40

FAMILIAL CONSEQUENCES

V. Walvekar and A. Virkud

INTRODUCTION

Indian studies on maternal mortality reveal hemorrhage as the leading cause of maternal death[1]. What is particularly disturbing is that the women who survive postpartum hemorrhage are often not well and that this problem receives very little attention. Indeed, out of nearly 120 million women who give birth each year, it is estimated that more than 60 million will develop some kind of complication. Of these, 15–20 million will develop moderate- to long-term disabilities, however small or large[2]. Under these circumstances, the global problem is staggering. As the woman is both a wife and a mother, she is the center of the family's existence; her mortality or even morbidity affects the functioning of the entire family, as well as the nurturing of her children. Of equal importance, the woman is an important part of a country's workforce, so her disability has an impact on society as a whole.

THE HIDDEN PROBLEM IN DEVELOPING NATIONS

The sociocultural climate in developing nations is such that a woman's health is given least priority. Hence, maternal morbidities receive little or no attention, either from the society as a whole or from the government and it agencies. In stark contrast, a death causes major disturbance in the family environment, and its potential resolution, e.g. a single father or remarriage, often complicates a previously bad situation. Unfortunately, no real evidence-based studies are available to highlight this hidden problem. It is worthwhile, however, to look at the issue from a qualitative point of view.

CONSEQUENCES OF POSTPARTUM HEMORRHAGE

Consequences to the mother

The problem is more than one of mortality. Little doubt exists that for every woman who dies, there are at least 20–30 who suffer long-term disabilities.

The immediate consequences include:

(1) Failure of or impaired lactation leading to an undernourished child prone to infections, especially if born preterm;

(2) Anemia leading to susceptibility to postpartum infections, ranging from simple endometritis to severe puerperal sepsis, which in itself can be a cause of maternal death later in the puerperium;

(3) Deterioration of existent diseases, especially in mothers who are anemic, or have tuberculosis, HIV, and cardiac lesions, all of which often create disabling complications, more so if there has been a prior surgical intervention for the management of postpartum hemorrhage;

(4) Postpartum mental alterations, especially in the sick mother who cannot fend for her child. Here, the stage is set for a classic postpartum depression or even psychosis, which may end in dire consequences such as suicide or infanticide in some cases.

Delayed consequences may include:

(1) Prolonged collapse with pituitary failure and Sheehan's syndrome, with resultant secondary amenorrhea and infertility (see Chapter 38);

(2) Premature aging, apathy and mental confusion[3];

(3) Chronic and debilitating anemia. Between 50 and 90% of pregnant women worldwide, with or without prior postpartum hemorrhage, suffer from this problem. The causes of anemia include inadequate dietary intake of iron, folic acid, and vitamin A, and anemic losses due to parasitic infestations and malaria. Women with severe anemia are more vulnerable to infection during pregnancy and childbirth, are at increased risk of death due to obstetric hemorrhage, and are poor operative risks in the event that Cesarean delivery is required. World-wide, anemia is considered the most important indirect cause of maternal mortality and morbidity. WHO data estimate that anemia associated with maternal causes in less developed countries in 2000 alone resulted in a loss of women's productivity valued at more than US$5 billion[4].

Consequences to the children

The same postpartum hemorrhage that threatens women's survival can also cause death and disability in newborns. The vast majority of the estimated 8 million perinatal deaths that occur annually in less developed countries are associated with maternal health problems or poor management of labor and delivery[5]. As an illustration, obstructed and prolonged labor, both important causes of postpartum hemorrhage, asphyxiate an estimated 3% of newborns, resulting in death for nearly 25% of these infants and brain damage for another 25%. In addition, women suffering from severe anemia resulting from postpartum hemorrhage are more likely to have low birth-weight infants (< 2500 g) in subsequent pregnancies. These low birth-weight infants are 20–30 times more likely to die in the first week of life than infants of normal weight, and those who survive are more likely to suffer neurological disabilities including cerebral palsy, seizures, and severe learning disorders[2].

Consequences to the family and society

A mother's disability profoundly affects the family and the community at large due to changes in the household responsibilities and finances:

(1) The cost of her treatment can cripple the family finances;

(2) Her reduced productivity can affect family income and may force the children to leave school, enter the labor force and/or assume domestic responsibilities;

(3) Children often are neglected, undernourished and have health problems;

(4) Some surviving children may be forced into child prostitution. Of the estimated 2.3 million women who make their livelihoods in prostitution, a quarter are minors;

(5) The emotional cost to the family may be manifest by psychopathic behavior either in surviving children or in the father.

If such are the potential consequences when the mother survives, it is logical to ask what happens when she does not?

Death of the mother

The consequences of maternal death are dramatic, not only for the family but also for the medical community and the society at large.

Emotional cost

(1) The family is shattered as the central and sustaining core is suddenly withdrawn;

(2) The children are suddenly orphans, at the mercy of their relatives and institutions; some may become delinquent or street children;

(3) The father is lost, emotionally and financially, and may blame the newborn, an event which often proves disastrous for the surviving child(ren);

(4) Medicolegal suits against the doctor and/or the hospital may come forward out of desperation, anger or even the desire for vengeance.

Children

Orphan children are more likely to become juvenile delinquents or wayward members of the society, often leading a life of petty and serious crime or begging. They are also at risk of physical and/or sexual abuse by family or community members.

The father/husband

(1) He may remarry for the sake of children, which may or may not be beneficial and may lead to destruction of the original family unit;

(2) He is at risk for depression, reduced income and dwindling resources. This picture is not pleasant but the story goes even further;

(3) He may initiate medicolegal proceedings out of anger or financial need.

Consequences to the society at large

Today, women form an important world-wide workforce, contributing immensely to the growth and development of nations. This prospect is seriously weakened by the long-term impact of problems following childbirth such as postpartum hemorrhage. It is very aptly said that 'A woman's health, a nation's wealth'. What is more important is that not only an is an effective workforce in place with healthy women, but also that the national cost of health care can diminish. In India for example, health and family welfare ministries in various states run and subsidize many public hospitals and medical colleges. These hospitals provide medical services at a nominal cost, as the actual cost is subsidized by the government. By reducing preventable maladies, the national health-care cost can diminish by a ripple effect.

MEASURES TO REDUCE THE RISK OF POSTPARTUM HEMORRHAGE AND ITS IMPACT

Role of the obstetrician

WHO recommends four prenatal visits during pregnancy as a minimum. The initial visit should be within the first 3 months of pregnancy. Adequate supervision helps to anticipate, diagnose and treat many problems such as pregnancy-induced hypertension and anemia before their severity takes a grave turn.

Role of the skilled attendant

The term 'skilled attendant' refers exclusively to people with midwifery skills (for example, doctors, midwives, nurses) who have been trained to proficiency in the skills necessary to manage normal deliveries and diagnose or refer obstetric complications.

Ideally, skilled attendants live in, and are part of, the community they serve. They must be able to manage normal labor and delivery, recognize the onset of complications, perform essential interventions, start treatment, and supervise the referral of mother and baby for interventions that are beyond their competence or not possible in the particular setting[6]. Depending on the location, other health-care providers, such as auxiliary nurse/midwives, community midwives, village midwives, and health visitors, may also have acquired appropriate skills if they have been specially trained. These individuals frequently form the backbone of maternity services at the periphery, and pregnancy and labor outcomes can be improved by making use of their services, especially if they are supervised by well-trained midwives.

Home visits also give health workers the chance to educate women about diet and healthy behaviors and to offer women nutritional supplements. This health awareness goes a long way. Antenatal care providers should inform women about the importance of safe delivery with a skilled birth attendant, the warning signs of complications, and how to plan for emergency care. In developing nations such as India, the importance of a hospital delivery, which can provide an environment which is safer for delivery and childbirth, can never be overemphasized (see Chapter 49).

Role of the obstetric community

The national body of obstetricians, The Federation of Obstetricians and Gynecologists of India (FOGSI) recognizes this need and has

implemented the following programs (see also Chapter 49):

(1) Reproductive and Child Healthcare: under this banner, in collaboration with UNICEF, various awareness and training programs for trained birth attendants (TBA), and doctors at primary health centers are conducted to handle emergency obstetrics cases;

(2) Emergency Obstetrics Care (EMOC) program of FOGSI: in collaboration with Macarthur Foundation; FOGSI has initiated the training of doctors in three states of India to deal with complications of pregnancy and labor in rural areas of India.

In summary, this problem is huge; the efforts needed are Herculean, the resources inadequate, and the consequences far-reaching. It is only the persistent will that can minimize the problem, if not eradicate it!

References

1. Daftary SN, Desai SV, eds. *Selected Topics in Obstetrics and Gynecology*, Vol 1. Dehli: BI Publications Pvt. Ltd, 2005:115
2. Murray C, Lopez A, eds. *Health Dimensions of Sex and Reproduction*, Vol. 3. Global Burden of Disease and Injury Series. Boston: Harvard University Press, 1998:170–4
3. Barton R, Burkhalter. Consequences of Unsafe Motherhood in Developing Countries in 2000: Assumptions and Estimates from the REDUCE Model. In Murray C, Lopez A, eds. *Health Dimensions of Sex and Reproduction*. Bethesda, MD: University Research Corporation, unpublished, 170–4
4. Murray C, Lopez A. Health Dimensions of Sex and Reproduction; Burkhalter, *Consequences of Unsafe Motherhood in Developing Countries in 2000*; Table 5
5. Tsui A, Wasserheit JN, Haaga JG, eds. *Reproductive Health in Developing Countries*. Washington, DC: National Academy Press, 1997:120–3
6. *Coverage of maternity care*. Geneva: World Health Organization, 1996 (unpublished document WHO/FRH/MSM/96.28). http://www.who.int/reproductive-health/publications/reduction_of_maternal_mortality/reduction_maternal_mortality_chap4.htm