

# Lack of effective communication by the staff as a risk factor for postpartum blues in an obstetric unit of a Base Hospital in Sri Lanka

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## Abstract

### Introduction

Postpartum blues (PB) occur in 30-75% of postpartum mothers within the first 10 days of delivery. It has been suggested that changes in hormone levels soon after delivery and psychosocial stressors may contribute to this condition. Lack of support and reassurance from clinical staff may be another such factor. The objective of this study was to explore the relationship between lack of effective communication by staff and the occurrence of PB.

### Methods

An interviewer administered questionnaire examining demographics, clinical details and current symptoms of PB was administered among 100 postpartum women within 2 weeks of delivery, who were consecutively referred to the Psychiatry Unit of Base Hospital, Mahiyangana. The presence of PB were diagnosed by a specialist in psychiatry. Communication by staff was assessed via an interviewer rated Likert scale, derived from the Health Care Communication Questionnaire and the Communication Assessment Tool.

### Results

PB was present in 55% participants at the time of interview. Lack of communication by staff was identified as a risk factor among 83.63% (n=46). While the effectiveness of communication average score had significant negative association ( $r=-0.75$ ,  $p<0.0001$ ) with PB, primiparity had a significant positive correlation ( $r=0.8$ ,  $p<0.0001$ ). No association was found between PB and mode of delivery.

### Conclusions

There appears to be a significant association between failure to communicate with and reassure postpartum women by staff in Obstetric Units and the occurrence of PB. Increased awareness and the training staff on communication may help reduce this occurrence. Other risk factors and confounders need to be addressed.

**Key words:** postpartum blues, risk factors, communication, health staff.

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## Introduction

Pregnancy and the postpartum period marks one of the most vulnerable periods in a woman's life for the development of psychiatric symptoms, due to biological, psychological and social changes. Following birth, women need to adapt to a new role as mothers, which results in changes in their relationships with their husband and family members. The first month after delivery is the most critical time, as this period is associated with a three-fold increased risk of depression (1).

Inwood classified post-partum psychiatric disorders as maternity or postpartum blues, post-partum (postnatal) depression and puerperal psychosis (2). Of the three conditions, postpartum blues (PB), also known as baby blues, is the first to occur, and is characterized by transient mood swings, including low mood, anxiety,

irritability and crying, which usually resolves within the first few days after delivery. However, elation of mood has also been occasionally reported (3). The prevalence of PB is estimated to be 30-75% and the onset is within the first 10 days (4). Symptoms peak around the 3<sup>rd</sup> to 5<sup>th</sup> day (4). Hormonal changes occurring soon after delivery is a reported predisposing factor. Psychosocial stressors act as triggers for the onset (4).

Psychological support is valued by women in the form of emotional expressions of caring, empathy and sympathy (5). Lack of support and reassurance is a factor which may increase anxiety and the risk of developing postpartum blues. This study was carried out to explore the relationship (if any) between lack of effective communication by staff and the presence of postpartum blues.



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## Methods

A hundred postpartum women within the 2 weeks of delivery, who were consecutively referred to the Psychiatry Unit of Base Hospital Mahiyangana were recruited for the study. Postpartum mothers who were delirious due to organic conditions, who had communication barriers or serious medical conditions were excluded from the study.

An interviewer rated questionnaire was administered, by the same interviewer, to all participants. The questionnaire consisted of two parts; the first part explored information on demographics and known risk factors for post-partum blues such as parity, obstetric history, past history, and examined for current symptoms of postpartum blues/ depression/ psychosis (6). The presence (or absence) of postpartum blues was also determined by clinical interview, by a specialist in psychiatry according to classification guidelines of Inwood (2). The specialist who assessed for PB was not involved in gathering of data related to staff communication skills and was blinded to the outcome of assessment of effectiveness of communication by staff, as well as to the results of the other parts of the questionnaire.

The second part of the questionnaire measured effectiveness of communication by staff including doctors, nurses and midwives; this was an interviewer rated Likert scale (1=poor, 5=excellent) derived from the Health Care Communication Questionnaire (HCCQ) and Communication Assessment Tool (CAT) (7,8). The Health Care Communication Questionnaire (HCCQ) is a measure of patients' experiences of communication with hospital personnel other than doctors (7). The Communication Assessment Tool (CAT) is a questionnaire measuring the quality of communication between patients and the physician (8). Selected questions from the above two questionnaires, compatible to a Sri Lankan context were translated into Sinhalese and

included. Participant ratings were marked in a Likert scale, and an average score was calculated for each participant. A score of 3 to 5 (representing 3=average, 4=good or 5=excellent), was considered as evidence of effective communication. A similar method of analysis has been used in previous studies, which used the CAT to assess communication skills of family resident physicians (9).

Only those who gave written informed consent were included in the study. Participants were informed ahead that their decision to participate or not in the study would not affect their care in the hospital. Privacy was maintained during the interview process and subjects were interviewed with a family member when requested.

All completed questionnaires were kept under lock and key, and data was accessed only by the study investigators. Anonymity and confidentiality of subjects was maintained throughout the process, except if a significant risk was detected during the interview. No monetary or material reimbursements were made to the subjects for participating in the study. Statistical calculations were done using SPSS 17.

## Results

Postpartum blues (PB) were present in 55% of participants at the time of interview. Others had sleep deprivation, mild anxieties regarding health of themselves or their baby or had been referred due to participants being noncompliant with staff requests.

Participant responses to the questionnaire on communication are shown in Table 1. With regards to measurement of the quality of staff communication, a score of less than 3, indicating poor communication, was found in 83.3% of participants with postpartum blues. The correlation coefficient ( $r$ ) between effectiveness of communication score ( $\geq 3$ ) and incidence of postpartum blues was  $-0.75$  ( $p < 0.0001$ ) (Figure 1).

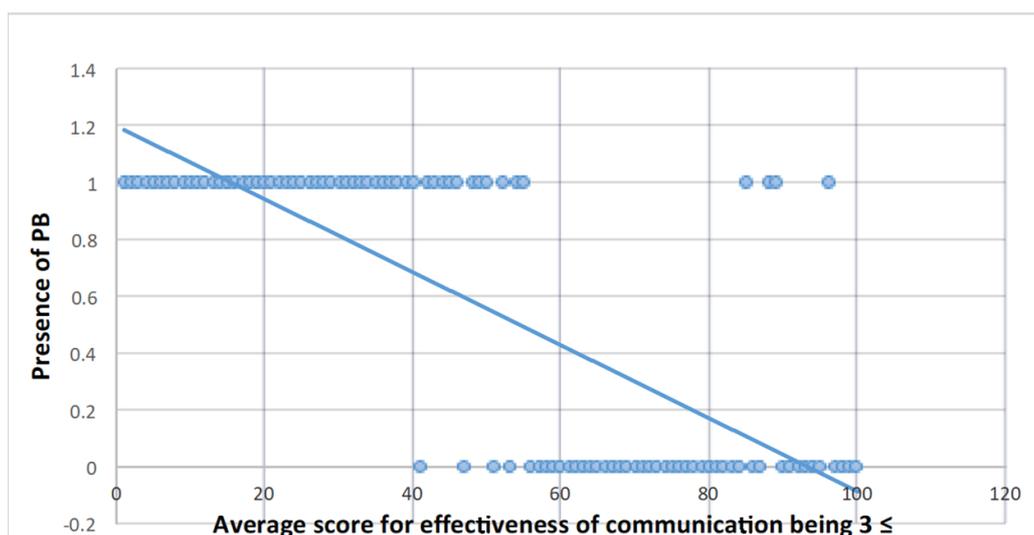


Figure 1. Scatter plot of incidence of PB and average effectiveness of communication score  $\geq 3$ .

Lack of effective communication by the staff as a risk factor for postpartum blues in an obstetric unit

Table 1. Responses for questions in the questionnaire regarding communication, stated as a percentage of the total responses of the participants

Question	Poor =1	Fair=2	Average=3	Good=4	Excellent=5
1. Did they show interest in your ideas about your health?	15%	20%	32%	19%	14%
2. Did you feel that your needs were being respected?	13%	25%	40%	15%	7%
3. Were you asked questions in an aggressive manner?	10%	30%	15%	25%	20%
4. Did they understand your main health concerns?	22%	12%	30%	25%	11%
5. Did they pay attention to you? (looked at you, listened carefully)	32%	35%	20%	10%	3%
6. Did they let you talk without interruptions?	26%	14%	30%	18%	12%
7. Did they give you as much information as you wanted?	27%	33%	25%	10%	5%
8. Did they talk in terms you could understand?	35%	15%	24%	19%	7%
9. Did they check to be sure you understood everything?	16%	20%	39%	18%	7%
10. Was the healthcare professional able to resolve your problem?	30%	20%	15%	25%	10%
11. Was the healthcare professional able to cope with any difficulties during the consultation?	40%	22%	15%	12%	11%
12. Did they discuss next steps, including any follow-up plans?	35%	35%	15%	10%	5%

Table 2. The occurrence of known risk factors for PB among study participants, and associations with occurrence of PB

Risk factor	Prevalence	Significance
Primigravida	60	p<0.001
Single mother	15	p=0.054
Marital disharmony	58	p=0.860
Past psychiatric disorders	10	p=0.003
Postpartum complications	25	p=0.014
Antenatal medical problems	13	p=0.899
Premenstrual tension	40	p=0.846
Social problems	72	p=0.215
Effectiveness of communication by staff average score <=3	46	p<0.001
Unwanted/unplanned pregnancy	42	p=0.144
Reluctance of baby gender	31	p=0.463
Neonatal complications	29	p=0.883
Past history of postpartum psychiatric disorders	58	p=0.802
Age <18 years	37	p=0.004
Psychiatric disorders in the antenatal period of most recent pregnancy	5	p=0.004

There was also a positive correlation between the parity status and the presence of PB ( $r +0.8, p < 0.0001$ ) (Table 2). This confirms the known fact that PB is more prevalent among primiparous women (10). Of the participants, 63% had a normal delivery, 29% had elective caesarean section and 8% had emergency section, and no association was found between the mode of delivery and occurrence of PB. A past history of psychiatric illness, young age of the mother (<18 years) or the presence of psychiatric symptoms during the recent pregnancy was also significantly associated with the occurrence of PB.

## Discussion

Soon after delivery, a woman who is struggling to adjust to a new role and already under stress, may find it difficult to understand the hospital processes occurring around her. Routine medical procedures involving her and the baby may be alien to her, and may increase anxiety. With this already heightened sensitivity, she may interpret the actions by the staff as hostile and threatening. Therefore, it's important that the health staff communicate effectively with the postpartum mother and inform about the procedures being carried out on her and the baby. Lack of such communication could be one factor which may increase maternal anxiety. While this is very relevant for all postpartum mothers, this maybe particularly important for mothers after delivery of their first child, since primiparity is associated with a significantly increased risk of development of PB, as shown by the results of our study and previous work (9).

Obstetric units in Sri Lanka are often busy due to limited human and medical resources. The staff have many demands on their time and may not be sensitive to the emotional changes of individual patients. The findings of this study show a statistically significant negative correlation between lack of effective communication and incidence of PB. Although these findings need to be interpreted in context of the limitations of this study, as discussed below, this is an important finding, and it is worth doing further research to explore and delineate in more detail, the association between health staff communication styles and the occurrence of PB in mothers soon after delivery.

When doing research in this area, a factor to be kept in mind is that effectiveness or quality of communication between health staff and patients is difficult to measure. Patient-centered communication (PCC) is widely endorsed as a central component of high-quality health care, but it is unclear what it is and how to measure it. It includes four communication domains: the patient's perspective, the psychosocial context, shared understanding, and sharing power and responsibility (11). There are a few assessment tools to measure quality of communication between physicians and patients, and between other health staff and patients, but none has

been validated to Sri Lankan setting. The questionnaire used in this study was derived from HCCQ and CAT but was not validated to Sri Lanka. An instrument to measure quality of communication between staff and patients validated to Sri Lanka is necessary.

The finding of this study points to the importance of patient centered communication and being sensitive to emotional changes of postpartum mothers, which may help reduce the occurrence of PB and also postpartum depression, which may develop in mothers who have had PB (1). Minimizing PB is likely to promote more effective bonding between the mother and her child and will also help reduce distress caused by this phenomenon, both to the mother and the family.

## Limitations

The participants in this study consisted of patients referred to psychiatry unit due to behavioural changes, and this may have biased our findings. No control sample was considered to calculate the risk ratios, and the confounding effect of risk factors other than lapses in communication have not been excluded, and this is a further limitation.

The questionnaire used in this study, which is a combination of HCCQ and CAT, has not validated to Sri Lankans – and this may also have biased the findings.

This study did not differentiate between staff categories – participant responses may have been biased by a single person in the staff who was not good in communication. Change of staff between shifts was not considered and the patient may have given an opinion based on the latest encounter or maybe the worse encounter during the admission period.

The response of participants may not reflect the true opinion as they may attempt to please the interviewers, who are also health staff. The confounding effects of education level, intelligence quotient and social context of participants were not considered.

## Conclusions

Poor communication between staff in obstetric units and postpartum mothers, may be a risk factor for the occurrence of postpartum blues, as evidenced by the negative correlation between the prevalence of postpartum blues and the effectiveness of communication score in this study. Increased awareness and training of staff on aspects such as communication skills may be useful to minimize this phenomenon. At the same time, there should be increased awareness and identification of other possible risk factors, such as a history of psychiatric disorders in the mother, young age of the mother, and psychiatric symptoms during the antenatal period leading up to the current delivery.

Further research should also consider multivariate analysis of risk factors for postpartum blues to identify the impact of individual risk factors. Analysis of communication separately for different staff categories would be helpful, as communication skills, expertise and training may differ between different staff categories. The development and validation of a tool for use in Sri Lanka, to more accurately measure effectiveness of communication in our local context, is also a direction for future research.

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## Disclosure statement

None declared.

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