

NEGATIVE IMPACTS OF GESTATIONAL DEPRESSION ON QUALITY OF LIFE

Humberto Correa^{1,2,3}, & Luiz De Marco³

¹*Department of Mental Health, UFMG (Brazil)*

²*Department of Mental Health, FCMMG (Brazil)*

³*Molecular Medicine, UFMG (Brazil)*

Abstract

Background: Perinatal depression, and particularly gestational depression, is an important and highly neglected public health problem. We have now a large body of evidence showing the negative impacts of depressive symptoms on quality of life (QoL) but very little is known about the association of gestational depression and QoL.

Methods: In this study we evaluated the impact of gestational depression (GD) on quality of life. We assessed 252 women in the second trimester of pregnancy using an abbreviated version of the World Health Organization Quality of Life questionnaire and the MINI International Neuropsychiatric Interview for depression diagnosis.

Results: In our sample, 20.6% (n= 52) were diagnosed with depression. We compared sociodemographic and clinical data and QoL domains of the two groups (with/without depression) using Chi-square tests, or Fisher's exact test, for categorial variables and Analyses of Variance for continuous variables. The results showed that depressed women scored significantly lower on all QoL domains, when compared with the group of non-depressed women.

Conclusion: In summary, prior and current depression are associated with worse quality of life. We suggest that clinicians should address not only depressive symptoms but also quality of life dimensions which include basic human needs such as life satisfaction and living conditions.

Keywords: *Gestational depression, quality of life.*

1. Introduction

Gestational depression (GD) is a prevalent psychiatric disorder, unfortunately still neglected. The GD prevalence can vary according to the populations and the diagnostic instruments used but it is well established that GD prevalence is higher in low- or lower-middle-income countries (Yin et al. 2021). The GD prevalence can also vary according to the time of evaluation of the gestational period and seems to be higher in the second trimester (Castro e Couto et al. 2016)].

A large body of evidence has shown that for offspring, GD can be associated with preterm birth or low birth weight and, more important, is associated with long-term negative neurodevelopmental consequences (Zhang et al. 2023). GD also impacts women significantly since they are at higher risk for substance abuse, suicidality, preeclampsia, postpartum depression, and edema (Yin et al. 2016; Castro e Couto et al. 2016). It is also known that a depressive episode negatively impacts the Quality of life (QoL), characterized by a global well-being and the ability in carrying out the tasks of living (Hohls et al. 2021). The impact of GD on women's Quality of Life remains a neglected matter of study, mainly in low-or middle-income countries (Soyemi et al. 2022).

2. Objective

This study aimed to assess the impact of GD on quality of life in a sample of second trimester pregnant Brazilian women, a middle-income country.

3. Methods

For this study, 252 consecutive women attending the Obstetrics and Gynecology Service of the Federal University Hospital in Belo Horizonte, Minas Gerais, between January 2014 and December 2019, were enrolled.

This study was approved by local Ethics Committee, all participants signed an informed consent, and it was conducted according to the Declaration of Helsinki (World Medical Association, 2013).

All patients were in the second trimester of pregnancy and the only exclusion criteria was illiteracy. A questionnaire was administered consisting of standardized questions regarding maternal age, education level, marital status, pregnancy planning, history of abortion, and sociodemographic status, among other factors.

To assess quality of life, we used an abbreviated version of the World Health Organization Quality of Life, WHOQOL-BREF (The WHOQOL Group, 1998). It is a self-report questionnaire, consisting of 26 questions, which assess four different domains of quality of life: physical, psychological, social relationships and environment. It has also two questions about the judgment of the subject concerning their quality of life. For the assessment of prior and current major depression diagnosis we used the structured interview MINI-Plus (5.0 version) following DSM-IV criteria (Amorin, 2000). All women diagnosed with depression were referred for treatment.

Statistical analyses were performed using Stata 13 software (StataCorp LP, College Station, TX, USA). We performed statistical analyses for proportions (MINI-Plus depression diagnosis, yes or not, included) using the chi-squared test or Fisher's exact test when appropriate. To determine differences between the groups concerning interval data, a series of one-way analysis of variance (ANOVA) were performed. We used the standard 0.05 threshold for statistical significance.

4. Results

Sociodemographic data and clinical features were compared between depressed ($n = 52$) and non-depressed women ($n = 200$). No significantly statistical differences were found between the two groups in all variables studied (age, years of education, number of children, marital status, religion, high risk pregnancy, pregnancy planning, history of abortion use of tobacco or alcohol during the pregnancy) but depressed women were more prone to have a previous depressive episode when compared to non-depressive women [($n = 31$, 59,6%) versus ($n = 38$; 19%); $P < 0.0001$] and a previous post-partum depression [($n = 12$; 23.1%) versus ($n = 11$; 5,5%) $p = 0.0004$].

In relation to domains of QOL, depressed women scored significantly lower in all domains, when compared to the group of non-depressed women (Table 1). Women with a previous depressive episode also scored significantly lower in all QoL domains.

Table 1. Comparison between the studied groups concerning quality of life.

	Women with depression		Non-depressed women		P Value
	N = 52; (20.6%)		N = 200; (79.4%)		
	M	SD	M	SD	
Physical Domain	11.8	2.4	14.0*	2.6	0.000
Psychological Domain	12.3	2.6	15.1*	2.5	0.000
Social Domain	12.7	2.8	15.3*	2.9	0.000
Environmental Domain	11.6	2.5	13.3*	2.5	0.000
Health Perception	13.2	2.8	15.0*	2.8	0.000
Overall Quality of life	12.1	2.0	14.2*	2.1	0.000

Note: N, number of individuals; M, mean; SD, standard deviation; * nondepressed women; >, depressed women

5. Discussion

We assessed 252 women in the second trimester of pregnancy, 52 of them (20.6%) were diagnosed with a major depression episode, using a structured interview. We were able to show that depressed women scored significantly lower on all QoL domains, psychological, social, environmental, and physical domains as well as health perception and the overall quality of life, when compared with the group of non-depressed women.

The perinatal mental health is a neglected issue, even more in low- and lower middle-income countries. Recently, a group from South Africa studied 285 women and found a reduction in all dimensions of QoL in depressed women versus non-depressed women, like our results (Soyemi et al. 2022). However, they studied women in the first and second trimester of pregnancy whereas we studied women in the second trimester. We evaluated women in the second trimester because a previous study conducted by us showed that depression prevalence can vary according to the time of evaluation of the gestational period and seems to be higher in the second gestational trimester (Castro e Couto et al. 2016).

Another recent study performed a systematic review of longitudinal studies in general population. Authors showed that QoL was reduced even before depression onset, dropping during the disorder, and improving at recover (Hohls et al. 2021). Longitudinal studies are also necessary in gestation depressed women.

In conclusion, a current major depression episode is associated with worse quality of life in our sample of pregnant second trimester women. The concept of QoL is multidimensional comprising different aspects of well-being instead of only the negative symptoms of a mental disease. We suggest that health personal should address not only depressive symptoms but also quality of life dimensions that includes basic human needs such as life satisfaction.

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