

POSTNATAL DEPRESSION IN SINGAPORE WOMEN

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ABSTRACT

A longitudinal study of depressive symptomatology in 200 postnatal women using the Edinburgh Postnatal Depressive Scale showed that depressive symptomatology is mild but present in nearly all the postpartum women; however only one per cent of the women over a 6-month period had scores suggestive of a postnatal depression. None had experienced any depressive hallucinations or delusions during this period.

Keywords: puerperium, depressive symptomatology.

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INTRODUCTION

The term 'postnatal depression' is rather ambiguous and Cox⁽¹⁾ stated that it may mean one of three things:

- a) *Postnatal blues*
This refers to a transient period during the first 2 weeks after childbirth when crying, irritability and a depressed mood is apparent.
- b) *Postnatal depression*
This is a depressive illness occurring in puerperal women who have definite symptoms of depression (eg low mood, crying spells; loss of appetite or weight, poor self esteem, biological symptoms like loss of appetite or weight, poor memory and concentration.)
- c) *Puerperal psychosis (Psychotic depression)*
This is a rather rare condition where in addition to depressive symptoms, there are also hallucinations and delusions.

It was Pitt⁽²⁾ (1968) who postulated that postnatal depression was a disorder specific to the puerperium and distinguishable from classical depressive illness. He suggested that 'atypical depression' be used to describe this condition which was caused by non-specific stresses of childbirth rather than just hormonal changes.

The prevalence of postnatal blues is higher at 50% and above⁽³⁻⁵⁾ while postnatal depression has been found to be at least 10%^(6,7) and puerperal psychosis is much lower at about 1-2 cases per thousand⁽⁸⁻¹¹⁾. In Singapore there are no published studies of postnatal depression, and this paper discusses a project that looked into depressive symptomatology of patients over a longitudinal period of 6 months, ie on the 5th day, end of 3rd month and end of 6th month.

METHODOLOGY

Two hundred women who had an uncomplicated delivery were screened for postnatal depression at the 5th day, end of 3rd month

and end of 6th month after delivery. A modified version of the Edinburgh Postnatal Depression Scale⁽¹⁾ was used. This scale was developed specifically for postnatal depression and comprised a questionnaire of 13 items each with a score of 0 to 3. The items included questions on depressed mood, self blame, inability to experience joy in motherhood, insomnia, irritability, thoughts of harm, and anxiety. In addition 3 extra questions were inserted that dealt with the hearing of voices, belief of being harmed and the wish to harm the baby (see Appendix 1). This questionnaire was modified for the Singapore patients and tested on 10 subjects. A cut-off point of 16 was used to indicate the probability of a depressive illness occurring as suggested by Cox⁽¹⁾. The fifth day was chosen as most women who delivered normally would have been home in their natural environment by that day as well as this being the day when symptoms of postnatal blues have been found to peak⁽¹²⁾. A research worker, experienced in patient interviews, saw the subjects after delivery in the ward briefly to explain the project to them. Thereafter at the fifth day, end of 3rd month and end of 6th month, phone interviews were done and answers to the questionnaire obtained.

Appendix 1

Items of the Edinburgh Postnatal Depression Scale:

The 13 items of the scale were:

1. The ability to laugh and see the funny side of things.
2. Being so upset by people that the subject felt like slamming doors and banging about.
3. Looking forward with enjoyment to things
4. A tendency to blame herself unnecessarily when things go wrong.
5. Being anxious or worried for no good reason.
6. Enjoyment of being a mother.
7. On occasions feeling panicky for no good reason.
8. Inability to cope.
9. Being so unhappy that there is difficulty sleeping.
10. Feeling sad or miserable.
11. A feeling of loss of control and wishing to hit someone.
12. Feeling sad and weepy.
13. Thoughts of harming oneself.

Three additional items were added to the original questionnaire to elicit severe symptomatology.

14. Thoughts of harming the baby
15. Hearing of voices when no one was around.
16. Feeling that people wished to harm her.

These items were rated on a 0 - 3 scale in ascending order of frequency.

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Table I – Depression scores by time period after delivery in 200 women

Score	5 days	3 months	6 months
0	40 (20.0%)	28 (14.0%)	37 (10.5%)
1 – 3	116 (58.0%)	112 (56.0%)	116 (58.0%)
4 – 6	29 (14.5%)	39 (19.5%)	36 (18.0%)
7 – 9	12 (6.0%)	13 (6.5%)	6 (3.0%)
10 – 12	1 (0.5%)	7 (3.5%)	2 (1.0%)
13 – 15	2 (1.0%)	1 (0.5%)	2 (1.0%)
16 and above	0	1 (0.5%)	1 (0.5%)
Total	200	200	200

P = N.S.

Table II – Mean depression scores by time period

Time period	N	Mean	SD	Max	Min	Sig
5th day	200	2.35	2.441	14	0	NS
3rd month	200	2.915	2.928	21	0	
6th month	200	2.39	2.478	16	0	NS

RESULTS

Table I shows the scores by period of time after delivery. Using the cut-off point of 16 for the diagnosis of a case of postnatal blues, it can be seen that during the first 5 days, there was no case, and it was only in the third and 6th months that 2 separate cases were picked up. Table I also indicates that depressive symptoms are common and increased with time – 80% of women had some symptoms during the 5th day and this increased to 86% by the end of the 3rd month, and 89.5% by the end of the 6th month. However the symptoms were mild and a maximum of 4.5% of women scored above 9 points out of a possible score of 39 points. There was no significant difference in the number of symptoms during the 3 periods tested. In addition there were no positive responses to the 3 extra questions that dealt with hallucinations and delusion.

Table II indicates the mean number of scores at each time period. The highest mean score was at 3 months, but there was no significant difference between mean scores on the 5th day and 3rd month and between the 3rd and 6th month; the mean number of symptoms was highest in the third month.

Table III shows the total scores of all the respondents to each question at the different time periods, and the ranking of the scores. Question 8 (about the ability to cope) was ranked first at all 3 periods. However most of the responses indicated mild inability to cope. Only 8 subjects (4%) were moderately or severely unable to cope at the 5th day, only 3 (1.5%) at the third month and only 2 (1%) at the 6th month. Question 6 (enjoyment of being a mother) was ranked 2nd at all 3 time periods. Again the number of respondents who gave moderate to severe responses were few – 5 (2.5%) on the 5th day, 7 (3.5%) at the 3rd month, 2 (1%) at the 6th month. Question 10 (feeling sad or miserable) was ranked 3rd, with 6 (3%), 4 (2%), 2 (1%) subjects respectively giving responses indicating moderate or severe sadness. Thereafter the rankings were not consistent. Feeling sad and weepy (Q12) was ranked 4th at the 5th day and 3rd month, but the 4th ranking at the 6th month was the feeling of possible loss of control and hitting someone (Q11). Difficulty in sleeping because of feeling unhappy (Q9) was ranked as 7th, 6th and 5th respectively; not being able to look forward with enjoyment to things was ranked 6th, 7th and 9th respectively. Self blame (Q4)

Table III – Total scores per question by respondents at day 5, 3rd month, 6th month

Question	Day 5		3rd month		6th month	
	Total Score	Rank	Total Score	Rank	Total Score	Rank
1	40	(4)	24	(8)	11	(7)
2	12	(8)	7	(11)	10	(8)
3	37	(6)	27	(7)	7	(9)
4	10	(9)	10	(9)	2	(11)
5	10	(9)	8	(10)	2	(11)
6	75	(2)	115	(2)	125	(2)
7	9	(11)	2	(12)	4	(10)
8	157	(1)	165	(1)	157	(1)
9	22	(7)	41	(6)	29	(5)
10	55	(3)	84	(3)	60	(3)
11	9	(11)	45	(5)	60	(3)
12	40	(4)	59	(4)	19	(6)
13	0	(13)	2	(12)	1	(13)
14	0	–	0	–	0	–
15	0	–	0	–	0	–
16	0	–	0	–	0	–

was rather uncommon and was ranked 9th or 11th. The lowest ranking was Q13 – that of feelings of self harm. None had such thoughts on the 5th day, one had moderate thoughts of self harm at the 3rd month and one had mild thoughts of this at the 6th month. There were no positive responses to the 3 additional questions at all the 3 time periods (Q14 – thoughts of harming the baby, Q15 – hearing of voices, Q16 – feeling of being harmed).

DISCUSSION

Cox et al⁽¹³⁾ in a longitudinal study of women prenatally and postnatally found that difficulty in coping with babies was present in the 13% of women with depressive illness. This item was ranked first in the Singapore women.

From this study it is apparent that depressive symptoms do not appear to be severe in postnatal Singapore women. The mean scores at each assessment period were found to be low at about 2.3. Of the symptoms ranked the top 3, the number of women who had scores suggesting more severe symptoms were few. However the symptoms persisted throughout the 6-month period. From the ranking of the 13 questions it can be seen that coping was the premier issue for the women from the 5th day to the 6th month. That the scores went up at the 3rd month and then decreased suggest that with time, the mothers' coping improved probably as they adapted to the child. Kendell et al⁽¹²⁾ studied mood changes in postnatal women over a 21-day period and found that using visual analogue scales, scores on depression and weeping peaked at the 5th day and then decreased. However in this study the total scores for Question 10, which addressed the feeling of sadness or being miserable increased to a peak at 3 months, instead of day 5, and then decreased in similar way to that of tearfulness (Q12) which also had a similar peak, again at 3 months. As for anxiety (Q7) there was a peak at the 5th day which dropped thereafter, and this conformed with the findings of Kendell et al's study⁽¹²⁾. Irritability was also rated in the British study and found to peak at the 9th day; in the Singapore subjects, irritability was rated in Q2 (the subject felt like slamming doors or hanging things) and Q11 (feeling like hitting someone). The total scores on Q2 were low and ranked from 8th to 11th while the ranking of Q11 rose in ranking over the months from eleventh (5th day) to fifth (3rd month) to 3rd (6th month). Thus there appeared to be rising irritation and anger over the months, and this irritation was expressed at a person rather than at things.

Cox et al⁽¹³⁾ found that the blues were not trivial or fleeting and could be an important predictor of women at risk of developing a depressive illness. In this study although symptoms of depression were present in nearly all the women throughout the 6 months, only 2 women had high scores (above 16), at the 3rd and 6th month. In a cross cultural study of Scottish and African women using the Standardized Psychiatric Interview, a frequency of postnatal depression was found to be 10% in the African women and 13% in the Scottish sample⁽¹⁴⁾. It would appear that somehow the moderately severe type of depression (postnatal depression) is not so common in the Singapore women and may be in the region of about one per cent compared to the much higher rates in other countries⁽²⁻⁴⁾. This appears to be a significant finding and further studies should be done on local women to ascertain whether hormonal, psychological or social factors protect them from postnatal depression.

As for postpartum depressive psychosis, none of the women had symptoms suggestive of a psychosis ie either hallucinations or delusions throughout this period. This is not surprising as the incidence is about 1-2 per 1000 in other countries⁽⁸⁻¹¹⁾.

CONCLUSION

This study thus shows that:

- a) depressive scores in the puerperium are low, from the 5th day to the 6th month.
- b) there does not appear to be a peak of symptoms at the 5th day with a decrease of symptoms thereafter; instead the peak is at the third month.

- c) those who are moderately depressed are few – only one percent of the sample.
- d) mild depressive symptoms are present in nearly all of the women throughout the 6 months of study.
- e) no depressive psychotic symptoms were found in any of the women.

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