JOURNAL OF ZANKOY SULAIMANI

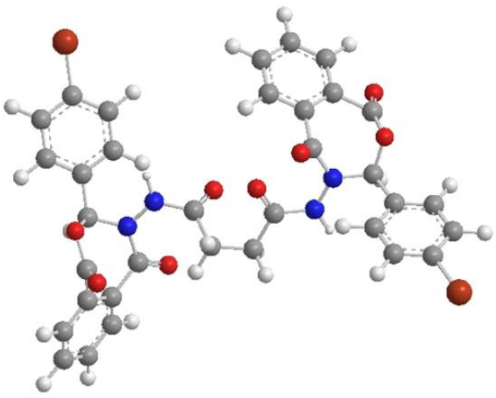
AUTHOR'S COPY

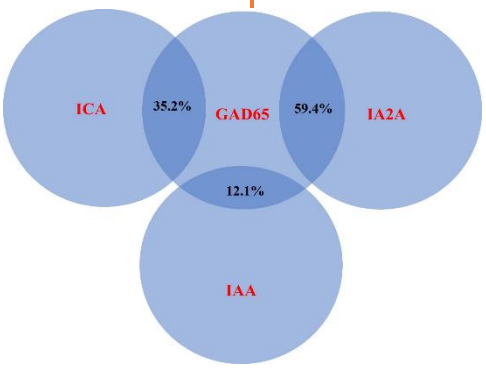
Part -A- (Pure and Applied Sciences)

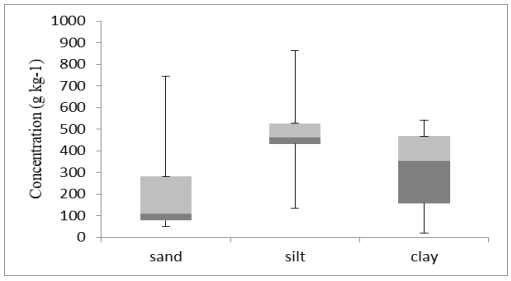
VOLUME 25 ISSUE 2 December 2023

ISSN: 1812-4100

www.jzs.univsul.edu.iq







Journal homepage www.jzs.univsul.edu.iq
Journal of Zankoy Sulaimani
Part-A- (Pure and Applied Sciences)
ISSN:1812-4100

Assessment of Prenatal Depression Among Primigravida Women in Sulaimaniyah City, Iraq

Shahla Hamid Hassan[1]* Abdulqadr Hussein Hamad[2]

1 College of Nursing, University of Sulaimani, Sulaimani, Kurdistan Region, Iraq
2 College of Nursing, Hawler Medical University, Erbil, Kurdistan Region, Iraq
*Corresponding email: shahla.hassan@univsul.edu.iq

Article info

Original: 12/11/2023
Revised: 10/12/2023
Accepted: 20/12/2023
Published online: 20/12/2023

Keywords :
Antenatal depression, prenatal depression, primigravida, EPDS

Abstract

Background: Mothers may experience challenges during pregnancy, especially primigravida because it is their first time giving birth is a life-changing incident. Antenatal depression can impact a woman while pregnant and, if left untreated, can be a prelude to postpartum depression. **Objectives:** To evaluate primigravida prenatal depression during pregnancy in Sulaimaniyah, Kurdistan region of Iraq, and to ascertain the correlation between these women's depression score and their sociodemographic features. **Patients and Methods:** In this cross-sectional study, antenatal depression was assessed using the Edinburgh Postnatal Depression Scale (EPDS) among 100 primigravida participants at selected healthcare centres. The study used a validated questionnaire to collect participants' data through a random sampling technique. **Results:** In the current study, most of the primigravida women (57%) were aged 18-24 years old, housewives (73%), and had an academic degree (44%). According to the EPDS cut-off point (≥10), 46 out of 100 women were determined to be depressed (46%). Among them, those aged 18-24 had more depression possibility (23%) than other age groups (p=0.212). Also, housewives experienced more depression possibility (29%) than other groups (p=0.031). Additionally, most women who had academic degrees had more depression possibility (28%) than other groups (p=0.003). **Conclusions:** Pregnant women frequently experience depression in this locality. Measures of prenatal depression ought to be a standard part of prenatal consultations to facilitate the early identification and treatment of mental health problems during the sensitive stage of pregnancy.

Introduction

It is generally known that numerous psychiatric diseases are frequent during pregnancy, with depression being the most common one. Pregnancy was formerly considered a stage of mental stability and protection for women from mental health issues [1]. Pregnancy may be natural, but it does not mean it is problem-free; minor discomfort may escalate and become a severe pregnancy complication, and symptoms of discomfort from pregnancy vary from one woman to another [2].

A mother experiences a wide range of physiological and psychological changes during pregnancy. This poses a considerably more significant risk of experiencing mental health problems for all women expecting a baby; perinatal depression is twice as common as that of gestational diabetics [3]. It is a common yet often misdiagnosed, least investigated, and undertreated disorder that can affect women during the antenatal and postnatal period [4].

Antenatal depression and anxiety are significant risk factors for postnatal depression in both developed and developing countries, with a history of psychiatric illness, poor marital relationships, stressful life events, a

negative attitude towards the pregnancy, and lack of social support [5]. Antepartum depression (APD) is a non-psychotic depressive episode of mild to moderate severity, beginning in or extending into pregnancy. APD is less well documented than postpartum (PPD); however, it is at least as common as PPD and for some, but by no means all women, it may continue into the postnatal period [6].

The Edinburgh Postnatal Depression Scale (EPDS) is the most widely used screening questionnaire for APD/PPD. It is a 10-item self-report questionnaire asking women to rate their feelings in the previous seven days. Each question was scored 0–3 (range: 0–30), and completion takes around 5 minutes. The cut-off points of 9/10 and 12/13 are also used as markers of possible minor and major depression, respectively [7].

A child's general mental abilities, cognitive, social, and emotional development, as well as their health, nutrition, and physical development, can all be affected by a mother's depression [8]. If ignored and undetected, it may result in various problems for the mother's health, increased infant death and illness, problems with the growth and development of the infant, and undernutrition in children [9]. It raises serious concerns for the health of both mothers and children because, in severe circumstances, it could even result in a mother's suicide [10]. Thus, this study aimed to provide early recognition and detection of perinatal depression during pregnancy to promote maternal mental health and child well-being.

Materials and Methods

Participants and study setting

The current cross-sectional study was conducted on 100 primigravida women in Sulaimaniyah, Iraq, from January 2021 to November 2022.

Questionnaire

The participants' sociodemographic data, including age, education level, and occupation, were collected using a self-prepared, validated questionnaire [11].

Inclusion/exclusion criteria

Primigravida women were included regardless of age, nationality or ethnicity. At the same time, those who were not ready to participate were excluded from the study.

Study protocol

The participants' data were collected at different healthcare centres in Sulaimaniyah, Iraq, including Sarwary Healthcare Care Centre, Kareza Wshk health care Centre, and Hasan Xawey health care centre. The level of antenatal depression was assessed by direct face-to-face interviews using the Edinburgh Postnatal Depression Scale (EPDS) through a random sampling selection method.

Ethical considerations

This study was conducted based on the declaration of Helsinki, and the experimental protocol was approved by the scientific and ethical committees of the College of Medicine, University of Sulaimani, Iraq (No. 178 in 19/09/2020-CoM-UoS) after intensive revision. Written informed consent was obtained from participants, and they were left free to leave the study without giving reasons.

Statistical analysis

The data was analyzed using Statistical Package for Social Science (SPSS, version 25). Fisher's Exact Test was used to determine values among groups, and $P<0.05$ was considered significant, while $p<0.001$ was set as highly effective.

Results

A total of 100 primigravida women were enrolled in this study. Regarding the sociodemographic data of the participants, most of them (57%) were aged 18-24 years old, housewives (73%), and had an academic degree (44%). Regarding the EPDS, most women (23%) aged 18-24 years had depression possibility, while the most petite women (5.0%) aged 32-38 years had depression possibility, and no one aged ≥ 39 had depression possibility with the non-significant difference between both groups (p=0.212). On the other hand, most housewives experienced depression possibility (29%), while those who had free work least (9.0%) were affected, with a significant difference between both groups (p=0.031). Additionally, most women who held academic degrees (28%) had depression possibility. The least (8.0%) experienced depression that were graduating from primary school. No one in the illiterate group had the chance of depression possibility, with a highly significant difference between both groups (p=0.003). Finally, it was realized that 46% of the participants had a possible depression score based on EPDS (Table 1).

Table 1: The participant's sociodemographic data and associated EPDS.

Sociodemographic variable		EPDS		Total	p-value
		Normal	Possible Depression		
		Number, %			
Age (Years)	18 - 24	34	23	57	0.212
	25 - 31	12	18	30	
	32 - 38	7.0	5.0	12	
	≥ 39	1.0	0.0	1.0	
Occupation	Employed	8.0	8.0	16	0.031*
	Housewife	44	29	73	
	Free work	2.0	9.0	11	
Education Level	Illiterate	3.0	0.0	3.0	0.003**
	Primary School	9.0	8.0	17	
	Secondary School	26	10	36	
	Academic Degree	16	28	44	
Total		**54**	**46**	**100**	

*: Significant difference; **: Highly significant difference using Fisher's Exact Test; EPDS: Edinburgh Postnatal Depression Scale

Discussion

Depression signs and symptoms can appear at any stage of pregnancy. It is crucial to check for warning signs during pregnancy since prenatal depression may have a negative impact on both the health of the mother and the unborn child [12]. This is the first study evaluating the primigravida women's perceived depression during pregnancy about their sociodemographic characteristics (age, education level, and occupation) in Sulaimaniyah City, Iraq.

In this study, based on the sociodemographic data of the primigravida women, most of them (57%) were aged 18-24 years old, housewives (73%), and had an academic degree (44%). In this respect, Omran et al. 2022 in Mosul, Iraq, found that most primigravida women were aged 21-25 years (46.33%), government employees (84.33%) and high school graduates (39.67%) [13]. Also, Mukhlif et al. 2021 in Baghdad, Iraq, reported that most primigravida women were aged 25-29 years (34.7%), housewives (75.3%), and University graduates (25%) [14]. While in Kirkuk, Iraq, Dawood, 2021 reported that the majority of primigravida women were aged 21-31 years (50%), housewives (75%), and illiterate/primary schools (40.9%) [15]. Based on these outcomes, there are variations in participants' sociodemographic data that might be due to sample size and number of hospitals involved, with accuracy of data collection.

Regarding the EPDS, in the current study, most women (23%) aged 18-24 years had depression possibility, while the least women (5.0%) aged 32-38 years had depression possibility, and no one aged ≥39 had

depression possibility with the non-significant difference between both groups (p=0.212). On the contrary, Mukhlif et al. 2021 mentioned that pregnant women aged ≥35 years had the highest depression rate (85%) compared to other age groups (p=0.436).

On the other hand, most housewives experienced depression possibility (29%), while those who had free work reported the most minor (9.0%), with a significant difference between both groups (p=0.031). Similarly, Mukhlif et al. 2021 found that housewives had the highest rate (77.9%) depression rate than other groups (p=0.275) [14]. These outcomes might be directly related to the fact that housewives spend most of their time at home and have less chance of social contact and feeling lonely, especially those living far from their parents and relatives. Additionally, most women who held academic degrees (28%) had depression possibility. The least (8.0%) experienced depression after graduating from primary school. No one in the illiterate group had the chance of depression possibility, with a highly significant difference between both groups (p=0.003). This outcome is consistent with a study by Mukhlif et al. 2021 in Baghdad, who found a significant correlation between depression and educational level (p=0.008) [14]. These findings might be related to the fact that those with academic degrees might be overloaded with other work and spend more time at work, challenging jobs that must be on call most of the time.

Finally, it was realized that 46% of the participants had a possible depression score based on EPDS, which is less than another study that found depression of 22.7% among pregnant women using EPDS score [15].

Conclusions

According to this study, depression is widespread in pregnant women. The findings imply that prenatal mental health assessments are necessary. For early detection and treatment of mental health issues during this delicate stage of pregnancy, depression screening should be a regular component of antenatal visits. Regular prenatal depression screenings by nurses provide chances for in-depth contraception and psychological counselling and could aid mothers in achieving the ideal childbirth.

Acknowledgements

The authors appreciate the healthcare staff of all enrolled Sulaimaniyah Hospitals, Sulaimaniyah, Iraq, for their kind help and support for this study.

Conflict of Interest

There is no conflict of interest as this research was a personal non-profit work.

References

1. Meltzer-Brody S. (2022). New insights into perinatal depression: pathogenesis and treatment during pregnancy and postpartum. *Dialogues in Clinical Neuroscience.* 13(1):89-100.

2. O'Hara M.W., Wisner K.L. (2014). Perinatal mental illness: definition, description and aetiology. *Best Practice & Research Clinical Obstetrics & Gynaecology.* 28(1):3-12.

3. Ortega M.A., Pekarek T., Fraile-Martinez O., García-Montero C., Pekarek L., Rodriguez-Martín S., Funes Moñux R.M., Bravo C., De León-Luis J.A., Lahera G. (2023). A Review: Integrative Perspectives on the Features and Clinical Management of Psychotic Episodes in Pregnancy. *Journal of Clinical Medicine.* 12(2):656.

4. Kent A. (2009). Psychiatric disorders in pregnancy. *Obstetrics, Gynaecology & Reproductive Medicine.* 19(2):37-41.

5. Biaggi A., Conroy S., Pawlby S., Pariante C.M. (2016). Identifying the women at risk of antenatal anxiety and depression: a systematic review. *Journal of Affective Disorders.* 191:62-77.

6. Gibson J., McKenzie-McHarg K., Shakespeare J., Price J., Gray R. (2009). A systematic review of studies validating the Edinburgh Postnatal Depression Scale in antepartum and postpartum women. *Acta Psychiatrica Scandinavica.* 119(5):350-364.

7. Smith-Nielsen J., Matthey S., Lange T., Væver M.S. (2018). Validation of the Edinburgh Postnatal Depression Scale against DSM-5 and ICD-10 diagnostic criteria for depression. *BMC Psychiatry.* 18(1):1-12.
8. Freitas C.J., Williams-Reade J., Distelberg B., Fox C.A., Lister Z. (2016). Paternal depression during pregnancy and postpartum: an international Delphi study. *Journal of Affective Disorders.* 202:128-136.
9. Mokwena K.E. (2021). Neglecting Maternal Depression Compromises Child Health and Development Outcomes and Violates Children's Rights in South Africa. *Children.* 8(7):609.
10. Kassier S., Madlala S. (2018). Antenatal and postpartum depression: effects on infant and young child health and feeding practices. *South African Journal of Clinical Nutrition.* 31(1):17-22.
11. Kozinszky Z., Dudas R.B. (2015). Validation studies of the Edinburgh Postnatal Depression Scale for the antenatal period. *Journal of Affective Disorders.* 176:95-105.
12. Becker M., Weinberger T., Chandy A., Schmukler S. (2016). Depression during pregnancy and postpartum. *Current psychiatry reports.* 18:1-9.
13. Omran S.H., Al-Khazraji L.A. (2022). Evaluation of Primigravida Pregnant Women's Perceived Stress during First Trimester Pregnancy. *Mosul Journal of Nursing.* 10(2):341-346.
14. Mukhlif M.M., Khalil S.S., Rasheed T.A. (2021). Prevalence Rate of Major Depression among Pregnant Women Attending Family Medicine Primary Health Care Centers in Baghdad Al-Rusafah. *Iraqi Medical Journal.* 67(2):74-80.
15. Dawood Ahmed S. (2021). Depression among Pregnant Women of Displaced Families in Kirkuk Governorate. *Kirkuk Journal of Medical Sciences.* 3(1):63-71.