MATERNITY BLUES: CROSS-CULTURAL VARIATIONS AND EMOTIONAL CHANGES

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The maternity blues are a group of symptoms of overemotionalism and overreactivity that appear very often in the early puerperium. The blues seem not to be part of a continuum with postpartum depression and puerperal psychosis. Causation is mostly biological, mainly the massive fluctuation of hormones in that period. There are no clear relationships with demographic or psychosocial factors. The clinical picture appears very similar in all the different settings in which it has been examined. As some women suffering from the blues will go on to develop postpartum depression, requiring medication and psychological interventions, it is very important to recognize the symptoms and to educate the patient and her partner, if there is one, so they will know what to expect and when to notify the obstetrician/gynecologist in case psychiatric referral is necessary. The time spent listening to the patient discuss her emotions and giving her pertinent education is very valuable, because the establishment of a good therapeutic alliance is crucial in the event that depression (a serious condition that puts both mother and child at risk) develops. (Prim Care Update Ob/Gyns 2003;10:167–171. © 2003 Elsevier Inc. All rights reserved.)

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Case History

Mrs. L, a 23 year-old secretary, had her first child, a healthy baby girl 5 days ago. She was very happy, with a deep, pleasurable sense of fulfillment, when she arrived home from the hospital. Two days ago, she became very angry when her mother failed to arrive on time to bathe the baby. Today, she found herself crying while listening to the news of a new explosion in her native Medellín. She hasn't slept well for the past 2 days, even though her husband helps with the baby during the night. She wonders if she will be able to hold on to her job, take care of the baby, and still have time for herself. While looking at her beautiful baby, she feels both joy and awe and starts crying again. What is happening to her?

Shortly after parturition, when women would expect themselves to be overtaken by joy and the sense of fulfillment rendered by motherhood, there is often a bewildering brief period of dysphoria. The new mother may find herself overemotional and irritable, crying easily and having some difficulty sleeping: the blues have set in.

Mood disturbances during pregnancy and after childbirth have been the object of great attention in the last decades. The most common entities are maternity blues, postpartum depression, and puerperal psychosis. They may have a minor functional impact that responds well to social support (eg, postpartum blues) or may cause significant functional compromise requiring more aggressive therapy (eg, postpartum depression).[1]

Maternity blues are so common and their features so different from those found in major depression presenting in the period after parturition that they may not be considered part of a continuum: blues → depression → psychosis.

However, some women presenting with the blues may go on to develop depression, and many others will wonder whether there is something "wrong" in their puzzling emotional response at a time when they assumed they would be blissful. At this time, there is no clear set of clues to help us predict which women reporting maternity blues will then present with depression, requiring psychological and often pharmacological intervention. Postpartum depression is a serious condition that may hinder infant development and cause serious suffering to the mother and often to those around her. Suicidality may accompany depression. In addition, puerperal psychosis is a very intense psychiatric condition that requires hospitalization and vigorous treatment.

Despite this, emotional symptoms are often dismissed as being normal physiologic changes during this period, corresponding to the moody and overemotional nature of women. This attitude puts some women at high risk for development of serious postpartum depression.

This is paradoxical because the puerperium is a period of well-

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known risk for mental health problems, and there is great interest in the popular literature regarding postpartum emotional disturbances, including the baby blues, which is a topic in most women's magazines and even in more general publications. Such publications may not be very accurate, and may tend to be contradictory.[2] However, it is a fact that most women have heard of the blues, and they would feel more comfortable and confident with their health care team if their complaints were anticipated and the evolution of the tension, as well as family and personal modifications to ease it, were discussed.

Maternity Blues: The Clinical Picture

Postpartum blues is described as a mild affective syndrome experienced by women, sometimes around 1 week to 10 days after childbirth. The characteristic features include mood lability, crying, anxiety, insomnia, poor appetite, irritability, poor concentration, and sadness, as well as feelings of isolation, restlessness and tension.

This group of complaints seems to be specific to the period after childbirth: its evolution is different from that of postoperative dysphoria, and the characteristic symptoms (emotionality and dysphoria) set it apart from other responses to stress. After surgery, there may be manifestations of sadness and anxiety, insomnia, and irritability that gradually diminish, whereas after parturition, symptoms do not appear until the 3rd or 4th day, increase, and then remit spontaneously.

Prevalence of the postpartum blues has been reported to range from 26 to 85%. This wide variation may be accounted for by the lack of operational criteria for the diagnosis. As the blues is not considered a disorder, it is not operationally defined in the *Diagnostic and Statistical Manual of Mental Disorders IV,* the diagnostic handbook in U.S. psychiatry, or in the International Classification of Diseases (10th revision), which is set forth by the World Health Organization.

Table 1. Prevalence of Post Partum Blues in Different Studies

Country	Women Reporting Blues (%)
USA	76
England	76
Germany	41
Italy	30
France	30
Jamaica	46
Japan	13–26
Tanzania	76

So, several researchers in different parts of the world have devised scales and questionnaires based on their own understanding of this set of symptoms. Therefore, prevalence has been determined using different definitions. Table 1 gives us an idea of the different results obtained in different settings. There tends to be a higher prevalence reported in Western countries, but the blues have been found in every country where they have been looked for.

There are scales that contain between 7 and 28 items. These include sadness, tearfulness, restlessness, anxiety, fatigue, tension, irritability, concentration problems, forgetfulness, confusion, anorexia, sleeping problems, and headache.

The blues are predominantly marked by mood fluctuations, sometimes in the direction of elation (elevation of mood), with higher hostility and lability of affect. Women with the blues may be exquisitely sensitive to minor interpersonal problems or be exaggeratedly empathic (for instance, crying about something they see on TV or crying because they are so happy). They may feel overwhelmed with joy or responsibility and tearful, but depression and sadness do not seem to be typical of the blues.

Most women experiencing the blues report that: 1) their mood is different from usual, with changes that are not similar to everyday fluctuations and 2) their main complaint is not sadness but rather an increase in emotionality; they seem to react more than usual to common situations.

Where Do the Blues Come From?

Several factors have been invoked as causative of blues. The postpartum period is marked by hormonal changes. It is also a period when the woman must adapt to new conditions and new demands; demographic and psychosocial factors have to be examined to see whether they are quite as important as in postpartum depression.[3] Researchers in different parts of the world have looked for a relationship between the blues and such factors, without much success. Demographic factors such as age or race or educational level do not help predict the blues. Current stressful events and obstetric complications are not related to these emotional changes either. In general, stressors and previous experience may influence what the woman says or does, but not whether the blues occur.

In Western women, there is evidence of some relationship with economic insecurity, the quality of conjugal relations, and the availability of social support. Also, the experience of a stressful event during pregnancy or worries about child care seem to be positively correlated with the blues.

Studies of the blues in different countries, although not very abundant, show that the presentation of the blues is not strongly correlated with cultural differences, and that the clinical picture is similar from place to place.

For instance, in Japanese women, who in general report the blues less frequently, the history of an unhappy childhood and the amount of time spent with the newborn in hospital were reported as being important. The blues were more common when the baby stayed in the nursery. The symptoms most commonly communicated by these Japanese mothers were depression, tearfulness, tension, irritability, confusion, restlessness, loss of appetite, and poor concentration.

In Costa Rican mothers[4] interviewed between 1983–1985, no association was found between maternal age, number of children, years of schooling, number of people in the household, or crowding and maternal dysphoria (occurring 2 days postpartum, with a mean duration of 18 days). Another group, interviewed between 1986 and 1990, differed from the previous one only in that their children suffered from iron deficiency anemia, although the mothers were not anemic themselves. In these women, postpartum dysphoria was related to a higher educational level of the woman and her partner and less crowded households. Interestingly, this was not true for postpartum depression in the same population; depressed mothers had more children, fewer years of schooling, and greater number of people living in the household and more people per room and were more likely not to have a husband or partner and more likely to live in a multigenerational household (which suggested economic hardship).

In Brazil,[5] women showed mostly oversensitivity and overemotionalism on days 3, 4, and 5 postpartum. Tearfulness, lability of mood, and irritation were other common symptoms. Depression was reported only on the 5th day postpartum. No relationship was found with sociodemographic variables.

It has been hypothesized that the maternity blues are a hormonally assisted grief reaction that will occur predominantly in women whose antenatal expectation of baby or delivery fails to be fulfilled by the reality of the events. The hypothesis was tested in a prospective study of 89 women. Surprisingly, the blues could be predicted by a sense of "pessimism" in late pregnancy that was actually fulfilled by postpartum reality. In addition, the triad of severity of premenstrual tension, unplanned pregnancy, and consideration given to elective termination in early pregnancy was associated with increased incidence of the blues.[6]

In Jamaican women, there was usually little idealization of motherhood and often scarce social support for newly delivered women. Although the prevalence of dysphoria seemed to be similar to that found in other countries, the evolution of the symptoms was more like that of postsurgical dysphoria: a peak in the 1st or 2nd day and gradual decline from then on. Brockington[7] has interpreted this finding as corresponding to the different psychosocial reality of Jamaican women, who had a more passive attitude towards maternity, ambivalent reactions of the families, economic hardship and the effect of poverty, and unplanned and unwanted pregnancies.

Physiologic Factors in the Blues

Changes in circulating levels of estrogen and progesterone may have an impact on the psychological status of susceptible women, as happens in premenstrual dysphoria and in certain mood changes described in some climacteric women. The blues have been hypothesized to be the expression of neurotransmitter imbalance due to the changes in hormonal concentrations or withdrawal of hormones or as a reflection of the mood-dampening effects of other hormones in a vulnerable population. Estrogen and progesterone have a myriad of psychoactive effects. Abrupt withdrawal may cause increased arousal, tenseness, and other symptoms of anxiety. Indeed, women in whom there was a greater difference between progesterone during gestation and progesterone postpartum (measured $\leq$10 days postpartum) reported higher anxiety and depression levels and were more restless.

There are also changes in the hypothalamic-pituitary-adrenal axis during the last months of pregnancy and after parturition that may correlate with changes in mood and alertness. Indeed, some researchers have found increased salivary cortisol levels in women on their 5th postpartum day (when symptoms peak). This elevation, however, was found in most women, regardless of their emotional state. Corticotrophin-releasing hormone (CRH) levels, on the other hand, seem to be different in women with the blues: they tend to rise in all women towards the end of pregnancy. In women without emotional complaints, there was normalization of CRH (as shown by adrenocorticotropic hormone secretion when the adrenal glands are challenged using bovine CRH) by week 12 postpartum, whereas in women reporting emotional symptoms, the abnormal response persisted beyond the 12th week. This would make women more susceptible to stress.[8]

An alternative explanation is to consider the blues as a physiologic event, destined to facilitate mother-child bonding and attributable to changes in the hormone levels.[9] A defined period of lability and overemotionality that separates the mother from her usual concerns and makes her available for the baby only is certainly very useful for the baby, who depends totally on her for survival. The emotional fragility of newly delivered mothers, which occurs in all settings and cultures,

has in fact promoted the establishment of rituals and habits around labor and the puerperium. A period of elation after childbirth with enhanced capacity to express feelings is also hypothesized to enhance bonding. These manifestations of hyperemotionality are not depressive in nature. On the contrary, blunting of affection is characteristic of depression, and it hinders bonding.

Blues and Postpartum Depression

So, are maternity blues related to postpartum depression? There seem to be two groups of women reporting emotional changes a few days after delivery: a large group in whom sadness is not the predominant complaint and who will report gradual improvement in moodiness and irritability from day 5 on, and a smaller group, describing more sadness and reporting that symptoms seem to fluctuate, and who do not improve in 2 weeks' time. The latter may go on to puerperal depression, a more serious disorder.

Some psychiatrists believe that the exaggerated sensitivity and emotional response of this period are perceived as dysphoria by women who are susceptible to mood fluctuations in relation to hormonal changes or who have the experience of previous depression. This is why it is wise to consider that a woman reporting emotional changes in the early puerperium might ultimately manifest depression.

Therefore, it is very important to discuss these events with the pregnant woman, her partner if there is one, and her relatives. There may be emotional changes after the baby is born; the woman may suffer from fatigue, irritability, and tearfulness; she may have trouble sleeping and lose her appetite. But, these symptoms will go away spontaneously and she should feel better 2 weeks after the birth. If this isn't so, then she must tell her doctor.

The history of previous premenstrual dysphoria, previous depressive episodes, severe marital problems, unwanted pregnancy, or lack of social support should alert the physician to the likelihood of postpartum depression, and psychiatric consultation is warranted. Primiparas experiencing more severe maternity blues are at increased risk for postpartum depression.[10]

One must always remember that women who suffer from affective disorders after one reproductive event are more vulnerable to recurrences associated with others. Clinicians should inquire about possible relationships between previous depression or psychologic distress and reproductive cycle events (menstruation, use of birth control medication, previous pregnancies), as it may help predict women who are vulnerable to affective disorders and psychological distress at these critical times.[11]

What the Doctor Can Do

Although it is one of the more mild forms of emotional changes after child birth, the blues can still be disruptive to the family unit. Appropriate assessment and intervention throughout the childbearing cycle can be very beneficial in helping families to understand and cope with emotional changes and the need to adjust and adapt the family, as well as help prevent more serious depressive syndromes.[12] Anticipation, recognition of these symptoms, and acknowledgement of their potential to evolve into depression are useful for the mother and the clinician.

As the blues will set in 2 or 3 days after parturition, when the mother has already left the hospital, the first thing to do is warn the patient and her partner of the possibility of these emotional changes. This will provide the mother with a chance to discuss her emotions and receive relieving information about the evolution of the syndrome. Helping her see the blues as part of a physiologic response, while acknowledging that the changes may be worrying and not represent her usual self, will dispel her fears of not being a "good enough mother". At the same time, knowing that her symptoms should remit in 2 weeks' time at the most will alert her and her relatives in case symptoms persist.

The clinician who takes the time to listen and talk to the new mother will reinforce the therapeutic alliance so that he or she will be told if symptoms worsen instead of remitting, and will be in an advantageous position to refer the patient to a mental health professional in a timely manner.

It is sometimes problematic to ask a patient to see a psychiatrist or psychologist. If the patient comes from a culture that stigmatizes mental illness, or if there are factors such as a poor conjugal relation or rejection from her family or the in-laws, or if she has no practical social support in terms of help with the baby, referral may not be successful. A good, trusting relationship with an obstetrician/gynecologist who has taken the time to ask questions about mental illness history, who inquires about stressful events, and who is open to discussing the patient's feelings and give her education and reassurance is tremendously helpful in these situations.

Summary

In summary, maternity blues appear to be a cross-cultural set of symptoms that present shortly after delivery, that are not clearly related to demographic or psychosocial factors, and that are different from everyday mood fluctuations. The etiology is probably linked to the

variations on hormonal levels during the end of pregnancy, labor, and early puerperium. There may be some evolutionary advantage in that this may enhance mother-infant bonding. However, both the clinician and the patient must be alert in case the symptoms do not remit and give way to depressive illness. It will be rewarding for the obstetrician/gynecologist to listen to the patient's emotional complaints and to provide her with education regarding the nature, duration, and evolution of the symptoms.

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