Impact of Pregnant Women's Depression State upon their Pregnancy Outcomes at Maternity Hospitals in Baghdad City

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Abstract

Objective: To assess the impact of pregnant women's depression state upon their pregnancy outcome

Methodology: A descriptive purposive study was used to assess the impact of pregnant women's depression state on their pregnancy outcomes. The study was conducted from (22nd \ September \ 2020 to 15th \ February \ 2021). A non-probability sample (purposive sample) was selected from 100 women. Data were collected through an interview with the mother in the counseling clinic, during the third trimester of pregnancy, as well as after childbirth in the labour wards to assess the outcome of pregnancy. Data were analyzed through descriptive statistics (frequency and percentages).

Results: The most important thing observed in this study was the negative pregnancy outcome for women suffering from depression during pregnancy. Low birth weight (31%), premature labor (22%), stillbirth (2%), intrauterine growth restriction (1%)

Recommendations: The study recommends according to the results. We suggest that health care providers pay attention to the mental state of pregnant women. Providing training and scheduling support during pregnancy for mothers in order to identify risk factors and achieve skills and knowledge to support mothers, as well as providing a soothing atmosphere to ensure a peaceful environment for pregnant women.

Key word : Impact, depression state, pregnancy, outcome.

Introduction

Depression is sadness or feeling down or irritable for weeks or months at a time. Some women may have depression before getting pregnant. But it also can start during pregnancy for a number of reasons — for example, if a woman isn't happy about being pregnant or is dealing with a lot of stress at work or at home.**[1]**

Depression is a common mental disorder which is characterized by loss of interest, depressed mood, and disturbance of sleep, psychomotor activity, and difficulty to concentrate, guilty feeling, easily tiredness and recurring thought of death wish [2]

Among psychiatric problems that occur in pregnancy, depression is a prevalent mental health problem affecting about one in five women worldwide[3]. Numerous studies reveal significant depressive symptoms in pregnant women that are associated with socio demographic and economic status and that depression during pregnancy may negatively influence psychosocial health [4]. depression, during pregnancy are commonly associated with low birth weight and perinatal morbidity and mortality [5]. Depression often remains undertreated during pregnancy and there is growing evidence that untoward perinatal outcomes can result. Our systematic review and meta-analysis was conducted to determine whether maternal depression during pregnancy is associated with adverse perinatal and infant outcomes. Maternal depression during pregnancy is associated with increased odds for premature delivery and decreased breastfeeding initiation; however, the effects are modest. More research of higher methodological quality is needed. Antenatal depression is a prevalent problem, affecting 5% to 15% of pregnant women[6]. as well has high public health significance because depression has

been associated with an increased risk of preterm birth and low birth weight[7]. which are 2 leading causes of mortality and morbidity [8]. Maternal depression during pregnancy has begun to be recognized as a factor that may adversely alter pregnancy outcomes. Depression also has been linked to known risk factors for adverse pregnancy outcomes such as smoking, substance abuse, hypertension, preeclampsia, and gestational diabetes.[9] recording studies 50.0% of the women suffering from depression during pregnancy also suffer from depression in the postpartum period [10]. It has been determined that pregnant women who are diagnosed with depression also have problems in their social relationships and have fears about being a parent [11.] Women experience depression and/or anxiety frequently. In addition, depression is sometimes described as a co-traveler because it is exists comorbidly with other physical conditions. Depression and/ or anxiety create difficulties for quality of life and, at the extreme, create a risk for suicide. [12]

Methodology

A descriptive purposive study was used to assess the impact of pregnant women's depression state on their pregnancy outcomes. The study was conducted from (22nd \ September \ 2020 to 15th \ February \ 2021). A non-probability sample (purposive sample) was selected from 100 women at Maternity Hospitals in Baghdad City,(Baghdad Teaching Hospital, AL-Elwya Maternity Teaching, Ibn Al Baladi Hospital, AL-Imamain AL-kadhmien Teaching Hospital, and AL-Karkh Maternity Hospital). Data were collected through an interview with the mother in the counseling clinic, during the third trimester of pregnancy, as well as after childbirth in the labour wards to assess the outcome of pregnancy and filled out the constructed questionnaire formats which designed for the purpose of the study . Validity through a panel of (10) experts and the reliability of the questionnaire is determined through the pilot study. Data were analyzed through the application of descriptive statistical approach (frequencies and percentages).

Inclusion Criteria include: Women who have psychosocial factors of anxiety, stress, depression, marital satisfaction, and social support .

Exclusion Criteria include: History of depression or anxiety disorder, Prenatal depression, Psychotherapy, Women have chronic previous medical illness, Previous

high risk pregnancy. An assessment tool is constructed in a form of questionnaire, and pregnancy outcome checklist. The study instrument comprised of five parts. Part One, Socio-demographic Characteristics. It is concerned with the identification of the sociodemographic characteristics of the study group, which include the following variables (age of wife and husband, level of education of wife and husband, occupation of wife and husband, general information, socioeconomic status, Part Two, Reproductive Status**.** It includes the following domains(women's age of married and date, gravida, Para ,abortion . Part Three psychosocial health of the mother. This part consists of (3) items concerned with stress, anxiety and depression They are responded by always,(scored 3), sometime,(scored 2), never,(scored 1). Part Four, social health of the mother**.** This part consists of (3) items concerned with social relationship, relation with husband and trend and tendencies towards pregnancy. They are responded by always,(scored 3), sometime,(scored 2), never,(scored 1). Part Five, evaluation of pregnancy outcome. This part consists of (10) items concerned with Newborn weight (less than 2500 kg,2500-3500 kg, more than 3500 kg). Number of newborns now(single, twin, triple and normal delivery). Birth defect category concerned of the congenital abnormalities , abortion less than 24 weeks ,stillbirth, Intrauterine growth restriction and big for gestational age. They are responded by Yes(correct answer, scored 1) No,(incorrect answer, scored 0).

Pilot Study:

A pilot study is carried out for the period of 5th October to the 29th October 2020 and it is conducted on (10) women of who are selected purposively from Baghdad Teaching Hospital. A pilot study was carried out before starting the data collection for the following purposes:

1.To confirm the clarity and content adequacy of the instrument structure throughout the subjects understanding and to determine the required modification.

2. To enhance the validity of the questionnaire.

3. To estimate the average time needed for data collection for each woman

4- Identify the barrier that may be encountered the

data collection process. The result of pilot study indicates that the questionnaire was clear for the participants, of the questionnaire takes(15- 20 min)for each women. The pilot study was excluded from the original sample of the study.

Result

Table (1): Assessment of Depression Level among Pregnant Women

Depression	f	%	M	SD
Mild	37	37	1.74	.645
Moderate	52	52		
Severe	11	11		
Total	100	100		

f: Frequency, %: Percentage, M: Mean, SD: Standard Deviation

Mild= 17-28, Moderate= 29-40, Severe= 41-51

Table (1) presents the assessment of depression level, the subdomain of psychological health that indicates the pregnant women are experiencing mild to moderate level of depression (mild= 37% and moderate= 52%)

Table (2): Correlation between Depression and Outcomes among Pregnant Women (N=100)

Depression / Pregnancy outcomes	Pearson correlation	p-value	Sig
Normal delivery with single viable baby	-.122	.227	N.S
Normal delivery with twin viable babies	-.018	.860	N.S
Birth defect	.162	.108	N.S
Stillbirth (intra uterine death)	.234	.019	S
Intrauterine growth restriction	-.205	.041	S
Large for date at birth	-.065	.523	N.S
Premature baby	.337	.001	H.S
A low birth weight infant (infant weighting less than 2.500 grams at birth)	.289	.004	H.S
Mode of Delivery	-.194	.053	N.S

P: probability, Sig: Significance, N.S: Not Significant, S: Significant, H.S: High significant

This table reveals that there is reverse significant relationship among depression with pregnancy outcomes of and intrauterine growth restriction at p-value=.041.

There is positive significant relationship between depression and pregnancy outcome of stillbirth at p-value=

.019.

The table also shows that there are strong positive significant relationship among pregnancy depression with outcomes of premature baby and low birth weight at p-value= .001 and .004.

Discussion

Discussion the impact of pregnant women's depression upon their preg- nanny outcome :

Table (1) shows the Assessment of Depression Level among Pregnant Women. the subdomain of psychological health that indicates the pregnant women are experiencing mild to moderate level of depression (mild= 37% and moderate 52%),(sever=11%).Antenatal depression is a prevalent problem, affecting 5%to 15%of pregnant women. Lucy(2016) [13]. where between 15 and 57% of women experience maternal depression Maternal depression in Syrian refugee women recently moved to Canada: a preliminary study. Asma (2017)[14] . Table (2) shows the observed frequencies , percent and cumulative percent of "pregnancy outcome" in the studied group, the results indicated that statistically there were been variety differences along different of the studied items, and as following:

In relation to subject "still birth" there was statistically significant relationship with maternal depression at p-value= .019.these result agree with Atefeh (2020) who reported the intrauterine fetal death were higher among mothers with depression during their pregnancies, compared to those who did not have depression [15]. Regarding the subject "intrauterine growth restriction" there was significant relationship between maternal depression with intrauterine growth restriction at p-value= .041. these result agree with Atefeh (2020) who reported intrauterine fetal growth restriction were higher among mothers with depression during their pregnancies, compared to those who did not have depression.[15] In relation to subject " preterm" there was statistically significant relationship with maternal depression at p-value=.001. these result agree with Dadi (2020) who reported Women with depression during pregnancy produce a higher level of cortisol hormone that can affect fetal growth and subsequently lead to adverse birth outcomes including preterm birth, low birth weight (LBW) [16].

Regarding the subjects " birth weight", there was highly significant relationship between depression and low birth weight at p-value= .004.These results agree with Parvin and Eileen (2017, 2020) who reported The correlation results showed a significant relationship between variable of depression with birth weight, (p<0.05) ,[17,18].

Recommendations:

1. We suggest that health care providers pay attention to the mental state of pregnant women.

2. Providing training and scheduling support during pregnancy for mothers in order to identify risk factors and achieve skills and knowledge to support mothers.

3. providing a soothing atmosphere to ensure a peaceful environment for pregnant women.

4.Management of perinatal depression should, ideally, begin before gestation and should include consultation and planning.

5. Interventions that focus on increasing partner engagement and participation in antenatal support may help reduce adverse birth outcomes by enhancing maternal resilience.

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Conflict of Interest: None to declare.

Ethical Clearance: "All experimental protocols were approved under the Ministry of Health were carried out in accordance with approved guidelines".

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