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Original Article

FACTORS AFFECTING POSTPARTUM DEPRESSION AMONG WOMEN OF THE UAE AND OMAN

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ABSTRACT

Objective: Is to evaluate factors related to the development of postpartum depression among an United Arab Emirates and Omani societies.

Methods: The study was prospective, observational, and descriptive using a self-reporting questionnaire. Arab women in the UAE who had recently delivered within two months were eligible for inclusion in the study whether they had a vaginal or caesarean delivery.

Results: The study included forty Emirati and Omani participants with Omani women being the majority (65 %). Around 55 % of the participants confessed low motherhood satisfaction, twenty-five (62 %) residing in a city and had the baby in a local hospital, twenty-one (52.5 %) of the newborns were boys. Many factors associated with an increased likelihood of PPD have been established in this study such as diet, exercise, colicky baby, financial constrains and many other factors which all show some association with PPD, Fifteen (37.5 %) of the questioned women preferred artificial sweeteners during pregnancy, ten of them had a cesarean delivery. Statistical analysis revealed that twenty-five (62.5 %) had a cesarean delivery, twenty-two of them complained of postpartum anxiety (*p-value* = 0.009, significant difference is present between anxious women who had vaginal childbirth and cesarean delivery).

Conclusion: PPD is a serious condition which merits thorough investigation and better understanding among families, friends, patients and healthcare providers. It is recommended that health authorities and institutions to arrange for public campaigns about this silent disease.

Keywords: Post-partum, Depression, Delivery, Newborn, Support, Anxiety.

INTRODUCTION

Depression is considered the most common medical condition affecting adult women [1]. Postpartum depression (PPD) is a silent disease where women face both the disease and the fear of complaining about it. It is a significant medical status with direct impact on public health. Feeling anxious or lost, forgetfulness, helplessness, irritability, tiredness, a loss of interest and insomnia after delivery is expected up to a certain extent. When these symptoms persist and continue to affect the mother's daily life and her motherhood, it becomes a serious issue where medical intervention is mandatory. The symptoms usually start two to three days after childbirth. Symptoms initially appear as the mother gets frustrated with her newborn baby, spouse, expenses, housework and the skepticism about their ability to cope with all of the changes in her life. Many factors affect the occurrence and the persistence of PPD such as hormonal changes, a lack of family support, past history of mental disturbance during gestation, and stressful life events [2].

Many studies have found a very high percentage of PPD in underdeveloped and developing countries especially among families with financial constraints [3]. In India for instance, the birth of a girl could be a major depressive factor to a mother because of the society which prefers a male gender [4]. Research shows that highly-educated women suffer less PPD than women with less or no education [5]. PPD is most common in the first six months after childbirth with a prevalence of around 19 % [6]. The major problem with depression is the lack of early diagnosis and detection which leads to major negative health consequences [7]. These consequences, that affect both the mother and the offspring, include a lack of motherhood bond, child behavioral problems, malnutrition, delay of normal childhood developments, insomnia, weakness, hyperactivity and low school achievement [8]. Many studies show a negative impact of PPD and concurrent child growth and development which may lead to physical and mental retardation [9]. Even after the age of sixteen, children of PPD mothers are at high risk of developing some degree of depression or psychopathological status [10]. Some studies conducted in the United Arab Emirates estimate the prevalence rate of PPD is about 18 % (in Dubai) and approximately 22 % in Abu Dhabi [11, 12]. A study carried out in Sharjah shows that PPD is a multi-factorial disease which needs thorough investigation and more research [13]. Social support from family and friends is essential for a post-partum mother in order to cope with the pressures of looking after a newborn while recovering from childbirth. A study revealed that social support is needed for women of childbearing age who work in Jordanian military hospitals. The prevalence of PPD in the Middle East is a issue that warrants further investigation [14]. Arab-Bedouin women living in southern Palestine are at high risk of PPD which merits further investigation and thorough evaluation [15]. The aim of this study is to evaluate factors related to the development of postpartum depression among United Arab Emirates and Omani societies.

MATERIALS AND METHODS

The study was prospective, observational, and descriptive using a self-reporting questionnaire. Women who had recently delivered within two months were eligible for inclusion in the study whether they had a vaginal or caesarean delivery. Emirati and Omani women with an age range between fifteen and fifty-nine years were included in the study. SPSS version 20 has been used for data analysis, cross sectional tabulation and statistical testing.

RESULTS

A total number of forty women answered the questionnaire through social media over the duration of less than one week. The living environment, city, rural region and urban was included to obtain whether this had any relation to depression or not. The study included forty Emirati and Omani participants with Omani women being the majority (65 %).

Mothers were asked several questions like their age and weight, number of parity, sex of baby, delivery type, type of food during pregnancy, place of living, problems of money and housing, whether the pregnancy was planned, pill use, hypothyroidism, satisfaction of physical state, carrying responsibilities, loss of concentration, significant anxiety and insomnia. Around 55 % of the participants confessed to low motherhood satisfaction, twenty-five (62 %) participants reside in a city and had their baby in a local hospital, twenty-one (52.5 %) of the newborns were boys.

An association has been observed between women who were not satisfied with their postpartum physical status and depression-related symptoms. A total number of twenty-five women questioned were not satisfied with their physical status after delivery. Of those twenty-five women, nineteen complained of insomnia and a loss of concentration or energy. On the other hand, fifteen women were observed to be satisfied with their physical status after delivery as compared with unsatisfied women (37.5 % vs. 62.5 %).

Conversely, a difference between women who planned their pregnancy and those who did not plan for pregnancy also existed. A total of twenty (50 %) women stated that their newborn was colicky; eleven of these twenty women became pregnant without planning. The remaining nine women who gave birth to colicky babies had planned their pregnancy. A significant interaction was present between planning pregnancy and dealing with colicky babies. Mothers who did not plan to become pregnant were more susceptible to experience depression after delivery; the colicky newborns exacerbated the risk of having depression.

A potential relationship has been observed between postpartum depression and eating behavior during pregnancy. Fifteen (37.5 %) of the women questioned preferred artificial sweeteners during pregnancy, ten of these women had a cesarean delivery. Statistical analysis revealed that twenty-five of the total women surveyed (62.5 %) had a cesarean delivery, twenty-two of the women who underwent a cesarean complained of postpartum anxiety (*p-value* = 0.009, significant difference is present between anxious women who had vaginal childbirth and cesarean delivery). Additionally, a total of 20 % preferred a high-sodium containing diet during pregnancy, 2.5 % preferred hydrogenated oil-containing food, 2.5 % preferred to process food, and 30 % were on a mixed diet. Uncontrolled nutrition has been shown to contribute to increased fetal weight, which might, in some cases, require the pregnant woman to have the baby via cesarean, and this could influence poor mental health and depression. Nine out of thirteen women who had their first baby in their twenties complained of significant anxiety. Overall findings showed that younger new mothers have an increased risk to develop postpartum depressive symptoms.

Participants surveyed were less likely to have money or housing problems, as 75 % said that they do not have these problems. Similarly, 90 % did not complain of hypothyroidism compared to 10 % with hypothyroidism.

DISCUSSION

The findings in this report are subject to two limitations. First, data from the survey are based on self-reporting and are not confirmed by the diagnosis of a physician. Second, additional variables of interest, such as illicit drug use, could not be analyzed because of the limited sample size. Third, women with pre-existing depression that might or might not also have reported PPS were not addressed. These women might have been classified as experiencing PPS but might have required different interventions to address their condition than other women without a history of depression. A 2007 study conducted by a health maintenance organization found that 54.2 % of women with PPD had also been diagnosed with depression either before or during their most recent pregnancy [16].

According to the findings of this study, many factors are associated with PPD either as a cause or a consequence of the disease. PPD could lead to a drastic reduction in mother's breast milk production and her willingness to breastfeed. It has been reported that PPD might be associated with discontinuation of breastfeeding [17]. Breastfeeding can promote hormonal processes that protect mothers against postpartum depression, which may be caused by increased prolactin levels. It can also reduce the risk of postpartum depression by helping the regulation of sleep and wake patterns for mother and child, improving mother's self-efficacy and her emotional involvement with the child, reducing the child's temperamental difficulties, and promoting a better interaction between mother and child [18]. According to Misri *et al.*, PPD could be caused by the cessation of breastfeeding but the severity of the disease might not be significantly altered [19]. Other studies confirmed the significant negative impact of PPD on the early cessation of breastfeeding [20]. The duration of breastfeeding seems to be negatively affected by PPD in the early stages after labor, this warrants full psychosocial support for nursing mothers especially in the first few months after delivery [21].

Lifestyle changes play a significant role in the development of PPD; the prevalence and risk factors for PPD among immigrant women in industrialized countries were compared with the prevalence and risk factors for PPD among Arab women in their home countries. The study stated that the prevalence and risk factors for PPD among Arab women in their home countries ranged from 10 % to 37 %, and the prevalence of PPD among immigrant women in industrialized countries ranged from 11.2 % to 60 %. Immigration stress and a lack of access to healthcare services were found among immigrant women. Lack of social support was more predominant in studies on immigrant women [22].

Perinatal stress such as couples problems and unstable lifestyle could lead to severe PPD warranting medical attention during pregnancy in order to prevent further progression of the disease [23, 24]. Lynch also supported the evidence of the perinatal stress and its impact on the progression of PPD [25].

Another factor influencing PPD, according to a study published by Archives of Women's Mental Health, was the levels of Vitamin D which has some impact on PPD. However, epidemiologic evidence of a relationship between vitamin D and depression is limited; some studies have shown a meaningful relationship between vitamin D and depression in selective populations [26].

Gestational diabetes also plays a role in the development of perinatal depression and PPD. Pregnant women and their healthcare providers should work together to prevent the development of such diseases. According to Kozhimannil, gestational diabetes was independently associated with perinatal depression. In the sample of women who gave birth, 15.2 % with gestational diabetes and 8.5 % without diabetes were depressed during pregnancy or postpartum. After adjusting for age, race, year of delivery, and gestational age at birth, women with diabetes compared with those without diabetes had nearly double the odds of experiencing depression during the perinatal period [27].

A study done by HERGÜNER aimed to investigate the level of depressive symptoms and to determine related factors of mothers who have infants with very low birth weight. The study found that low infant birth weight and a long hospital stay of mothers are predictors of postpartum depression [28]. Age plays an important role in the development of PPD, other studies illustrated the association between young age and PPD which is affected by prior depression and social support [29]. On the other hand, adult PPD is associated with pregnancy intention, mental health during pregnancy and the presence of stressors. Preterm labor had a significant negative impact on PPD among seventy-three mothers included in a study. The participants suffered from high levels of anxiety [30-32]. Approximately 10 to 20 % of first-time mothers in a study conducted in China suffered from PPD. According to the same study daughter-in-law/mother-in-law relationship, gender of the baby and one-child policy contributed to their PPD [33, 34].

CONCLUSION

Although self-reporting measures are not typically used for clinical diagnosis, the self-report depression scales do reflect a range of depressive symptoms that are typically associated with the diagnosis of depression, and they are reliable measures. Although several currently available depression screens have been used to identify postpartum depression in research and practice, additional studies with large, representative samples are needed to help identify the ideal postpartum depression screening tool. The "ideal" screening tool should be brief, inexpensive, easy to administer, possess a high sensitivity and good specificity, and contribute toward improved clinical outcomes.

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CONFLICT OF INTERESTS

Declared None

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