# Prevalence of postpartum depression among women attending primary health care centers in Majmaa city, Saudi Arabia, 2017-2018

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# **Abstract**

Background: Due to the compounded negative impacts of postpartum depression on mother, child and whole family, addressing postpartum depression in a timely and proactive fashion is therefore essential to ensure optimal growth and development of the community. This study therefore aims at addressing the pattern and prevalence of postpartum depression among mothers in Al-Majmaa city, Saudi Arabia and associated factors.

**Method:** This study is analytical cross-sectional study. It was conducted in primary health care centers in Majmaa city. Data was collected by a pre-tested, close-ended questionnaire. Collected data was entered in the SPSS version 23 and Pearson's Chi square tests and analysis of variance were used.

**Results:** The prevalence of postpartum depression among women attending primary health care centers in Majmaa city is 50.7%. the key factors in suffering from postpartum depression among women are duration of marriage, receiving social support during pregnancy, receiving social support prepatum and maternal health. The test values were significant for these variables (> 0.05) as they were 0.45, 0.00, 0.00 and 0.29 respectively.

Postpartum depression is more prevalent among those who are married for 1-5 years (32.4%) than other categories. It also shows that those who reported they had social support

some of the time during pregnancy are more likely to suffer from postpartum depression than others (47.9%) contrary to those who reported they have social support all of the time (11.3%). The case was the same for receiving social support postpartum. Surprisingly the women who had excellent maternal care are more likely to suffer from postpartum depression (66.2%)

**Conclusion:** the study concluded that the level of prevalence of postpartum depression among women is 50.7%.

**Keywords:** Postpartum Depression, Majmaa city, Saudi Arabia.

# Introduction

Postpartum depression is defined as an episode of major depression that is temporally associated with childbirth<sup>1</sup>. The American Psychiatric Association, in the 2013 diagnostic and statistical manual of mental disorders (DSM-V), amended the name to peripartum depression and stipulates that the onset of mood disturbance can occur in pregnancy or within four weeks of childbirth<sup>2</sup>. Peripartum depression occurs in 15–20% of childbearing women each year<sup>3</sup>.

Peripartum depression potentially is a devastating disorder that carries significant lifetime consequences for women and their children<sup>4</sup>. There are long-term risks associated with the illness including increased risk of recurrence of peripartum and non-peripartum depression with increased disease burden with subsequent depressive episodes<sup>4,5</sup>. Further, children of mothers with peripartum depression are at increased risk for developmental delays and behavioral problems<sup>6,7</sup>. Moreover, it disturbs the bonding between mother and child, which causes negative effects on cognitive development and social-emotional development of the child. These problems may persist and are unlikely to be responsive to intervention over time if the maternal depression remains untreated<sup>8</sup>.

The time following the birth of a child is one of intense physiologic and psychological change for a new mother. While many studies have looked at possible etiologies, including hormonal fluctuation<sup>9,10</sup>, biological vulnerability<sup>11</sup>, and psychosocial stressors<sup>12</sup>, the specific etiology of PPD remains unclear.

Postpartum depression is highly indicated when symptoms are severe and have lasted over two weeks. It is noted that in about 1 to 2 per 1,000, postpartum depression results in postpartum psychosis. In the United States, postpartum depression occurs in about 8 per 100,000 births<sup>13,14</sup>. Postpartum depression has also been seen as a temporary depression that afflicts about 15 percent of women following childbirth. It is more intense and long lasting than the "baby blues," which affect as many as half of new mothers<sup>14</sup>. The cause of postpartum depression is not well known, however, it has been linked to a variety of endocrine root causesespecially postpartum thyroid dysfunction<sup>15,16</sup>.

Postpartum depression also leads to increased costs of medical care, inappropriate medical care and discontinuation of breastfeeding<sup>17</sup>.

The family unit is also affected by postnatal depression, which may coexist with child abuse and neglect, marital discord, divorce and family violence<sup>18</sup>. Addressing maternal postpartum depression in a timely and proactive fashion is therefore essential to ensure optimal growth and development of the child<sup>19</sup>. This study was therefore aimed to address the pattern and

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prevalence of postpartum depression among mothers in Al-Majmaa city, Saudi Arabia and associated factors.

# Methodology

This study is analytical cross- sectional study. It was conducted in primary health care centers in Majmaa city in order to identify the prevalence of PPD among the concerned society.

The concerned study population is identified as the women who had a recent delivery within 2 to 8 weeks attending primary health care centers in Majmaa city.

Data was collected by a pre-tested, close ended questionnaire which was filled by attributing female doctors that are in direct contacts with the patients.

The questionnaire form consisted of two parts: one included socio-demographic data and other variables, and the other was Edinburgh Postnatal Depression Scale, which was administered in a standardized Arabic version for the benefit of the participants.

Collected data was entered in the SPSS version 23, applying Pearson's Chi square tests and analysis of variance will be used to find out the significance of the prevalence of postpartum depression in mothers who visit the primary health care centers in Al-Majmaa city.

# **Results**

The data was collected from 140 women in primary health care centers in Al-Majmaa city. The majority of the sample (51.4%) were between 26-30 years old, while 25.7% were between 18-25 and 22.9% were above 35 years. Moreover, 90.7% live in city, while 7.9% live in village.

62.9% of the sampled mothers were multiparous, 26.9% were primiparous and 10.7% gave birth for more than 5 children. 38.6% were married from 6 to 10 years, while 31.4% were married for 1 to 5 years. The majority of the sampled mothers (75.5%) belong to middle-income class. The majority (32.1%) reached secondary education.

Concerning working status, approximately 63% were housewives. The result show that 94.3% of the sample did not face any delivery complications and 60% of them gave birth vaginally.

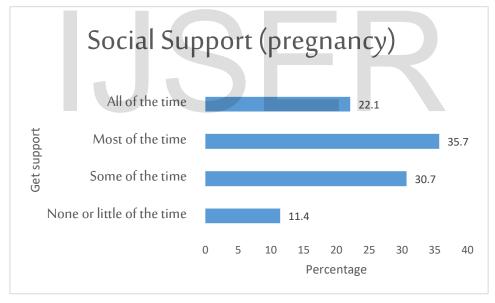
In addition, 22.1% reported they have social support all the time during pregnancy and 35.7% said most of the time. On the other hand, 22.1% reported they have social support all the time postpartum and 34.3% reported most of the time. About 24% of the sampled mothers reported they faced stressors during the past two years.

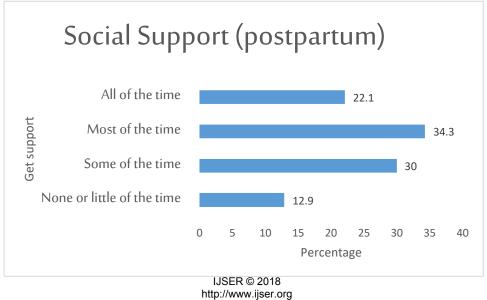
The scoring system based on the previously mentioned results showed that the prevalence

of postpartum depression among mothers is 50.7%.

The relation between suffering from postpartum depression and other variables was tested to determine the key factors affecting suffering from this depression. The results of the correlation show that the key factors in suffering from postpartum depression among women are duration of marriage, receiving social support during pregnancy, receiving social support prepatum and maternal health. The test values were significant for these variables (> 0.05) as they were 0.45, 0.00, 0.00 and 0.29 respectively.

Table (1) shows that postpartum depression is more prevalent among those who are married for 1-5 years (32.4%) than other categories. It also shows that those who reported they had social support some of the time during pregnancy are more likely to suffer from postpartum depression than others (47.9%) contrary to those who reported they have social support all of the time (11.3%). The case was the same for receiving social support postpartum. Surprisingly the women who had excellent maternal care are more likely to suffer from postpartum depression (66.2%).





Variables		Suffering from postpartum depression		Total
		No	Yes	
Duration of marriage * P-value=0.045 Gamma= -0.155	1-5	30.4%	32.4%	4
	6-10	47.8%	29.6%	:
	11-20	14.5%	31%	
	20-30	4.3%	7%	
	>30	2.9%	0	
Social support (Pregnancy)* P-value=0.000	None or little of the time	8.7%	14.1%	16
	Some of the time	13%	47.9%	43
	Most of the time	44.9%	26.8%	50
	All of the time	33.3%	11.3%	31
Social support (Postpartum)* P-value=0.000	None or little of the time	8.7%	16.9%	18
	Some of the time	15.9%	43.7%	42
	Most of the time	42%	26.8%	48
	All of the time	33.3%	12.7%	32
Maternal health* p-value=0.029	Poor	0	1.4%	1
	Good	53.6%	32.4%	60
	Excellent	46.4%	66.2%	79

# **Discussion**

This study aimed at assessing the prevalence of postpartum depression among women in Majmaa city in Saudi Arabia. The results of this study suggest that the prevalence is about 51%. The prevalence rate in our study is relatively high if compared to other studies. For example, in one of the studies in Canada the results showed that the national prevalence rates of minor/major PPDS and major PPDS were found to be 8.46% and 8.69% respectively. The analysis revealed an association between total household income and both minor/major and major PPDS. Immigration status, delivery at a young age, and a prior diagnosis of depression were all found to be positively associated with both forms of PPDS<sup>20</sup>.

Moreover, a meta-analysis that analyzed several international studies found, at 6 weeks postpartum ,the mean American prevalence rate of PPD to be.15.4% and the mean prevalence rate in the United Kingdom to be 12.8% <sup>21</sup>.

Supporting the results of our study, Epperson (1999) suggested that dissatisfaction with the marital relationship and poor social support increases a woman's risk to develop postpartum major depression<sup>22</sup>.

# Conclusion

The study concluded that the level of prevalence of postpartum depression among women is 50.7%. It is more prevalent among

those who are in the beginning of their marriage, those who received moderate social support during pregnancy and prepatum and those who received excellent level of maternal car.

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