How to Save Mothers in Pakistan

Maternal health in Pakistan has been in a deplorable state for the indefinite past. At 276 per 100,000 live births, the maternal mortality ratio is well above the 140 per 100,000 Millennium Development Goal target. An analysis of the current situation of maternal health in Pakistan investigates the reasons why so many Pakistani women die in childbirth, and recommends steps to improve the situation.

Why do mothers die in Pakistan?

Maternal mortality is best viewed as a multi-dimensional event. A woman's death can be considered from medical, demographic, social, and health systems perspectives. Inaugurating the Safe Motherhood Initiative in 1987, Dr. Mahmoud Fahimallah addressed the multiple dimensions of maternal mortality through the rhetorical question, “Why did Mrs. X die?” The fictional Mrs. X, it was found through various types of evaluation mechanisms, died from many “causes”, depending on perspective (see Box 1).

Box 1: Why Mrs. X Died

- According to the death certificate, Mrs. X died of ante-partum hemorrhage due to placenta praevia.
- According to a hospital audit, Mrs. X died because facilities were inadequate to treat her problem; in particular, the blood supply was inadequate.
- According to a health services assessment, Mrs. X died because she lived far from the hospital, and adequate transport was unavailable.
- According to a household survey, Mrs. X died because she was poor and uneducated, and so could not afford to deliver in hospital, or obtain adequate nutrition during pregnancy, etc.
- According to a family planning survey, woman already had five children and another baby was not wanted, but Mrs. X died because family planning services were not readily available.

In Pakistan, all these perspectives are important. From a medical perspective, women die in childbirth from preventable causes, because the health system does not have the means to save them. The distribution of causes of maternal deaths in Pakistan (from the PDHS 2006-07) is shown in Figure 1. About half of all deaths are from three causes: postpartum hemorrhage, puerperal sepsis, and eclampsia/toxemia.

Figure 1: Causes of Maternal Deaths in Pakistan, PDHS 2006-07

Properly treated, women should rarely die of these causes; but proper treatment is in short supply. A 2005 study in 30 percent of the districts of Punjab and Northwest Frontier Province found that there were sufficient basic EmOC facilities in the public sector to meet 8 percent of the WHO-recommended minimum number, and slightly over half the minimum number of comprehensive EmOC facilities. As a result of the inadequacy of public facilities, two-

\[\text{This Policy Brief, jointly prepared by Peter C. Miller and Faateh ud-Din Ahmed is made possible by the generous financial support of the David and Lucile Packard Foundation.}\]

\[\text{1 Refer to Policy Paper “Maternal Mortality in Pakistan”}\]
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thirds of facility-based deliveries take place in private sector facilities (PDHS 2008). PDHS data show that 60.9 percent of women of reproductive age saw a skilled health provider for antenatal care during their last pregnancy; 59.8 percent were effectively protected against neonatal tetanus; 34.3 percent were delivered in a health facility; 36.8 percent were delivered by a skilled birth attendant; and 42.0 percent had at least one post-natal visit. These numbers, while better than comparable data from the past, are far from adequate.

Which mothers die in Pakistan?

As box 1 shows, women are at increased risk of dying in childbirth from many directions: for example, age and parity, poverty and lack of education, lack of access to facilities, and understanding of how best to take care of their pregnancies. Figure 2 shows several of these factors, comparing the risk of dying in childbirth for a high-risk category of the factor with the risk for the lowest-risk category.

In sum, there are several different types of factors related to maternal mortality:

- Mother’s reproductive history. Mothers at substantially increased risk are those bearing their first child, and who are more than over 35 years old.
- Socio-economic status. As with many other studies in Pakistan and elsewhere, lack of mother’s education stands out as the dominant risk factor among socio-economic variables.
- Accessibility of emergency care. Distance to hospital, distance to public transport, and availability of telephone communications are all associated with risk of maternal death.

The strong observed protective effects of ever use of family planning and of antenatal care

Figure 2: Maternal Mortality Risks in Pakistan by Selected Factors

- Cell phone (Ref group) vs. No Cell phone (Risk group: 1.2)
- 1-2 Births (Ref group) vs. 0 Births (Risk group: 2.0)
- Age 20-34 (Ref group) vs. Age ≥ 35 (Risk group: 1.6)
- Ever used FP (Ref group) vs. Never used FP (Risk group: 3.3)
- Secondary + (Ref group) vs. No education (Risk group: 3.6)
- Distance to public transport ≤ 10 (Ref group) vs. Distance to public transport ≥ 40 km (Risk group: 3.1)
- Antenatal checkup, last pregnancy (Ref group) vs. No antenatal checkup, last pregnancy (Risk group: 3.3)

Source: Midhet et al.
require verification, but suggest that a woman’s ability to take active steps to look after her reproductive health can also have a substantial bearing on her risk of dying in childbirth.

**Implications for policy**

Having examined the situation with maternal mortality in Pakistan and analyzed the determinants, the question is: What can be done? Action can, and must, be taken at many levels. There are actions that can be taken by mothers, by BHU personnel, by health managers, etc., all the way to the National Assembly. The following are some perspectives that can give all of us vital tasks to accomplish.

The cause of death perspective suggests some tasks that stem directly from identification of the problems. Here are a few:

- Establish “active management of third stage labor” (AMSTL) in as many deliveries as feasible.
- For home deliveries, arrange emergency transport in advance as a routine practice.
- Increase the ready availability of blood at EmOC centers for treatment of postpartum haemorrhage.
- Improve doctors’ practice in diagnosing and treating pre-eclampsia, through simple and clear MOH protocols and through detailing in the private sector.
- Train and encourage dais to use clean delivery kits, proper handwashing, and other clean delivery steps, and to diagnose and refer promptly for complications.
- Establish post-abortion care in policies, guidelines, protocols and standards.

Each of these steps, except perhaps for improving the blood supply, is a discrete task that can be done in the present context without unreasonable expense and effort.

A broader concept of reproductive health would include family planning during the period between pregnancies, and involve helping a couple to delay, avoid, or achieve the next pregnancy, depending on the wishes and interests of the couple. Health professionals can in particular support family planning to reduce maternal mortality in the following ways:

- Whenever possible, discuss the risks and problems to mother and child of having children too young, too old, too many, and too fast, and the value of family planning in achieving **healthy timing and spacing of pregnancy**.

- Strengthen **postpartum care**. Most delivering women in Pakistan receive no postpartum care at all, and even women delivering in facilities often receive at most a single perfunctory visit.

- Ensure that **emergency contraception** is known and readily available at the peripheral level, thereby particularly avoiding abortion-related mortality as well as pregnancy that a woman would consider particularly dangerous.

Measures need to be taken to ensure that mothers and communities have improved understanding of the various steps needed to enhance maternal health. Ideally, such measures should combine mass media, local media, and interpersonal communication creatively to get a series of targeted messages across. Local efforts have been made to do this, with some success – for example, the Hala Project in Sindh, the SMART project in D.G. Khan, the PRIDE project in the earthquake areas, and the PAIMAN Project nationally. To achieve this is partly a matter of resource allocation. Pakistan must build on the Lady Health Worker program and the currently evolving Community Midwife program to make mothers and families better informed.

Vulnerability, in the sense of high risk of maternal mortality, is more a matter of poverty
in its various forms than of medical risk factors that can be identified in advance. Within the category of poverty, some groups stand out in the data.

**Balochistan:** The exceptionally high MMR in Balochistan – 2.8 times that of Pakistan as a whole – appears to be the result of a “perfect storm” of negative factors: poor quantity and quality of EmOC facilities, widespread illiteracy and poverty, and a very sparse population with poor transport facilities, etc. A concerted effort is needed to bring Balochistan up to at least the national standard in maternal care (as well as other aspects of development).

**The rural poor:** Some locations in Pakistan combine difficulty of access to emergency maternal care with poverty and lack of education to create especially vulnerable groups. District authorities should identify such locations, and take steps to ensure that, to the extent possible, difficulties of access are minimized.

Finally, it is clear that general improvements in the **health system and in community education** would help to address all the problems described above. If quality health services were more easily available, all the various perspectives described by Prof. Fatullah would be addressed. If mothers and communities had a better understanding of the process of childbearing and its risks, many problems could be avoided or solved more promptly. These broader problems are the hardest to address; but until they are dealt with at the highest levels, the more specific measures indicated above will still leave far to many women dying in childbirth.

Every Pakistani has a role to play in addressing the unacceptably high levels of risk faced by women in their indispensable task of bearing children. For our leaders in public health, the essential task is to point the way so that these many and essential roles can be played.

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