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ORIGINAL ARTICLE

Evaluation of Relation between Psychiatric Capital and Prevalence of Postpartum Anxiety and Depression in Different health Centers of Birjand

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Abstract

Introduction: Postpartum depression and anxiety is an important and disabling disorder that, if not diagnosed and treated in a timely manner, could worsen and develop into a chronic condition. Different factors play a role in this disorder, including psychiatric capitals. This study plans to investigate the relation between psychiatric capitals and prevalence of postpartum depression and anxiety in females referring to different medical centers of Birjand.

Methods: This was a descriptive correlational study. Women who had a history of delivery 6 to 8 weeks prior to the study were enrolled. Of all available medical centers, 5 were chosen using randomized-clustered method and 162 patients where picked. These patients were asked to fill Edinburgh's postnatal depression scale (EPDS), Zung's self-rating anxiety scale (SAS) and Lathan's psychological capital questionnaires. Data were gathered and analyzed using SPSS version 18 and Pearson correlation coefficient tests.

Results: Mean age of participants was 32.25±4.44. There was a significant reverse correlation between psychiatric capitals and depression and anxiety of postpartum (p-value <0.05).

Conclusions: This study shows that psychiatric capital and its elements could predict psychological well-being accurately and reliably. With this in mind, medical centers supporting pregnant women should hold different related workshops aiming to improve psychiatric capital of their clients.

Key Words: Psychiatric Capital; Anxiety; Depression; Delivery

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Introduction

Depression is one of the most common psychiatric disorders and a common denominator

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of human life, and is seen in almost all countries and cultures. Various studies show that women are depressed 2 times more than men. Stress factors such as childbirth, menstruation, learned helplessness, hormonal differences, inadequate social skills, and the difference in psychosocial stresses in men and women are involved (1). During pregnancy and after delivery, very significant psychological and physiological changes occur that sometimes lead to pathological changes and cause psychiatric disorders. Postpartum mental disorders, including postpartum depression, create problems for the mother, infant and other family members, and this may affect the level of attachment of the mother and the baby and other family relationships, and even a threat to safety and health of mother, baby and other children (2-5).

Anxiety is another mental disorder that occurs in pregnant women and after childbirth. In many women, the birth of a child is the cause of anxiety that triggers the onset or recurrence of chronic depression disorders (6). In fact, the postnatal period is a transitional period in which the mother faces new patterns and relationships that requires adaption (7).

Among the variables that affect the mental health of mothers during pregnancy and delivery is psychological capital, which is one of the indicators of positivism, which is characterized by individual belief in one's ability to succeed, perseverance in pursuing goals, creation of positive attributes about oneself and tolerance of problems (8). Also, being able to have psychological capital enables individuals to be less tense, in addition to better coping with stressful situations, and to have high potential in order to face problems. (9). Seligman believes that psychological capital embodies the positive aspects of human life. He believes that human and social capital is obvious, easily observable and can be easily measured and controlled. While psychological capital is more potent, and is difficult to measure and develop (10, 11).

Recent studies at the University of Michigan suggest that there is a relationship between the symptoms of maternal depression and hormonal neurological changes and adjustment disorders in various aspects of sleep and nutrition and mood and dependence in the newborn (12). Depressed mothers are less responsive to the infant, and they have complex problems with the baby (13), which seriously threatens the emotional-cognitive development of the infant and may lead to negligence and misbehavior in the baby's care (14, 15). The cause of this disease is not yet known; however, biological factors such as sudden loss of estrogen concentration after delivery, decreased progesterone, increased cortisol urinary excretion, anti-thyroid antibodies, prolactin, oxytocin and beta-endorphins (16 and 17) are involved. Therefore, timely diagnosis and differentiation of this disorder from postpartum depression is one of the tasks of the treatment group. The medical team (including general practitioner, midwife, and family planning and vaccination experts) should be able to identify those who are prone to postnatal psychiatric disorders (especially depression and postpartum anxiety), and guide them regarding the care and support for this period (18). Treatment with serotonin reuptake-inhibitors, psychotherapy (sometimes as a treatment option and sometimes to increase the acceptance of drug therapy by the patient), and in severe cases, hospitalization are among the treatments of this disorder (19). Therefore, the symptoms of depression during pregnancy or previous history of depression and the presence of risk factors necessitate careful follow-up (20). This study was conducted to investigate the relationship between psychological capital and postpartum depression and anxiety in women in Birjand.

Methods

This was a descriptive correlational study. The statistical population consisted of all mothers who referred to health centers during the first 6 to 8 weeks postpartum. From the health centers of the city, 5 centers were selected randomly and then 162 people (according to Morgan table) were selected by available sampling. The criteria for inclusion into the study were all women who referred to health centers within 6-8 weeks postpartum and were willing to participate in the study. In order to collect data, the Edinburgh, Zanck, and Luthanes questionnaires were used. The Standard Depression Inventory of Edinburgh has 10 questions related to depression, anxiety, feelings of guilt and suicidal thoughts, and has been set up by Cox et al. (1987) and has been used repeatedly to investigate the diagnosis of postpartum depression. The questionnaire is designed to make it possible to diagnose depression from 6 weeks postpartum. The Edinburgh Score is between 0 and 30, and score 12 or more is considered as postpartum depression. Questions 1, 2, 4 are scored from 0 to 3 and questions 3, 5, 6, 7, 8, 9, 10 are scored from 3 to 0 (19). The Zang Anxiety Inventory was designed by Zang in 1970. The Zang Anxiety Scale is designed to measure anxiety and has 20 questions with 4

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choices: never, occasionally, most often and almost always. The questions in this questionnaire are based on physical-emotional syndrome. Since some questions are scored inverted, fewer references can give the same answer to all options. Also, a number of questions on this scale emphasize the positive symptoms of anxiety and a number of others emphasize on the negative symptoms. Those with less anxiety have a lower score and those who are more anxious get higher scores on this scale (6). Also, the Luthanese psychological capital inventory questionnaire consists of 24 questions and 4 subscales of hope, tangibility, optimism and self-efficacy in which each subscale has 6 sentences; questions 1-6 are related to the self-efficacy subscale, questions 7-12 are related to the hope subscale, questions 13 to 18 are related to the resilience subscale and questions 19-24 are related to the optimistic subscale (22). The questionnaires were validated by three faculty members. To determine the reliability of the questionnaires, the Cronbach's alpha method was used and the Cronbach's alpha coefficient was 85%, 79% and 81%, respectively. Data analysis was performed using SPSS software version 18 and descriptive statistics including mean, standard deviation and inferential statistics including Pearson correlation coefficient at the significance level of 0.05 were performed.

Results

The mean age of women was 32.25 ± 4.44. The highest number of respondents was between the ages of 27 to 31 (41.36%) and the lowest number of respondents were from 17 to 21 (12.34%) and based on the degree of education, 27.77% had diploma, 50% had bachelor's degree and 21.6% had master's degree.

Also, the results showed that the average score of women's hope was 21.5 ± 6, the mean score of optimism was 20.9 ± 5, the average score of resilience was 25 ± 6, self-efficacy was 23 ± 9 and the total psychological capital was 90 ± 23, the mean anxiety score was 39.25 ± 9, the mean score of depression was 18 ± 8 in the studied women. The Kolmogorov Smirnov test was used to determine the normality of the data. All variables had normal distribution due to their significance level of more than 0.05.

The results also showed that there is a significant negative relationship between psychological capital components with postpartum depression and can predict the level of depression based on the components of psychological capital ($p<0.05$). Also, there is a significant negative relationship between the components of psychological capital and anxiety and the level of anxiety can be predicted based on the components of psychologicall capital ($p<0.05$) (Table 1).

Table 1: Relationship between dimensions of psychological capital with postpartum depression and anxiety

Optimism (N=162)	Resilience (N=162)	Hope (N=162)	Self-efficacy (N=162)	Psychological capital (N=162)	Variable
R=-0.520 P=0.0001	R=-0.474 P=0.0001	R=-0.484 P=0.0001	R=-0.132 P=0.02	R=-0.508 P=0.0001	Postpartum depression
R=-0.318 P=0.0001	R=-0.279 P=0.0001	R=-0.193 P=0.015	R=-0.068 P=0.41	R=-0.242 P=0.002	Anxiety

Discussion

The main objective of this study was to determine the relationship between psychological capital and depression and anxiety in women after childbirth. Childbirth is one of the most influential changes in women's lives. This change is an unforgettable experience not only for women, but due to its importance, it is very effective in shaping the psychological and physical effects of women (21). The results of this study showed that psychological capital and its components have a negative and significant relationship with depression in postpartum women. With the increase in psychological capital, women's depression reduces. These findings are consistent with the results of Hughes et al. (22). The psychological capital is a function of social capital, and the quantity and quality of interactions in social relations determine social capital. On the other hand, social relationships affect the size of psychological capital. Therefore, changes in the quantity and quality of these social relationships can affect the performance of a person. Adler et al. (23) also showed that the fluctuations and changes in the status of psychological capital at the individual and general levels are correlated with the change in the amount of social capital. Thus,

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social capital is associated with a more favorable situation of individual and general health, higher levels of optimism, increased positive health behaviors, increased resilience to problems, and reduced mental disorders. People with a high psychological capital have the ability to interact more socially. So, what connects people to each another, and leads to repetition and continuity of interactions, is psychological capital. It seems that people with a higher psychological capital can have more continuous social interactions and better social life.

Further findings showed that there is a significant negative relationship between psychological capital and anxiety in postpartum women. Therefore, psychological capital is directly related to happiness and well-being of individuals and psychological well-being prevents anxiety in difficult conditions. This conclusion is not consistent with the investigations of Decker (24), Saadati et al. (25). Therefore, the anxiety during pregnancy can affect mother's relationship with the infant and affect the mental health of the children in the next evolutionary period, and the children will face mental health problems in adulthood.

One of the positive aspects of our study is that our studied women are from different social, economic and cultural classes of the society, and therefore a good representative of the society. Of course, the study method is cross-sectional and for mothers immediately after delivery. Therefore, it is recommended that further studies be carried out in a cohort manner. The present study can be used in midwifery and psychological services to promote maternal and child health especially in reducing the causes of depression and anxiety and stress in mothers.

Conclusions

Since psychological capital had a significant correlation with depression and anxiety variables in postpartum women, it is suggested that the grounds for the increase of this capital, both at the family level and at the community level, are prepared. The existence of a significant amount of psychological capital facilitates social activities, so that in times of crisis, it can be used to solve problems as the main source of solving problems such as depression, and the current study confirms this issue.

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Author's contribution

Ghanbarzdeh N, Shahriyari A and Nadjafi-Semnani A designed the study. Shahriyari A helped with data gathering and coordination with different medical centers. Final data analysis was performed by Mohammadi Y and Nadjafi-Semnani A. Manuscript was prepared by Nadjafi-Semnani M, Mohammadi Y and Nadjafi-Semnani F, Nadjafi-Semnani A and Ghanbarzdeh N. All authors read and approved the final manuscript.

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Conflict of interest

There is no conflict of interest of authors for this study.

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