Factors associated with women's psychosocial profile during prenatal

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ABSTRACT

Objective: analyze the factors associated with the psychosocial profile of women during prenatal care at the University Hospital – Maternal-Child Unit of the Federal University of Maranhão – HUUFMA. **Methods:** a cross-sectional study conducted with 160 pregnant women without age limit assisted at the HUUFMA Obstetrics Outpatient Clinic from March to October 2017. The assessment of the psychosocial profile was measured using the Prenatal Psychosocial Profile (PPP-VP). **Results:** most pregnant women, about 41.25% (66) had only completed high school; aged from 15 to 35 years old, about 65.66% (105); in the last gestational trimester 46.25% (74); most of them primigravid, 60% (96); with less than six prenatal appointments performed 67.52% (108). As for the gestational trimester, there was no statistical significance with the PPP-VP constructs; concerning parity, multiparas were the ones who showed more stress, and the Tukey test showed that this group had more stress when compared to nulliparas. **Conclusion:** it is pertinent to infer that about the gestational trimester, there was no influence on the constructs of the psychosocial profile, but when relating parity, the opposite situation was observed, especially in multiparous women, in which the greater number of births directly reflected in the maladjusted level of stress. Greater attention is necessary to these issues for adequate prenatal care.

Keywords: Pregnant woman, Psychosocial profile, Self-esteem, Stress, Support.

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INTRODUCTION

When the gestational period begins, the woman starts developing a process that will lead to organic and bio-psycho-social alterations[1]. However, biophysical risks are prioritized, and little is emphasized on social, psychological, and lifestyle factors[2]. The increased sensitivity during pregnancy is closely related to mood swings, which are also expressed in the emotional area through increased irritability and vulnerability to external stimuli[3].From the discovery to its acceptance, the process of pregnancy involves a complex process that revolves around aspects such as the social support of the family, the partner, and health professionals, in addition to feelings of ambivalence and concerns[4].

During the gestational period, emotionally, the woman may not feel attractive or feminine, thus decreasing her self-esteem. It might be conflicting to be in a moment culturally considered blessed and, at the same time, not enjoying herself[1]. Other aggravating factors can occur, such as the pregnant woman being alone and having an unplanned pregnancy, lack of family support, economic difficulties, tumultuous relationships, and for planned pregnancies, fearing not being successful in pregnancy and childbirth[5].

Other aspects such as the acceptance of body and physiological changes are dominant factors in the interference of good mental coexistence in the gestational period. Within the psychological approach, pregnancy is still discussed in an expressively artificial way, especially regarding assessing the pregnant woman's psychic condition during the three trimesters[6].

The gestational period can generate high levels of anxiety. For this reason, there is a higher incidence of psychiatric disorders and frequent intense psychological changes usually related to family, marital, and/or the pregnant woman's personality issues[7]. In the third trimester, with the approach of childbirth, whose main characteristic is irreversibility, that is, it is a situation that needs to be faced, and it is often unprepared due to the difficulty of knowing how labor will be[3].

It is important to highlight proper and quality monitoring for pregnant women, and the role of health professionals qualified to deal with those who present emotional changes during prenatal care[8], in addition to the need to evaluate and support them emotionally during pregnancy, and provide affect and adequate support from the social, family, and health teams so that women can deliver their babies and promote their development[9].

Thus, the present work has the general objective to analyze the factors associated with the psychosocial profile of women during prenatal care at the University Hospital – Maternal-Child Unit of the Federal University of Maranhão - HUUFMA. Its specific objective is to identify whether the gestational trimester and parity are associated with the characteristics that make up the psychosocial profile of women during prenatal care.

MATERIAL AND METHODS

Analytical cross-sectional study, with primary data collection. Of the pregnant women included in this study, most are aged between 15 and 35 years old. Those who only had one appointment or did not have a medical record in that hospital were excluded.

The research was carried out from March to October 2017 at the Obstetrics Clinic of the Maternal-Child Unit of the University Hospital of the Federal University of Maranhão (HUUFMA) in São Luís - MA, with pregnant women who were undergoing prenatal care. The research was evaluated and approved by the Scientific Committee of the University Hospital (COMIC-HUUFMA) through opinion No. 1,548,766.

Sample Size

There were 450 pregnant women undergoing prenatal care at the Obstetrics Clinic during the data collection period. The sample studied and analyzed is probabilistic, simple-random type, composed of 160 pregnant women, established through sample calculation for descriptive studies with a sampling error of 5%, a confidence level of 95%, and a test power of 80%.

Outcome

The data research instrument used to assess the psychosocial profile was the Prenatal Psychosocial

Profile (PPP), a questionnaire created by Mary Ann Curry and collaborators, which has been validated, adapted, and translated into Portuguese. The PPP addresses the pregnant woman regarding identification, clinical and obstetric data and consists of three separate scales that measure stress, social support, and self-esteem[10].

Statistical analysis

Data were analyzed using the resources of the Statistical Program for the Social Sciences (SPSS) software, version 18.0. Initially, descriptive statistics were performed using absolute and relative frequency measures. To analyze the influence of each construct item on the final sum of the components (Stress, Support from the Partner, Support from other people, and Self-esteem), Linear Regression was employed to calculate the beta and the coefficient of explanation (R^2). Pearson's coefficient (r) was used to estimate the correlation between the PPP/VP questionnaire components.

The independent variables were represented by the characteristics of parity and gestational trimester. Dependent variables corresponding to PPP-VP constructs (stress, partner support, support from others, self-esteem) were converted into summary measures (mean and standard deviation). Analysis of variance was performed (ANOVA test: one criterion) followed by Tukey's test to verify if there is no difference between the scores of the PPP constructs obtained by the pregnant women according to the gestational trimester and parity. The significance level adopted was 95%.

RESULTS

When analyzing the characterization of the sample (Table 1), we observed that most pregnant women completed high school, aged between 15 and 35, were in the third trimester of pregnancy, were multiparous, had had less than six prenatal appointments, and were nulliparous.

The analysis of variance (Table 2) demonstrates no differences of significance among the gestational trimesters regarding the components of the PPP-VP.

Table 1. Distribution of the sample according to the variables related to the characterization of the pregnant women evaluated. São Luis-MA, 2017.

Variable	Frequency	%
Education		
Illiterate	1	0.63%
Incomplete Elementary School	20	12.50%
Complete Elementary School	11	6.88%
Incomplete High School	41	25.63%
Complete High School	66	41.25%
Incomplete Higher Education	9	5.63%
Graduated	12	7.50%
Age		
< 15	8	5%
15 to 35	105	65.66%
>35	47	29.42%
Gestational trimester		
1st Quarter	32	20%
2nd Quarter	54	33.75%
3rd Quarter	74	46.25%
Classification according to the number of pregnancies		
Primiparous	96	60.00%
Multigravida	64	40.00%
Number of prenatal appointments		
≤ 6	108	67.52%
≥6	52	32.48%
Paridade		
Nulliparous	69	43.13%
Primipara	49	30.63%
Multiparous	42	26.25%

Table 3 demonstrates the analysis of variance to establish the degree of significance between parity and the PPP-VP constructs. Among the aspects analyzed, stress presented statistical significance, and multiparous, according to the analysis, are the ones with the highest stress values when compared with the primiparas and nulliparous.

When evaluating the scores of the construct through the Tukey Test, multiparous are the ones with greater expressiveness of stress than the nulliparous.

Table 2. Analysis of variance between the summary measures of the PPP-VP components and their statistical significance with the trimester of pregnancy in prenatal women. São Luis-MA, 2017

	Trimester of Pregnancy			F	p-value
	1st	2nd	3rd		
	mean (sd)	mean (sd)	mean (sd)		
Stress	15.71(4.01)	16.29 (4.31)	16.47 (4.56)	0.3345	0.7213
Partner support	61.62 (14.62)	55.85(15.50)	61.05 (11.45)	2.8221	0.0608
Support from other people	49.53(13.96)	49.81 (13.43)	49.90(14.32)	0.0081	0.9926
Self-esteem	33.93 (4.34)	33.42 (3.91)	32.90 (3.72)	0.8269	0.5572

sd: standard deviation

Table 3. Analysis of variance between the summary measures of the PPP-VP components and their statistical significance with parity in prenatal women. São Luis-MA, 2017.

	Parity			F	p	Tukey Test (TT)
	Nulliparous	Primipara	Multiparous			
	mean (sd)	mean (sd)	mean (sd)			
Stress	15.52 (4.09)	15.97 (3.79)	17.80 (5.04)	3.88	0.02	1 x 2 p>0,05 1 x 3 p<0,05 2 x 3 p>0,05
Partner support	59.85 (15.26)	59.77 (13.13)	58.26 (11.88)	0.19	0.82	
Support from other people	48.68 (14.28)	52.69 (12.77)	48.26 (14.21)	1.55	0.21	
Self-esteem	33.79 (3.74)	33.32 (4.03)	32.40 (3.96)	1.67	0.18	

sd: standard deviation

DISCUSSION

When surveying the obstetric data of pregnant women, we aimed to analyze the influence of some factors that may interfere with the psychosocial profile during prenatal care, including parity and the gestational trimester.

Regarding the gestational trimester, a considerable part was in the third trimester of pregnancy (46.25%). The mother experiences anxiety due to expectations for the moment of delivery, especially if the perception of pregnant women about their preparation for childbirth is considered insufficient[11].

The analysis of variance of the PPP-VP showed no significant differences regarding the aspects of the constructs related to the level of significance with the gestational trimester. It is worth noting that, among the analyzed constructs, the one that came closest to a statistical significance for the gestational trimester was the partner's support (p=0.06), which presented a borderline *p* for this variable; the sample size may have interfered for no significant difference occurs.

Pregnancy can be desired or not because even when there is a significant acceptance, there can be a rejection and vice versa. Such a fact can be noticed in pregnancy's first and third trimesters. The first trimester is a period of uncertainty and great anxiety experienced by the pregnant woman; it is evident that the physiological changes are barely visible. The second trimester is more stable as the first fetal movements occur. From then on, women begin to have a notoriety of what it is to be a mother. In the third trimester, anxiety becomes more accentuated by the proximity of childbirth and the expectation of a change in routine after childbirth[12].

In the gestational period, the partner's relationship is related to emotional issues, from household chores to the demonstration of affection and participation in prenatal care. It also serves the partner to offer more security for the pregnant woman, thus reducing her fears and feelings during this pregnancy period, allowing the increase of the affective bond between them to prevent domestic violence.

The importance of the pregnancy period is worth mentioning that the partner accompanies the woman in health and social support programs, aiming to strengthen in the face of adversities that can occur in the gestational period and at the baby's birth, in addition to monitoring during prenatal appointments[13].

Regarding the condition of alteration of psychosocial factors during pregnancy, there are statistically significant differences at the parity level, with primipara women tending to show greater concerns than multiparous women[14]. Confirming the above, multiparous women (mean=17.80), in the analysis of variance, were the ones with the highest level of stress, especially when compared to nulliparous women (TT=1 x 3, $p<0.05$).

The increased anxiety in women with other children may be associated with concerns regarding acceptance and maternal responsibilities towards pre-existing children. In fact, despite the prior knowledge associated with the pregnancy process, multiparous women experience other concerns such as the need to adapt maternal tasks, the increase in responsibilities and concerns, and the increase in expenses associated with children[15].

The work presents as limiting factors: pregnant women of all age groups to compose a more significant sample size, failing to evaluate a specific age group of girls under 15 years old or women over 35 years old because they present in a small sample number. Moreover, the work only evaluates psychosocial factors in the conception period, excluding a pre-conceptional and post-conceptional evaluation. Finally, no data collection instrument in the Brazilian literature describes the Brazilian people with specificities, so an adapted international instrument was used.

CONCLUSION

No changes were observed among the gestational trimesters regarding the aspects of the construct; the only one that approached a relevance was the partner's social support.

Regarding parity with the PPP-VP constructs and the relationship between the variations, we observed that stress was more evident in multiparous women, as they have greater responsibilities and expenses with the presence of another child, which may contribute to emotional wear and tear on this pregnant woman and make them even more susceptible to psychological maladjustments.

Therefore, greater attention is needed during prenatal care for the pregnant woman and the people around her, especially the partner, to understand the importance of support.

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AUTHORS' CONTRIBUTION

Gomes FCS contributed to the interpretation of data and writing of the manuscript. Serra LL and Chein MBC contributed to the critical review of the study and the final version of the manuscript. Aragão FB, Reis AD, and Pereira JFS contributed to analyzing and interpreting the data. Lopes FF participated in the study, elaboration, supervision of the research, critical review, and approval of the final version of the article submitted for publication and guided the manuscript. Pires FK and Cunha HS participated in the critical review of the study and the construction and approval of the article's final version submitted for publication. All authors declare to be responsible for all aspects of the work, guaranteeing its accuracy and integrity.

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

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