

Asia Research Institute

Working Paper Series

No. 33

Symptoms of Ill Health and Health Seeking Behaviour of Sri Lankan Mothers During the Puerperium

W. Indralal De Silva

Professor of Demography
Chair, Department of Demography
University of Colombo, Sri Lanka

November 2004



The **ARI Working Paper Series** is published electronically by the Asia Research Institute of the National University of Singapore.

© Copyright is held by the author or authors of each Working Paper.

ARI Working Papers cannot be republished, reprinted, or reproduced in any format without the permission of the paper's author or authors.

Note: The views expressed in each paper are those of the author or authors of the paper. They do not necessarily represent or reflect the views of the Asia Research Institute, its Editorial Committee or of the National University of Singapore.

Citations of this electronic publication should be made in the following manner: Author, "Title," ARI Working Paper, No. #, Date, www.nus.ari.edu.sg/pub/wps.htm. For instance, Smith, John, "Ethnic Relations in Singapore," ARI Working Paper, No. 1, June 2003, www.ari.nus.edu.sg/pub/wps.htm.

Asia Research Institute Editorial Committee

Chua Beng Huat

Geoffrey Wade

Mark Frost

Tilman Frasch

Jiang Yang

Asia Research Institute

National University of Singapore

Shaw Foundation Building, Block AS7, Level 4

5 Arts Link, Singapore 117570

Tel: (65) 6874 3810

Fax: (65) 6779 1428

Website: www.ari.nus.edu.sg

Email: arisec@nus.edu.sg

The Asia Research Institute (ARI) was established as a university-level institute in July 2001 as one of the strategic initiatives of the National University of Singapore (NUS). The mission of the Institute is to provide a world-class focus and resource for research on the Asian region, located at one of its communications hubs. ARI engages the social sciences broadly defined, and especially interdisciplinary frontiers between and beyond disciplines. Through frequent provision of short-term research appointments it seeks to be a place of encounters between the region and the world. Within NUS it works particularly with the Faculty of Arts and Social Sciences, Business, Law and Design, to support conferences, lectures, and graduate study at the highest level.

**Symptoms of Ill Health and Health Seeking Behaviour of Sri Lankan Mothers
during the Puerperium**

W. Indralal De Silva¹

Introduction

During the past few decades there has been a growing recognition of the reproductive health issues for people, particularly women, in third world countries. However, every year, at the global level, some eight million women suffer pregnancy related complications and over half a million die, 99 per cent of them in developing countries (World Health Organization, 2004). Most of these deaths can be averted even where resources are limited but, in order to do so, the right kind of information is needed. The poor reproductive health of women in third world countries is an outcome of the general neglect of health and nutrition in childhood and adolescence which affects their future well being (Datta et al., 1980; Mathai, 1989; De Silva, 1998). Therefore improvement of the reproductive health status of women in the third world is being considered as one of the most important goals of human and social development.

Mothers in the third world countries with their limited resources and cultural background, rarely give priority to their own health problems except when there is a life threatening danger (Brady and Winikoff, 1992; Bhatia and Cleland 1995a). Hence it is not surprising that such women are also reluctant to admit having health problems

¹ Professor of Demography (Chair), Department of Demography, University of Colombo, Colombo 03, Sri Lanka. This article was written during the author's three months term at the Asia Research Institute, National University of Singapore, as a Visiting Research Fellow.

or hesitate to seek medical help, especially if the ailment is related to reproductive health (Bang et al., 1989; Jejeebhoy, 1994).

Problems that are specific to women's reproductive process can be divided into two. Firstly, problems occurring during pregnancy, delivery, and the puerperium, referred to in the medical literature as *obstetric (maternal) morbidity*. Secondly, problems that occur to non-pregnant women and outside the puerperal period of six weeks, known as *gynaecological morbidity* (Graham and Campbell, 1991).

There are very few studies of general morbidity data routinely collected, especially in developing countries (Barbieri, 1991). The number of community-based studies on *obstetric morbidity* is further limited. Global data generated to gather information about the long-term consequences of puerperal sepsis and its associated complications is scarce (World Health Organization, 1994). Whatever information is available also indicates that a significantly large proportion of women in the developing countries do suffer from obstetric, particularly puerperal problems (Bang et al., 1989; Bhatia and Cleland, 1995b). Among the three categories of *obstetric morbidity*, *puerperal morbidity* is grossly neglected in many societies. The 42 days following delivery is the generally accepted definition of the puerperium and is the definition used by the World Health Organization in defining maternal death (WHO, 1990).

Puerperal infections are an important cause of morbidity and mortality among postpartum women in developing nations. The infected woman, in acute stages, suffers pain and illness. Her condition may eventually result in infertility, chronic debilitation or death. The incidence of puerperal infections in developing countries is not accurately known (World Health Organization, 1994).

Over the last several decades maternal health care in Sri Lanka has improved considerably compared to many other developing nations. However for cultural and economic reasons, puerperal maternal health care has not received much attention when compared to the care provided during pregnancy. This may be attributed to the fact that although the pregnant female is cared for, the attention is focused basically on the child which the mother carries, rather than the mother. Therefore, when mother and child become two separate beings, the mother gets attention only when she develops symptoms of serious physical or psychological pathology. Even though such conditions could be fatal, many mothers manage to survive with lasting health consequences for the rest of their lives (Bhatia and Cleland, 1996). This study was undertaken to examine the following issues in the Sri Lankan setting; To ascertain the prevalence of puerperal symptoms of ill health in Sri Lankan society, and to investigate what women do when they are confronted with such conditions , and whether they seek treatment and if so the sources.

Data and Methods

In Sri Lanka, earlier research rarely focused on *maternal morbidity*, and was limited to hospital-based statistics. Hospital-based statistics are not likely to yield an accurate picture since many morbid conditions are not referred to the hospital system (Fortney, 1995). The hospital based *maternal morbidity* can therefore be thought of as the tip of the iceberg. Thus, an important goal has been to gather information on *maternal morbidity* and care by using community based surveys, where mothers, Public Health Midwives (PHMs) and other health care workers answer questions about their experiences.

A policy to improve maternal health in Sri Lanka depends on its ability to yield a broad diagnosis of the problem when applied in a community setting. Therefore, to investigate the prevalence and nature of women's perception of *maternal morbidity*, a number of focus group discussions, with mothers in the post puerperium, selected for this study, were conducted by health personnel in different locations of the study area. Focus group discussions occurred prior to the questionnaire development, as this was a relatively new field of research. Subsequently, the study using structured interviews, obtained detailed information on symptoms of ill health and health seeking behaviour during the puerperium from mothers who have just completed the puerperium period. The analysis made in the present study is based on the second data source only.

The collection of data from 600 mothers using structured interview schedules was done within one week following their puerperium, specifically, 43-50 days after the delivery. Identification of mothers for the interview was carried out with the assistance of 24 research assistants (enumerators), who had received special training from researchers before the fieldwork. Identification of mothers was done by using the Public Health Midwives² (PHMs) registers in selected areas of Kalutara district. The district is located about 50 km south of the capital city of Colombo and it represents diverse characteristics of Sri Lankan society, including urban and rural, farming and fishing communities, a relatively developed township with a high density of population, two major ethnic groups and three major religions, and all this within easy access to researchers and in a relatively limited geographical area.

² Registration of pregnant mothers in her area during home visits within the first four months of pregnancy is considered as one of the main duties of the Public Health Midwife (PHM) in Sri Lanka. The PHM through systematic home visits should also provide care to pregnant, postpartum mothers and newborns in their respective PHM areas; PHM is the "front line" health worker providing domiciliary health care and also distributes oral pills and condoms and regularly follows up family planning users and assist MCH clinics.

The respondents were identified from the three Medical Offices of Health (MOH) areas, namely, Kalutara, Beruwala and Matugama, in the Kalutara district. The sample was mothers who had given a birth about 43-50 days before the date of interview, whose usual residence was in the three MOH areas, and whose child was alive at the time of interview. The three MOH areas that were selected purposively for the study altogether comprise 105 PHM areas. Each enumerator selected for the study was required to cover 3-5 PHM areas depending on the geographical extent and the number of eligible respondents to be interviewed. Each enumerator was first asked to make a primary visit to each mother identified by the PHM's register and to check her availability to be interviewed. A minimum of three visits was made to locate a mother. If she moved to her parent's place or elsewhere, attempts were made to obtain her new address and locate her. The enumerators continued to identify mothers for the study using the eligibility criteria given to them until each enumerator identified and interviewed approximately 25 mothers from the allocated PHM areas for the purpose.

Mothers whose youngest child died during the 42 days after birth form an interesting group, but the number of such mothers was very small because of the low infant mortality in Sri Lanka³. A mother who has lost her child during the puerperium is more likely to be suffering from ill health, both physically and psychologically, than a mother whose child is surviving during the same period. However, because of the small numbers and the difficulty in interviewing them, those mothers who lost their child during the puerperium were not included in the study.

³ During 1997 and 1998, the infant mortality rate of the study area was found to be 17 per 1000 live births. The figure is comparable with the infant mortality rate at the national level. Since the study interviewed only about 600 mothers (assuming one live birth per mother) the infant deaths from these mothers are expected to be only 11. Since deaths in the first six weeks of infancy contributes about 60 percent of the total infant deaths in Sri Lanka, the expected number of infant deaths of these 600 mothers are further lowered to about 6 deaths.

Enumerators were given a maximum duration of two months to identify and complete the interviews with the eligible respondents. The interviews included information on household socio-economic, cultural and demographic characteristics, together with symptoms of ill health and health seeking data.

As a result of mothers migrating to their parents' residence before delivery and co-residence there for a few weeks even after the delivery, about 5 per cent of the eligible mothers could not be located in the three MOH areas. The percentage of partial or full refusals was negligible. All mothers selected through the registers had survived to the time of interview. Altogether, 92 per cent of the selected women were successfully interviewed.

Results

Prevalence of symptoms of ill health during the puerperium

Reviews of maternal morbidity (Koblinsky et al., 1993; Howard, 1987; Liskin, 1992) show that ill health in the immediate postpartum period may have continuing effects on women's lives, particularly on their economic activities and also on the child's well being. However, mothers in general believe that ill health following childbirth is a natural phenomenon, which requires no professional help (Obermeyer, 1993). Therefore, an attempt has been made in this study to collect a range of puerperal symptoms of ill health, which may be experienced by members of the study population during the puerperium. Since mothers were interviewed just a few days after the end of puerperium, it is very unlikely that they would have had any major recall bias of their conditions.

Symptoms of ill health which they had experienced during the six week period following all previous births were also collected in the study. However, in the

preliminary analyses, it was observed that most mothers tended to underestimate symptoms of ill health that they had experienced during the previous puerperal periods. Therefore, the present study reports the prevalence of symptoms during the recent puerperium only.

All morbidities can be measured along a severity continuum, which could be ranged from 'nuisance' to life threatening. Naturally, some morbidity is immediately life threatening, although they occur in less severe forms, such as postpartum hemorrhage (Fortney, 1995). Even though their understanding may be imperfect, it is still useful to know from the mothers which of the symptoms that they suffered during the puerperium they themselves perceived as 'serious' or 'not serious'. In the light of these observations we collected the perceived severity of each reported symptom from each mother.

Of the total 596 deliveries, 78 (13 percent) were cesarean, and the balance were vaginal deliveries (87 percent), including a few cases of forceps deliveries. Only about one percent of the total deliveries took place at home, with the balance being in some health institution (major public hospital, private hospital or maternity homes). Over 70 percent of mothers who have had vaginal delivery for the recent birth spent only one night in the health institution while another 5 percent did not stay even a single night there. In contrast to the vaginal delivered mothers, those who underwent cesarean sections spent an average of five nights in the health institution before returning home.

Clearly, the experience of ill health during puerperium by these mothers is much higher than expected; with a low level of maternal mortality⁴ in Sri Lanka, one would also expect to have a low level of puerperal morbidity.

A large proportion (40 percent) of mothers reported excessive bleeding during puerperium. Of those who reported so, one quarter felt that it was 'serious' (Table 1). About one-third of the mothers reported either painful burning feeling when urinating (32 per cent) or breast engorgement (35 per cent), or shivering (34 per cent) during the puerperium. Mental health status of mothers during the puerperium was also assessed through the change in the mental make up with the view to identifying any level of post delivery depression. About 5 percent of mothers reported some degree of change in mental make up during the puerperium, and of them 42 percent noted their condition as 'serious'.

At the time of field work the enumerators identified 2 mothers who were eligible for the detailed interview but it was difficult to communicate with them as they were experiencing severe post delivery depression. Therefore only one of them was able to express her symptoms of ill health with the assistance of her sister. Both of them had lost their husbands, who were soldiers fighting the separatists, a few weeks before the interview. One unmarried eligible mother, who worked as a domestic aid, was also identified with severe post delivery depression. However the enumerator was able to interview her only at the second visit, made one week following the first.

⁴ The reported maternal mortality ratio of 40 per 100,000 live births in Sri Lanka is identified as one of the lowest in the developing world. However, researchers believe that the ratio under estimates the actual level of maternal mortality in Sri Lanka. This under estimation has arisen primarily due to the intentional misclassification of some actual maternal deaths to a series of common gynaecological causes that are a result of complications due to induced abortion. Induced abortion remains illegal in Sri Lanka, but a significantly large number of pregnancies are terminated by trained and untrained personnel using modern and folk methods (De Silva, 1996). Hypertensive disorders of pregnancy, haemorrhage, sepsis and anaemia were leading causes of the reported maternal deaths in Sri Lanka.

When the level of severity of all reported symptoms was examined, in general about 30 percent of all episodes were identified by mothers as ‘serious’, the balance being ‘not serious’ or inconsequential. When only the most commonly reported symptoms of ill health are considered, about one-quarter of reported episodes of excessive bleeding and shivering were identified as ‘serious’.

Health Seeking Behaviour during the Puerperium

In the present study we were unable to assess whether the reported level of severity of each episode was actually life threatening. Not all severe symptoms of ill health are life threatening; it primarily depends on the type of episode we are dealing with. However, it is the individual’s recognition of a problem and its level of severity, which largely determines the demand for health care (Bhatia and Cleland, 1995a; Stewart et al., 1996). Thus we have collected information on health seeking behaviour of each mother related to each symptom reported during the puerperium.

The study investigated the proportion of the mothers who sought treatment, how that behaviour differs according to the symptom of illness that they encounter during the puerperium and any particular type of symptom for which mothers have taken treatment more frequently than others. Of the 31 mothers who reported change in mental make-up during the puerperium, 71 per cent had sought treatment (Table 2). When the overall health seeking behaviour during the puerperium is considered, it is clear that this particular type of symptom was given the highest importance by these mothers and their immediate family members, while symptoms such as vaginal discharge with bad smell received the lowest importance for obtaining treatment (12 per cent).

Change in mental make-up during the puerperium is closely related to a some degree of postpartum depression that typically begins two to three weeks after delivery and lasts for at least two weeks, sometimes over a year. Despite the prevalence of postpartum depression, it should not be treated lightly, as it carries risks to the mother, to the child's development and even the safety of every member of the family. Those most at risk had a prior depressive episode before pregnancy or a family history of depression. In addition, women who have an unwanted pregnancy, have experienced complicated labour or delivery, who lack social support, or who have experienced some form of major stress such as the death of a loved one are also at increased risk.

For most of the symptoms of ill health that they suffered during the puerperium, only about 30-50 per cent had sought treatment. This particular pattern clearly indicates that many mothers in Sri Lanka believe that ill health is a natural phenomenon after childbirth and therefore no special treatment is required.

Whenever a mother reported a particular type of symptom of ill health that she encountered during the puerperium, data on its perceived severity was also collected. The underlying argument is that if a mother felt that a particular type of symptom is 'serious' then one would expect her to seek treatment, compared with a situation where a mother reports the same type of symptom but perceived it as 'not serious'. Supporting this hypothesis, for each type of symptom reported in Table 2, the majority of mothers sought treatment when they also perceived that particular type of symptom as 'serious'. For example, of the 8 mothers who reported that they had suffered 'seriously' infected episiotomy during the puerperium, 87 per cent had sought treatment while only 25 per cent among the mothers who suffered 'not serious' type of infected episiotomy had sought treatment. Even though a higher proportion

(77 percent) of mothers in the category of ‘serious’ change in mental make-up sought treatment, a high proportion (67 per cent) of mothers who suffer ‘not serious’ change in mental make-up also sought treatment.

Presumably change in mental make-up, irrespective of its severity, might have been considered an important symptom of ill health to obtain treatment by their family members because this kind of condition greatly influences the caring of the new born. Again it is largely the community who sought treatment for this type of symptom for the sake of the child rather than the mother.

In general, for a number of symptoms of ill health that the mother categorized as ‘serious’ during the puerperium, well over two-thirds had sought treatment while treatment was infrequently sought in the ‘not serious’ category.

Source of Treatment

There is often a tendency for studies to focus specifically on the act of seeking ‘health care’ as defined officially in a particular context (Ahmed et al., 2001). However, in this study data is also gathered on visits to more traditional healers and self-care. The type of place selected for treatment when a mother develops a ‘serious’ or ‘not serious’ type of symptom of ill health during the purperium was investigated and results are presented in Table 3 and 4.

The overall picture clearly indicates that most of them have visited health institutions that belong to the government sector, particularly at the tertiary level, bypassing the secondary and primary level government institutions. For example, of the 8 mothers who reported that they had suffered ‘seriously’ with infected episiotomy, the majority obtained treatment from a tertiary level government institution while none visited secondary or primary level government institutions

(Table 3). Another two women obtained treatment from private hospital/doctor while the remaining woman sought no treatment at all. One-half of the mothers who reported 'serious' difficulty in controlling urine had selected tertiary level hospitals for treatment.

It is important to note that when a mother 'seriously' suffers from fever or excessive bleeding or pain in lower abdomen or change in mental make-up or lowering of womb or backache during the puerperium, she frequently uses private hospital/doctor treatment rather than the government sector institution (Table 3). For symptoms that the mothers thought needed quick attention, private sector treatment was preferred, because they thought that public hospital treatment could not be received immediately.

For some of the symptoms of ill health during the puerperium that mothers perceived as 'serious', a significantly large percentage also depended on self-medication and religious/ritual activities. The most important category of self-medication was identified as the direct purchasing of medicine from pharmacies. In a country such as Sri Lanka where most of the pharmaceuticals could be obtained without prescription, this pattern is not unusual. For instance, 51.7 per cent of mothers who reported a 'serious' type of painful, burning feeling when urinating obtained some pharmaceuticals from the pharmacy or used homemade medicine or used religious/ritual activities or a combination of these. This particular type of treatment was also used significantly when mothers suffered from symptoms such as breast engorgement, vaginal discharge with bad smell or shivering. In a culture where many women believe that health problems are common after childbirth a significantly high proportion relied on self-medication while some did nothing about it (Table 3).

As to the differences that could be expected in the health seeking behaviour once we take-up the 'not serious' type of symptoms of ill health that mothers encountered during the puerperium, clearly an overwhelming majority of them have completely ignored treatment (Table 4). For example, a sample as high as 95 per cent of mothers did not seek treatment for the vaginal discharge with bad smell when they regarded it as 'not serious' (Table 4).

Self-medication and religious/ritual activities dominate as the mother's source of treatment for the symptoms of ill health during puerperium. For instance over 50.7 per cent of the mothers used self-medication for breast engorgement when it was perceived as 'not serious'. Also mothers who suffered 'not serious' types of pain in lower abdomen, or painful burning feeling when urinating or constipation, about one-third used self-medication or religious/ritual treatment.

Reasons for Not Seeking Professional Care

The mothers who suffered 'serious' symptoms of ill health during the puerperium but did not seek any professional treatment were requested to provide their main reason for not seeking such care. Those who obtained treatment from tertiary/secondary/primary level government institution or private hospital/doctor are excluded from this analysis. Also, four categories of symptoms with cell size less than five (vaginal discharge with bad smell, difficulty in controlling urine, change in mental make up and infected episiotomy) were excluded.

A large proportion of mothers reported having felt that no treatment was necessary for their 'serious' symptoms of puerperal ill health (Table 5). As many as 76 per cent of those who reported that they have suffered 'serious' pain in lower abdomen during the puerperium thought that no treatment was necessary, while

another 10 per cent of them had been told by others that no treatment was necessary. Such advice was coming mainly from the mother or mother-in-law or from an elderly member of her family. With the same symptom only 14 per cent obtained traditional treatment, including treatment from Ayurvedic practitioners or use of home medicine or use of religious/ritual treatment or a combination of these.

About one-third of the mothers who suffered with 'serious' breast engorgement or constipation or shivering sought traditional treatment rather than seeking any professional attention. Members in the community generally believe that these types of puerperium symptoms of ill health which are perceived as non life-threatening can be cured by adopting traditional methods of treatment. As shivering is considered as a sign of the devil in many South Asian societies, one third of the mothers who have not sought professional care consider rituals as a suitable method of treatment.

Of the mothers who suffered with 'serious' backache but did not seek professional care, about 20 per cent were advised by others that no treatment was necessary, while 64 per cent of the mothers felt that no treatment is required, therefore only the remaining 16 per cent used traditional treatment for 'serious' backache (Table 5). Many of those who suffered from 'serious' symptoms of ill health did not seek professional health care due to a number of 'other' reasons. Analysis of the responses to the 'Other' category in Table 5, for example, show that 14 per cent of mothers who suffered from 'serious' type of fever and 56 per cent with 'serious' type of lowering of womb sought no treatment due to reasons such as 'no one was at home to look after the child/children', 'was ashamed to seek treatment' or thought that 'the available treatment was too expensive'. Women with high parities who noted the problem had to look after their previous offspring, along with the new born. In many

instances the lowering of the womb has been medically diagnosed as ‘serious’, requiring expensive treatment including surgery. Many mothers in this study belong to the poor farming and fishing communities and find it extremely difficult to go for expensive treatment in the private sector. Provision of surgery in government hospitals for mothers with ‘serious’ lowering of the womb has also become difficult because of over crowding in these institutions.

Summary and Conclusions

Policy focus on maternal health became more significant after international organizations, such as the United Nations, recognized the importance of the reproductive health policies and programmes of the third world countries (Hardee et al., 1998). In particular, the 1994 International Conference on Population and Development (ICPD), held in Cairo, gave a clear direction in policy formulation on reproductive health including maternal health issues for the governments of the developing nations (Mertens, 1995; United Nations, 1995). However, for developing countries as a whole, the data clearly demonstrate that many women are not receiving appropriate level of care during all stages of childbearing (Fortney, 1995; Navaneethan and Dharmalingam, 2002).

In almost all countries, women are far more likely to receive antenatal care than to have skilled care during pregnancy and childbirth, and are least likely to receive postpartum care. In fact, however, women need care most during delivery and the puerperium, because the majority of maternal deaths (61 per cent in developing countries) occur after delivery. Most of these take place during the first 24-48 hours after delivery, largely due to postpartum haemorrhage or hypertensive disorders, but

also later, due primarily to sepsis. Women, families, and even health professionals are often not aware of the risks to women during this period.

Almost all deliveries investigated in this study occurred in a safe and healthy environment, were vaginal, and on average spent only one night in the health institution. Approximately 10 per cent of deliveries took place using cesarean section in a health institution and needed hospitalization of about 5 days. Only 1 per cent of deliveries occurred at home. Irrespective of such satisfactory conditions at the delivery time (natal care), maternal morbidity during the puerperium is commonly experienced by these mothers, especially excessive bleeding, painful urination, breast engorgement and shivering.

Changes in mental makeup leading to post delivery depression were felt by 5 per cent of mothers, with at least half of them feeling the condition as 'serious'. Decision making regarding the requirement for treatment was based on self assessment of severity of episode of the mother or based on the advice of the mother or mother-in-law of the patient or from an elderly member of her family.

The majority of mothers sought treatment only when they perceived that a particular type of symptom was 'serious'. Additionally there was a selectivity of symptoms of puerperium ill health which served as a guideline when prioritizing the need for treatment. Family members were an important source of influence when seeking treatment for conditions like depression because such a condition may affect the care of the newborn child and to some extent family reputation. However, further investigation of the factors that lead mothers to judge certain symptoms as 'serious' or 'not serious' is needed, as this has a major effect on the seeking of treatment.

There was a preference for government sector tertiary level health institutions, to obtain treatment, while secondary or primary level government institutions were

bypassed. Private hospital or doctor treatment was opted for by only a quarter of the study population, because of the likelihood of incurring high costs to receive such treatment. Many mothers in this study belong to the poor farming and fishing communities who cannot afford expensive treatment in the private sector. Nevertheless in instances where immediate treatment was needed the patients preferred the private sector because there was a difficulty in getting the government hospital treatment at immediate notice.

In Sri Lanka most pharmaceuticals can be obtained without prescriptions. Risky practices such as adherence to self medication by directly purchasing medicine from pharmacies, and the practice of religious/ritual activities as form of medication for some serious symptoms of ill health are observed among the mothers surveyed.

On many occasions, women develop complications of pregnancy and childbirth that are not immediately evident after the birth of the child. Postpartum care ensures that the health status of the mother is monitored long enough to detect such problems. Awareness need to be raised among women, family members, and health professionals including domiciliary care providers, about the postpartum period as a time of significant health risk, and warning signs for postpartum complications need to be included in education campaigns about obstetric emergencies and the need for referral.

References

- Ahmed, S., F. Sobhan, A. Islam & Barkat-e-Khuda (2001), "Neonatal morbidity and care-seeking behaviour in rural Bangladesh", *Journal of Tropical Paediatrics*, 47(2):98-105.
- Bang, R., A. Bang, M. Baitule, Y. Chaudhary, Y. Sarmukaddams & O.T. Tale (1989), "High prevalence of gynecological diseases in rural Indian women", *Lancet*, 1:85-88.
- Barbieri, M. (1991), Report on the IUSSP Seminar on measurement of maternal and child mortality, morbidity and health care: Interdisciplinary approaches, 4-7 November 1991, Cairo, Egypt.
- Bhatia, J.C. & J. Cleland (1996), "Obstetric morbidity in South India: results from a community survey", *Social Science and Medicine*, 43(10):1507-1516.
- Bhatia, J.C. & J. Cleland (1995a), "Self-reported systems of gynecological morbidity and their treatment in South India", *Studies in Family Planning*, 26(4):203-216.
- Bhatia, J.C. & J. Cleland (1995b). "Determinants of maternal care in a region of South India", *Health Transition Review*, 5(2):127-142.
- Brady, M. & B. Winkoff (1992), *Rethinking Postpartum Health Care*, New York: The Population Council.
- Datta, K.K., R.S. Sharma, P.M.A. Razak, T.K. Ghosh & R.R. Arora (1980), "Morbidity patterns among rural pregnant women in Alwar, Rajasthan: a cohort study", *Health and Population: Perspectives and Issues*, 3(4):282-292.
- De Silva, W.I. (1998). "Socio-economic changes and adolescent issues in the Asian and Pacific Region", In: *Report and Recommendations of the Expert Group Meeting on Adolescents: Implications of Population Trends, Environment, and Development*, Asian Population Studies Series, No.149, pp. 46-81, New York: United Nations.
- De Silva, W.I. (1996). "The silent cry: socio-cultural and political factors influencing induced abortion in Sri Lanka", Paper presented at the IUSSP seminar on Socio-cultural and Political Aspects of Abortion from an Anthropological perspectives, 25-29, March, Trivendrum, India.
- Fortney, J.A. (1995), *Reproductive Morbidity: A Conceptual Framework*, Working Paper No.95-02, Research Triangle Park NC: Family Health International.
- Graham, W. & O. M.R. Campbell (1991), *Measuring maternal health: Defining the issues*, Report No.1, London School of Hygiene and Tropical Medicine.
- Hardee, K., K. Agarwal, N. Luke, E. Wilson, M. Pendzich, M. Farrwell, H. Cross, (1998), *Post Cairo Reproductive Health Policies and Programmes: A Comparative Study of Eight Countries*, Policy Occasional Papers, USAID.
- Howard, D. (1987), "Aspects of maternal morbidity: the experience of less developed countries, In: *Advances in International Maternal and Child Health*, D.B. Jellifee (eds.), Vol. 7, Oxford: Oxford University Press, pp. 1-35.
- Jejeebhoy, S.J. (1994), Maternal morbidity and mortality in South Asia: priorities for social science research, Paper presented at the Workshop on Reproductive Health in South Asia, New Delhi, 26 September.

Koblinsky, M.A., O.M.R. Campbell & S.D. Harlow (1993), "Mother and more: a broader perspective on women's health", In: *The Health of Women: A Global Perspective*, M. Koblinsky, J. Timyan & J. Gay (eds.), Westview Press.

Liskin, L. (1992), *Prevalence of Maternal Morbidity in Developing Countries*, Center for Communications Programs, The Johns Hopkins University.

Mathai, S. T. (1989), "Women and the health system", In: *Women and Nutrition in India*, C. Gopalan & S. Kaur (eds.), New Delhi: Nutrition Foundation of India.

Mertens, W. (1995), The 1994 International Conference on Population and Development (ICPD): Context and Characteristics, *Policy and Research Papers*, IUSSP.

Navaneetham, K., & A. Dharmalingam (2002), "Utilization of maternal health care services in South India", *Social Science & Medicine*, 55(10):1849-1869.

Obermeyer, C. M. (1993), "Culture, maternal health care, and women's status: A comparison of Morocco and Tunisia", *Studies in Family Planning*, 24(6): 354-365.

Stewart, M.K., C. K. Stanton, M. Festin & N. Jacobson (1996), "Issues in measuring maternal morbidity: lessons from the Philippines Safe Motherhood Project", *Studies in Family Planning*, 27(1): 29-35.

United Nations (1995), *Report of the International Conference on Population and Development, Cairo*, New York.

World Health Organization – WHO (2004), *Beyond the numbers*, Geneva.

Acknowledgement

Financial support for this study was received from the Department of Reproductive Health and Research, World Health Organization, Geneva. The author would like to express his deep appreciation for the comments and assistance of John Cleland, Iqbal Shah, Gavin Jones, Lois Verbrugge and Shireen Jejeebhoy.

Table 1 Percent of mothers who reported a symptom of ill health (prevalence) during the six week period after delivery of their recent birth

Symptom	Percent and number reporting symptom		Level of seriousness (percent)			
			‘ Serious’		‘Not serious’	
Fever	7.9	(47)	31.9	(15)	68.1	(32)
Excessive bleeding	39.8	(237)	25.7	(61)	74.3	(176)
Vaginal discharge with bad smell	4.0	(24)	12.5	(3)	87.5	(21)
Pain in lower abdomen	24.3	(145)	31.0	(45)	69.0	(100)
Difficulty in controlling urine	2.0	(12)	50.0	(6)	50.0	(6)
Painful, burning feeling when urinating	32.0	(191)	31.4	(60)	68.6	(131)
Change in mental make up	5.2	(31)	41.9	(13)	58.1	(18)
Breast engorgement	34.9	(208)	31.7	(66)	68.3	(142)
Infected episiotomy	2.7	(16)	50.0	(8)	50.0	(8)
Constipation	11.5	(69)	47.8	(33)	52.2	(36)
Shivering	33.7	(201)	22.4	(45)	77.6	(156)
Lowering of womb	8.4	(50)	44.0	(22)	56.0	(28)
Backache	22.8	(136)	42.6	(58)	57.4	(78)

Table 2 Percent sought treatment among those mothers who reported a symptom of ill health as ‘serious’ or ‘not serious’ during the six week period after delivery of their recent birth

Symptom	Percent sought treatment among those with:				
	‘Serious’ symptom (N)		‘Not serious’ symptom (N)		Total (N)
Fever	66.7	(15)	31.2	(32)	42.5 (47)
Excessive bleeding	52.5	(61)	31.8	(176)	37.1 (237)
Vaginal discharge with bad smell	66.7	(3)	4.8	(21)	12.5 (24)
Pain in lower abdomen	44.4	(45)	39.0	(100)	40.7 (145)
Difficulty in controlling urine	66.7	(6)	16.7	(6)	41.7 (12)
Painful, burning feeling when urinating	68.3	(60)	38.2	(131)	47.6 (191)
Change in mental make up	76.9	(13)	66.6	(18)	71.0 (31)
Breast engorgement	54.0	(66)	53.7	(142)	54.3 (208)
Infected episiotomy	87.5	(8)	25.0	(8)	56.3 (16)
Constipation	72.7	(33)	27.8	(36)	49.3 (69)
Shivering	55.6	(45)	35.5	(156)	40.0 (201)
Lowering of womb	59.1	(22)	35.7	(28)	46.0 (50)
Backache	62.1	(58)	35.9	(78)	47.1 (136)

Note: In the sample 518 mothers (87 per cent) out of 596 interviewed had a vaginal delivery of their last birth.

Table 3 Percentage distribution of mothers who reported a ‘serious’ symptom of ill health during the six week period after delivery of their recent birth by source of treatment

Symptom	Source of Treatment				No treatment	Total	
	Tertiary level institution	Secondary/primary level institution	Private hospital/ private doctor	Other*		%	N
Fever	20.0	0.0	26.7	20.0	33.3	100	15
Excessive bleeding	13.1	3.3	21.3	14.7	47.5	100	61
Vaginal discharge with bad smell	33.3	0.0	0.0	33.3	33.3	100	3
Pain in lower abdomen	11.1	0.0	22.2	11.1	55.5	100	45
Difficulty in controlling urine	50.0	0.0	16.7	0.0	33.3	100	6
Painful, burning feeling when urinating	6.7	1.7	8.3	51.7	31.6	100	60
Change in mental make up	15.4	7.7	38.5	15.4	23.0	100	13
Breast engorgement	7.6	1.5	4.5	39.4	47.0	100	66
Infected episiotomy	62.5	0.0	25.0	0.0	12.5	100	8
Constipation	27.2	0.0	13.6	18.2	40.9	100	33
Shivering	13.3	2.2	8.9	31.1	44.4	100	45
Lowering of womb	24.2	3.0	39.4	6.1	27.3	100	22
Backache	19.0	1.7	32.8	8.6	37.9	100	58

Note: * - Includes direct purchase of some medicine from a pharmacy, homemade medicine, religious/ritual activities etc.

Table 4 Percentage distribution of mothers who reported a ‘not serious’ symptom of ill health during the six week period after delivery of their recent birth by source of treatment

Symptom	Source of Treatment				No treatment	Total	
	Tertiary level institution	Secondary/primary level institution	Private hospital/ private doctor	Other*		%	N
Fever	6.3	3.1	12.5	9.4	68.8	100	32
Excessive bleeding	3.4	2.8	7.4	18.2	68.2	100	176
Vaginal discharge with bad smell	4.8	0.0	0.0	0.0	95.2	100	21
Pain in lower abdomen	0.0	2.0	2.0	32.0	61.0	100	100
Difficulty in controlling urine	0.0	0.0	0.0	16.7	83.3	100	6
Painful, burning feeling when urinating	0.0	0.0	2.3	35.9	61.8	100	131
Change in mental make up	16.7	0.0	22.2	27.8	33.3	100	18
Breast engorgement	1.4	0.0	2.8	50.7	45.1	100	142
Infected episiotomy	0.0	0.0	25.0	0.0	75.0	100	8
Constipation	0.0	0.0	0.0	35.7	64.3	100	36
Shivering	5.2	0.0	5.2	25.2	64.5	100	156
Lowering of womb	5.6	2.8	8.3	11.1	72.2	100	28
Backache	5.1	1.3	11.5	17.9	64.1	100	78

Note: * - Includes direct purchase of some medicine from a pharmacy, homemade medicine, religious/ritual activities etc.

Table 5 Percentage distribution of mothers according to reasons given for not seeking professional care for their 'serious' symptom of ill health during the six week period after delivery of their recent birth

Symptom ^a	Reason for not seeking professional care**				Total	
	Preferred traditional treatment	Thought no treatment necessary	Some one told no treatment necessary	Other*	%	N
Fever	28.6	57.1	0.0	14.3	100	8
Excessive bleeding	19.4	61.1	16.7	2.8	100	36
Pain in lower abdomen	13.8	75.9	10.3	0.0	100	29
Painful, burning feeling when urinating	56.3	37.5	4.2	2.1	100	48
Breast engorgement	40.0	47.3	10.9	1.8	100	55
Constipation	30.8	61.5	7.7	0.0	100	19
Shivering	34.4	50.0	15.6	0.0	100	32
Lowering of womb	11.1	22.2	11.1	55.5	100	7
Backache	16.0	64.0	20.0	0.0	100	25

Note: * - Include responses such as no one at home to look after child/children, shame or expensive.

** - Professional care includes care sought at tertiary, secondary or primary level government institution or in private hospital/doctor.

a - Four categories of symptoms namely, vaginal discharge with bad smelling, difficulty in controlling urine, change in mental make up, infected episiotomy are excluded from the table since each contain less than 5 cases.