

## CASE STUDY RESPONSE

### Addressing the 'third delay' in maternal mortality: need for reform

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The story of the young woman in rural Gujarat (1) and of the woman from Dharavi in Mumbai (2), reveal the faces hidden behind the statistics, and the problem of the high maternal mortality rate in India (3-5). The reported maternal mortality ratio (MMR) in India was 301 per 100,000 live births in 2001-03 (5). Higher rates are found in a few other countries in the South Asian region and in sub-Saharan Africa (6).

There have been two approaches to resolving the high numbers of maternal deaths. One is to augment the capacity of the system to deal with maternity by building up the supply side. The second approach works towards the recognition of every pregnancy as having a potential for risk of disability or mortality within communities and calls for the creation of demand for maternal health services. The Averting Maternal Deaths and Disability (AMDD) Programme uses the first approach and strengthens the capacities of healthcare institutions to provide basic and comprehensive Emergency Obstetric Care (EmOC) to all women, and thus reduce the "third delay", which is delay in receiving adequate care when a facility is reached (7,8). The first delay is in deciding to seek appropriate medical health for an obstetric emergency; the second is delay in reaching an appropriate obstetric facility (9). The AMDD Programme operates on the assumption that all pregnant women are at risk for serious complications and thus focuses on improving access, utilisation and quality of emergency obstetric care (7). The programme prioritises the preparation and readiness of basic and comprehensive EmOC facilities, thus reducing the 'third delay' (8).

In rural areas where the institutional delivery rate is low, efforts are on to encourage the use of the appropriate healthcare service for obstetric care. The accredited social health activist (ASHA) within the National Rural Health Mission (NRHM), the flagship programme of the government of India, in part addresses this need for demand generation for appropriate obstetric care services among women in rural communities (9). The safe motherhood intervention under the NRHM, called the Janani Suraksha Yojana (JSY), identifies the ASHA as one of the potential link workers connecting women in need of obstetric services with an accredited centre offering appropriate services. Her role as described in the JSY is, among other things, to "identify a functional government health centre or an accredited private health institution for referral and delivery and escort the beneficiary woman to the pre-determined health centre and stay with her till the woman is discharged." (10)

I examined the two case studies keeping in mind the interventions available within the country for reducing maternal morbidity and mortality. One case is of a woman who had symptoms of bleeding from the vagina very late in her third trimester and had presented herself at a healthcare facility, accompanied by her husband. She was examined by a healthcare provider and was found to require further diagnostic procedures that were available in the same facility. It is not the absence of infrastructure that is the main reason of her death. However, because the ultrasound service was not exclusively available for dealing with obstetric emergencies, she had to wait for about 90 minutes before she underwent ultrasound examination to determine the cause of bleeding. This was the best possible care that could be delivered in that situation where there was already a queue of 15 people. Following the diagnosis of internal haemorrhage, prompt intervention was also possible in the same system thanks to the good offices of a sympathetic intern who followed the woman from the time he started her treatment. Yet, the woman died in spite of the almost heroic efforts to save her. The delay in performing the ultrasound examination and subsequent surgical intervention possibly resulted in her death.

The second case highlights the story of a woman whose delivery was attended by the local Traditional Birth Attendant (TBA), who immediately referred her to the local hospital. On arrival at this unit, it was established that she had experienced an intrauterine death and therefore needed a facility with comprehensive obstetric care that was not available at the local unit. She was provided transport to the better equipped facility. Yet, we find that the patient was shifted through five hospitals, including two visits to the same community health centre. About 24 hours after she went into labour, the woman died. Here we see a trail of inadequate infrastructure to provide comprehensive obstetric care, including blood bank services.

In both cases we find that the problem was not the "first delay" (delay in deciding to seek appropriate healthcare in an obstetric emergency) or the "second delay" (delay in reaching an appropriate obstetric facility). The woman in the urban centre does reach a centre that can provide the care she needs, but the system is not geared to prioritise an emergency, in this case the need for a speedy ultrasound for a haemorrhaging patient. The lack of prioritisation can make the difference between life and death for a pregnant woman. In the rural area, the woman is shuttled between various healthcare facilities in

an effort to locate the one that can cater to her needs. In both cases we find that the women had sympathetic and supportive family members and spouses and even a traditional birth attendant in the rural area who provided appropriate referral. And, yet, both women died. In the urban area, the woman died because of the manner in which healthcare is organised and delivered impersonally in large hospitals, and in the rural area the woman died because of the delay in accessing appropriate healthcare. In both cases, the deaths occurred in a healthcare facility and the women died because the healthcare system lacked the ability to respond promptly to emergencies (11).

These deaths were unnecessary and could have been easily avoided had there been a systemic response to, and recognition of, an obstetric emergency and how to deal with it. Well thought out schemes such as the JSY hold out the promise of reducing maternal mortality by ensuring that women who reach accredited facilities will get appropriate care. As long as women died at home or on their way to hospital, the system could hide behind the excuse that women and their families were unwilling to come to healthcare facilities. But the deaths of these women after they had reached the healthcare system, with no or minimal delay, are evidence of how the system failed them and is indeed a violation of their right to life.

Health systems have to build accountability mechanisms into their operations and go beyond merely following one rule for all conditions. The programmes implemented in the area of health in general, and maternal health in particular, attempt to resolve problems that are experienced by a majority of people. But these programmes and protocols do not address the needs of those who may have special problems. A health system that is equitable would have the capacity to adequately address the needs of all women, including those who have special needs, such as blood transfusions and comprehensive obstetric care. This means that health systems have to be built on the basis of the ethical requirement of equity. In addition to a community-based approach to the provision of healthcare, including methods to address the first two delays, this means having procedures in place that have protocols for prioritising emergencies that cannot wait over those health needs that can wait.

Health policies and programmes that do not take into account differing needs, do not achieve the benchmark of fairness and ethical practice (13). Once women come into healthcare facilities for obstetric care, where there are conditions that can save their lives, the health system cannot be excused for failing them. Therefore every maternal death that occurs has to be examined carefully to determine whether or not it was avoidable. In both the cases described here, we find that the deaths were avoidable and therefore represent a failure of the health system. It is therefore necessary to build up infrastructure within healthcare facilities in rural areas and also

to train personnel at facilities in urban areas to understand that their responsibilities extend to ensuring a functional system that delivers obstetric care. Otherwise, efforts to reduce maternal deaths will translate into merely relocating the site of maternal mortality from the home to the hospital.

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