

POST PARTUM MATERNAL MORBIDITY: A DESCRIPTIVE CROSS SECTIONAL STUDY IN THE ANURADHAPURA DISTRICT

WAND Wickramasinghe *, SB Agampodi, TC Agampodi, DB Nugegoda, GHI Darshika , KD Galgamuwa , NL Mohotti and WPK. Ranasinghe

Department of Community Medicine, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka

*wpkranasinghe@gmail.com

Key words: Maternal morbidity, Post partum period

INTRODUCTION

Post partum maternal morbidity is an important condition that has to be promptly dealt with, in order to uplift maternal and child health care service provision. Despite its importance, limited information is available with regard to post partum maternal morbidity, owing to the difficulty in defining, interpreting and measuring maternal morbidity. (Fortney *et al.* 1999) Substantial proportions (55 %) of maternal deaths occur during the post partum period which highlights the importance of early detection and prompt management of post partum maternal morbidity. (Family Health Bureau 2007). Despite a well developed public health set up providing care at the domiciliary level and field services, minor ailments during post partum period are often under detected mainly due to the health seeking behavior of the community. Information regarding post partum maternal morbidity from hospital based studies is limited and they only represent the proportion which had relatively acute and severe morbidity that necessitated hospitalization (Vallely L *et al* 2005). Thus only limited documented information is available related to minor post partum maternal morbidities and their effects on day to day activities. Hence the present study was carried out with the purpose of determining the prevalence of post partum maternal morbidities and their effects in relation to the number of days affected the need for medical care and hospitalization.

METHODOLOGY

A community based descriptive cross sectional study was carried out in two Medical Officer of Health areas in the Anuradhapura district (Nuwara gam Palatha Central and Nuwara gam Palatha East). Study population included post partum mothers residing in the area who had delivered a live baby within the past 6 months during the study period. Study participants were recruited by

using a two stage cluster sampling technique. Study was conducted at field immunization clinics. Data collection was carried out by using a structured interviewer administered questionnaire with the informed written consent of the participants. The questionnaire developed by the Aberdeen University was used. It was translated to Sinhalese and changes made for it to be adaptable to the local culture. Ethical clearance for the present study was obtained under the study on "Disease burden and economic impact of maternal morbidity", from Ethical review board of Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka.

RESULTS

Demography: A total of 374 mothers were interviewed from two Medical Officer of Health areas who resided in 44 Public Health Midwife areas. 97.3 % of mothers (n=364) were Sinhalese. The mean age of the participants was 28 years. 83.1% of mothers (n=311) were housewives.

Maternal Morbidity Prevalence: Out of 374, 170 mothers (45.45%) have had at least one episode of ill health during the post partum period. Amongst them 26 mothers (15.3%) have had more than one episode of maternal morbidities. Altogether there were 192 different episodes of post partum maternal morbidity. Lower abdominal pain, pain at episiotomy site, infection of surgical wound or episiotomy site were the commonest post partum maternal ill health conditions amongst the study participants. (Table 1)

Table 1: Prevalence of Post partum maternal morbidity

Morbidity Condition	Number of episodes	Prevalence %
Lower Abdominal pain	41	10.9
Pain at Episiotomy site	36	9.6
Infected LSCS site	19	5.1
Infected Episiotomy site	13	3.5
Fever	8	2.1
Breast Engorgement	7	1.9
Inadequate Breast milk	4	1.0
Constipation	4	1.0
Anaemia	3	0.8
Urinary Tract Infections	3	0.8
Vaginal Bleeding	3	0.8
Hypertension complicating pregnancy	3	0.8

Effect of post partum maternal morbidity: The 170 mothers who were suffering from any ill health condition were affected an average duration of 20.1 days. Infected LSCS site, infected episiotomy site together with associated pain and lower abdominal pain were the episodes which caused the most number of days of ill health.

Table 2: Average number of days of ill health in the most prevalent conditions of post partum maternal morbidity

Morbidity Condition	Average number of days of ill health
Lower Abdominal pain	18.7
Pain at Episiotomy site	15.6
Infected LSCS site	19.3
Infected Episiotomy site	12.3
Fever	4.1
Breast Engorgement	3.7

Severity of post partum maternal morbidity: Amongst the 192 episodes of post partum maternal morbidity 54.7 % (n=105) of episodes necessitated medical care. Only 15.1 % (n=29) necessitated hospitalization.

DISCUSSION

As the study methodology was depended upon the recalling capacity of the participants, there is a possibility of underestimation of the number of ill health episodes. Nonetheless study reveals 45.45 % of the participants have had at least one episode of ill health during the post partum period. Yet most of the episodes were usually ignored as minor ailments which are attributed to normal physiological responses following delivery. This study shows, though often overlooked, lower abdominal pain and pain at episiotomy site could be disturbing symptoms for a substantial proportion of mothers during the post partum period which is a crucial time period for both mother and the newborn. (Cunningham *et al* 2002) As the average number of days of ill health per episode of a maternal morbidity was approximately 3 weeks, the importance of early detection and prompt intervention is crucial. Even though about half of the maternal ill health episodes sought medical care, only 15 % of the episodes necessitated hospitalization. Thus it signifies that hospital based studies would yield a gross underestimation of prevalence of the post partum maternal morbidities, especially minor ailments. In addition to that it is crucial to detect maternal morbidities as early identification and prompt intervention of maternal morbidities is an efficacious strategy in lowering the maternal mortality.

CONCLUSIONS

Even though minor ailments during post partum period are common, these episodes often go unnoticed owing to lack of morbidity data. Hence when dealing with post partum maternal morbidity extensive community based research addressing not only moderate to severe post partum morbidities but minor ailments as well is needed.

REFERENCES

Cunningham F, Gary, Eds, *et al.* 2002, *Williams Obstetrics*. 21st edition. McGraw Hill, New York.

Family Health Bureau 2007.

Fortney JA, Smith JB 1999, Measuring maternal morbidity. In *Safe motherhood initiatives: critical issues*. Edited by Berer M, Ravindran TKS. London: Reproductive Health Matters, pp.43 - 50.

Vallely L, Ahmed Y, Murray SF 2005, Postpartum maternal morbidity requiring hospital admission in Lusaka, Zambia – a descriptive study, *BMC Pregnancy Childbirth*, 5, pp.1.