

Mood swings at mothers after childbirth

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ABSTRACT

Aim To determine the frequency of psychomatic changes after discharging the mother from hospital after vaginal delivery and caesarean section.

Methods A prospective, randomized study was conducted at the Department of Gynecology and Obstetrics and with the help of visiting nurse services of health centers in cities Novi Sad and Sombor, Serbia. The study included 200 mothers, 100 giving birth vaginally and 100 giving birth by caesarian section. The data were gathered by filling in a questionnaire-anonymously.

Results There was no significant statistical difference in the distribution of patients by age, employment and economic status. During the first week the need for home care support services was requested by 43 (43%) mothers giving birth vaginally and 35 (35%) mothers giving birth by caesarian section. Fatigue was mainly present after delivery in both groups ($X = 3.51$, $SD = 1.236$), as well as a sense of exhaustion ($X = 3.47$, $SD = 1.260$). Difficulty in breathing in general was not present in most cases of giving birth both vaginally and with caesarian section ($X = 1.32$, $SD = 0.818$).

Conclusion Fatigue and a feeling of exhaustion were the most common at the majority of mothers in both groups while other symptoms of pospartal depression were present in insignificant numbers. The results obtained by this study had a positive impact on support from their partners and health visitor services.

Key words: pospartal depression, cesarean section, labor.

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INTRODUCTION

Pregnancy and puerperium are associated with profound, emotional and social changes both for parents and other family members (1-3). While many changes in the mother's pregnancy and childbirth as perceived enjoyment, some of them do not share positive feelings and are often subject to emotional changes that result in various biopsychosocial behaviors (1). They are also associated with mental symptoms and disorders in severity from very mild to psychotic (2,3).

The swings in the postpartum period include postpartum sadness (maternity blues, or the third day syndrome) which occurs in approximately 50-70% of mothers and lasts for about 4-10 days (4). Most often manifestation of postpartum sadness is mild and transient symptoms of anxiety, tearfulness, and loss of appetite (5). Postpartum psychosis is a rare and severe disorder that occurs within the first six weeks after birth (6).

The postpartal depression (PPD) means every non-psychotic depressive disorder that occurs during the first four weeks after giving birth, and according to research criteria, it can occur during the first year after giving birth as well as during pregnancy (7). This is a serious condition that occurs in 10-15% of mothers (8). It takes several months to several years if left untreated (9). Symptoms of postpartum depression are similar to depression that can occur at any time during a life: the sudden loss of weight or obesity, guilt, worthlessness, headache, fatigue, dizziness, fainting, rapid heartbeat, difficulty breathing, fear, sweating, insomnia, loneliness, frustration, sadness, disinterest in the newborn, a sense of outrage (especially towards the partner), mood swings from anxiety to panic and scary thoughts about death and suicide (5, 10). Risk factors for the occurrence of postpartum depression are birth complications, difficulties in the relationship with the partner, lack of social and emotional support from their partners and families, living in community with other people (other than the partner), single mothers, a positive family history, unpleasant and stressful life events, unemployment, poor socio-economic conditions and health problems of any mother's child (11, 12).

Hormonal changes are in fact the trigger for the PPD appearance, and risk factors can also inclu-

de previous abortions, adolescent mothers, premature birth and childhood sexual abuse (13). Those women who have previously suffered from depression have a 15 -25% higher risk for the occurrence of PPD (14, 15). The evidence suggest that maternal depression has deleterious effects to new mothers, their infants, as well as family relationships (16).

The postpartal depression could be treated in four ways: pharmacological, biological, or psychosocial, and with a combination of pharmacological and psychosocial therapy (5).

The study related to this and similar fields from nurses' point of view are much more represented in the whole world comparing to investigations from our region. The practical importance of the research is to shed light on the frequency of occurrence of these mood disorders at the new mothers, and to give registered nurses better chance to notice and recognize these symptoms in order to prevent the occurrence of more serious complications.

The aim of this study was to determine the frequency of psychosomatic changes after discharge from hospital at mothers giving birth vaginally and with a caesarean section.

PATIENTS AND METHODS

A randomized, prospective, comparative research at the Clinic for Obstetrics and Gynecology, Clinical Center of Vojvodina, Novi Sad, and with the help of visiting health centers in cities Novi Sad and Sombor (Serbia), has been carried out at the women who gave birth vaginally and with caesarean section during the period 01.06.2007. - 30.09.2007.

The study has included 100 mothers who laboured by vaginal delivery (group A), and 100 women who have laboured with Caesarean delivery (group B). The research was approved by the Ethical Committee of the School of Medicine in Novi Sad. All participants read and signed informed consents about the purpose of the study (participation was voluntary and anonymous).

The questionnaire has been included except general patient information, the Likert scale which was used for rating the most common symptoms of mood disorders (1 to 5) (Table 3).

After completing the survey the questionnaires

were given back to the researcher. The data related to maternity were gathered by researcher with the help of home care service staff. The study included women who laboured by vaginal delivery or Caesarean section, and who asked for home visiting services of health centers in Novi Sad and Sombor. The tests excluded all patients who did not fully comply with testing protocol designed questionnaire.

The research results were processed by the appropriate statistical methods, and the statistical significance was tested by χ^2 test. The data was analyzed by the statistical program Statistical Package for the Social Sciences (SPSS).

RESULTS

The average age of largest number of patients who gave birth by vaginal delivery was 28.5 years ($X = 28.5$, $SD = 6.11$), and for mothers who gave birth by Caesarean section the average age was 29.2 years ($X = 29.2$, $SD = 5.41$) ($p > 0.05$) (Table 1).

Table 1. Age structure of patients*

Age	No (%) of patients		
	Group A	Group B	Total
15-24	24 (24)	16 (16)	40 (20)
25-34	62 (62)	71 (71)	133 (67)
35-44	14 (14)	13 (13)	27 (13)
Total	100	100	200

*Group A: Maternity labored through vaginal; Group B: Maternity laboured Caesarean

Sixty (66%) out of 100 interviewed mothers were employed, while 34 (34%) were not employed. Out of 100 interviewed mothers who gave birth by vaginal delivery and Caesarean section 68 (68%) were employed, while 32 (32%) were not employed ($p > 0.05$). Eighty two (82%) out of 200 mothers who

Table 2. The economic status of women*

Economic status	No (%) of patients		
	Group A	Group B	Total
Below average	9 (9)	7 (7)	16 (8)
Average	82 (82)	82 (82)	164 (82)
Above average	9 (9)	11 (11)	20 (10)
Total	100	100	200

*Group A: Maternity laboured through vaginal; Group B: Maternity laboured Caesarean

Table 3. Mean and Standard deviation of the most common symptoms of postpartum mood disorders in 200 woman

Symptoms	Mean (X)	Standard deviation (SD)
Inability to relax	2,80	1,385
Fatigue	3,51	1,236
A sense of exhaustion	3,47	1,260
Dizziness	1,67	1,080
Fainting	1,39	0,923
Pounding or rapid heart beat	1,47	0,956
Instability	1,63	1,034
Nervousness	2,59	1,339
Difficulties in breathing	1,32	0,818
Fear	2,00	1,339
Sweating (not caused by heat)	2,76	1,657
Sorrow	1,99	1,320
Disappointment	1,52	1,070
Tearfulness	2,62	1,558
Irritability	2,27	1,402
Loss of interest in other people	1,75	1,151
Loss of appetite	1,80	1,228
Insomnia	1,95	1,342
Anxiety	2,63	1,508
Loneliness	1,62	1,089

have given birth vaginally and those with the Caesarean section in both groups assessed their economic status as average ($p > 0.05$) (Table 2). From the total of 200 surveyed mothers 165 (82.5%) were satisfied with the level of engagement of their partners in the house. The smallest number of patients giving birth with Caesarean section, 35 (16%) were not satisfied with the help of their partners at home ($p > 0.05$). Forty three (43%) mothers who gave birth by Caesarean section asked for the help of home care services during the first seven days after discharge from hospital, and 35 (35%) mothers after the vaginal delivery asked the help of a help visiting service during the first seven days ($p > 0.05$) (Figure 1).

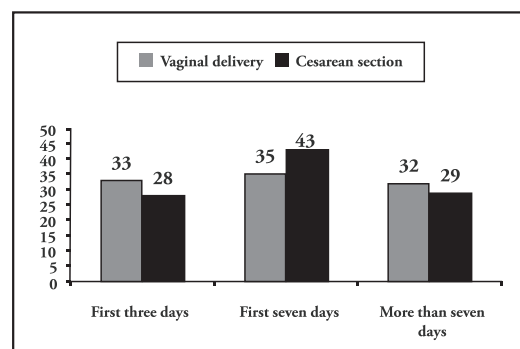


Figure 1. Help of home care service after delivery

The largest number of patients after vaginal delivery and caesarean section noted that fatigue was mainly present after birth, and after discharge from hospital ($X = 3.51$, $SD = 1.236$). The feeling of exhaustion was also mainly present in the majority of mothers in both groups ($X = 3.47$, $SD = 1.260$). Difficulty in breathing in general was not present in either group ($X = 1.32$, $SD = 0.818$). Other problems were mainly presented at most patients. There was no statistically significant difference in the appearance of symptoms that lead to mood disorders among mothers with vaginal delivery and caesarean section, and after discharge from hospital ($p > 0.05$) (Table 3).

DISCUSSION

Both groups of mothers included in this study, laboured by vaginal delivery or Caesarean section, were homogeneous for age structure. The largest number of respondents in both groups belonged to the age between 25 and 34, and the average age of women in Vojvodina according to the 2002 Census was 41.3 years (deep demographic age) (17). In the study carried out by Hau and Lavy, women between 35 and 39 years of age showed a significantly lower incidence of maternal blues (18).

When economic status is in question, most of the women in this study assessed it as average. Unemployment, unresolved housing, child care problems and unsatisfactory living standards represent the major barriers for the implementation of views on arranged marriages, as well as the ideal number of children (19,10).

After the discharge from hospital and returning home mothers do need help of nurses and home care services, as well as the partner or other family members. Depending on numerous factors, such as the method of childbirth, parity, marital and socio-economic status, education level and others, this kind of help is not needed to every mother equally (13). Furthermore, the number of visits by home care service is not equal for every mother too (13). The majority of mothers in this study after caesarean section and after vaginal birth needed the assistance of home care services during the first seven days after discharge from hospital at home. Under-utilization of home care services in women with depressive

symptoms was noted in some cultures (20). This was probably due to the presence of the stigma, as well as to the belief that the symptoms of depression are a common part of childbirth, or a temporary maladjustment that will eventually remit (20).

Majority of mothers in our study were satisfied with the level of engagement of their partners at home. According to literature 34.8% of interviewed mothers in Sweden were very satisfied with the home care after delivery by the health visitor service, while only 1.8% were not satisfied (21). In our study the percentage of mothers who were very satisfied with the home care after delivery by the health visitor services was much higher. While postpartum practices in modern Western cultures are considered individualistic, new mothers in Asian cultures rely on practical and emotional support from family members such as the mother, mother-in-law, relatives and husband (10). Such cultural practices are considered as protective factors against postpartum depression (15). The difference in the number of satisfied women in this study could be explained by the level of expectation or the cultural differences. Dissatisfaction with partner support is associated with high degree of the woman's emotional well-being (22). Woman with depressive symptoms need more support than the partner was able to provide, or that woman is unable to recognize the support given (22).

According to the data obtained in our study fatigue and a sense of exhaustion were mainly presented in both groups. Early identification of factors relating to the occurrence of postpartum depression is important in order to start appropriate treatment on time (23,24). The treatment of postpartum depression includes psychotherapy and pharmacotherapy and should result in better quality of life and a reduction of disease morbidity (23). According to the data in the literature, in 16% of mothers the maternal concern was not present at all, while in 45% it was present (25). The results of this study have shown that large majority of patients with postpartal depression in the first month after birth noted some of the symptoms relating to difficulties in breathing, pounding or rapid heart beating, and disappointment, while a smaller proportion of them admitted that some of these symptoms

were present for more than four months after birth. Majority of mothers thought that occurrence of these symptoms were normal in their condition. Moreover, the most PPDs in our investigation were diagnosed at the internal department, not at the Department of Gynecology and Obstetrics. According to the results of our study, tearfulness was mainly present in 22% of mothers in both mothers delivered by caesarean section and vaginal delivery, and it was completely present in 16% of them. According to a large study of Gleazener and associates the tearfulness was present in 24% of mothers in both groups eight weeks after discharge from hospital (26).

The detection of postpartum depression in mothers is very complicated for several reasons. There is an expected period after giving birth to adjust to the newborn and the new role of motherhood, so that in the first period after giving birth the mother cannot recognize if the changes that are happening to her are physiological (1). Moreover, if they recognized the mood swing they were usually reluctant to admit it to themselves, fearing that they are “bad mothers” (1). The obstacles in appropriate diagnosis of women who had previously suffered from PPD were created by the clinicians themselves too, and related to their uncertainty in respect to the usage of drugs during breastfeeding (1). By solving these barriers, the detection of PPD symptoms would be much easier. This would include

distinguishing PPD from similar disorders, identification of patients at increased risk for PPD, the introduction of formal screening and promoting educational materials to pregnant women about PPD (1). Ballard and colleagues have found that depressive illness was associated with unemployment and low social status (27).

The obtained data favour the need for improvements of patronage services of visiting nurses training to recognize symptoms of PPD and timely instructions to the travail of a specialist psychiatrist. A visit to a psychiatrist in Serbia is still a “disgrace”, so many cases of mood swings turn into more serious forms due to the delayed visit to a medical specialist. Additional problem for women who notice any of PPD symptoms is lack of information on who to address for help.

In conclusion, majority of mothers in both groups from this study experienced fatigue and feeling of exhaustion as the most common symptoms of PPD, indicating very low risk of developing post partal depression after discharge from hospital. The results obtained by this study have shown a positive impact that the results of the study had both on partners and visiting service.

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Competing interests: none to declare.

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Promene raspoloženja porodilja nakon porođaja

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SAŽETAK

Cilj Utvrditi učestalost psihosomatskih promena, nakon otpusta iz bolnice, kod porodilja porođenih vaginalnim putem i carskim rezom.

Metode Prospektivno, randomizirano istraživanje sprovedeno je na Klinici za ginekologiju i akušerstvo, kao i uz pomoć patronažnih službi domova zdravlja u Novom Sadu i Somboru. Istraživanjem je obuhvaćeno 200 porodilja, od toga 100 porođenih vaginalnim putem i 100 carskim rezom. Podaci su prikupljeni putem anonimnog upitnika.

Rezultati Nije ustanovljena statistički značajna razlika u distribuciji pacijentkinja prema starosnoj dobi, zaposlenosti i ekonomskom statusu. Potrebu za pomoći patronažne službe, u prvih sedam dana nakon otpusta iz bolnice, imalo je 43 (43%) porodilja porođenih carskim rezom i 35 (35%) porodilja porođenih vaginalnim putem. Umor je uglavnom bio prisutan simptom nakon porođaja, a po otpustu iz bolnice kod najvećeg broja ispitanica iz obe grupe ($X=3,51$; $SD=1,236$), kao i osećaj iscrpljenosti ($X=3,47$; $SD=1,260$). Teškoće u disanju uopšte nisu bile prisutne kod većine porodilja porođenih vaginalnim putem i carskim rezom ($X=1,32$; $SD=0,818$).

Zaključak Kod najvećeg broja porodilja iz obe grupe, umor i osećaj iscrpljenosti bili su najzastupljeniji, dok su ostali simptomi postpartalne depresije bili zastupljeni u neznatnom broju, u čemu je značajan pozitivan uticaj imala podrška od strane partnera i patronažne službe.

Ključne reči: postpartalna depresija, carski rez, porođaj.