

Mood Changes Affecting Husband and Wife in Postpartum Period: Epidemiological and Risky Factors Study

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ABSTRACT

Introduction:	The puerperal period is regarded as a time of particularly drastic change in the lives of women. Furthermore, their changes are followed by other major changes affecting life in general including the relationships between husband and wife and between family members.
Aim of the Study:	To assess the mood changes affecting both parents during postnatal period.
Subjects and Methods:	This study included 200 postpartum women and their partners with no age, social class and educational class limitation. Participants were subjected to socio-demographic assessment, obstetric history assessment and psychiatric assessment to detect depression by Edinburgh Postnatal Depression Scale and detection of elation by Highs questionnaire.
Results:	Depression is found in 12% of postpartum mothers and 11% of their husbands. Elation is found in 9% of mothers and 1% of partners. There is a significant association between mother's depression and caesarian type of delivery, unreceived anti-natal care and late age of women, There is a significantly association between mothers elation and positive past psychiatric history, late age, unreceived antenatal care and rural residence. There is highly significant association between father depression and father late age, negative attitude of fathers and diseased mood of mother.
Conclusion:	Postpartum depression and elation in mothers and fathers is common and is determined by psychosocial and socio-demographic factors.

Key words: Mood changes, postpartum depression, elation.

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INTRODUCTION

Puerperal period is regarded a time of particularly drastic change in the lives of women affecting both body and mind. Along with the drastic changes brought about by the hormonal system accompanying child birth, they are required to adopt a new role as being mothers, furthermore, their changes are followed by other major changes affecting life in general including the relationships between husband and wife and between family members, thus the puerperal period is a time in which various psychiatric symptoms readily appear and in that context is also regarded as a critical time from the stand point of mental health care of mothers and children¹. Maternal postpartum depression is prevalent, with 8% to 25% of women experiencing subclinical depressive symptomatology sometimes during the first year postpartum². Postpartum psychiatric illness was initially conceptualized as a group of disorders specifically linked to pregnancy and childbirth and thus was considered diagnostically distinct from other types of psychiatric illness. More recent evidence suggests that postpartum psychiatric illness is virtually indistinguishable from psychiatric disorders that occur at other times during a woman's life²⁸. Several recent studies have found similar rates of postpartum depression in new fathers, particularly in

families where the mother is also experiencing depression³. However, to our knowledge, no study exists that examines paternal depression in the first year postpartum in a large, nationally representative sample. Postpartum depression in mothers has been linked with negative parenting behaviours associated with negative child outcomes⁴. Little empirical researches had studied either the prevalence or the actuality of depression in postnatal father. Harvy and McGroth A study on a group of fathers whose woman were admitted to mother and baby unit found them to have an increased prevalence of psychiatric morbidity compared with control sample⁵. The prevalence of depression was 20% in both mothers and fathers in an 86 couples 8 weeks after childbirth⁶.

SUBJECTS AND METHODS

This study was done in the postnatal care unit of Gynecology and Obstetric Department of Zagazig University Hospital, Sharkia, Egypt in the period from February 2007 to August 2007. The study included 200 postpartum women and their partners at 6th week postpartum, with no social and educational class limitation. Exclusive criteria included

subjects with mental retardation, personality disorders, drug or substance dependant and general medical disease. All postpartum women and partners were subjected to semi-structural psychiatric interview using the DSM-IV criteria in addition to the psychiatric measures using Edinburgh Postnatal Depression Scale and Highs questionnaire for elation. All participants gave a verbal consent and were subjected to the following:

1. Socio-demographic assessment including name, age, income, residence and desire for pregnancy for mothers and fathers.
2. Obstetric assessment including type of last labour, number of pregnancies, number of children, previous abortions or still birth and clinical examination.
3. Psychiatric assessment to detect mood changes by psychometric tests:
 - Detection of depression at 6th week postpartum by Edinburgh Postnatal Depression Scale (EPDS). It consists of 10 short statements. Mothers underlay which of 4 possible responses according to severity (yes all the time, yes most of the time, no not very often, not at all)

as close to how she is felling.

Participants who scored above a threshold 12-13 were likely to be suffering from a depressive illness⁷.

- Detection of elation 6th week postpartum by Highs questionnaire based on (schedule for Affective Disorders and Schizophrenia-lifetime Version) SADSL criteria. It consists of 7 short statements. Mothers underlay which of 2 possible responses according to severity (yes, a lot and yes, a little) with scoring 2 for the first choice and 1 for the second choice as close to how she is felling. Significantly participants' scoring more than 8 on the Highs scale is a positives case for elation⁸.

4. Statistical methods:

- Chi-square (x2) test.

$$\alpha = \sum \frac{(O - E)^2}{E} \text{ where } \sum = \text{summation}$$

O = observed value, E= Expected value.

RESULTS

Table 1: Sociodemographic data for mothers.

	Variable	No	%
Age	15-25 y. Young age	116	58%
	26-40 y. Late age	84	42%
Occupation	Employment	110	55%
	Unemployment	90	45%
Past psychiatric history	Positive	5	2.5%
	Negative	195	97.5%
Antenatal care	Received	164	82%
	Unreceived	36	18%
Type of delivery	Normal delivery	188	94%
	Caesarian delivery	12	6%
Parity	Primipara	80	40%
	Multipara	120	60%
Residence	Rural	140	70%
	Urban	60	30%

Table 2: Association between mother depression and other variable.

Variable	Normal		Depressed		X ²	P value
Age:						
Early	108	93.1%	8	6.9%	6.812	0.009*
Late	68	81.0%	16	19.0%		
Occupation:						
Unemployment	94	85.5%	16	14.5%	1.5	0.221
Employment	82	91.1%	8	8.9%		
Past psychiatric H:						
Negative	173	88.7%	22	11.3%	5.21	0.24
Positive	3	60.0%	2	40.0%		
Antenatal care:						
Received	150	91.5%	14	8.5%	10.394	0.001**
Unreceived	26	72.2%	10	27.8%		
Type of delivery :						
Normal	169	89.8%	19	10.2%	6.86	0.005*
Caesarian	7	58.4%	5	41.6%		
Parity:						
Primipara	72	90.0%	8	10.0%	0.505	0.477
Multipara	104	86.7%	16	13.3%		
Residence						
Rural	120	85.7%	20	14.3%	2.429	0.129
Urban	56	93.3%	4	6.7%		

Depression is: **Highly significant with unrecieved antenatal care. *Significant with late age, and caesarean delivery, Not significant with occupation, parity and residence.

Table 3: Association between mother elation and other variable.

Variable	Normal		Elated		X ²	P value
Age:						
Early	112	96.6%	4	3.4%	10.349	0.001**
Late	70	83.3%	4	16.7%		
Occupation:						
Unemployment	102	92.7%	8	7.3%	0.890	0.345
Employment	80	88.9%	10	11.1%		
Past psychiatric H:						
Negative	180	92.3%	15	7.7%	16.286	0.00**
Positive	2	40.0%	3	60.0%		
Antenatal care:						
Received	156	95.1%	8	4.9%	18.901	0.00**
Unreceived	26	72.2%	10	27.8%		
Type of delivery :						
Normal	175	90.4%	13	9.6%	16.55	0.002*
Caesarian	7	58.4%	5	41.6%		
Parity:						
Primipara	72	90.0%	8	10.0%	0.163	0.687
Multipara	110	91.7%	10	8.3%		
Residence:						
Rural	124	88.7%	16	11.3%	3.34	0.006*
Urban	58	96.6%	2	3.4%		

Elation is:**Highly significant with late age, positive past psychiatric history, and antenatal care, *Significant with rural residence, and caesarian delivery, Not significant with occupation, and parity.

Table 4: Sociodemographic data for fathers.

Variable	No	%
Age	18-25 y. Young age	84 42%
	26-40 y. Late age	116 58%
Residence	Employment	195 97.5%
	Unemployment	5 2.5%
Mood of wife	Depressed	36 4%
	Normal	164 96%
Attitude of fathers toward pregnancy	Positive	129 64%
	Negative	71 35%
Number of child	Yes	80 6%
	No	120 94%
Past psychiatric history	Positive	8 4%
	Negative	192 96%
Incidence of	Depressed fathers	22 11%
	Elated fathers	2 1%

Table 5: Association between father depression and other variable.

Variable	Normal	Depressed	X ²	P value
Age:				
	111 95.7%	5 4.3%	12.625	0.00**
Early				
	67 79.8%	17 20.2%		
Late				
Occupation:				
	174 92.3%	21 11.3%	0.422	0.514
Employment Unemployment				
	4 80.0%	1 20%		
Past psychiatric H:				
	171 88.5%	170 88.5%	1.030	0.310
Negative				
	7 87.5%	1 12.5%		
Positive				
Mood of mother:				
	150 91.5%	14 8.5%	5.648	0.017*
Normal				
	28 77.8%	8 22.2%		
Diseased				
Attitude of fathers:				
	120 93.0%	9 7 %	6.008	0.014*
Positive				
	58 81.7%	13 18.3%		
Negative				
Number of child:				
	73 91.3%	7 8.8%	0.689	0.406
First child				
	105 87.5%	15 12.5%		
More than one child				

Depression is: **Highly significant with late age, *Significant with mood of mothers after labour, Not significant with Number of child, attitude of fathers toward pregnancy, and Past psychiatric history of fathers.

The results show that the incidence of father elation is 1% and this result is unrespectable and statistically neglected.

DISCUSSION

In Psychiatric disorders occurring during pregnancy have attracted the interest of both researchers and clinicians revealing high incidence of depression in postpartm period⁹.

Depression that occurs during pregnancy or within a year after delivery is called perinatal depression. The exact number of women with depression during this time is unknown. But researchers believe that depression is one of the most common complications during and after pregnancy. Often, depression is not recognized or treated, because some normal pregnancy changes cause similar symptoms and are happening at the same time. Tiredness, problems sleeping,

stronger emotional reactions and changes in body weight may occur during pregnancy and after pregnancy; nevertheless these symptoms may also be signs of depression.

First time mothers and those with high anxieties about their wellbeing during the later stages of pregnancy; usually respond to reassurance based on information and explanation.

A heightened emotional state and anxiety about the impending delivery are common in latter stages of pregnancy in contrast to the variability of emotional changes during pregnancy. Majority of women experience a sequence of marked emotional and behavioural changes in the first 24-48 hours following delivery¹⁰.

The prevalence of depression in mothers in our study (12%) is relatively confirmed with, 10-14%¹¹, 11% (8, 12-14)

and 14%¹⁵ reported in previous studies. This suggests that our methods for measuring depression were valid for this population.

On the other hand, there was disagreement with our results as the prevalence of depression in mothers was 6% in another study¹⁷ which recruited a sample of postpartum women after one year, so this gave the chance for treatment of depressed women. Also there were missed cases due to long period between delivery and participation in the study decreasing the rate of depression. In addition, the traditional belief; that recently delivered women is in *ayin* state (depletion of vitality) and she is encouraged to recover her health by resting in bed and take tonics lead to the misdiagnosis of many depressed cases. The determination of intimacy and enrich high emotional and maternal support made strengthen a mother's self-esteem and provide a buffer against stress and hardship encouragement in early motherhood¹⁷.

Moreover, another study disagreed with our results as they used other methods and scales giving a chance for the appearance of new cases resulting in a higher prevalence rate of depression (19%). This was due to difference between cultures and antenatal care programs that are needed to support the patient and give good screening for depression during pregnancy¹⁶.

The incidence of depression during postpartum period was highly significantly associated with late age mothers who did not receive antenatal care and caesarean delivery. This result is confirmed with previous reports^{19,20} which stated that women who had been previously diagnosed as having severe anxiety were at high risk to mood changes after childbearing²¹.

There have been recent suggestions that mothers, in addition to becoming depressed after childbirth, may experience symptoms suggestive of elation^{8,16,23}. The incidence of elation of mothers in our study is higher (9%) than the incidence reported as 1%¹⁴ and 1-2%²⁷ in other studies¹. This main differences is due to the sample number and limitation of our study to a special class following up in the gynecological and obstetric outpatient. Also the used OF scales is subjective which depend on the patient own words giving a chance for subjects to neglect some unnecessary symptoms to the physician, leading to misleading answers.

The results of our study show high significant association between elation and late age of mothers, positive past psychiatric history, antenatal care, rural residence and caesarean delivery. These results is in disagreement with other studies that used 7-items Highs scale which is applied on participants without previous discussion so participant gave the nearest answer by yes/no. Also the sample consisted of lower educational level who answered the questions with the help of other persons so answer did not express precisely the participant.

This study has considered elation as an issue of mood changes with a rate higher than other studies, which

considered elation as an item of postpartum psychoses, as many cases was not presented with full psychotic criteria so most of cases were not diagnosed as postpartum psychoses decreasing the incidence of elation in other studies than in ours.

There is a significantly association between mother's elation and positive past psychiatric history, late age, unreceived antenatal care and rural residence and this is in agreement with previous reports²⁷ and in disagreement with others¹⁴. The disagreement was attributed to the high supports offered to mothers with past psychiatric history in western countries than eastern countries. This help and sympathy surrounding postpartum women strengthen them against psychoses.

Here, the incidence of depression in fathers (11%) is relatively confirmed with previous studies (9%)²⁵. Nevertheless, the incidence was 1% in another study¹⁴, although both studies used the same methods as ours. This low incidence of depression is attributed to the exclusion of participants who have no past psychiatric history and the limitation of fathers' age. Our results is also in disagreement with the incidence of depression (3-4%) in another study²⁶ due to the underestimation of depression by general practitioners have no enough experience to diagnose a case of depression. Conversely, incidence was 20% in a study on only 86 couples after 8 weeks postpartum selected randomly⁶. This high incidence was attributed to the presence of general medical diseases and the role confusion that fathers might experience in the transition to fatherhood²⁵.

Our results show high significant association between father depression and father late age, fathers' negative attitude and disturbed mothers' mood. Significant association between depression and mother's mood after labour as well as the burden of home responsibilities added other stressors on fathers, The incidence of father elation was very low (1%) and significantly unpredictable.

CONCLUSION

Postpartum depression and elation in mothers and fathers are common and are determined by psychosocial and socio-demographic factors.

Recommendation

Providing psychiatric assessment, antenatal programs and studying the biological changes during postnatal period in both fathers and mothers is extremely important for early diagnosis and treatment of psychiatric co-morbidity.

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