

## **Postpartum Depression and Family Dysfunction**

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### **Abstract**

#### **Keywords**

family dysfunction,  
postpartum  
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risk factors

Postpartum depression is a very important disease within the postpartum pathologies worldwide and it is associated to family dysfunction. The aim of this research is to determine the association between family function and postpartum depression in Naval Hospital of Specialties in Veracruz patients. Methods: We conducted a transversal, prospective, comparative and observational study with patients from the Naval Hospital of Specialties in Veracruz during the period January - October 2019. Results: a prevalence of 1% of postnatal depression and a positive association between family dysfunction and postnatal depression were obtained.

### **Introduction**

In the last decades, the knowledge about depression during the pregnancy/postpartum period has experienced important progress; several studies suggested that women had depressive disorders of pregnancy or postpartum, and there was continuity in the perinatal psychic symptoms. Primary health care (PHC) is an ideal setting for a preventive approach to psychosocial conflicts and mental disorders for three reasons (1-5).

Currently, the most widely used screening instrument to detect probable cases of PPD is the Edinburgh Postnatal Depression Scale (EDPE) (6), which was developed at Livingston and Edinburgh health centres to assist primary care professionals in detecting postnatal depression. It consists of 10 short self-administered questions that refer to how mothers have felt during the past week; each answer is scored from 0 to 3 points, obtaining the overall score with the sum of all the questions. A total of 13 or more points indicates

the likelihood of having the depressive disorder. Their sensitivity and specificity vary from study to study, but in a review by Eberhard-Gran et al. out of 18 EPDS validation studies between 1987 and 2000 ranged from 65-100% and 49-100%, respectively (9).

There are risk factors associated with postpartum depression that have already been identified, such as socioeconomic characteristics (age of the mother, employment status, marital status, subjective financial situation and loss of work during pregnancy) (7).

In 2013, the most recent version of the American Psychiatric Association's classification of mental illnesses (DSM-5), took up these advances and, in the criteria for Major Depression, replaced the old "post-partum onset" specifier with the "peripartum onset" specifier. This name can be used to specify that the major depressive episode occurred during pregnancy or in the four weeks following delivery (8).

During pregnancy, childbirth and puerperium, a series of biochemical, psychological and social changes occur in women that cause a greater vulnerability to the appearance of psychic disorders, which in the postpartum period are classified as mild postpartum depression or maternity blues (a mild and transitory syndrome that occurs 2-4 days after childbirth and affects 50- 80% of women who have given birth), major postpartum depression (begins 2-8 weeks after childbirth) and postpartum psychosis (appears in the first 8 weeks) (5).

Family function owned by the family system that makes it a living, autonomous organism and allows it to differentiate itself from the simple sum of its components. Each family possesses and transmits its own pattern of beliefs, rules and norms, rituals, experiences, relationships among its elements and with the environment, etc, which makes them unique and unrepeatable, so it is not possible to define a pattern of normality. The patterns of family functioning are conditioned by the socio-cultural context to which the family belongs (10).The family APGAR is an instrument

used to identify the function of the family. It was developed by Smilkstein in 1978 as a self-administered format with only 5 questions that, in a simple and fast way, evaluates the 5 areas in which the authors subdivide the family function: adaptability, cooperation or participation, development, affectivity and resolution capacity (table 2)(11).The objective of this research was to determine the association between family function and postpartum depression at the Naval Specialty Hospital of Veracruz in the period January - October 2019 in the Outpatient Area of the Gynecology and Obstetrics Service.

## **Materials and Methods**

A transversal, prospective, comparative and observational study was conducted with patients from the Naval Hospital of Specialties in Veracruz during the period January - October 2019. Women in the postpartum period attached to the hospital, who were in the outpatient area of Gynecology and Obstetrics, with a minimum age of 13 years or older, were included, excluding patients with a diagnosis of psychiatric disease prior to pregnancy. After the approval of this study by the ethics and research committee of the institution, the researchers went to the waiting room of the gynecology area to interview patients who met the selection criteria, requesting their informed consent to participate; then the Edinburgh Test and the APGAR family test were applied to the participants. The data was analyzed using the Mann-Whitney U-test and the Fisher exact test. To evaluate, the ratio of mummies with 95% confidence intervals was calculated, considering with statistical significance the value of  $p < 0.05$ .

## **Results**

102 patients were included in this study, which were married in 75. 5%, housewives in 54. 9%, tobacco users in 17. 6%, alcoholics in 35. 3%, and breastfeeding in 93. 1%. The prevalence of family dysfunction and depression was 1%. Table 1 describes the general characteristics of the population studied.

Table 1. Socio-demographic characteristics of the population under study.

|                        |                      | Total | %     |
|------------------------|----------------------|-------|-------|
| <b>Marital status</b>  | Single               | 12    | 11.8% |
|                        | Married              | 77    | 75.5% |
|                        | Divorced             | 5     | 4.9%  |
|                        | Free union           | 8     | 7.8%  |
| <b>Occupation</b>      | Housewife            | 56    | 54.9% |
|                        | Worker               | 46    | 45.1% |
| <b>Depression</b>      | Depressed            | 1     | 1.0%  |
|                        | Without depression   | 101   | 99.0% |
| <b>Smoking</b>         | Yes                  | 18    | 17.6% |
|                        | No                   | 84    | 82.4% |
| <b>Alcoholism</b>      | Positive             | 36    | 35.3% |
|                        | Negative             | 66    | 64.7% |
| <b>Breast feeding</b>  | Yes                  | 95    | 93.1% |
|                        | No                   | 7     | 6.9%  |
| <b>Family function</b> | Family functionality | 101   | 99.0% |
|                        | Family disfunction   | 1     | 1.0%  |

Table 2. Factors associated with postpartum depression. Comparison made by Fisher exact test. Statistical significance with a value of  $p < 0.05$

|                 |                      | Depressed (n=1) |        | Without depression (n=101) |        | OR | IC 95% | P value |
|-----------------|----------------------|-----------------|--------|----------------------------|--------|----|--------|---------|
|                 |                      | Total           | %      | Total                      | %      |    |        |         |
| Marital status  | Single               | 0               | 0.0%   | 12                         | 11.9%  | -- | --     | 1.0     |
|                 | Married              | 1               | 100.0% | 76                         | 75.2%  | -- | --     | 1.0     |
|                 | Divorced             | 0               | 0.0%   | 5                          | 5.0%   | -- | --     | 1.0     |
|                 | Free union           | 0               | 0.0%   | 8                          | 7.9%   | -- | --     | 1.0     |
| Occupation      | Housewife            | 1               | 100.0% | 55                         | 54.5%  | -- | --     | 1.0     |
|                 | Worker               | 0               | 0.0%   | 46                         | 45.5%  | -- | --     |         |
| Smoking         | Yes                  | 1               | 100.0% | 17                         | 16.8%  | -- | --     | 0.17    |
|                 | No                   | 0               | 0.0%   | 84                         | 83.2%  | -- | --     |         |
| Alcoholism      | Positive             | 0               | 0.0%   | 36                         | 35.6%  | -- | --     | 1.0     |
|                 | Negative             | 1               | 100.0% | 65                         | 64.4%  | -- | --     |         |
| Breast feeding  | Yes                  | 0               | 0.0%   | 95                         | 94.1%  | -- | --     | 0.06    |
|                 | No                   | 1               | 100.0% | 6                          | 5.9%   | -- | --     |         |
| Family function | Family functionality | 0               | 0.0%   | 101                        | 100.0% | -- | --     | 0.009 * |
|                 | Familiar disfunction | 1               | 100.0% | 0                          | 0.0%   | -- | --     |         |

Patients without depression were mainly married with 76 (75. 2%), with housewife occupation in 55(54. 5%), with positive smoking in 17 (16. 8%) of them, positive alcoholism in 36 (35. 6%), providing breastfeeding in 95 (94. 1%) and did not present cases of family dysfunction; the patient with depression was married, housewife, tobacco user, did not consume alcohol, did not provide breastfeeding and presented family dysfunction, showing statistically significant differences in the latter. Table 2 shows the comparison between patients with and without depression.

## Conclusion

The prevalence of postpartum depression and family dysfunction in our patients was very low compared to what was generally established by other researchers, all of which can be seen in various results, including parts of Latin America and Mexico which reported a prevalence between 17. 8% and 22.5% (12, 13, 14, 15). Similarly, the association between family dysfunction and depression was demonstrated, a situation that is presented in the same way as that established in the medical literature (16, 17).

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