Spot Light on Risk Factors of Post Partum Depression (A Clinical Study)

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This study was done on fifty women who had delivered a live baby on Obstetric and Gynecological Department in Tanta University Hospital .

In attempt to thraw a light on some risk factors of post partum depression (6 - weeks Edinburgh postnatal Depression Scale (EPDS) score ≥ 13) , EPDS was used to rate 50 patients at five days and six weeks post partum . There was highly significant positive correlation between the two scores . Sex of the baby (female) , delivery by caesarean section (CS) and bottle feeding , were all significantly associated with a high EPSD score at six weeks post - partum . Low birth weigh , a delivery much more difficult than expected , and baby having blood tests for jaundice on 3 or more days were all non significantly associated with post partum depression . However , a recollection of low mood after a previou birth was significantly associated with post - maternal depression after a precurrent birth . Post partum illness are difficult to treat, fore there , efforts should be made to prevent their onset by eleminating or least reducing the risk factors .

Further research is critically needed to explore biological risk factors .

(Egypt. J. Psychiat.,1998, 21: 185-191).

INTRODUCTION

Postpartum depression is a common and treatable clinical syndrome which affects up to 50% of all women. (Walther , 1997).

Despite, the high prevalence of post partum depressive disorders, many signs and symptoms of this illness are dismissed as normal physiologic changes associated with childbirth (Susman , 1996) .

Depressed mothers were less likely to use explanation , suggestion and questions when dealing with their children and more likely to ignore their children's requests , the latter looked at their mothers less and showed more self - directed activity (Stein et al ., 1991).

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Disturbances in early mother - infant interactions were found to be predictive of poor infant cognitive outcome at 18 monthes. infant attachment was significantly associated with post partum depression (Murreay et al., 1996).

Prompt recognition and treatment of post partum depression are imperative in order to limit the negative impact on both the mother and infant. The presence of risk factors suggests the need for carful follow - up (Areias et al 1996).

Aim of the work

The aim of this study is to throw a light on some risk factors of post - partum depression and this may play a role of prevention and reducing negative impacts of psychological problems after birth and minimising adverse consequences for the new baby and al family members .

SUBJECTS AND METHODS

This study was done on fifty women who had delivered a live baby on obstetric and gynecological department in tanta university hospital .

The delivered women will be subjected to : -

1- The edinburgh postnatal depression scale (EPDS) (Cox et al ., 1987). IS a ten- item self rating questionaire while , when used six weeks after delivery , is highly specific and sensitive in the detection of post partum depression (EPDS $\geq$ 13 at six weeks) (wichbey & hwang , 1996) .

2- Using (EPDS) at five days solely to investigate symptoms of post natal depression in the early post partum , and not to identify the " blues " .

3- Data conserning some possible obstetric risk factors (a delivery much more difficult than expected which is assessed among (five - point scale from " much easier to much more difficult " than expected) and delivery by caesarean section together with a self - assessment of low mood following the birth of a previous child in multiparous patients were obtained by a simple questionaire .

4- Details of the infant included :-

- Sex of the baby (female).
- Low birth weigh (< 2 kg).
- Bottle feeding only .
- Baby having blood tests for jaundice on 3 or more days or in special care baby unit .

RESULTS

Patients in this study comprise 50 purperal women , all were under the age of 50 years. those delivered of a still birth or whose baby was seriously ill were excluded from the study . the mean age was 26.5 years (range 16-40).

Twenty four (48%) out of 50 purperal women presented with post - partum depression (EPDS score at 6 weeks $\geq$ 13).

There was a highly significant positive correlation between EPDS scores at five days and those at six weeks (spearman rank correlation : r= 0.824, p< 0.001, n=50) fig.1)

In general sever dysphoria (EPDS scores $\geq$ 13 was more common at five days than at six weeks (n=34 (68%) v.n=24 (48%)) in the studied 50 purperal women (Fig. 1).

In this study , the recollection of low mood lasting several days or more after the birth of a previous child was significantly associated with a high EPDS score ($\geq$ 13) at six weeks (p < 0.001).

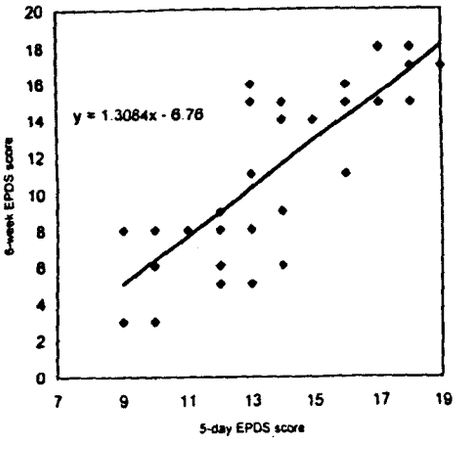

Fig.(1)

Table 1
Correlation Between EPDS Score of Depression at Six Weeks and Recollection of Low Mood Following The Birth of a Previous Child

	EPDS Score		Total
Recollection	+ve	-ve	
+ve	17	6	23
-ve	7	20	27
Total	24	26	50

P < 0.001 * Odd's Ratio = 8.10

Table 2
Correlation Between EPDS Score of Depression at Six Weeks and Difficult Delivery Than Expected

	EPDS Score		Total
Difficult Delivery	+ve	-ve	
+ve	24	24	48
-ve	0	2	2
Total	24	26	50

P < 0.05

Table 3
Relation Between EPDS Score of Depression at Six Weeks and Caesarean Section (CS).

	EPDS Score		Total
CS	+ve	-ve	
+ve	17	4	21
-ve	7	22	29
Total	24	26	50

P < 0.001 Odd's Ratio = 13.36

Table 4
Correlation Between EPDS Score of Depression at Six Weeks and of Baby (Female).

	EPDS Score		Total
Sex of Baby	+ve	-ve	
M	8	16	24
F	16	10	26
Total	24	26	50

P < 0.05 Odd's Ratio = 0.31

Table 5
Correlation Between EPDS Score of Depression at Six Weeks and Low Birth (LBW) (<2Kg)

	EPDS Score		Total
Sex of Baby	+ve	-ve	
+ve	0	16	4
-ve	24	10	46
Total	26	26	50

P < 0.05

Table 6
Relation Between EPDS Score of Depression at Six Weeks and Bottle Feeding Only.

	EPDS Score		Total
Bottle Feeding	+ve	-ve	
+ve	0	6	4
-ve	24	20	44
Total	24	26	50

P < 0.05*

Table 7
Correlation Between EPDS Score of Depression at Six Weeks and Baby Having Blood Tests for Jaundice on 3 or More Days.

	EPDS Score		Total
Jaundice	+ve	-ve	
+ve	9	8	17
-ve	15	18	33
Total	24	26	50

P < 0.05 Odd's Ratio = 1.35

(Tab.1).

There was no significant correlation between EPDS score of depression at six weeks and either difficult delivery than expected, baby having blood tests for jaundice in 3 or more days , or low birth weight (< 2 kg) . (p> 0.05). Tab . 2.3 & 4). Significant correlation between EPDS score at six week and sex of baby (female) p < 0.05), bottle feeding (p<0.05) and CS (p< 0.001).

(Tab . 5 , 6 & 7).

Fig. (1) correlation between EPDS scores at five days and at six weeks post - partum . r= 0.824, n= 50, p< 0.001.

DISCUSSION

Early detection of post - partum illness is rare because the focus of the first post- matenal visit is the reproduction health of the mother, her emotional well being is not routinely addressed; the stigma placed by culture on mental illness creates another barrier to early diagnosis . patients and their families conceal the severity of the problem out of shame the cultural expectation of " parentral bliss " (Areias et al ., 1996).

A further difficulty in identifying depressed mother is that screening scales for depression appear to have a number of limitations when used on childbearing women their emphasis on the somatic symptoms of associated with childbearing as well as the reluctance of community workers to use questionaires which is time consuming (clamam, 1990) .

In this study , there is significant association between maternal depression at five days and at sixth weeks post partum . This is in agreement with harding, 1989 and hannah et al., 1992 . However , it is also true the post maternal depression is not an invietable consequences of low mood in the first few days after delivery (Cooper et al., 1988).

Fontaine & jones in 1997 found that , mothers who later become depressed reported relative well - being , joy and surprise immediately after delivery) post partum pinks).

There is a significant correlation between post - partum depression and recollection of low mood following the birth of a previous child . this is goes with the study of o'hara et al., 1991.

So high EPDS score in the first post - partum week, and the recollection of low mood after the birth previous child showed alert both quickly and cheaply that the mother is at a high risk of developing post - partum depression,

In disscussing the other risk factors of post - partum depression, there is significant positive association between post - partum depression and both bottle feeding and caesarean section . this is in agreement with the study of (hannah et al., 1992).

Kendell et al., 1984 found that mood changes after caesarean section caused by somatic factors as post - operative pain, cortisol is known to rise post - operatively and been implicated in mood changes . levy , 1987 stated that, major surgery which causes greater adrenal stress would results in a high incidence of dysphoria .

Endorphins have also been implicated in mood changes and have been shown to be increase during surgery (Koob & Bloom, 1983). howeve newnham et al., 1984 found no correlation between the post operative depression and endorphin levels.

Regarding bottle feeding as a risk factor of post - partum depression.

meichael in 1995 stated that, one source of negative self - evaluation that can play a role in precepitating depression is the discripancy between the expectation of motherhood and the reality of coping with an infant specialy if the feeding proves difficult (bottle feeding). the vicous circle established between the mood and lack of energy , and negative evaluation of one' role as a mother can be a potent factor in the maintainence of depression (Michael, 1995).

There was a significant correlation between post - partum depression in this study and sex of baby (female) in contrary to other studies as hannah et al., 1992 have found no significant correlation between post - partum depression and sex of baby (female). this can be explained by cultural belief in our society that male is superior and take more advantages than female .

No significant correlation between post - partum depression and difficult labour than expected in this study . other studies reported the same result (gennaro, 1988 and stein et al., 1989). however dean & Kendell in 1981 and o'hara et al., in 1984 stated that, there was significant association between post - partum depression and stressful labour. No significant correlation between either low birth weight or presence of baby having blood tests for jaundice on 3 or more days and post - partum depression in this work . This is in agreement with other studies (hannah et al., 1992).

Altration in hypothalamic - pituitary adrenal (HPA) axis function attributable to childbearing show remarkable similarity to those observed in depressed women . post - partum women . post - partum women are also at increased risk for hypothalamic - pituitary - thyroidal (HPT) axis dysfunction (wisner & stowe , 1997).

Further research is critically needed to explore biological risk factors.

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إلقاء الضوء على العوامل الخطرة فى حدوث إكتئاب ما بعد الولادة " دراسة اكلينيكية "

أجريت هذه الدراسة على ٥٠ حالة بقسم النساء والتوليد بمستشفى طنطا الجامعى وفى محاولة لإلقاء الضوء على بعض العوامل الخطرة فى حدوث اكتئاب ما بعد الولادة وقد تم محاولة استخدام قياس الضوء على بعض العوامل الخطرة فى حدوث اكتئاب ما بعد الولادة وقد تم محاولة قياس ايدنبرج لحدوث الاكتئاب عند خامس يوم وستة أسابيع بعد الولادة قد وجد علاقة ذو دلالة إحصائية بينهما

كما أنه قد وجد أن العلاقة بين جنس الطفل (كأنثى) والولادة القيصرية والرضاعة الصناعية من ناحية وحدوث اكتئاب ما بعد الولادة من ناحية أخرى ذات دلالة احصائية

ومن هذه الدراسة نجد أن العلاقة بين الأطفال قليلى الوزن والذين مرت ولادتهم بصعوبات لم تكن متوقعة والأطفال المصابين بالصفراء كما يتضح من عينات الدم من ناحية وحدث اكتئاب ما بعد الولادة من ناحية أخرى ليست ذات دلالة احصائية وعلى الجانب الآخر وجد أن حدوث الاكتئاب اعقاب الولادات السابقة له علاقة ذات دلالة إحصائية مع حدوث إكتئاب ما بعد الولادة الحالية

وقد أن اكتئاب ما بعد الولادة من الصعب علاجه وعلي هذا تأتى أهمية الوقاية من حدوثه عن طريق إزالة أو التقليل من العوامل الخطرة وعلي أمل أن الدراسات المستقبلية توضح أهمية العوامل الخطرة البيولوجية فى حدوث هذا المرض.