# Disturbances of humour in postpartum: our experience

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### **Summary**

The study was conducted on 64 women who were to give birth. The average age ranged from 31-44 years and the instruments for evaluation consisted of:

- 1) Individual and psychological questionnaires;
- 2) Italian version of the Short Form Health Survey Questionnaire (SF-36);
- 3) Sheehan Disability Scale;
- 4) Zung self-rating depression scale.

Of the women included in the study 27.7% found their humour worsened during their last pregnancy, while 19.15% said that their humour worsened after the birth. In these patients we frequently found obstetric and/or puerperal pathologies. There was also a strong correlation with the premenstrual syndrome and with hyperemesis in the first trimester.

On the contrary, there was no correlation with familiarity and socio-demegraphic characteristics. The data allow us to conclude that any pregnant woman can develop medium or strong symptoms of depression thus calling for great attention to be paid to the psychological dynamics of birth.

Key words: Pregnancy; Puerperium; Psychosis; Depression.

#### Introduction

Pregnancy and puerperium are critical moments in a woman's life, due to the multitude of modifications that take place at a biological, psychological and social level. In order to confront these changes adequately, one needs to undergo a new interior adjustment – i.e., new balance between the exterior and interior. If this does not occur, or occurs with difficulty, it is expressed through dysfunctional situations; if a woman is unable to accept these biopsychological changes that she is experiencing in a sensible and serene way, the pregnancy, childbirth and childcare become a risk period in her life in which various psychopathological changes can occur and can be clinically serious enough to call for psychiatric help.

The term "puerpal psychosis" includes all the psychiatric or better still psychopathological states that are linked with pregnancy, childbirth, childcare and abortion. These states can vary from mild neurotic reactions to psychosomatic disturbances to serious long lasting psychosis.

In general, we can say that the majority of neurotic and neuropsychic disturbances appear during pregnancy, while most psychotic disturbances but not only, appear after childbirth.

In our study, we have concentrated specifically on the postpartum emotional and psychiatric complications distinguishing them into two types:

- puerperal psychosis, commonly known as postpartum blues (an emotional state rather than a psychiatric one;
  - postnatal depression.

Puerperal psychosis includes severe psychotic states at the beginning of the postpartum period. This pathology is well known and is easily diagnosed. In particular in DSM IV [3] puerperal psychoses are mentioned only as examples of atypical psychoses as the clinical symptoms are found in general chapters on psychotic disturbances not classified anywhere else.

Puerperal psychosis is manifested at the end of a pregnancy, usually in a severe manner, more or less within two-six weeks after childbirth, with an incidence that varies between 0.8 and 2.5 cases of every 1.000 births [4]. Today its semiology is well known: agitation, hallucinations, mental confusion, a void of ideas, delirium, change in humour, risk of suicide or infanticide, etc. as well as the therapeutic treatment. [5, 6].

We are interested, however, mostly in postnatal depression and postpartum blues which compared to puerpal psychosis, are taken less into consideration even though they represent the most frequent postpartum psychiatric or emotional complications.

The maturnity or postpartum blues (or syndrome of the third day or postpartum dysphoria) is a frequent phenomenon (30-80% of women) that is manifested during the 3<sup>rd</sup>-10<sup>th</sup> day after birth and that is often regarded as something common and anyway "psychological" [2, 7]. However, we need to emphasize that postpartum blues is not a form of depression, but rather a state of intense emotion, characterized by change in humour, with a tendancy to cry and sometimes a slightly confusioned state. On the other hand, a depressive state exists which is defined by women themselves as a real form of depression: fatigue, difficulty in thinking and concentrating, irritability accompanied by insomnia, and afterwards a feeling of rejection towards the newborn [8].

The postpartum blues (PPB) worsens when the mother returns home after hospitalization, however the state is harmless and is often resolved spontaneously within a few days. As far as risk factors for PPB are concerned, the following have been identified: premenstrual syndrome, unwanted pregnancy, first born, anxiety, depressive humour during pregnancy, low social level and a strong neurotic score. Furthermore, although there is unanimous agreement on the hormonal hypothesis, i.e., of a correlation between PPB and sudden hormonal changes in early postpartum, relevant results have not been published.

Postnatal or postpartum depression is usually the result of maternity blues that worsens in a percentage that varies between 3 and 20%. From a clinical point of view, postpartum depression is manifested by the first three months after birth, usually within four to six weeks, generally gradually with a change in humour at night, crying, discouragement, sense of inadequacy in taking care of the newborn baby and, in severe forms of depression – it – when the mother feels guilty – could lead to serious states: agitation, psychomotor inhibition or total insomnia. Nearly always the clinical picture is less serious. There is usually excessive worry and anxiety for the newborn, physical and intellectual sluggishness, hypocondria with connected psychosomatic disturbances, irritability, difficulty in concentration, loss of memory and sleep disturbances including difficulty in falling asleep and nightmares at night.

Of these mothers, 40-50% have an obsessive fear of harming their baby, and while in 30% of patients it is only an obsession, in 60-70% of cases there is also a compulsion, which "can" however, only be thought and not done [4].

On the whole, therefore it is an atypical depressive syndrome and even though sadness is present, the clinical picture is dominated by symptoms which are neurotic in nature (fatigue, irritability, anxiety, phobias, compulsive obsessive disturbances). As the symptoms are in most cases not that severe, they can often be overlooked, not only by the family and doctors but also by the patient herself which affects the health of the woman and her baby. Often these depressive forms can disappear spontaneously in a few months but if they are not diagnosed and treated they can be present for years, and cause irreversible damage in a woman's and her children's social and private life.

It is precisely for this reason that today in order to prevent postnatal depression or to diagnose it in early stages, that on one hand its semiology needs to be more clearly defined (therefore it important to pay particular attention to the mother's complaints, even when they apparently have nothing to do with depression, but have to do with e.g. work, husband, children, social life but rarely with themselves directly) and on the other hand risk factors need to be emphasized. Different authors agree unanimously on the following: difficulties in family life during the woman's infancy and possible separation from her parents, absence of social support, conflict or separation from the partner and particularly severe postpartum blues.

On the contrary, prevention and recognition in the early phases of this type of pathology are also important to avoid the emergence of mother-child pathologies that can negatively affect the psycho-emotional development of the child, which could also persist after the mother is better.

The emotional and intellectual development of a child depends largely on experiences and emotional relationships that they have with their parents. Depressed mothers show and express indifference and often adversion towards their children, communicate less with their children, and are less capable of stimulating their children by means of games or conversation compared to mothers who are not depressed. Compared to the latter, children whose mothers are depressed have slower psychomotor and psycho-affective development. This leads to a vicious circle – the child becomes closed and seeks less communication and stimulation when the mother is already depressed.

Postnatal depression is therefore a complication of postpartum depression, which apart from having personal and social repercussions for the mother, can jeopardize the development between mother-child and consequently the psychological outlock of the child. When postpartum blues represents an important risk factor for the emergence of postnatal depression, it should not to be considered a normal postpartum situation.

The only solution for a woman who shows signs and symptoms of postnatal depression is to send her to a competent and specialized psychiatrist, who can prescribe specific anti-depressive therapy and also adequate psychotherapy.

#### **Patients and Methods**

The study was conducted at the Gynecology and Obstetrics Department of San Salvatore Hospital in L'Aquila. The sample consisted of 64 women who were to give birth. The average age ranged from 31-44 years (SD = 4.94) with a minimum of 21 and a maximum of 42; 93.6% were married while 4.7% were separated; 65.6% had a high school diploma, 12.5% had a degree and 14.1% had a middle school education. Only 34.4% were employed, another 34.4% were housewives while 11% were unemployed or looking for first employment. Of the women 48.4% did not have any children while 32.8% had already been pregnant. All women were given evaluation forms (to be filled in by themselves) accompanied by a brief letter explaining the study they were participating in. The instruments for evaluation consisted of:

- An individual and psychological questionnaire, which included the principal information on demographic and psychosocial data related to work and socio-economical conditions, to family and social relations and to psychophysical condition during their last pregnancy and during and after the birth. Another sheet was filled in by the women's medical doctor on her obstetric family history.
- The Italian version of the 36-item Short Form Health Survey Questionnaire (SF-36), to evaluate the quality of life in relation to the health of the individual. The aim of this instrument was to document appropriately and completely the subjective functioning of the women and the satisfaction of their life. The questions are arranged in such a way that the higher the score, the better the state of health. The 36 items foresee

answers like Likert on 4-5 levels with a score between 0-100. Before modifying and transforming the rough score, eight scales are obtained: physical activity, physical role and health, general health, vitality, social activity, role or emotional state, and mental health.

- The Sheehan Disability Scale (SDS) which consists of three subscales to be filled in on ten levels (0 = not at all incapable, 1-3 = slightly, 4-6 = moderately, 7-9 = a lot, 10 = very) to evaluate the level of disability in the work environment, in relationships and in family life and family responsibilities. A subscale on five levels is also included (from 1 = no incapacity to 5 = total incapacity) for the global self-evaluation of social and working incapacity during the week preceding the interview.
- The Zung Self-Rating Depression Scale (Z SDS) to evaluate the symptoms of depression in the week preceding the questionnaire. The scale is composed of 20 items that "test" emotional items, somatic (8 items) and psychological ones (10 items) of depression. Each item is codified on a 4-point scale according to the level (from 1 = not at all or only for a while to 4 = serious). A score that is equal to or superior to 65 as the "cut off" point is for significant serious depressive symptoms from a clinical point of view.

The scales and questionnaires were handed back ten days before the birth.

#### Results

From the entire sample only 70.15% (n = 47) completed and handed back the questionnaires. The main reasons for not having participated were lack of time and no interest in the survey.

Table 1 shows the socio-demographic characteristics of 47 women included in the statistical analysis of the results.

Table 1.— Socio-demographic characteristics of sample studied (in %).

	Total Sample	Worsening of humour after birth
Marital Status	(n = 47)	(n = 9)
Married	93.6	88.9
Separated	6.4	11.1
Education		
elementary education	4.3	
middle school education	17	22.2
high school diploma	59.6	77.8
higher degree	14.9	
Employment		
self-employed	8.5	
head of office employee	19.1	
worker	8.5	11.1
unemployed/looking for work	10.7	11.1
housewife	31.9	33.3
student	2.1	
other	21.3	44.5
Employment of partner		
self-employed	19.1	22.2
head of office employee	29.8	11.1
worker	27.7	22.2
other	23.4	44.5
Residence		
rural town	42.6	66.7
small town	8.5	
town	44.7	33.3

The average age was 34-40 years (SD = 4.76); 93.6% were married while 6.4% were separated; 59.6% had a high school diploma while 14.9% had a higher degree and 17% middle school education. Only 36.2% were employed, 31.9% were housewives while 10.7% were unemployed or looking for work; 51.5% of women did not have any children while 31.9% had experienced pregnancy.

## Conditions linked to birth and to reproductive functions

Of the sample studied 25.5% acknowledged having suffered from premenstrual syndrome and 38.3% experienced nausea during the first trimester of pregnancy. The average number of weeks with amenorrhea was 39.38 (SD = 1.44) with a minimum of 32 and maximum of 41 weeks. Of the women interviewed 87.2% delivered at term while 12.8% had preterm births.

In 97.9% of cases the preceding births had been at term and 2.1% had had a spontaneous abortion. In 8.5% of cases there had been complications during the birth, 44.7% needed medication and 27.7% had to use drugs; 70.2% of women had urinary problems after the birth, 27.7% had a burning sensation when urinating, 25.5% had the stimulus to urinate frequently, 17% had difficulty in urinating. 34% had difficulty with intestinal activities; 59.6% breast-fed, 31.9% breast fed and used formula, only 8.5% used formula, 29.8% had difficulty in starting breast feeding, 17% had problems with rhagades on their nipples and 23.4% had to use a breast pump.

## Frequency of symptoms of depression

Of the women included in the study (n = 47), 27.7% found that their mood worsened during the last pregnancy while 19.15% (n = 9) said that their humour worsened after the birth.

Three women (6.38%) had symptoms of depression (2 > 65) with ZSDS but only two of these said that their humour worsened after birth. In two women this happened three days after birth, in one two days after birth and in another seven days after birth (an average of 3.75 days from birth).

Table 2 shows how the group of women with symptoms of depression (n=3) all had premenstrual syndrome; 66.7% of cases had a complicated preterm birth and greater problems with intestinal activity. In the group of women whose humour worsened after birth (n=9), 66.7% suffered from premenstrual syndrome and during the first trimester of pregnancy, 33.3% had a preterm birth, 22.2% had complications during birth, and 77.8% of cases had to have medication.

### Level of disability

The results of the levels of disability evaluated on the basis of the patients' judgment of their inability to carry out their role in the workplace, in society and in the family are shown in Table 3.

The results show that after the birth 63.6% of the women, according to them, did not experience inability

Table 2. — Frequency percentage (%) of some conditions linked to childbirth and reproductive functions.

	Total Sample	Worsening of humour	Symptoms of
	(n = 47)	after birth (n = 9)	depression (n = 3)
Premenstrual syndrome Nausea in the first	25.5	50	100
trimester of pregnancy	38.3	83.3	33.3
Type of birth	07.0	00.0	22.2
at term preterm	87.2 12.8	83.3 16.7	33.3 66.7
Results of preceeding pregnancies	72.0	10.7	00.7
at term preterm spontaneous	97.9	100	100
abortions	2.1		
Complications during childbirth	8.5		66.7
Problems linked to intestinal functioning	34	50	66.7
Urinary symptoms	70.2	83.3	66.7
Need for medication	44.7	83.3	66.7
Use of drugs	27.7	16.7	33.3
Type of feeding maternal	59.6	83.3	33.3
formula mixed	8.5 31.9	33.3 16.7	33.3
Problems with feeding difficulty to start	29.8	50	
nipple rhagades use of formula	17 23.4	16.7 16.7	33.3

Table 3. — Level of disability (%) linked to worsening of humour (in postpartum period).

	Total Sample	Worsening of humour after birth	Symptoms of depression
	(n = 47)	(n = 9)	(n = 3)
Work activity			
none	34	33.3	33.3
average	55.4	33.4	66.7
a lot	10.6	33.3	
Relations in life			
none	40.4	33.3	
moderate	55.3	50	100
a lot	4.3	16.7	
Family life			
none	29.8	33.3	
moderate	65.9	50	66.7
a lot	4.3	16.7	33.3
Social and work			
incapacity			
none	63.8	66.7	
moderate	36.2	33.3	100

in any of the three specific subscales of SDS while three women with symptoms of depression did.

Inability in the work place was present however in 66% of the total sample, and mostly in women whose humour

worsened after birth. Interference in family life was present in 59.6% of the total sample compared to 66.7% of women whose humour worsened after birth. The most significant differences can be seen in family life/responsibilities of the family where 16.7% of women whose humour worsened after birth said they had had severe difficulties compared to 4.3% of the total sample.

#### Health

Table 4 shows the results relative to the state of health of our sample. Both mental health (71.83%) and general health (74.57%) were good on the whole with the exceptions of women whose humour worsened after birth. They stated that they were very agitated (physical health status 28.13%), sad and had no energy (vitality 50.63%) which interfered with normal social activities both in the family and with friends (social activity 50.81%).

In the entire sample, a limit was noticed both in employment and in work due to pregnancy (physical health status 37.77%) and a drop in concentration (emotional state 67.29%).

Table 4. — Results regarding health (%) based on subscales.

	Total Sample	Worsening of humour after birth	Symptoms of depression
	(n = 47)	(n = 9)	(n = 3)
Physical activity	75	69.38	80
Physical health status	37.77	28.13	41.67
Physical pain	65.8	68.63	80.33
Health in general	74.57	64	64.67
Vitality	62.66	50.63	45
Social activity	73.67	57.81	50
Emotional state	67.29	52.38	
Mental health	71.83	61.5	65.33

## Discussion and conclusions

From the data obtained there was a strong correlation between disturbances of humour in postpartum with the premenstrual syndrome and with hyperemesis in the first trimester. However, there was no correlation between preceeding births, nor with familiarity or significant socio-demographic characteristics.

In two women out of three women with symptoms of postnatal depression, we found obstetric pathologies (preterm birth) and puerperal problems (difficulty in breast feeding and a need for medication for the episistomy).

These data without doubt show that a reactive depression is therefore directly correlated to possible pre- and postnatal complications.

The most significant aspect was the stress on returning home. The new maternal role and caring for the newborn determine significant psychological changes in mothers. When examining Table 3 on disability, contrasting data emerge that make us hypothesize on behalf of the total sample, the tendency to minimize one's condition by declaring well being and competence which are not realistic. The data is more synchronous if one evaluates the group with the worsehumour after birth.

In any case the fact that the woman seeks help and comfort from her partner more than from her mother (and absolutely no other) shows that the objective is to reorganize the relationship of the couple in light of their new role as parents.

The data obtained allow us to conclude that first of all, an "Identity kit" of a pregnant woman at risk does not exist, and any pregnant woman can develop medium or strong symptoms of depression. However we must pay particular attention to women with by hyperemesis in the first trimester or with obstetric and/or puerperal patholo-

This calls for greater surveillance on behalf of the medical staff regarding the psychological dynamics of birth and the emotional manifestations of pregnant women and new mothers because this could suggest the first manifestations of a psycho-emotional disturbance.

Special attention should also be given to the return home. Often the advantages of early dismissal from hospital have been discussed, however one must remember/be aware that this could accelerate symptoms of depression for some women. Therefore the criteria for identifying pregnant woman at risk should be re-examined and perhaps the strategies for dealing with puerperium should be diversified considering that our data confirm that the onset of a postpartum depressive crisis generally begins three days after birth.

Home assistance could be useful not only to help women during a delicate phase of their life but also to help the whole family to redefine their new roles.

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