the outbreak of depressive symptoms during pregnancy.<sup>1</sup>

Pregnant adolescents may be more vulnerable to the development of depressive syndrome, even because changes in humor and hormones are common during this phase. Bound to that, a previous report of depression may represent a risk factor to depression during pregnancy.<sup>13</sup> This study revealed that 10.9% of interviewees reported a history of

depression prior to the current pregnancy. Depression is typically a chronic and recurring condition; therefore, we must assume that previous history of depression is a meaningful risk factor for depression during pregnancy.<sup>11</sup>

This research shows that 63.6% of adolescents underwent some type of stressful event the last year. Out of these, 34.3% attributed the death of a family member or friend to a stressful event. In a study already mentioned performed by a public outpatient facility for adolescents in Rio de Janeiro, researchers detected that stressful events were associated to depression during pregnancy, and states the major events are related with accidents, conflicts with relatives, friends or in the relationship.<sup>1</sup>

According to some authors, frequency of depression seems to be higher among pregnant adolescents than non-adolescents<sup>14-15</sup>, and may be connected to a number of risk factors, such as: psychiatric background, low income, poor education, school evasion, undesired pregnancy, drug addiction, being single, absence of family and/or social support, stressful event, among others.<sup>1</sup> During that period, biological, psychological and social changes relating to physical growth, sexual maturity, acquisition of the reproduction capacity occur, which allow the development of an adult identity inserted in the social mean.<sup>16</sup>

According to the instrument used, Beck's Depression Inventory (BDI), the result for this research was that 49.1% of pregnant adolescents show depressive symptoms varying

from mild, moderate and serious. However, when questioned about the existence of some current psychiatric problem, 3.6% of pregnant adolescents stated they had some minor mental disorder, such as depression and anxiety.

From the collection of data performed with high-risk pregnant adolescents, the research showed that 37.5% of them presented a mild level of depressive symptoms, with no cases of moderate or serious intensity, however, in another study, 59% of adolescents presented mild depressive symptoms, 33% with moderate symptoms and 0.8% with serious symptoms. The author justifies such symptomatology occurs when there is little social support to such mothers.<sup>17-18</sup>

## CONCLUSIONS

Prevalence of depressive symptoms in pregnant adolescents in the city of study was 9.1% for serious depression, 16.4% for moderate to serious depression, and 23.6% for mild to moderate depression.

It is acknowledged that 65.4% of pregnant adolescents in this study had not planned pregnancy, and that 29.1% thought about interrupting pregnancy.

Taking into account that nursing is ahead of basic care, also in the performance of low risk prenatal procedures, it is essential to enable the nurse for identifying depressive symptoms and direct the pregnant woman to specialized service. Or, yet, we may detect the presence of a mental health team in a health center, in order to assist depressed pregnant

women, by providing qualified and humanized care and proper treatment.

It is also required that the health center staff, particularly the nursing staff, is organized to deal with matters such as family planning, by informing adolescents by means of lectures at schools and even strategies within the health center, so that this group of people is reached and, therefore, minimizing undesired and early pregnancies, as well as any related grievances.

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