

## Review Article

## Prevalence of Signs and Symptoms of Post-Partum Morbidity

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**Abstract:** Postpartum haemorrhage is the leading cause of maternal mortality at a worldwide scale. The postpartum morbid consequences include problems, such as postpartum infection, anaemia, perineal tears, urinary tract infection, and depression; others defined in the literature as long-term morbidities/disabilities include incontinence, fistula, pelvic inflammatory disease, genital prolapse, hypertension, haemorrhoids, nerve damage, pituitary failure, anaemia, and infertility. Information on postpartum morbidity in developing countries is limited and, when available, usually describes the type of medical conditions diagnosed at the hospital level. The maternal includes different short-and long-term morbid conditions that can result from acute obstetric complications or poor management at delivery. Many of the maternal morbidities and disabilities may arise during delivery or in the first 1-2 week(s) following delivery and can become chronic if not cared for appropriately. The aim of this study was to review the literature on signs and symptoms of post-partum morbidity.

**Keywords:** post-partum morbidity, signs, symptoms, review.

### INTRODUCTION

Almost all maternal deaths(99%)occur in developing countries [1]. Sixty percent of maternal deaths occur in the postpartum period [2]. Postpartum haemorrhage is the leading cause of maternal mortality at a worldwide scale [3, 4]. The postpartum morbid consequences include problems,such as postpartum infection, anaemia, perineal tears, urinary tract infection, and depression; others defined in the literature as long-term morbidities/disabilities include incontinence, fistula, pelvic inflammatory disease, genital prolapse, hypertension, haemorrhoids, nerve damage, pituitary failure, anaemia, and infertility. Information on postpartum morbidity in developing countries is limited and, when available, usually describes the type of medical conditions diagnosed at the hospital level [5]. The maternal includes different short-and long-term morbid conditions that can result from acute obstetric complications or poor management at delivery [8, 9]. Many of the maternal morbidities and disabilities may arise during delivery or in the first 1-2 week(s) following delivery and can become chronic if not cared for appropriately. Globally, 15-20 million women each year are estimated to suffer from these postpartum and long- term morbidities [10]. A few studies from Asia specifically reported problems women experience in the postpartum period and the high prevalence of health problems [14-17]. The aim of this study was to review the literature on signs and symptoms of post-partum morbidity.

### REVIEW OF LITERATURE

In a study [6] in Morocco, self reported postpartum morbidity prevalence was of 13.1%. Haemorrhages, fever and pregnancy-induced hypertension were the main complications: 71.92; 12.18 and 10.64 % respectively.

A cross-sectional study [7] of women in the postpartum period was done independent of place of delivery, in Al Massira district, Marrakech, from December 2010 to March 2012. In this study, 44% of women reported postpartum problems. This prevalence is high, and the morbidities were a mixture of benign and severe. The most common type of problem was psychological (10%) and reveals that mental distress that should be addressed because it is an indicator of postpartum depression [21]. The second most common complaint was symptoms of genital infections (8%). It should be noted that 91% of women did not seek care. The reasons given for not seeking care were distance from home to the maternity hospital, no pain, a bad experience during childbirth (for those who delivered at the regional maternity hospital), and fear of having a serious illness. Only 12 women (1%) who attended the 42-day postpartum consultation had a severe condition such as an infected perineal tear, infected caesarean section or episiotomy wound, third-degree uterine prolapse, cervical cancer, or severe anemia. These women, who apparently were not aware of the severity of their problem, were immediately referred to the university hospital. Anemia was diagnosed in 19% of

women, but only a small proportion of them complained of symptoms that could be attributed to anemia, and none were from women with hemoglobin > 10 g Hb/dL.

A study in Bangladesh [11] reported that among the different postpartum morbidities/disabilities, genital infection was the most common in all delivery categories, ranging from 14% in mothers having caesarean section without maternal indications to 27% in those with perinatal deaths. Urinary tract infection was higher in mothers with normal uncomplicated births (14.9%) and those with acute obstetric complications (12.0%) compared to below 10% in the other two groups. Perineal tears were relatively high among mothers with either normal uncomplicated births (18.4%) or perinatal deaths (15.7%); in the other two groups, the corresponding figure was low (1% or below). Among longer-term morbidities, external haemorrhoids were the most common in all four categories (ranging from 5.98% to 10.37%). Hypertension was the second most common longer-term morbidity: About 8% of women in the acute obstetric complication group were diagnosed as hypertensive at 6-9 weeks postpartum. The corresponding figures varied from 6% to 3% in the other three groups. Levels of uterine prolapse were higher in women with an uncomplicated normal vaginal delivery (5.6%) and those with a perinatal mortality (4.5%) compared to the other two groups (with below 2%). Though severe anaemia was uncommon among all study subjects, overall 3.6% of women had moderate or severe anaemia postpartum, varying from 5.1% in the acute obstetric complication group to 1.6% in women who had caesarean section without maternal indications. Twenty-one percent women who delivered at home developed perineal tears three times more than women who delivered at facility (7%). Similarly, more women with delivery at home suffered from prolapse than those who delivered at facility (16% versus 10%). Older women ( $\geq 30$  years of age) were more likely to have hypertension, haemorrhoids, prolapse, and perineal tears compared to those who were younger (< 20 years of age). Women with higher parity (4+) were more likely to have a prolapse than the primipara. Women from richer households were more likely to be diagnosed with haemorrhoids than those from the poor households. Overweight women (BMI > 25) were more likely to suffer from hypertension than those who were underweight. The women who delivered at home had perineal tears 3.5 times more often than those with a delivery in hospital. Prolapse was higher in women with vaginal deliveries compared to those with a caesarean section. Women without any formal education were more likely to suffer from anaemia than those who had at least 8 years of schooling.

In a study in Rajasthan [12] nearly three-fourths of the women were detected to have a morbidity after delivery. The most common problems were postpartum anaemia, sepsis, and breast and perineal

infections. The most common serious morbidity detected was severe anaemia present in 7.4% of women whose haemoglobin was tested (5.7% of all women). Fever was present in 4.0% of the women, although signs of uterine infection were present in only 1.3% of the women. The remaining women with fever had an upper urinary tract infection or respiratory infections. The incidence of puerperal sepsis was 1.4% following home-delivery and 1.2% following institutional delivery. The incidence of any kind of infective illness after delivery was 6.0% following home-delivery and 5.7% following institutional delivery. Conditions relating to breasts (breast engorgement, mastitis, or flat nipple) were detected in 4.9% of the women—none, however, had a breast abscess on the day of the postnatal visit. Breast infections were also more frequent among women who had institutional deliveries. Additionally, breast conditions were more common among women with perinatal death than among those with a surviving neonate (13.1% and 4.3% respectively). Conditions relating to the perineum (perineal pain, tear, or infection) were detected in 4.5% of the women. The prevalence of perineal conditions was significantly more frequent among women who had institutional deliveries (6%) than among those who had home-delivery (1.1%). Urinary incontinence was reported by 0.1% of the women. None of the women had genitourinary fistula. Life-threatening complications, such as severe anaemia, uterine infection, secondary postpartum haemorrhage (PPH), and severe hypertension or eclampsia, were experienced by at least 7.6% of the women, of which 5.7% had severe anaemia, and 1.8% had one of the other conditions. Since haemoglobin was not tested in 22% of the women, it is possible that the actual prevalence of life-threatening conditions was higher. Life-threatening conditions were present in 9.7% of those who had home deliveries and 6.6% in those who had institutional deliveries. A large proportion (28%) of the women also reported lower abdominal pain, backache, or pain in arms and legs. It was found that severe anaemia was more prevalent among women who had home-deliveries and among women from the scheduled castes and tribes. Furthermore, multiparous women (having 3 or more children) were more likely to have severe anaemia than those with 1-2 children.

A study in India [13] reported that the most common complications were secondary postpartum haemorrhage, prolonged labour, puerperal infections and breast problems. Abnormal presentation and postpartum morbidities such as breast problems, puerperal infection, psychosis and fits were associated with adverse perinatal outcomes. During the 28 days postpartum, 32.1% women reported foul smelling vaginal discharge, but by the case definition 10.2% had puerperal infections of genital tract. The proportion of women with breast problems was highest on the fifth day postpartum (9.1%) but most disappeared by day 28 (1.6%). Breast problems were associated with fever in

20 women (2.6%). The duration of bleeding showed considerable variation. Bleeding stopped between 7 and 13 days after birth in 320(41.4%) women. However, 18.7% still had bleeding on the 14th day, and 3.6% complained of bleeding on the 28th day with half still using pads. Altogether, 52.6% reported at least one intrapartum or postpartum morbidity and 23.7% had two or more morbidities.

Another study reported [18] that fifty eight out of 620 women “spontaneously” reported a health problem and 84% said they experienced at least one complaint out of a list of sixteen. Only 4% of the study population specifically attended hospital for a health problem. Half of the women who reported a health problem took action to alleviate the complaint. A quarter in this group had sought advice from a professional health worker while two thirds used home remedies such as panadol, hot compresses and African medicine. Panadol was the most frequently used drug for abdominal pain and fever. Hot compresses were applied to the abdominal wall to alleviate abdominal cramps and sometimes put in the vagina to stop bleeding. African medicines are herbal concoctions used for a broad range of symptoms. They are smeared on the abdominal wall to relieve abdominal cramps, put into the vagina to stop bleeding and taken orally as a brew for both purposes. We found that puerperal infection was likely when women reported a combination of three symptoms i.e. lower abdominal pain, fever and foul smelling vaginal discharge. This combination was present in 58 participants (9%). Out of these 58 women, 31 could be diagnosed with a puerperal infection after a physical examination and the results of the high vaginal swab were taken into account.

A study in China [19] reported high prevalence of health problems was found in women in the postpartum period. A majority of women (59.3%) reported at least one symptom during the puerperium. The most frequently cited symptoms were backaches(29.6%), anal disease (including constipation, haemorrhoids and anal fissure; 25.7%), breast problems (including breast swelling, cracked nipples and mastitis; 19.6%) and dizziness or headaches(14.8%). Women reported anaemia (10.0%), oral disease (including gum bleeding, oral mucosal ulcer, angular cheilitis and glossitis; 9.3%) and common colds(8.3%). The majority(63.7%) of the women had a check-up six weeks after delivery. A few(14.1%) were said to have disordered uterine involution. The factors that were significantly and positively associated with the occurrence of backaches or arthralgia were suburban residence, egg intake and mean sleep duration during the puerperium. Bathing had a negative association. For anal disease, positive associations were found with rural residence, Caesarean section, cereal intake, leafy vegetable intake and frequent recipe change. Doing housework had a negative association factor. Rural residence, leafy

vegetable intake and breastfeeding that began within 0.5h after giving birth were associated with less breast problems, whereas home natal delivery, Caesarean section and meat intake had adverse associations. Tooth brushing appeared to increase the risk of gum bleeding. Sugar intake and an average time staying in bed increased the risk of oral mucosal ulcers, angular cheilitis or glossitis; whereas leafy vegetable intake decreased the risk of these oral problems.

Another study [20] reported that the results revealed that approximately two-fifths of our total population suffered from at least one of the six postpartum morbidities, which were high fever, lower abdominal pain, foul-smelling vaginal discharge, excessive bleeding, convulsions, and severe headache. Large socioeconomic differences among the prevalence of having one or more morbidity were found. Morbidity among the poorest mothers was more than double that among the wealthiest mothers. Muslim and high-parity women were also disproportionately burdened by postpartum morbidities. Approximately half of these women reported seeking treatment for one or more morbidities.

## CONCLUSION

Policies should aim to increase the level of awareness about postpartum morbidities and their related treatments, especially among women belonging to these groups. Efforts should be made to increase the uptake of antenatal and delivery care as well as increase the physical accessibility to healthcare facilities. Postpartum is often a neglected part of maternal health. So it needs more attention. The factors responsible for postpartum morbidity should be detected. Antenatal education programme needs to be implemented on a large scale. Postnatal care should be given to the mothers. The health professionals should be trained to pay more attention to women’s complaints (mental distress in particular).

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