### **ORIGINAL ARTICLE**

# Postpartum Depression & Body Image Dissatisfaction in Housewives and Working Women

SAIRA GHAFOOR¹, SHAZIA AFTAB², ZAFAR HALEEM BALOCH³, SADIA RASHID⁴, ALIYA WAHEED⁵, NAZISH ALI<sup>6</sup>

<sup>1</sup>Assistant Professor, Jinnah Medical College hospital Karachi

<sup>2</sup>Associate Professor, Jinnah Medical College Hospital Korangi, Karachi

<sup>3</sup>Senior Lecturer, Jinnah Sindh Medical University, Karachi

<sup>4</sup>Assistant Professor Jinnah Medical College Hospital Korangi, Karachi.

<sup>5</sup>Assistant Professor Jinnah Medical College Hospital Korangi Karachi

<sup>6</sup>Assistant Professor Bagai Medical University/Fatima Hospital Karachi

Corresponding Author: Dr. Saira Ghafoor, Email: ghafoorsaira@yahoo.co.uk, Cell Phone: +923342801812

#### **ABSTRACT**

**Objective:** Our study aims to examine the association of body image dissatisfaction with postpartum depression in females of Pakistan. It also aims to find out if there is a relationship between postpartum depression and age, education and parity of mother.

**Study design and setting:** The study was carried out in two hospitals: Jinnah Medical college hospital Karachi and Medicare Hospital, Karachi. The data collection was carried from January 2019 - July 2019.

**Methodology:** It was a questionnaire based study which targeted females of Pakistan who were of child bearing age and were able to read and understand the questionnaires given to them, Women with a psychiatric illness were excluded. Edinburgh postnatal depression scale (EPDS) was used to assess depression in postpartum women while a body image Questionnaire was used to evaluate the extent of body image dissatisfaction (BID).

**Result:** 200 women, who were analyzed for postpartum depression, had a mean age of 28.14 years with 1.87 mean numbers of children. Mean EDB (Edinburgh) score came out to be 13.55. There was no significance of age, parity, education and occupation in determining prevalence of postpartum depression. Also body image did not play any role in causing depression however, relation between happiness and physical appearance did prove to be statistically significant (p-value 0.04).

**Conclusion:** According to our study, body image plays no role in postpartum depression and proves to be non-significant; whereas one's physical appearance is an important factor in determining a woman's happiness. **Keywords:** Postpartum Depression, Body Image Dissatisfaction, Housewives, Working Women.

### INTRODUCTION

Depression is a common medical condition with a prevalence of 20% - 25% in women worldwide. It is a constant loss of interest in activities negatively affecting the mental and physical health. It is characterized by feeling of hopelessness and sleep disturbances. Also, it appears as a hurdle in social interaction due to personality changes. <sup>1</sup>

Postpartum depression has affected the women globally. Previously it was believed that postnatal mood disorders were defined by culture and women from western societies suffered more. However in different societies its prevalence rate varies; Women from Asia and South Africa have been identified as being most at risk than United States of America, European and Australian women who appear to have lower levels². Various current studies shows that 17% of Arab women, 1 in 10 women in Indian Population, 1 in 6 women in Chinese population³.In Pakistan prevalence rate ranges from 28 percent to 63 percent, placing it among the highest in Asia⁴.

Postpartum depression is a stigma which is not acknowledged in our society and consequently not dealt with due to lack of awareness. It is associated with great hormonal changes in mothers during and after pregnancy. Pregnancy and postpartum causes dramatic alterations in steroid and peptide hormones which alter the mothers' hypothalamic pituitary adrenal and hypothalamic pituitary gonadal axis. Dysregulations in these endocrine axes are related to mood disorders and as such it should not come

as a major surprise that pregnancy and the postpartum period can have profound effects on maternal mood<sup>5</sup>.

The onset of depressive symptoms begins between two weeks to a month after delivery and may last several months or even year. In a recent study, the results showed that six weeks postpartum, 22% of the women had symptoms<sup>6</sup>. depressive Women with postpartum depression usually present with low self-esteem, emotional distress and experience trouble in bonding with the baby. Some women cease breastfeeding and it greatly affects both maternal and child health7. Common risk factors of postpartum depression include history of depression, lack of partner, marital difficulties, lack of social support, poverty, family violence, increased life stress, substance abuse, antenatal depression, history of previous abortions. unplanned pregnancy, ambivalence toward the pregnancy and anxiety about the fetus8.

Among other associations, the major risk factor of postpartum depression is body image dissatisfaction due to drastic changes in weight during and after pregnancy. Body image dissatisfaction triggers low self-esteem in women. Body changes from pre-pregnancy, and rapid trimester-specific changes in body weight and size during pregnancy, may provoke body dissatisfaction. Body dissatisfaction refers to a subjective negative evaluation of one's figure or body parts, and it is multidimensional in nature<sup>9</sup>.

Significant associations were found between depression, body image dissatisfaction, and social support with excessive gestational weight gain<sup>9.</sup>

Actual postnatal weight proved the most important predictor of psychological well-being following birth. Hierarchical regression indicated that gestational weight gain, shorter duration (6 months or less) of breastfeeding, and post-partum body dissatisfaction at 3 and 6 months are associated with higher PWR at 9 months; stress, depression, and anxiety had minimal influence. Body image dissatisfaction in the 3rd trimester of pregnancy is a severe risk factor for postpartum depression<sup>10</sup>. The risk of perinatal depression was 4 times higher in women dissatisfied with their body image<sup>11</sup>.

This study has been done on Pakistani population while there are not significant papers covering this population in their survey. The importance of this investigation was to enlighten the fact that almost half of Pakistani women population went through depression during their post natal period, with body image dissatisfaction being one of the most crucial cause because the physical changes that occur during pregnancy predisposes a woman to challenges such as social pressure which triggers inferiority complex. This study was done in order to explore possible associations between two separate groups, comparing housewives and working women including depression and body image dissatisfaction together in one study and if there is a relationship between postpartum depression and age, education and parity of mother.

# **METHODOLOGY**

The study design was questionnaire based study. The participants were women who delivered their children in 2018. The selection criterion wasnon probabilitypurposive sampling.

Sample of 216 was selected out of which 16 questionnaires were canceled. 6 women didn't complete the questionnaire properly and didn't provide contact information for completion. 5 questionnaires were canceled

because women refused to answer certain questions. 5 questionnaires were canceled because women didn't comprehend the questions easily because they weren't proficient in English as they claimed to be. Sample size was calculated by using online open epi software for proportion 17% prevalence from research conducted in Saudi Arabian women 15.

The participants selected were:

- Women who were capable of comprehending and completing the self-administered questionnaires provided in English Language.
- 2) The women of child bearing age were recruited.
- The women diagnosed with any pre-existing psychiatric illness were excluded.

The study was carried out in two hospitals: Jinnah Medical college hospital Karachi and Medicare Hospital, Karachi. The data collection was carried from January 2019 - July 2019. We carried out separate interviews for women were unable to understand English. The sample size was 200 women out of which 111 were housewives and 89 were working women. All participants provided written informed consent for the study. The Edinburgh Postnatal Depression Scale (EPDS) was used to measure depression in the participants. Body Image Dissatisfaction (BID) Questionnaire was made and a pilot study was done to test its reliability.

The ethical approval was obtained from the relevant ethical review committee of Jinnah Medical College hospital Karachi. SPSS 25 was used for analysis of the data collected.

#### RESULTS

A total of 200 women were analyzed in this study. Their mean age was  $28.14(\pm 4.935)$  years. Their mean number of children was  $1.87(\pm 1.019)$ .

Table 1:Demographic variables of study participants

Variable	Frequency(n)	Percentage(%)	Mean(SD)		
Age(years)					
18-29	121	60.5			
30-35	64	32.0			
Above 35	15	7.5			
Parity			1.87(1.019)		
One child	93	46.5			
Two	59	29.5			
Three	34	17.0			
Four	10	5.0			
Five	3	1.5			
Six	1	0.5			
Occupation	1				
Housewife	111	55.5			
Working	89	44.5			
Education					
Undergrade	63	31.5			
Graduate	91	45.5			
Postgraduate	32	16.0			
Missing	14	7.0			
EDB Scale Category	·		•		
Depression less likely	31	15.5			
Depression possible	38	19.0			
Fairly high possibility of depression	32	16.0			
High probability of depression	99	49.5			

Table 2 Association of FDB	(Edinburah)	) category 8	& basic characterstics of study	narticinants

Characterstics	N%	Depression less likely	Depression possible	Fair possibility of Depression	High Possibility of Depression	P-value	
EDUCATION				•	•		
Undergraduate	633(1.5)	11(17.5)	9(14.3)	7(11.1)	36(57.1)	0.587	
Graduates	91(45.5)	16(17.6)	16(17.6)	18(19.8)	41(45.1)		
Postgraduate	32(16.0)	4(12.5)	8(25.0)	5(15.6)	15(46.9)		
Occupation		• , , ,		,	· ,	0.377	
Housewife	111(55.5)	16(14.4)	18(16.2)	16(14.4)	61(55.0)		
Working	15(16.9)	15(16.9)	20(22.5)	16(18.0)	38(42.7)		
Age Cat	, ,	, ,	,	` '	, ,	0.480	
18-29	121(60.5)	17(14.0)	23(19.0)	19(15.7)	62(55.0)		
30-35	64(32.0)	11(17.2)	12(18.8)	8(12.5)	33(51.6)		
Above 35	15(7.5)	3(20.0)	3(20.0)	5(33.3)	4(26.7)		
BID1	/						
YES	134(67.0)	28(20.9)	32(23.9)	20(14.9)	54(40.3)	<0.001*	
NO	66(33.0)	3(4.5)	6(9.1)	12(18.2)	45(68.2)		
BID2	(/						
FACE	54(27.0)	7(13.0)	11(20.4)	5(9.3)	31(57.4)	0.394	
BODY PARTS	133(66.5)	20(15.0)	24(18.0)	25(18.80	64(48.1)		
BOTH	13(6.5)	4(30.8)	3(23.1)	2(15.4)	4(30.8)		
BID4	- ( /	(/		/ /		<0.001*	
YES	67(33.5)	1(1.5)	10(14.9)	11(16.4)	45(67.2)		
NO	133(66.5)	30(22.60	28(21.1)	21(15.8)	54(40.6)		
BID5			-			0.421	
YES	108(54.0)	15(13.9)	25(23.1)	16(14.8)	52(48.1)		
NO	92(46.0)	16(17.4)	13(14.1)	16(17.4)	47(51.1)		
BID9	- ( /		- 7	- /		0.526	
Slimness	31(15.5)	3(9.7)	5(16.1)	4(12.9)	19(61.3)		
Beauty	46(23.0)	5(10.9)	7(15.2)	9(19.6)	25(54.3)		
Character/ Manners	123(61.5)	23(18.7)	26(21.1)	19(15.4)	55(44.7)		
Shartace, marriera 125(51.5) 25(16.7) 25(21.1) 15(16.4) 55(44.7)						0.893	
Good	75(37.5)	15(18.7)	14(18.7)	10(13.3)	36(48.0)		
Indifferent	88(44.0)	11(12.5)	17(19.3)	15(17.0)	45(51.1)		
Frustrated	37(18.5)	5(13.5)	7(18.9)	7(18.9)	189(48.6)	$\overline{}$	
BID14						0.040*	
A lot &Partiy	145(72.5)	18(12.4)	27(18.6)	20(13.8)	80(55.2)		
Not at all	55(27.5)	13(23.6)	11(20.0)	12(21.8)	19(34.5)		

<sup>\*</sup>a p-value calculated by chi square test

<sup>\*</sup>p-value 0.05 is considered as significant

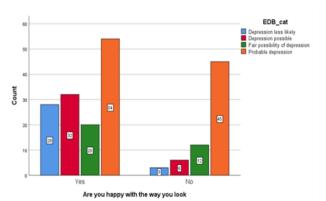
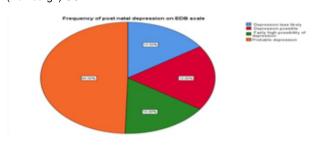


Figure 1. Pie chart: Frequency of postnatal depression on EDB (Edinburgh) SCALE



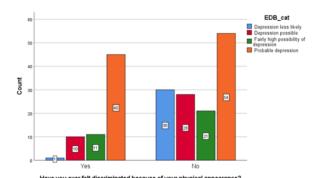


Figure 3.Histogram 2: Correlation of EDB (Edinburgh) scores with RID 4

Their mean EDB (Edinburgh) score was 13.55(±5.131). The details of education and employment status are defined in table 1. Out of 200 women 111(55.5%) were housewives and 89.5(44.5%) were working. Postnatal depression scores more than 13 was considered high probable depression, that was found in 99(49.5%) women. The association between education and depression was found to be insignificant with a p-value of 0.587. The correlation of employment status & age was also found to be insignificant with p-values of 0.480 and 0.377 respectively. This signifies that postpartum depression

wasn't associated with these factors in our study population.

We also analyze body image concerns in women who got high EDB scores i.e >13 and found that most women were happy with the way they look with significant p-value of <0.001. They didn't feel discriminated with the way they look with a significant p-value of <0.001. It denotes that in Pakistani population body image concerns are not associated with postpartum depression. There must be some other variables that are related to such high values of clinical depression score that weren't our study variables.

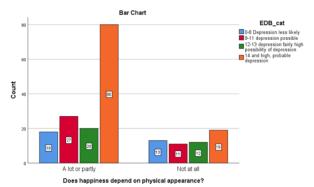


Figure 4. Histogram 3: Correlation of EDB(Edinburgh) scores with BID 14

In our study population a high frequency of women gave responses that happiness does depend on looks partly or a lot with p-value of 0.04. All the values are described in detail in Table 2. In Figure 4 it is represented graphically.

## **DISCUSSION**

Postpartum depression is a stigma which is not acknowledged in our society and consequently not dealt with. Due to lack of awareness, people often confuse it with superstitions such as evil eye or possession. It is associated with great hormonal changes in mothers during and after pregnancy. Body image dissatisfaction triggers low self-esteem in women. For sociocultural reasons, women seem consistently more susceptible to having body image concerns than men<sup>12</sup>. In High socioeconomic groups women consider increased weight as a threat to their value and social standing in the society. In Low socioeconomic groups, women lack knowledge about their dietary requirements and the need to indulge in physical activities. It is postulated that although there lies a massive gradient between the educational level of socioeconomic groups, depression was associated with obesity regardless<sup>13</sup>.

The research was conducted in order to find out the association between postpartum depression and body image dissatisfaction from a population of 200 Pakistani women comparing house wives and working women over a period of 12 months. The research found that Postpartum Depression and Body Image dissatisfaction are not associated significantly. 99 (49.5%) women out of the recruited 200 participants had postpartum depression.

134 (67%) women were satisfied with the way they look out of which 54 (40.3%) women had high probability of

postpartum depression. However, 66 (33.0%) women weren't satisfied with their physical appearance and 45 (68.2%) of these women had high possibility of postpartum depression (P-value<0.001) indicating poor association between the two. When asked if they were discriminated because of their physical appearance, 133 (65%) women denied and it was still evident that 54 (40.6%) out of these women had high possibility of postpartum depression (p-value<0.001). They were also inquired if happiness depends upon physical appearance and 145 (72.5%) out of 200 women agreed. 80 (55.2%) of those who agreed had high possibility of postpartum depression. Age, parity education and employment status of the participant were not significantly associated with postpartum depression.

Based on the above results, it becomes evident that satisfaction with the body image did not play a major role in determining whether there is a chance of postpartum depression. Our study is supported by a research that states their prediction that body dissatisfaction would be greater during the postpartum period compared to during pregnancy was partially supported since women reported feeling significantly fatter, and experiencing their weight and shape as more salient at all three postpartum time points compared to during pregnancy. However, women reported feeling the least strong and fit at early pregnancy, with levels returning to pre-pregnancy levels by 12 months postpartum, while general self-perceptions of feeling attractive did not change across the perinatal period. However, in baseline controlled prospective analyses, only a model of greater depression late in pregnancy predicting body dissatisfaction at six weeks postpartum and feeling fat throughout the postpartum was supported 14.

Another article suggests that BID (Body Image Dissatisfaction)predicted PPD symptoms, even after controlling for previously established risk factors but no main effect emerged between maladaptive perfectionism and postpartum depression symptoms<sup>15</sup>.

Physical appearance of an individual is an important aspect in building a person's character and determining his state of mind. According to our study it proved to be a major reason behind the happiness of a person regardless of other social factors and around half of the people for whom physical appearance mattered, suffered from postpartum depression. Physical changes that a woman experiences during pregnancy and after delivery greatly affects how they see themselves and behave in a society.

Contrary to our findings, another study states that pregnancy encourages women to recognize and appreciate the functionality of their body while discouraging self objectification. Pregnancy may be a unique time for women during which gaining weight is acceptable. It has been argued that women are more likely to prioritize their own health and the health of their fetus at this time, over and above aesthetics<sup>16</sup>. Postpartum depression also depends on the social support that mothers receive after giving birth to a baby, their relation with their mother, and their partner. Good bonding between a mother and daughter not only helps her deal with her postpartum issues but also proves to be helpful in her counseling and get through depression. Whereas understanding from one's partner not only helps in raising a child efficiently but also helps in developing positive thinking towards life and makes her think of herself

as worthy. As also stated in article 17that abusive partners made the postpartum period difficult for women and severely affected how they see themselves in a society. According to our study, age and parity did not reveal significant association with post partum depression in Pakistani population. However, in a study conducted in Sri Lanka, EPD scale total scores were positively related to delivery age of mothers. Presence of postpartum depression was significantly associated with delivery age over 35, having more than 4 living children and mothers' diseases. Mothers who attended prenatal sessions and whose partners were employed were less likely to report postpartum depression  $^{18}$ . In a study conducted in Japan evaluating postpartum depression and mother-infant bonding by parity, multiple regression analyses revealed a moderate relationship between postpartum depression and mother-infant bonding. While these scores were shown to decrease from the first child to the second in the follow-up subgroup<sup>19</sup>.

Lack of self-esteem in the mother and also lack of attendance in prenatal classes affected the incidence of postpartum depression. Not getting proper counselling during the antenatal period resulted in mothers overthinking during their postpartum period which led to the depressive symptoms.

# **CONCLUSION**

After completing our study, we conclude that there was no association found between body image dissatisfaction and postpartum depression. Instead there were a large number of women who were satisfied with their body image but still suffered from depression during the postpartum period. Also physical appearance proved to be a significant factor in determining incidence of postpartum depression. As shown by our results, women who were happy with their physical appearance did not experience depressive symptoms while for those who were not satisfied with their physical appearance continued to suffer from depression postpartum.

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