SciencePG
Science Publishing Group

Relationship Between the Baby Blues and Postpartum Depression: A Study Among Cameroonian Women

Georges Pius Kamsu Moyo[1, *], Nadège Djoda[2]

[1]Faculty of Medicine and Biomedical Sciences, University of Yaoundé I, Yaoundé, Cameroon

[2]Department of Internal Medicine, Psychiatry, Faculty of Medicine and Biomedical Sciences, University of Yaoundé I, Yaoundé, Cameroon

Email address:
kamsuzicfried@yahoo.fr (G. P. K. Moyo)
[*]Corresponding author

Abstract: Background: The baby blues and postpartum depression are two of the three major entities of psychic disorders related to the puerperium. There exists a chronological distinction of these conditions which equally vary according to severity and prognosis. Objectives: This study aimed at investigating a possible relationship between the baby blues and postpartum depression in newly delivered Cameroonian women. Method: A retrospective study with case-control design was carried out at the Yaoundé Gyneco-Obstetric and Paediatric Hospital (YGOPH) over a period of 6 months on a sample of 214 newly delivered women. The group of cases consisted of women diagnosed with postpartum depression, while the group of controls consisted of women without postpartum depression. Subjects that were earlier checked for baby blues using the Kennerley and Gath blues questionnaire during the 1st week following delivery, were reassessed between the 4th and 6th weeks to diagnose postpartum depression. The Edinburgh Postnatal Depression Scale (EPDS) was used to separate various groups and a retrospective cross checking was made. Results: We recruited 214 newly delivered women, among which 50 (23.36%) manifested postpartum depression while 164 (76.63%) women did not. Up to 31 (62%) of women with postpartum depression had earlier manifested the baby blues. After multivariate analysis of risk factors, the baby blues appeared as one of the independent predictive factors for postpartum depression (OR=3.52, p=0.00). Conclusion: The baby blues was not only a risk factor, but also an independent predictive factor for the manifestation of postpartum depression in this survey. Therefore, the prevention and early management of the baby blues during the perinatal period may help to prevent the onset of postpartum depression.

Keywords: Baby Blues, Maternity Blues, Postpartum Depression, Cameroon

1. Introduction

Postpartum is a period of emotional and psychological upset for a woman's life [1]. The risk of psychological impairment is increased by ten during the course of the puerperium and one woman out of ten will develop postpartum psychiatric disorders [1]. During this period, the new mother has to accustom to the companionship of her baby and equally develop the sense of responsibility towards the newborn. These psycho-affective developments are of paramount importance for the woman's integration to maternity [2, 3]. However, a number of newly delivered women complain of psychological tension, environmental stress, mood and emotional instability few days into postpartum. These accompanied by behavioural disorders such as unexpected irritability, crying, indifference with regard to the baby, refusal to breastfeed and nursing care [2, 3]. In theory, this discomfort could be attributed to the physiological hormone variations following parturition and psychological modifications associated with conditioning to the new situation which maternity constitutes [2, 3]. Failure or threats to these adaptation processes leads to psychological alterations, among which the baby blues is the most precocious [3]. The baby blues, also known as maternity blues or postpartum blues may be defined as a mild, transient

and physiological mental impairment occurring within the two first weeks following delivery. It is the most precocious and commonest of mental derangements of the puerperium [2, 4]. Its diagnosis relies essentially on the recognition of the baby blues syndrome also formerly known as the postpartum sadness syndrome [4]. The baby blues is sometimes described as being trivial and fleeting while postpartum depression is a depressive syndrome per se, known to be more serious and long lasting [2, 5, 6]. These psychic disorders of postpartum may alter mother-to-baby relationship, affect the psycho-affective and neurological developments of the child and spoil the expected joyful ambiance that goes with the birth of an infant [7]. These may justify the necessity for an early recognition in order to ensure mother and baby wellbeing which is necessary for the baby's development [8-10]. Epidemiological data over the frequency of postpartum blues and postpartum depression vary a lot from one country to another. This could be due to non-specificity of diagnostic criteria and diversity of measurement means [2, 3, 11, 12]. Some studies have earlier reported an existing relationship between the baby blues and postpartum depression [2, 13, 14]. Our study was thus meant to investigate in order to confirm or refute this hypothesis in our context.

2. Methodology

A retrospective study with case-control design was carried out on an overall sample of 214 newly delivered women. The subjects were recruited over a period of 6 months at the maternity unit of the Yaoundé Gynaeco-Obstetric and Paediatric Hospital (YGOPH), which is a university teaching hospital in Cameroon. After approval of the protocol by the ethical committee and the patient's consent obtained, a pretested questionnaire was administered and information retrieved from the patient's file. Data collected included demographic, clinical, psychosocial and neonatal parameters. A two-step diagnostic procedure was then carried out with Subjects being assessed for baby blues during the first week following delivery and later on reassessed between the 4th and 6th week of postpartum for Postpartum Depression. Women diagnosed with postpartum depression consisted the group of cases, while those without were considered as the control group. Various groups were then statistically cross-checked to identify risk factors, including the baby blues.

The scales used were the Kennerley and Gath blues questionnaire and the Edinburgh Postnatal Depression Scale (EPDS) respectively. The Kennerley and Gath blues questionnaire is an approved self-rating scale consisting of 28 items pertaining to the emotional state of newly delivered women. The available answers are "yes" or "no" corresponding respectively to marks of 1 and 0 with a maximum score of 28 and a minimum of 0. Women who had an overall score greater than the mean peak score of their group were considered positive for the baby blues. The Edinburgh Postnatal Depression Scale (EPDS) developed by Cox et al in 1987 is a validated scale for screening postpartum depression. It comprises 10 multiple choice items rated each on a scale of 0-3, with a total score ranging from 0 to 30. Women with EPDS scores $\geq$ 12 were considered as having postpartum depression while a score < 12 permitted to rule out postpartum depression.

The calculated minimal sample size was 48 women per group using Schlesselman's formula with a standardized power of 84%. Statistical analyses were done using CSPro version 4.1 and SPSS version 22.0 software. The difference was statistically significant for P-value<0.05. Pearson Chi square and Fisher's exact tests were used to compare proportions. Odds Ratio (OR) and its 95% Confidence interval (CI) were calculated to assess the association between variables. Multivariate analysis served for isolating predictive factors.

3. Results

We recruited 214 newly delivered women, among which 50 (23.46%) manifested postpartum depression while 164 (76.63%) women did not. The overall number of women who manifested the baby blues was 80 (37.38%), out of which 31 (62%) later developed postpartum depression. After bivariate analysis, the baby blues appeared among to be a risk factor associated with postpartum depression 3.94 (OR=3.94, p=0.0), and persisted as an independent predictive factor after multivariate analysis (OR=3.52, p=0.00) as shown in table 1.

Table 1. *Predictive factors of postpartum depression after multivariate analysis of risk factors.*

Factors	Adjusted Odds Ratio	IC (95%)	P-value
Lack of satisfaction in marital relationship	6.91	3.29 – 14.49	0.00
Recent conflicts with the partner	2.55	1.05 – 6.18	0.04
Inadequate emotional support from conjoint	1.32	0.45 – 3.93	0.61
Inadequate financial support from conjoint	1.28	0.30 – 5.43	0.74
Can't rely on conjoint	3.10	0.76 – 12.64	0.11
Can't trust the conjoint	1.18	0.48 – 2.91	0.72
Inadequate emotional support from family	2.24	0.79 – 6.35	0.13
Recent financial problems	3.85	1.44 – 10.28	0.01
Recent job loss	1.93	0.64 – 5.78	0.24
History of abortion	2.73	0.95 – 7.81	0.06
Unplanned pregnancy	1.08	0.27 – 4.35	0.91
Undesired pregnancy	1.64	0.66 – 4.12	0.29
Depressive symptoms in pregnancy	1.66	0.71 – 3.89	0.24
Anxiety during pregnancy	1.36	0.56 – 3.31	0.49

Factors	Adjusted Odds Ratio	IC (95%)	P-value
Baby blues	3.52	1.48 – 8.41	0.00
Difficulties in feeding the baby	2.55	1.05 – 6.18	0.04
Problems with baby's sleep	2.02	1.06 – 3.81	0.03

4. Discussion

Having used the most approved scales for assessing the baby blues and postpartum depression at each diagnostic stages of our study, the final analyses showed that the baby blues might not only be a risk factor but also a predictive factor for women developing postpartum depression [2, 4, 10]. Such relationships were earlier described by a number of researchers in various contexts of study design, size of population and measurement means [13-16]. Similar associations were confirmed in all cases. In this survey, close to one woman out of three with the baby blues later on manifested postpartum depression, suggesting a possible continuity between poorly managed baby blues and postpartum depression. Therefore, postpartum depression may likely be assimilated to severe forms of the baby blues. This is in vein with results obtained by Nott et al [17] in 1976 who claimed it is debatable whether women with atypical, severe reactions following delivery suffer a condition which is different from the baby blues. As such "severe baby blues" may be separated from the common "trivial and fleeting" baby blues, and so be placed at the end of a continuum of blues reactions [17, 18]. The baby blues could therefore constitute a transitional psychological impairment from which other psychiatric disorders related to puerperium can emerge. The atypically severe baby blues may be characterised by an abnormal longer duration and/or more severe signs and symptoms. Nevertheless, a number of researchers recommend careful control of atypical baby blues to identify those that are susceptible to progress towards postpartum depression, and promptly manage them [13]. Future studies might explore causality relationship between severe baby blues and postpartum depression given that hypotheses on the magnitude of their relationship have been emitted [2, 15]. In effect it seems that the tendency for a woman to develop postpartum depression is likely proportional to the severity of the baby blues she presents. However, there may be a necessity for consensus on a measuring scale and cut-off point for the diagnosis of severe baby blues [4].

5. Conclusion

The baby blues was not only a risk factor, but also an independent predictive factor for the manifestation of postpartum depression in this survey. Therefore, the prevention and early management of the baby blues during the perinatal period may help to prevent the onset of postpartum depression.

Funding

Conflict of Interest

The authors declare that they have o competing interest.

Ethical Approval

The study was approved by the Institutional Ethics Committee.

Acknowledgements

References

[1]   Oates M. Major mental illness in pregnancy and puerperium. Baillières Clin Obstet Gynaecol 1987; 3 (4): 905-920.

[2]   Rezaie-Keikhaie K, Arbabshastan ME, Rafiemanesh H, Amirshahi M, Mogharabi S, Sarjou AA. Prevalence of the Maternity Blues in the Postpartum Period. J Obstet Gynecol Neoatal Nurs. 2020. https://doi.org/10.1016/j.jogn.2020.01.001.

[3]   Virginie IM, Michel riex. Baby blues. Eres spirale. 2019; 89: 131-135.

[4]   Kennerley H, Gath D. Maternity blues. Br J Psychiatry. Baltimore: Williams and Wilkins, 1994; 155: 367-73.

[5]   O'Hara MW, Schlechte JA, Lewis DA, Varner MW. Controlled prospective study of post-partum mood disorders: Psychological, environmental and hormonal variables. J Abnorm Psychol 1991; 100 (1): 63-73.

[6]   Lemperière T, Rouillon F, Lépine JP. Troubles psychiques liés à la puerpéralité. Encyclopédie medico-chirurgicale Psychiatrie, 1984. p. 7.

[7]   Lundy B, Field T, Cigales M et al. Vocal and focal expression matching in infants of mothers with depressive symptoms. Infant Ment Health J 1997; 18 (1): 265-73.

[8]   Murray L and cooper P J. Effects of postnatal depression on infant development. Child Dev 1996; 67 (5): 2512-26.

[9]   Sharp D, Hay D F, Pawlby S, Smucker G, Allen H and Kumar R. The impact of postnatal depression on boys' intellectual development. J Child Psychol Psychiatry, 1995; 36 (8): 1315-36.

[10]   Cox JL, Holden JM, Sagovski R. Detection of postnatal depression: development of the 10-item Edinburgh postnatal depression scale with two other depression instruments. Nurse Res 2001; 50 (4): 242-50.

[11] Bedford A and Foulds G. Delusion symptoms states. Anxiety and depression. Windsor: National Foundation for International research 1978.60. p.

[12] Edhborg. Comparison of different instruments to measure blues to predict depressive symptoms. 2 months postpartum: A study of new mothers and fathers. Scand J Caring Sci 2008; 22 (2): 186-195.

[13] Reck C et al. Maternity blues as predictor DSM-IV depression and anxiety disorders in the first three months of postpartum. J Affect Disord 2009; 113 (1-2): 77-87.

[14] Watanabe M. et al. Maternity blues as a predictor of postpartum depression: a prospective cohort study among Japanese women. J Psychosom Obstet Gynaecol 2008; 29 (3): 206-12.

[15] Zanardo V, Volpe F, de Luca F, Giliberti L, Giustardi A, Parotto M et al. Maternity blues: A risk factor for anhedonia, anxiety, and depression components of Edinburgh Postnatal Depression Scale. J Matern-Fetal Neonatal Med. 2019; 25: 1–7.

[16] Fiala A, Svancara J, Klanova J, Kasparek T. Sociodemographic and delivery risk factors for developing postpartum depression in a sample of 3233 mothers from the Czech ELSPAC study. BMC Psychiatry. 2017; 17 (1): 104.

[17] Nott P N and Cutt S. Validation of the 30-item GHQ in postpartum women. Psychol Med 1982; 12 (2): 404.

[18] Stein G S, and Van den Akker O B A. The retrospective diagnosis of postnatal depression by questionnaire. J Psychosom Res 1992; 36 (1): 67-75.