

Identification of depressive symptoms during postpartum in adolescent mothers

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ABSTRACT

The study objectives were to determine the prevalence of depressive symptoms in adolescent mothers and to characterize them regarding sociodemographic, behavioral and mental health aspects. An observational study, descriptive and cross-sectional, developed in health units with 72 adolescent mothers through the Edinburgh Postnatal Depression Scale (EPDS) and the Hamilton Rating Scale for Depression (HAM-D). Within the participants, 20.8% presented depressive symptoms by the EPDS. The most frequent questions referred to the feelings of guilt, anxiety, and ideas to self-harm. We highlighted the feelings of guilt (60%) and feelings of not being worth living (40%). Most participants (73.3%) did not recognize to be depressed. The results show the importance to have an individualized prenatal, when is possible to know vulnerabilities, psychosocial and family aspects, to include tracking of depressive symptoms in the anamnesis and, to use it the attention network, the reference and the counter-reference.

Descriptors: Depression, Postpartum; Adolescent; Postpartum Period; Obstetric Nursing.

INTRODUCTION

The pregnancy-puerperium period is marked by emotional changes, from social and psychological factors, that can influence the pregnancy development and also the wellbeing of the dyad mother-child⁽¹⁾. In this period, adolescent pregnant constitute a more vulnerable tracking than the adult pregnant, considering the behavior and social changes marking the adolescence⁽²⁾.

Studies⁽³⁻⁴⁾ show that when compared to adult mothers, adolescent mothers are characterized by lower income situation, to not have a partner and to have lower levels of education⁽³⁾. These characteristics are associated to depression during pregnancy, that is a predictor for post-partum depression in 75%⁽⁴⁾. Adolescent mothers have a smaller social support network and seem to have a higher prevalence of puerperium depression than adult mothers⁽³⁾.

The non-specified depressive disorder or minor depression is characterized by the presence of depressive humor or anhedonia, for a minimum period of two weeks. During this time, the individual might experiment between two or four of the following symptoms: changes in appetite, weight and sleeping patterns, agitation or psychomotor delay, fatigue, feelings of useless or guilt and recurrent suicidal ideation⁽⁵⁾.

In this context, maternal or perinatal depression refers to depression episodes during pregnancy (pre-natal depression) or on the first 12 months after delivery (postpartum depression)⁽⁶⁾. Until the moment, there are no specific diagnostic criteria for the perinatal depression and the actual diagnosis is based on the Diagnostic and Statistical Manual for Mental Disorders – 4th edition - (DSM-IV-TR). In the present study, we used the Edinburgh Postnatal Depression Scale (EPDS), that addresses the intensity of depressive symptoms on the last seven days and, therefore, it does not give a clinical diagnosis of major or minor depression. Therefore, at the measure that it is unlikely that the remission for major depression occurs without treatment with medications⁽⁷⁾.

The depressive disorder and/or the depressive symptomatology during gestational period, although frequent, remain sub-identified. In this sense, to know the risk factors will facilitate health professionals to identify women with higher chances to develop this condition, contributing for its primary prevention and its negative repercussions for the binomial's health⁽⁸⁾. We also appropriated from the Health Promotion theoretical reference, through it, we rescued the perspective to relate health, and healthy living conditions, highlighting how much physical, psychological, and social aspects are associated to achieve a healthy maternity.

Global data shows the depression prevalence during pregnancy and puerperium, independent of the woman's age, varying from 5.5% to 33.1%⁽⁹⁾. In Brazil, the prevalence varies from 12% to 37%⁽¹⁰⁾. A recent study found a depression prevalence during pregnancy of 24.3% (n=600), and postpartum 10.8% (n=555)⁽⁴⁾.

Among adolescents, the puerperal depression oscillates between 25-36%. This prevalence is higher than in adult puerperium and among adolescents out of the pregnancy-puerperium cycle⁽¹¹⁾. Evidence suggests post-partum depression in adolescents being preventable with the personal bond and adoption of healthy habits during pregnancy⁽¹²⁾.

The younger the pregnancy, the higher is the risk to develop depressive symptoms. In a research developed in a four year period after birth with adolescent mothers, 57% of them manifested depressive symptoms, moderate to severe, during this period⁽¹³⁾.

Frequently, women presenting puerperal depression do not recognize the symptoms as part of the disease, once these cause many habitual discomforts during puerperium, as fatigue, sleeping changes, and

libido reduction. In other times, they seem reluctant to talk about symptoms, maybe due to social expectations of happiness associated with maternity⁽¹⁴⁾.

Adolescent mothers with puerperium depression present difficulties to establish a bond with the child, including little emotional control and affected social behavior⁽¹⁵⁾. Prospective studies show maternal depression possibly affecting the child's development until school age and to bring out the development of depression during adolescence⁽¹⁶⁾. For the woman, puerperium depression is associated to higher occurrence of marital separation and sexual dysfunction⁽¹⁷⁾. Still, suicide is within the main causes of death during the postpartum period, with estimates of three to 11 for 100.000 births⁽¹⁸⁾.

Facing all these evidence, we recognize the importance to study puerperal depression among adolescents among us. We identified, in our bibliographic review sociodemographic and psychiatric characteristics being correlated to depression outside the pregnancy-puerperal cycle, and in adult women they are well known. However, we found few studies describing these characteristics in adolescent mothers, showing a knowledge gap produced and advertised in this specific theme. We understand the need of a study to characterize adolescent mothers with depressive symptoms in our reality, through it, we try to strengthen our health actions towards women in primary care, imagining proposing assistencial changes, aggregating more quality to the care provided to women in the pregnancy-puerperal cycle.

The objectives of the present study were to determine the prevalence of depressive symptoms in adolescent mothers, to characterize adolescent mothers with depressive symptoms regarding sociodemographic, behavioral and mental health aspects.

METHODS

An observational, descriptive, and cross-sectional study in four Basic Health Units in Ribeirão Preto, São Paulo, Brazil.

The study reference population is all adolescent mothers between zero and four months postpartum being followed, and their children, in the four Health Units constituting the Sanitary District, and who attended the inclusion and exclusion criteria of the study. The sampling criterion was non-probabilistic by convenience, with previously stipulated data collection, during six months, from April to October of 2012. Data from the Primary Care Information System pointed that a total of 832 pregnant adolescents users of the public health system in the whole city of Ribeirão Preto/SP, during the studied period. The sample was constituted by 72 adolescents who were between zero and four months postpartum during the data collection.

Participants were identified from a screening of all pregnant adolescents who started their prenatal in the elected Health Units and lately, we recruited adolescent mothers at the moment that they were at the Basic Health Unit to have their childcare consultation. Through the management system used by the Municipal Health Secretary of Ribeirão Preto/SP connecting all Health Units and allowing access to scheduled consultations, we identified the consultation dates for childcare. The interviews were conducted with the

mothers, while they waited for the consultation.

The inclusion criteria defined for this study were: (i) women aged between 10 and 20 incomplete years, (ii) children aged between zero to four months, (iii) with unique pregnancy with more than 37 weeks and (iv) with child not presenting abnormalities. As exclusion criteria, it was considered the use of anti-depressive or anti-psychotic medications during recruitment for the study.

For the data collection, three instruments were used, being one for sociodemographic characterization and two for assessing humor and affective disorders: I) an instrument was created based in previous experiences of researchers and compared with the national and international literature for sociodemographic characterization.

The final version was submitted to content validation and appearance by three judges specialized in the field; II) EPDS and III) the Hamilton Rating Scale for Depression (HAM-D). The EPDS addresses the intensity of depressive symptoms on the last seven days and, therefore, does not provide a clinical diagnosis of major or minor depression⁽⁶⁾.

At first, we applied the sociodemographic questionnaire then, the EPDS. In cases when adolescents obtained a score lower than 12, the participation was ended. In cases when the participant presented a score higher or equal to 12 in EPDS, indicating the presence of depressive symptoms, we applied the HAM-D. We used the score higher than 25 to characterize patients severely depressed, between 18 to 24 points for patients moderately depressive, between seven to 17 points for patients lightly depressed and below seven indicating remission of the diagnosis or absence of depression. The mean time used for interviews was 30 minutes.

The data collection started after approval of the Ethics in Research Committee from the Nursing School of Ribeirão Preto at Universidade de São Paulo, attending to the Brazilian regulation for studies with human beings. Once the adolescent accepted to participate, they signed the Consent Term and, the Free and the person responsible for them signed the Informed Consent Term. Participants aged 18 or older signed the Free and Informed Consent Term. All participants and their responsible kept one signed copy of the Free and Informed Consent Term or the Consent Term.

We processed the data collected by double entering in a spreadsheet for data management, and we conducted the statistical analysis using the software Statistical Package for Social Sciences, version 21. Based on the characteristics of this study, we based the analysis on descriptive statistics, and in the conduction of statistical tests for comparative analysis between variables.

RESULTS

Sociodemographic characterization of participants

The age of 72 participants varied between 13 and 19 years, with a mean of 17.3 years, (SD= 1.4 years) and median of 18 years. The sample was characterized by adolescent mothers in a stable relationship (39;

54.2%), education varying from four to 12 years, with a mean of 8.3 studied years (SD= 1.8 years) and median of 8.5 years. Most of them did not have a paid employment (62; 86.1%), lived in a brick house (70; 97.2%), 33 (46%) were rented and 27 (37.5%) lived in owned houses. Six adolescent mothers (8.3%) informed that the house did not have treated water and sewage. Most of them lived with the child's father and with their family (parents, siblings and/or grandparents), with a similar distribution between these two categories, 25 (34.7%) and 26 (36.1%), respectively. The number of people living at the house varied from two to 12 people, with a mean of 4.8 people.

Obstetric characterization of participants

Regarding obstetric characteristics, 61 (84.7%) adolescent were first time mothers. All referred to have done their prenatal at the municipal public service, and most, 59 (81.9%) with a number of consultations equal or superior to six. For 47 (65.3%) participants, the pregnancy was not planned and for eight (11.1%) it was not desired. Most adolescent mothers had natural delivery (54; 75%) and 18 (25%) had a caesarian section.

Behavioral and mental health characterization of participants

From the 72 participants, 21 (29.2%) informed a family history of mental illness and 43 (60%) reported to not have a confident friend. From those, seven (9.7%) revealed a history of emotional issues, dependence of alcohol and/or psychoactive substances. Two participants (2.8%) reported to have been informed about the depression diagnosis by the doctor conducting the prenatal. During the puerperal period, two (2.8%) were diagnosed with postpartum depression by their doctors and they used medication as only depression treatment.

Table 1: Distribution of adolescent mothers who attended the Health Units for childcare consultation, according to behavioral and mental health characteristics. Ribeirão Preto, SP, Brazil, 2012.

Variable	n (%)
Confident friend	Yes 43 (59.7)
	No 29 (40.3)
History of emotional issues or use of substances	Yes 7 (9.7)
	No 65 (90.3)
Family history of mental illness or emotional issues	Yes 21 (29.2)
	No 51 (70.8)
Emotional changes or dependence of alcohol/drugs/substance	Depression 2 (2.8)
	Alcohol abuse 1 (1.4)
	Abuse of other psychoactive substances 1 (1.4)
	Postpartum depression 3 (4.2)
	Absence of emotional issues 62 (90.3)

Prevalence of depressive symptoms in participants

We identified 15 (20.8%) adolescent mothers with depressive symptoms, resulting in a mean score of

8.5 points, varying from zero to 25, standard deviation of 5.2 and median of 7 points.

Table 2: Distribution in frequencies and percentages of EPDS items between adolescent mothers present at the Health Units for childcare consultations. Ribeirão Preto, SP, Brazil, 2012.

Questions	Scores				Mean (sd)
	0 n (%)	1 n (%)	2 n (%)	3 n (%)	
1. To laugh	54 (75.0)	11 (15.3)	2 (2.8)	5 (6.9)	0.42 (0.85)
2. To enjoy daily	38 (52.8)	19 (26.4)	11 (15.3)	4 (5.6)	0.74 (0.91)
3. Guilt	18 (25.0)	11 (15.3)	33 (45.8)	10(13.9)	1.49 (1.02)
4. Anxiety	10 (13.9)	25 (34.7)	28 (38.9)	9 (12.5)	1.50 (0.88)
5. To be scared	37 (51.4)	12 (16.7)	14 (19.4)	9 (12.5)	0.93 (1.10)
6. Tasks	27 (37.5)	21 (29.2)	17 (23.6)	7 (9.7)	1.00 (1.00)
7. Sleep	48 (66.7)	6 (8.3)	10 (13.9)	8 (11.1)	0.69 (1.08)
8. Sadness	38 (52.8)	24 (33.3)	2 (2.8)	8 (11.1)	0.72 (0.96)
9. Cry	32 (44.4)	34 (47.2)	3 (4.2)	3 (4.2)	0.68 (0.74)
10. Self-aggression	57 (79.2)	6 (8.3)	7 (9.7)	2 (2.8)	0.36 (0.77)

The questions referring to feelings of guilt and anxiety were the ones with higher frequency, considering the sum of scoring 2 and 3, both exceeded 50%. The self-aggression idea came (2.8%) to two adolescents (2.8%) many times on the past few days before the interview and sometimes to seven (9.7%) adolescents, as specified on Table 2.

For fifteen adolescent mothers (20.8%) with depressive symptoms, we applied the HAM-D, with a mean score of 17.3 points, with a standard deviation of 4.6; median of 16 points, resulting in a score varying from 11 to 27 points, according to Table 3.

Table 3: Distribution of frequencies and percentages from the HAM-D of puerperal adolescents in Health Units for childcare consultations. Ribeirão Preto, SP, Brazil, 2012.

Questions	Scores					Mean (sd)
	0 n (%)	1 n (%)	2 n (%)	3 n (%)	4 n (%)	
1. Depressive humor	*	6 (40.0)	7 (46.7)	1 (6.7)	1(6.7)	1.80 (0.86)
2. Guilt	2 (13.3)	9 (60.0)	4 (26.7)	*	*	1.13 (0.64)
3. Suicide	9 (60.0)	6 (40.0)	*	*	*	0.40 (0.50)
4. Initial insomnia	*	3 (20.0)	12(80.0)	*	*	1.80 (0.41)
5. Intermediate insomnia	*	8	15 (100)	*	*	2
6. Late Insomnia	*	7 (46.7)	8 (53.3)	*	*	1.53 (0.51)
7. Work	*	1(6.7)	9(60)	5(33.3)	*	2.27 (0.59)
8. Delay	14(93.3)	1 (6.7)	*	*	*	0.07 (0.25)
9. Agitation	8 (53.3)	4 (26.7)	3 (20.0)	*	*	0.67 (0.81)
10. Psychic anxiety	*	2 (13.3)	11 (73)	2(13.3)	*	2 (0.53)
11. Somatic anxiety	*	12(80.0)	2 (13.3)	1(6.7)	*	1.27 (0.59)
12. Gastrointestinal sym.	12(80.0)	1 (6.7)	2 (13.3)	*	*	0.33 (0.72)
13. General somatic sym.	10(66.7)	4 (26.7)	1 (6.7)	*	*	0.40 (0.63)
14. Genital symptoms	12(80.0)	3 (20.0)	*	*	*	0.20 (0.41)
15. Hypochondria	8(53.3)	*	6 (40)	1(6.7)	*	1 (1.13)
16. Weight loss	14(93.3)	*	1 (6.7)	*	*	0.13 (0.51)
17. Criticism	11(73.3)	3(20.0)	1 (6.7)	*	*	0.13 (0.51)

Among the questions addressed on the HAM-D, we highlight the feeling of guilt present for nine adolescent mothers (60%) who think they disappointed other people and, four (26.7%) presented idea of guilt or remorse from bad actions in the past. Six (40%) participants thought that it was not worth living. All adolescent mothers referred to the difficulty to execute activities that they used to do. Most participants (73.3%) did not acknowledge to be depressive. We highlight that according to the classification used, one (6.6%) participant was classified as severely depressive, six participants (40%) as moderately depressive and, eight (53.4%) as lightly depressive.

DISCUSSION

Findings of this study allow us to know the characteristics of adolescent mothers with depressive symptoms, users from the public health service from a Sanitary District of Ribeirão Preto/SP. This characterization alert us for a possible group of women vulnerable to depression during postpartum.

The World Health Organization estimates that in 2020, depression will be the most prevalent disease (6%) among women, being the higher of all, in repercussion to other aspects of women's life, as work, family, interpersonal relationships⁽⁶⁾. Results from a meta-analysis about postpartum depression found a prevalence of 13% among adult and adolescent women, with peaks on the first 12 weeks after delivery. Another systematic review found a prevalence of 19.2%, also on the first 12 postpartum weeks⁽¹⁹⁾. The last systematic review found showed a prevalence of 18.4% of depression during pregnancy, being 12.7% keeping the symptoms postpartum⁽⁶⁾.

Regarding cross-sectional studies of postpartum depression, they corroborate with our results; a study with Portuguese adolescents found the same average of 8.5 points with a 25.9% of adolescents with depressive symptoms, in a total of 54 participants⁽²⁰⁾. Another study with a sample of 44 adolescent mothers found 16.7% of depressive symptoms using the EPDS⁽¹⁹⁾.

The manifestation of anxiety is seen as the most prevalent psychiatric condition in the general population. It is estimated that 28.8% of people have anxiety disorders. These can be manifested as depressive symptoms, as occurred with our study participants. It is known that during the pregnancy-puerperium cycle, women experience worries related to the baby's health, their own health, finances and, maternity. Some studies showed that children from more anxious mothers frequently have low weight at birth and they present risks of cognitive and behavioral difficulties during the first childhood.

Our results diverge from a study conducted in João Pessoa-PB with women between 18 to 38 years, with 29.2% of mothers with depressive symptoms⁽²¹⁾, regarding the idea to harm themselves, with 36.5% of mothers with depressive symptomatology, who reported the idea of death and suicide. During postpartum, women with emotional alterations, abuse of substance or both, present increased risk for suicidal trials. Still, from the mothers who die due to suicide on the first six months after the delivery, major depression as primary diagnosis is in 21% of cases⁽²²⁾.

The average scores of the Hamilton Rating Scale for Depression indicated that patients were

moderately depressive. A study conducted in Pelotas-RS, found a prevalence of 19.1% of postpartum depression and a mean score of 10.60 in the HAM-D scale with a standard-deviation of 8.4⁽²³⁾. An epidemiology study with Chinese women revealed that a proportion of women in the postpartum with moderate depression symptoms are similar to ours⁽⁵⁾. Thus, other studies conducted in Asia by nurses, resulted in lower numbers of depressive symptoms during postpartum among young women⁽²⁴⁾.

In our sample, 2.8% of adolescents were diagnosed with depression by doctors. Still, according to the EPDS, 20.8% had depressive symptoms. The reviewed literature shows that in most cases, depression is not detected during pregnancy or on immediate postpartum and stays without treatment, showing that depression is a severe health problem and needs to be identified earlier⁽²⁵⁾.

CONCLUSION

This study showed that adolescent mothers presented depressive symptoms, although they did not reported the perception of these symptoms in their routine. Within the symptoms, the guilt and anxiety were the most frequents. These descriptive findings instigate us to conduct new studies with adolescent mothers, prospectively, searching for associations between maternal characteristics and manifestations related to their mental health. We should remember, although we did not have such conclusion, maternal depression affect both, mother and child, and it can have repercussion in the family life.

The results call attention for health promotion, about the importance of an individualized prenatal, allowing to know the vulnerable adolescent pregnant, the personal and family psychosocial aspects, to include the tracking of depressive symptoms in the anamnesis and to have a flux for reference and counter-reference inside the attention network. This investigation could be present in the clinical practice of all primary care professionals, within those, we emphasize the nurse.

The study was conducted with a small sample of adolescent mothers and users of the health system in Ribeirão Preto-SP, Brazil, and although it was constituted by the whole population of the Sanitary District, it is a study limitation to allow more discussion of the results. Another limitation was the HAM-D including symptoms that are considered expected physiological reactions during postpartum, as fatigue and sleep disorders, and it excludes other as ambivalent feelings regarding the child and the pressure of the responsibility to care, difficulty to reveal their symptoms afraid of being stigmatized, within others. It is expected that our found results will fulfill some gaps in this field and to sensitize professionals regarding the importance of the repercussions related to puerperal depression and of how women are affected in their lives.

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