

# PERCEPTION OF PREGNANT WOMEN ABOUT THE RISK FACTORS OF DEPRESSION DURING PREGNANCY

PERCEPÇÃO DAS GESTANTES ACERCA DOS FATORES DE RISCO PARA DEPRESSÃO NA GRAVIDEZ

PERCEPCIÓN DE LAS MUJERES EMBARAZADAS SOBRE LOS FACTORES DE RIESGO PARA LA DEPRESIÓN EN EL EMBARAZO

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## ABSTRACT

**Objective:** to identify the risk factors of depression perceived by women during their pregnancy. **Method:** this is a cross-sectional and descriptive study with a qualitative approach carried out from January 12 to 27, 2017. Fifteen pregnant women participated through four focus groups promoted in the high-risk pregnancy clinic of a public university hospital. For data collection, focus groups were recorded in audio and later transcribed, following a script with questions regarding socioeconomic and obstetric data and five open questions related to the perception of the pregnant women about risk factors for the development of depression. Data analysis took place according to Bardin's thematic content analysis and met the consolidated criteria for qualitative research reports. **Results:** the statements of the pregnant women identified 10 risk factors for depression during their pregnancy. We distributed this data into socioeconomic risk factors; psychic; obstetric/maternal factors; and psychosocial factors. They can contribute to future studies in the line of knowledge, for the qualification of prenatal care and the promotion of mental health of pregnant women and the improvement of Nursing practices, benefiting the profession. **Conclusion:** according to the perception of pregnant women, multiple risk factors contribute to the development of depression during their pregnancy. The identified risk factors contributed to the elaboration of the risk scale for depression in pregnancy and may support the planning of prevention and early diagnosis actions and the promotion of the mental health of pregnant women.

**Keywords:** Nursing; Pregnancy; Depression; Risk Factors.

## RESUMO

**Objetivo:** identificar os fatores de risco para a ocorrência da depressão na gravidez na percepção das gestantes. **Método:** estudo transversal e descritivo, com abordagem qualitativa, realizado no período de 12 a 27 de janeiro 2017, do qual participaram 15 gestantes por meio de quatro grupos focais promovidos no ambulatório de gestação de alto risco de um hospital público universitário. Para a coleta de dados os grupos focais foram gravados em áudio e posteriormente transcritos, seguindo um roteiro que continha questões referentes a dados socioeconômicos e obstétricos e cinco questões abertas relacionadas à percepção das gestantes sobre os fatores de risco para o desenvolvimento da depressão. A análise dos dados ocorreu segundo análise de conteúdo temática de Bardin e atendeu aos critérios consolidados para relatos de pesquisa qualitativa. **Resultados:** os depoimentos das gestantes permitiram identificar 10 fatores de risco para a depressão na gravidez, os quais foram distribuídos em fatores de risco socioeconômico; psíquico; obstétrico/materno; e psicossocial, que podem contribuir para estudos futuros na linha de conhecimento, para a qualificação da assistência pré-natal e promoção da saúde mental das gestantes e para o aperfeiçoamento das práticas

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de Enfermagem, beneficiando a profissão. **Conclusão:** segundo a percepção das gestantes, múltiplos fatores de risco contribuem para o desenvolvimento da depressão durante a gravidez. Os fatores de risco identificados contribuíram para a elaboração da escala de risco de depressão na gravidez e podem subsidiar o planejamento de ações de prevenção e diagnóstico precoce e promoção da saúde mental da mulher grávida.

**Palavras-chave:** Enfermagem; Gravidez; Depressão; Fatores de Risco.

## RESUMEN

**Objetivo:** identificar los factores de riesgo para la ocurrencia de depresión en el embarazo según la percepción de las gestantes. **Método:** estudio transversal descriptivo cualitativo realizado del 12 al 27 de enero de 2017. Participaron 15 gestantes a través de cuatro grupos focales promovidos en la clínica de embarazo de alto riesgo de un hospital universitario público. Para la recogida de datos, las conversaciones de los grupos focales se grabaron en audio y después se transcribieron, siguiendo un guión con preguntas sobre datos socioeconómicos y obstétricos y cinco preguntas abiertas relacionadas con la percepción de las gestantes sobre los factores de riesgo para el desarrollo de la depresión. El análisis de datos se llevó a cabo de acuerdo con el análisis de contenido temático de Bardin y cumplió con los criterios consolidados para los informes de investigación cualitativa. **Resultados:** los testimonios de las gestantes permitieron identificar 10 factores de riesgo de depresión durante el embarazo, distribuidos de la siguiente forma: factores de riesgo socioeconómico; psíquico; obstétrico / materno; y psicosocial. Estos resultados podrían contribuir a futuros estudios en la línea del conocimiento para la calificación de la atención prenatal y la promoción de la salud mental de la gestante y para la mejora de las prácticas de enfermería, en beneficio de la profesión. **Conclusión:** según la percepción de las gestantes, hay múltiples factores de riesgo que contribuyen al desarrollo de la depresión durante el embarazo. Los factores de riesgo identificados aportaron a la elaboración de la escala de riesgo de depresión en el embarazo y podrían respaldar la planificación de acciones de prevención y diagnóstico precoz y promoción de la salud mental de la mujer embarazada.

**Palabras clave:** Enfermería; Embarazo; Depresión; Factores de Riesgo.

## INTRODUCTION

The World Health Organization (WHO) estimates that around 10% of pregnant women and 13% of women who have just given birth worldwide suffer from some mental disorder. In developing countries, the rates are even higher with 15.6% during pregnancy and 19.8% after delivery.<sup>1</sup>

This high prevalence is associated with the physical and psychological changes that pregnancy and the transition to motherhood bring to women. Although most of them often see pregnancy and motherhood as a social indicator of self-fulfillment, many of them see pregnancy negatively, which can result in the development of mental disorders before and/or after delivery.<sup>2</sup>

One of the relevant mental disorders that women can develop during pregnancy is depression. This disorder is the leading cause of health problems and disability worldwide. According to the World Health Organization (WHO), more than 300 million people are living with depression, an increase of more than 18% between 2005 and 2015.<sup>3</sup>

In pregnancy, depression causes substantial negative consequences not only in the short term on maternal and neonatal health but also to have a long-term impact on adult life and the family.<sup>4</sup>

Several factors contribute to the development of depression in pregnancy associated with its outcome. Socioeconomic,<sup>5,6</sup> psychosocial,<sup>6</sup> biological<sup>7</sup> and psychological<sup>6,8</sup> risk factors are well-founded in previous studies.

The identification of risk factors allows outlining a scenario of the vulnerability of pregnant women to depression, anticipating the detection of cases and interrupting the process of illness earlier, favoring the performance of professionals in prenatal care, such as nurses, regarding decision making assertive to prevent and treat this disorder.

Thus, this study aimed to identify the risk factors of the depression perceived by pregnant women.

## METHOD

### TYPE OF STUDY

This is a descriptive study with a qualitative approach that represents one of the stages of a larger study aimed to elaborate and validate the risk scale for depression during pregnancy.

The literature review can support the elaboration of the items of a scale by consulting the target population and by consulting specialists in the area.<sup>9</sup> This study shows one of the phases that supported the elaboration of the scale items that are the consultation with the target population, in this case, the pregnant women.

### SCENARIO AND POPULATION

The study was carried out in the high-risk pregnancy clinic of a public university hospital in the interior of the state of São Paulo, Brazil. The sample had 15 pregnant women. Seven of them did not have a diagnosis of depression who were not identified in the group to preserve them. There were no sample losses since there were no refusals and withdrawals.

We opted for this composition due to the uncertainty of the number of pregnant women diagnosed with depression who would be present on each day of the prenatal care. This is because there is no specific outpatient clinic for the prenatal care of pregnant women with mental health disorders. Also, we sought the interaction among the pregnant women was sought to enhance communication for data collection.

The inclusion criteria were pregnant women aged 18 years old or older; perform prenatal care at that clinic; have a depression diagnosis of the pregnant women in confirmed in the medical records. The exclusion criteria were the inability of verbal communication and understanding without the participation of another person, assessed by the researcher's observation and during the consultation with the health team, and not by the application of any evaluation instrument.

Given the inclusion and exclusion criteria, a consecutive non-probabilistic sample was used for the recruitment of pregnant women, which can be understood as the choice of people or objects more readily accessible as individuals of a research.<sup>10</sup>

## DATA COLLECTION

Data collection took place in the period between January 12 and 27, 2017, through focus groups (FG). The interviews were recorded on audio and later transcribed, conducted by a script developed by the researcher, and tested on pregnant women who were not part of the study. The script contained two parts. The first part obtained socioeconomic and obstetric data of the participants such as age, marital status, religion, education, labor activity, income, gestational age, abortion history, number of births, pregnancies, and live children. The second part had five open questions related to the perception of pregnant women about the risk factors for the development of depression.

The focus groups were held in a group room that met the requirements of privacy and silence, considering that they would be recorded with the authorization of the participants. The planning included the following steps: the selection of the participants; the choice of a moderator and his assistants; the organization of technical and material resources for recording; and the choice of material suitable for execution.<sup>11</sup>

The researcher contacted the pregnant women in the waiting room of the outpatient clinic while they were waiting for the prenatal consultation. They explained the pregnant women about the purpose and design of the study and the objectives and the purpose of carrying out the FGs, inviting them to participate in the research. Those interested were directed to the group room, where they received the Informed Consent Term (ICF).

We performed four FGs with an average duration of 52.5 minutes (SD  $\pm$  9.5), with a minimum of 40 and a maximum of 60 minutes, from Wednesday to Friday on the days of operation of the Fetal Malformations and Twinning Ambulatory (AMEF), Gestational Hypertension and Heart Disease Clinic (HIG) and the Prematurity Clinic (APREM), respectively. The FGs were not held on Mondays and Tuesdays because of the unavailability of the group room. We considered this number of FG adequate because the topic was continued until its exhaustion, allowing

the achievement of the proposed objectives. Each group had two to five pregnant women participating. Despite the restricted number of participants in two FGs with only two and three participants each, they were not disregarded since the interaction between the participants was representative and produced sufficient data with content rich in information to achieve the objective.

One of the researchers of the study and an assistant led the groups. The researcher was a nurse, master of Nursing, doctoral student, and was the moderator of the focus group after training for this purpose. The assistant was a nurse, a master in Nursing, and a doctoral student with experience in conducting focus groups. Her performance helped to observe the group's behavior; the notes in the field diary referring to the relevant points and their impressions about the group; and the intervention in conducting the group with the inclusion of questions or complementation of some questions.

## DATA ANALYSIS

The data emerging from the FGs duly recorded with the consent of the participants and transcribed by the researcher resulted in discursive texts submitted to Bardin's content analysis<sup>12</sup> carried out by two researchers.

After reading the empirical data, we eliminated the redundant, semantically equivalent, irrelevant, unclear, or unrelated statements and we selected the relevant fragments of the statements. Then, the testimonies were systematically organized and aggregated into thematic units according to the risk factors identified. Then, the risk factors associated with depression in pregnancy were identified and later organized into categories and subcategories. We followed the Consolidated Criteria Guidelines for Qualitative Research Reports (COREQ).<sup>13</sup>

## ETHICAL ASPECTS

The study complied with the ethical precepts established in Resolution 466/2012 and the Research Ethics Committee of the *Escola de Enfermagem de Ribeirão Preto* at the *Universidade de São Paulo* (EERPUSP) approved it under Opinion 1835654. In the presentation of the results, the statements were designated by the letter P, indicative of a pregnant woman, followed by Roman numbers corresponding to each participant, to ensure their anonymity.

## RESULTS

In the 15 participants, the age group predominating was between 30 and 34 years old, with an average of 32 years old (SD  $\pm$  4.0), minimum age of 24, and a maximum of 38 years

old. Most pregnant women were in a stable marital status (married or with a partner) (86.7%); having a religion (100%) and professed Catholic belief (60%); studied until high school, which corresponds to 12 years of study (60%); and who performed paid work (60%). Among them, 55.5% were employed at the time of the study.

Only five of the total number of participants reported the monthly family income, which was between two and three minimum wages for most participants (80%), with an average of R\$ 1,387.20 (SD ± 482.30), minimum of R\$ 1,200.00 and maximum of R\$ 2,200.00.

Most of the participants were in the third gestational trimester (80%), with an average of 34 weeks (SD ± 5.0), a minimum of 25 and a maximum of 39. Most of them were also in a second pregnancy or more, being multiparous women (93.7%), with an average of 3.5 pregnancies (SD ± 1.5), a minimum of one and a maximum of seven pregnancies. There was also a predominance of pregnant women who had already given birth (66.7%). The number of previous deliveries ranged from zero to four, with an average of two deliveries (SD ± 1.3).

Most pregnant women had a history of previous abortions (80%) and had live children (73.4%). The number of abortions ranged from zero to two, with an average of 0.8 (SD ± 0.7) loss. The number of live children ranged from zero to three, with an average of 1.6 children (SD ± 1.2).

We considered only the testimonies of pregnant women diagnosed with depression to identify the risk factors considering that they had the risk factors for having the diagnosis defined in the medical record. From the analysis of the testimonies, 10 risk factors emerged, organized in four thematic categories, divided into subcategories, according to the risk factors identified by the pregnant women. They are shown in Table 1.

## SOCIOECONOMIC AND DEMOGRAPHIC RISK FACTORS

### UNEMPLOYMENT

The unemployment experienced by the pregnant woman, her spouse, or another family member is a risk factor for depression during pregnancy reported by pregnant women. The concern about the financial situation by unemployment affects the pregnancy and it was perceived by the pregnant women.

*My husband has been unemployed for seven months, we pay rent. We are very worried, you know? If we can handle it, we have to buy baby clothes, we have to buy a lot of things. We are very worried, calculating, what can we buy this month? Because we pay rent, you know? And baby things, I didn't buy anything. I didn't buy anything, nothing, nothing! (P1).*

Table 1 - Risk factors identified in the focus groups, according to the categories. Ribeirão Preto, SP, 2017

Category	Subcategory	Risk factors
Socioeconomic Risk Factors	Economic	Unemployment
Psychic Risk Factors	Mental disorder	History of depression Fear
	Emotions and feelings	Concern during pregnancy Comorbid anxiety during pregnancy
Obstetric/maternal risk factors	Current pregnancy	High-risk pregnancy Obstetric complications
	Obstetric history	History of unfavorable obstetric outcome (abortion, intrauterine death or neonatal death)
	Maternal health conditions	Diseases or symptoms related to the pregnant woman's physical health
Psychosocial Risk Factors	Violence	Violence during pregnancy

## PSYCHIC RISK FACTORS

### HISTORY OF DEPRESSION

The history of depression at any time in life is a highly important risk factor for having disorders in pregnancy, indicated by pregnant women.

*When my pregnancy was discovered, I had and I still have depression. I've been losing weight, losing weight. I was almost five months pregnant when I found out [...] I'm down! (P2).*

### FEAR

Fear is a feeling of many pregnant women, especially when they bring with them a history of unfavorable obstetric outcome marked by previous losses, premature births, and obstetric complications. There is also the fear of childbirth and obstetric complications in the current pregnancy.

*I'm really scared, you know? I lost it in the bathroom, the feet came out. Then I go to the bathroom, I sit on the toilet and take a look because it's scary, right? (P3).*

*I fear that something will happen and he will be born premature, just like the other two, this is my fear. And so, I also fear as the two others I had and lost, then hemorrhage attacked me. So, I'm afraid that the same thing will also happen, a fear (P4).*

## CONCERN DURING PREGNANCY

Concerns are in everyone's life. In the context of pregnancy, in which several changes are inserted in the pregnant life, they are even more present. However, when this concern is exacerbated to the point of interfering in the daily life of the pregnant woman, it starts to contribute to the deterioration of her psychological well-being, associated with depression in pregnancy.

*Due to the other losses [sic], then you are worried that you can't. And then we are emotional, right? We end up crying for anything (P3).*

*I'm very worried! My concern is to be born special just like my other son. And because I'm feeling a lot of pain. Because this is my third pregnancy and I didn't feel anything about the others. And not now, I am in pain all the time (P8).*

## COMORBID ANXIETY DURING PREGNANCY

Maternal anxiety beyond the usual and capable of interfering in daily life was mentioned by the pregnant women in their statements, even not diagnosed as a mental disorder by the specialized clinical evaluation among the participants in the focus groups.

*I am very anxious and at the same time a little afraid. From the beginning, suffering, blood loss, placental abruption. It's a struggle! (P4).*

## OBSTETRIC/MATERNAL RISK FACTORS

### HIGH-RISK PREGNANCY

The experience of a high-risk pregnancy can contribute to changes in the woman's emotional state and mental health by triggering feelings such as fear, sadness, and apprehension, contributing to depression during pregnancy as shown in the statements of the pregnant women.

*I'm afraid because I already lost one and now, I have a broken bag and I'm losing a lot of fluids. It is very serious, right? I know it's risky. So, there is no way, I am very apprehensive, very afraid. I already had an ectopic pregnancy. And I think that this also influences the emotional state a lot. It's been very difficult (G5).*

*I'm sad, very sad! It is because of the pressure. My blood pressure is high, it only rises during pregnancy. Then I have a lot of headaches and I feel really bad. And there is a risk (P6).*

## OBSTETRIC COMPLICATIONS

The pregnant women think that the obstetric complications in the current pregnancy directly impacts their mental health since it enhances negative feelings such as anguish, sadness, and despair, generating suffering during pregnancy.

*From the beginning, suffering, blood loss, placental abruption. It's a struggle! [...] I had five months, I was hospitalized for several days with hemorrhage, then I had a placental abruption. The doctor said I was not going to hold the baby. Then I went into despair. I had sadness and anguish! (P4).*

## HISTORY OF UNFAVORABLE OBSTETRIC OUTCOME

The experiences lived by the pregnant woman previously influence the current pregnancy causing apprehension and concern when remembering the past. These feelings, triggered by remembering the past can favor depression during pregnancy.

*I've been worried since the moment I got pregnant! Because I'm hypertensive. In other pregnancies too, I already had pre-eclampsia, the last [child] took eight months because the pressure was rising. So, I am very worried (P7).*

## DISEASES OR SYMPTOMS RELATED TO THE PREGNANT WOMAN'S PHYSICAL HEALTH

The maternal health condition in diseases or symptoms related to the pregnant woman's physical health can contribute to changes in her psychic state as mentioned by the participants in their statements.

*I am very anxious! I have lupus and a lot of things are showing up. It is swelling, these bubbles are appearing. But I think it's due to lupus. The dosage increases, the corticoid decreases, otherwise, it is dangerous to lose the baby. There is this whole phase there (P3).*

## PSYCHOSOCIAL RISK FACTORS

### VIOLENCE DURING PREGNANCY

Being a victim of physical, sexual, or psychological violence during pregnancy when the woman expected to receive support and affection instead of mistreatment and aggression, she has her psychological well-being also violated and predisposed to depressive disorders. Thus, the violence suffered during pregnancy was reported as causing depression.

*If I tell my story, you cry! I have three children, a girl, and two boys, the youngest is 18 years old. Then this pregnancy happened, it was going well. When it was the 2<sup>nd</sup> of November, the day of the dead, my husband arrived home very upset, then I was beaten, beaten a lot! My middle son who got in the middle to protect me. Then, in short, I had to call the police, with the law Maria da Penha, he is under arrest. And so, wow, my floor is over, right? Then I found myself alone, carrying a child! Then I got really angry, I just cried, I didn't eat anymore. I got depressed (P7).*

## DISCUSSION

The perception of pregnant women who participated in the FGs allowed us to identify and understand the risk factors associated with depression during pregnancy. Among the 10 risk factors identified, most of them had some psychic and obstetric/maternal risks, with four factors each. The history of depression, fear, concerns about pregnancy, and anxiety during pregnancy was prominent among pregnant women, integrating psychological risk factors.

Pregnancy is a sensitive period in a woman's life and is likely to bring high levels of anxiety and concern about unique influences on her mood. However, as evidenced in a previous study and the FGs of this study, concerns related to pregnancy should be considered as possible correlates of poor maternal mental health states.<sup>14</sup>

Pregnancy can also be a stressful and anxiety-provoking life event. On the other hand, anxiety as a common mental disorder can silently deteriorate women's health,<sup>15</sup> being a relevant predictor associated with depression in pregnancy.<sup>5</sup>

Also, the pre-conceptional history of a mental health problem such as depressive episodes throughout life is well documented in previous studies as one of the most important predictors of depression in pregnancy and highlighted in FGs by pregnant women.<sup>5,16</sup>

Regarding obstetric risk, the focus groups reported the history of unfavorable outcomes, complications during pregnancy, high-risk pregnancies, and impaired maternal health.

Unfavorable obstetric outcomes such as those related to the interruption of pregnancy by abortion, intrauterine death or neonatal death affect the mother's mental health and well-being and represent risk factors strongly associated with anxiety, depression and other adverse mental health outcomes.<sup>17</sup> These findings are consistent with a Brazilian study that had the most important result of the high prevalence of depression in pregnant women with recurrent abortions (41.3%), suggesting that this disorder is very common in women who suffer from recurrent interruptions of their pregnancies.<sup>18</sup>

The interruption of a pregnancy is devastating for mothers and their families since most of them experience significant psychological distress for a long time. The death of a fetus or child shortly after birth causes long-term mourning and is

related to high levels of anxiety, depression, and symptoms of post-traumatic stress.<sup>19</sup>

Women who have experienced perinatal loss are four times more at risk of depressive symptoms, highlighting the powerful impact of the loss and the intense suffering it can cause to parents.<sup>20</sup> These emotional consequences are not only from the loss of the current pregnancy but also the concern about the fate of any subsequent pregnancy, representing intangible costs.<sup>21</sup>

Regarding the gestational risk, the findings of the focus groups are in line with the results of an Israeli study in which the perception of high-risk pregnancies in the fetus or the woman predicted an increase in depressive symptoms. The perception of a situation as threatening or risky is not necessarily associated with an external condition but may reflect a negative feeling towards a neutral condition. Although the level of subjective perception of risk is often higher than the real objective risk, its perception can lead to despair and negative feelings.<sup>22</sup>

The anxiety of mothers who face a risky pregnancy for their health and the health of the fetus indicates a highly stressful situation that can potentially culminate in emotional outcomes such as sadness, discouragement, and depression.<sup>23</sup> Also, women who experience pregnancy with complications incorporate the problems associated with pregnancy and the child. Their concerns often include the pregnancy and the child's health, with depressive thoughts associated with expected failures and complications. The woman is affected by guilt and depression depriving her of the joy that should be associated with maternal experiences.<sup>24</sup>

No less important and impactful, the FGs highlighted the experience of pregnancy with fragile maternal health as a risk factor. Women with pregnancy complications who face high-risk pregnancies or who carry chronic pre or post-pregnancy conditions also experienced additional problems associated with maternal health status, often permeated by hospitalizations of the pregnant woman.

These conditions of illness or symptoms related to the physical health of the pregnant woman are a risk for the development of depression during pregnancy as they have significantly more problems of mood and emotional lability that can culminate in depressive symptoms or the disorder.<sup>23</sup>

The categories of socioeconomic and psychosocial risk factors include the selection of only one factor each. The socioeconomic risk, quantified by the unemployment factor, was ratified in a study carried out in Pakistan, which reported that unemployed women were more depressed during pregnancy. According to this study, unemployed women do not have economic support and have free time to think about their pregnancy.<sup>2</sup>

Although the psychosocial category was formed only by the risk factor violence in pregnancy, it had the greatest negative impact for pregnant women, considering the repercussions of violence suffered during pregnancy both in the pregnant woman and in the baby.

Violence at the time of pregnancy is a serious public health problem with an adverse effect on perinatal mental health.<sup>24</sup> Corroborating the testimonies of pregnant women in FGs, the experience of violence during pregnancy has been cited as an important risk factor for depressive symptoms, as in a study among Japanese<sup>25</sup> and Jamaican women.<sup>6</sup>

The statements of the pregnant women in this study such as being aware of their condition, allowed the identification of risk factors for depression during pregnancy, the improvement of the knowledge of the studied population and the proposed research methodology, contributing to the production of valid and reliable measures on an unprecedented scale for screening the risk of depression in pregnancy by the absence of such an instrument as mentioned before, which may contribute to future studies.

The mentioned scale has the potential to subsidize the performance of nurses in prenatal care for the prevention, early detection, and timely treatment of depression during pregnancy. Thus, the results of this study will certainly reflect the qualification of prenatal care, and promote the mental health of pregnant women and the improvement of Nursing practices, benefiting the profession.

The limitations are characterized by a cross-sectional study carried out in a short period.

## CONCLUSION

According to the perception of pregnant women, multiple risk factors contribute to depression during pregnancy, with emphasis on risk factors of socioeconomic, obstetric/maternal, psychic, and psychosocial aspects.

The risk factors identified through the analysis of the statements of the pregnant women contributed in an expressive and valuable way to the elaboration of the risk scale for depression during pregnancy and can subsidize the planning of preventive actions, early detection, and promotion of the pregnant woman's mental health.

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