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EVALUATION FOR RISK OF DEPRESSION IN PREGNANT WOMEN IN A TEACHING HOSPITAL

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ARTICLE INFO	ABSTRACT

Objective: to identify pregnant women predisposed to prenatal depression in a teaching hospital in Paraná. **Method:** Exploratory quantitative survey conducted with 43 pregnant women, who were in the third trimester of pregnancy. Data were collected at the nursing consultation and by applying the Edinburgh Postnatal Depression Scale, validated for Portuguese language. For association analysis it was used the Fisher's exact. **Results:** Women with depressive symptoms represented 20.45%; Women's sociodemographic data were unrelated to the risk index for depression. **Conclusion:** Prenatal care offered to women at risk for depression may improve, given that these women had not been identified with this depressive symptomatology, which may suggest a deficit of care regarding to the mental health of pregnant women. It is suggested that scales for identifying depressive symptoms should be applied by nurses during prenatal care, for identification, diagnosis and treatment during pregnancy.

INTRODUCTION

Pregnancy is the period before childbirth and is one of the most important moments for a woman. However, this moment is not always surrounded by happiness and joy in preparing the arrival of the baby. This period involves numerous physical, hormonal, psychic and social insertion changes, which may reflect directly on women's mental health, such as prenatal and puerperal depression (LIMA *et al*., 2017). Prenatal depression can be considered an important health issue, as its prevalence in developing countries is around 20% and in developed countries varies from 5% to 30% (HARTMANN; MENDOZA; CESAR, 2017). The main risk factors for prenatal depression are: history of anxiety or prior depression, impaired social support, pregnancy complications, stress, previous losses, domestic violence, unwanted pregnancy, relational factors, low level of education, and abuse of substances /smoking (GETINET *et al*., 2018; Bayrampour *et al*., 2018). Studies show that 10% to 15% of all women have symptoms of anxiety and depression during pregnancy (SHAKEEL *et al*., 2015; JARDE *et al*., 2016). A study found that 23.5% of pregnant women were at risk for pregnancy

depression when applied to the Edinburgh Postnatal Depression Scale (GETINET *et al*., 2018). The main symptoms of depression in pregnancy are lack of appetite / energy and feeling of guilt, very similar to the symptoms of depression at any other stage of life. This symptomatology is harmful not only to women but also to the fetus, and may influence fetal development. In addition, depression may increase the risk of preeclampsia, premature birth and low birth weight (SHAKEEL *et al*., 2015; JARDE *et al*., 2016;). It is noteworthy that depressed pregnant women are more vulnerable to unbalanced nutrition, due to lack of appetite and are also predisposed to tobacco, alcohol and drug usage (MARCUS, 2009). In this context, the first step in identifying prenatal depression is to screen for pregnancy. This screening can be performed by nurses, at all levels of health care, the professional who accompany women throughout the pregnancy-puerperal cycle. For the early detection of risk factors for prenatal depression there are specific instruments, among them the Edinburgh Postnatal Depression Scale, which aims at identifying pregnant women at risk for prenatal and puerperal depression, which can be used by nurses. Being the primary screening for the early detection of prenatal and puerperal depression, in Brazil there are some public policies regarding to women's health, based on the principles of the Unified Health System which include: the Integrated Women's

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Health Policy that promotes care based on a broader perception of its life context, guided by the principle of humanization; the Prenatal and Birth Humanization Program that ensures access and quality of prenatal care, childbirth and postnatal care; and the Prenatal and Puerperium Technical Manual which aims at welcoming women from the beginning of pregnancy, ensuring the birth of a healthy child and ensuring maternal and neonatal well-being (BRAZIL, 2012). Given the above, the question arises that it is possible to identify pregnant women at risk for prenatal depression through the Edinburgh Postnatal Depression Scale, applied in nursing consultation. Therefore, the objective of this study was to identify pregnant women predisposed to prenatal depression in a teaching hospital in Ponta Grossa city, Paraná.

MATERIALS AND METHODS

This is a quantitative research, carried out in a maternity of a teaching hospital, in Ponta Grossa city, Paraná, Brazil, which serves pregnant women at usual and intermediate risk. In this maternity ward, the 37-week nursing consultation is performed by the resident nurses of the obstetric nursing program. The consultation is approximately an hour long and is held in a specific room, within the institution itself, at a time previously scheduled by the Basic Health Units of the city hall. Data collection was carried out from October 2018 to March 2019, at the 37-week nursing consultation and by applying a structured questionnaire containing questions related to sociodemographic and obstetric profile, anamnesis, guidelines and nursing diagnoses. The Edinburgh Postnatal Depression Scale (EPDS), translated and validated in Brazil (SUN *et al.*, 2004) was also used, being this instrument easily understood and the most used to assess the risks of prenatal and puerperal depression. This scale is self-applicable, composed by 10 questions and divided into four grades (0 to 3), and measures the presence and intensity of depressive symptoms in the last seven days. Pregnant women are considered at risk for developing depression if the Edinburgh Postnatal Depression Scale (EPDS) score is equal to or greater than 10. The convenience sample consisted of 43 pregnant women attended at the nursing consultation. Inclusion criteria were pregnant women who attended the 37th week consultation of the institution, with a gestational age of 35 to 40 weeks and who agreed to participate in the research by signing the Informed Consent Form. Exclusion criteria were pregnant women under 35 weeks of gestation who did not fully meet the Edinburgh Postnatal Depression Scale. For analysis, data were organized in Excel® spreadsheet from the dependent variable score in the Edinburgh Postnatal Depression Scale (<10 or ≥10) and the independent: age, present partner, education, parity, tobacco usage, history of post-depression-partum, history of gestational depression, risk stratification and number of prenatal consultations. Subsequently, Fisher's exact test was applied to verify the association between the data found at a significance level of 5%. To conduct the research, all ethical aspects provided for in Resolution No. 466/2012 of the National Health Council were considered. It is noteworthy that this study is part of the project Prenatal and Postpartum Nursing Consultation (PPNC) , approved under opinion No. 1,055,927 by the Research Ethics Committee from the State University of Ponta Grossa.

RESULTS

The study included 43 pregnant women, aged around 27.9 years and an average of 7.7 prenatal consultations. Data related to frequency, proportion and associated factors are presented in Table 01. None of the variables showed significant differences, however some deserve to be highlighted, such as prenatal consultations, tobacco usage, previous pregnancy depression and previous postpartum depression.

Table 1. Characteristics of pregnant women according to EPDS score. Brazil, 2019 (n = 43)

Variables	EPDS <10 n (%)	EPDS ≥10 n (%)	*p* Value
Age			
< 30 years	21 (61,8)	5 (55,6)	0,72
≥ 30 years	13 (38,2)	4 (44,4)	
Partner			
Yes	25 (73,5)	7 (77,8)	1
No	9 (26,5)	2 (22,2)	
Scholarity			
< 7 years	17 (50)	6 (66,7)	0,47
≥ 7 years	17 (50)	3 (33,3)	
Parity			
Primigesta	11 (32,3)	1 (11,1)	0,40
Multigesta	23 (67,7)	8 (88,9)	
Smoker			
Yes	2 (5,9)	2 (22,2)	0,19
No	32 (94,1)	7 (77,8)	
Anterior postpartum depression			
Yes	0 (0)	1 (11,1)	0,21
No	34 (100)	8 (88,9)	
Depression in previous pregnancy			
Yes	0 (0)	1 (11,1)	0,21
No	34 (100)	8 (88,9)	
Stratification			
Habitual	25 (73,5)	7 (77,8)	1
Intermediate	9 (26,5)	2 (22,2)	
Number of prenatal consultations			
< 7 consultations	8 (23,5)	0 (0)	0,17
≥ 7 consultations	26 (76,5)	9 (100)	

DISCUSSION

The presence of depressive symptoms from the Edinburgh Postnatal Depression Scale was found in 20.45% of pregnant women in the present study, corroborating similar studies that found about 20% of depressive symptoms in pregnant women, especially in the third trimester (LIMLOMWONGSE; LIABSUETRAKUL, 2006; FAISAL; MENEZES, 2007; PATEL *et al.*, 2002), while Couto *et al.* (2016) show an incidence of 27.93% through the Edinburgh Postnatal Depression Scale in the third quarter. Therefore, the perinatal period does not protect women against depression (PEREIRA *et al.*, 2010), on the contrary, pregnancy itself is one of the factors why the rate of depression in women (20%) is higher than in men. (10%) (CRUZ *et al.*, 2005). Despite the proximity of the findings in the studies cited above, there are also studies that show some discrepancy about the prevalence of depressive symptoms found. For example, the most recent study that applied the Edinburgh Postnatal Depression Scale to pregnant women in a social maternity hospital showed 62.7% of pregnant women with depressive symptoms, concluding that the presence of depressive symptoms in prenatal care may be influenced by socioeconomic status of the pregnant woman (MURATA *et al*, 2012). In addition, the forms of investigation, evaluation time and instruments used to track depressive symptoms in pregnant women may influence the findings (NORHAYATI *et al.*, 2015). In particular, the instruments used need special observation regarding to the instability of the cutoff points (TANDON *et al.*, 2012). Specifically with the Edinburgh Postnatal Depression Scale, the gestation phase in which the scale is applied also seems to

have influence; because in the study in question all were in the third trimester of pregnancy. When considering only the third trimester, the data found are close to the findings of this study, ranging from 18.5% in a study conducted in Portugal (FIGUEIREDO; PACHECO; COSTA, 2007) to 25.4% in a study conducted in Brazil (LIMA *et al*., 2017). Depressive symptoms in the third trimester may be explained by anxiety and pre-delivery concerns (LIMA *et al*. 2017).

The literature states that the gestational period is marked by several situations that women need to face (LORETO, 2008), and the presence of depressive disorders in this phase makes coping difficult for these women (PEREIRA *et al*, 2010). The situations involve: body, psychic and hormonal changes that need acceptance; relationship with the nuclear and extended family; in addition to concerns about maintaining household chores, work and family care (LORETO, 2008; PEREIRA *et al*, 2010). Only two pregnant women reported previous history of depression, one of them with an episode of postpartum depression and another pregnant woman reported depression in the previous pregnancy. When compared statistically to the other group of women without risk for depression, there was no significance, but studies show that this relationship is relevant to the emergence of depressive symptoms in a new pregnancy (BISETEGN *et al*., 2016). In a study conducted with women with a history of depression, it was showed that they were 50% more likely to develop this disease during pregnancy and puerperium; and in cases of postpartum depression, this risk increases to 85% (FAISAL; MENEZES, 2012; GIALLO; COOKLIN; NICHOLSON, 2014; SILVA *et al*., 2017; FERREIRA *et al*. 2018). Another study revealed that women with a history of depression are almost three times more likely to have prenatal depression compared to pregnant women without a history of depression (BIRATU; HAILE, 2015). Regarding to prenatal care, more than 70% of the women in the study were stratified as pregnant women with usual risk, and most of them had a pregnant woman's card with at least seven prenatal consultations, as recommended by Paranaense Mother Network. (PARANA, 2018). However, it is questioned that 100% of the women who presented symptomatology in this study presented the recommended number of prenatal consultations, which leads to questioning the quality of prenatal care and the sensitivity of professionals to recognize the symptoms and perform the appropriate referral of these pregnant women for follow-up.

In order to reaffirm this finding, a recent study showed that 61% of pregnant women with risk factors are not identified during prenatal care, and justifies part of this finding with the difficulty of professionals, especially those in nursing, in identifying signs and symptoms of the disease. depression, added to the ignorance of the pregnant women themselves about depression. Therefore, all these factors only increase the risk for prenatal depression (AOYAMA *et al*., 2019). During prenatal care monitoring of depressive symptoms as well as identification of risk factors is of great value for early identification of possible gestational and postpartum complications, mainly related to mental health. Early detection helps in care focused on the needs of pregnant women, in addition to the planning of the professional facing prenatal care (GIALLO; COOKLIN; NICHOLSON, 2014). Gestational depression when undiagnosed and untreated can bring numerous data to both mother and baby, as depression during gestation increases the risk of using tobacco, alcohol, and other drugs, as well as increased risk of malnutrition and difficulty

in pregnancy. prenatal care and seeking health care, which increases the risk of neonatal mortality (AOYAMA *et al*., 2019). Therefore, prenatal care is essential for the promotion of mental health of pregnant women and their families, however, the actions taken are largely focused on specific pregnancy issues, especially physical and biological issues. Actions aimed at promoting mental health and preventing possible problems are not seen in many situations. Monitoring the mental health of pregnant women is of great importance, since the knowledge of the support network for the identification of risk factors for mental health (KLIEMANN; BÖING; CREPALDI, 2017). Prenatal educational actions aimed at raising awareness and informing pregnant women and the general population are of great importance to increase the visibility of the disease, facilitating the identification of symptoms and the search for help. In addition, the role of health professionals, especially nursing professionals, who can know previously identify depressive symptoms, making the necessary referral for diagnosis and treatment (AOYAMA *et al*., 2019) is of paramount importance.

Conclusion

It can be concluded that it is possible to identify pregnant women at risk for depression when applied to Edinburgh Postnatal Depression Scale prenatally. However, the sociodemographic profile of pregnant women with depressive symptoms was not significant when compared to women without symptoms and risk for depression. Thus, it is suggested that validated instruments should be applied during prenatal care by nurses, seeking early detection of risk for prenatal depression, since this pathology can impair maternal and fetal health and as soon as identified and treated, These risks can be minimized. There is also a scarcity of research in Brazil on instruments to assess pregnancy depression. Therefore, more studies are needed on the mental health of pregnant women, in the context of primary care, since it is the fundamental part of the care of pregnant women during prenatal care.

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