Chapter IV
Relevance of Maternal Health and Obstetric Care

Maternal and Child Health – The Indispensable Component

From the time period, when a systematic, collective, and conscious effort to the health of the public had been conceived, many programmes and policies were devised and implemented. With the increasing recognition of the failure of existing health services to provide health care, alternative ideas and methods to provide health care have been considered and tried. These efforts called for a revolutionary approach to health care and ultimately led to the Alma-Ata declaration in 1978. It declared that the ‘the existing gross inequality in the health status of the people particularly between developed and developing countries as well as within countries is politically, socially and economically unacceptable’. The Alma-Ata declaration called for the acceptance of WHO goal of Health For All by the year 2000 AD and proclaimed Primary Health Care as the way to achieving the goal.

India is also a party to that declaration. The major change that was required in the health policy so far followed in the country was the shift of focus from curative to preventive services. The structure prescribed for the delivery of services by Alma-Ata was already followed in the country as per the recommendations of the Bhore Committee (1946)1.

For delivery of comprehensive health care to all the people, special weightage has to be given to delivering health care to the weaker and vulnerable section of the community; which is definitely women and children. One of the components of Primary Health Care is maternal and child health care, including family planning.
No issue is more central to global well-being than maternal and perinatal health. Every individual, every family and every community is at some point intimately involved in pregnancy and the success of childbirth. Yet every day, 1600 women and over 10000 newborns die due to complications that could have been prevented. (WHO, 2001)

Every year, almost 600,000 women in the world die from pregnancy-related complications, and many more suffer from long-term disability, such as chronic pain, fistula, impaired mobility, damage to the reproductive system, and infertility. Twenty-three million women (15% of all pregnant women) develop life-threatening complications every year. The problem is most acute in developing countries, where complications of pregnancy and childbirth are the leading causes of disability and death among women of reproductive age.

Over the past several decades, maternal health programs have used antenatal screening to try to identify women at risk for complications. Though beneficial in many ways, these efforts have not succeeded in lowering maternal mortality rates. Studies show that most women who develop complications do not have any known risk factors. Indeed, even when a woman is in good health and receives antenatal care, there is no way to know whether she will develop complications and require emergency services. As a result, high-quality EmOC (Emergency Obstetric Care) needs to be available to every pregnant woman, and a health professional, can save lives by proper vigilance and responsiveness to life-threatening complications.

The maternal health community has identified three types of delays that can affect a woman’s chances of surviving an obstetric emergency. The first relates to social factors such as - delay in deciding to seek care when danger

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1Perinatal health - Health of the foetus, which has completed 22 weeks of development and up till seven days after birth.
signs appear, and delay in reaching a health facility, and the second relates to lack of resources, poor infrastructure, dearth of appropriate facilities, women’s low status, family decision-making about childbirth - that occur outside the facility and sometimes result in emergencies that are beyond medical help. The third type of delay is those delays occurring once a woman reaches the hospital - is often under the provider's control.

Although many health systems in developing countries cannot support providers as adequately as desirable, there are still opportunities to do better with what resources are on hand. The direct physical causes of maternal death - hemorrhage, complications of unsafe abortion, sepsis/infection, hypertensive disorders (eclampsia), obstructed labor - are treatable, the efforts of the hospital to provide swift and competent EmOC, using resources effectively, can have a significant impact on pregnancy outcomes.

Given the general scarcity of financial resources, the public sector needs to determine its priorities carefully. According to the widely accepted policy, the health care needs of infants, children and pregnant women, which account for a high proportion of all deaths (and presumably also of illness) deserve urgent attention.

In the context of adopting human development as the ultimate goal of all our developmental efforts, empowerment of women and development of children gain priority on the country's development agenda. Women and Children together constitute 65.6 per cent of India's total population and account for 673.80 million (as projected) in 2001.

Women, as an independent target group, account for 495.74 million and represent 48.3 per cent of country's total population, as per the 2001 Census. The National Health Policy 2001 (Draft) promises to ensure increased access to women to basic health care and commits the highest priority to the funding
of the identified programmes relating to women's health. During the Ninth Plan period, several new initiatives were taken as part of the Reproductive and Child Health (RCH) Programme (1997), in order to make it broad-based and client friendly. All the interventions with respect to the erstwhile programme of Child Survival and Safe Motherhood (CSSM) became part of RCH. During this period, the focus shifted from the individualized vertical interventions to a more holistic integrated life-cycle approach with more attention to reproductive health care. This includes access to essential obstetric care during the entire period of pregnancy, provision of emergency obstetric care as close to the community as possible, improving and expanding early and safe abortion services and provision for treatment of Reproductive Tract Infections/Sexually Transmitted Infections (RTI/STI) cases at the sub-district level.

**Maternal Health**

Maternal mortality and morbidity remains a major health problem in India. Estimating the maternal mortality ratio is never a precise exercise and estimates suggest the rate is between 407 and 540 per 100,000 live births. The latter estimate was recorded in the most recent DHS (Ensor, Tim and Dey, Rita, 2003)\(^3\). The rate is considerably higher in rural areas.

The NFHS found that, based on a standard of living index used in the NFHS, institutional delivery accounted for 29 percent of total deliveries amongst the low standard of living group but more than 84 percent in the high group (IIPS/Measure_DHS+, 2000)\(^4\). Assistance at delivery, obtaining antenatal care and post-partum checks for non-institutional deliveries exhibit similar trends.

A major part of the reproductive health care in India is provided by the private sector. Costs of delivery services in private nursing homes and hospitals are around 70 percent higher than in public facilities. Rural use of
private services is lower than for urban areas - a combined effect of lower incomes and availability of services. Table 3.1 gives an idea about the utilization of reproductive health services by the type of provider in a rural - urban context.

Table 4.1

<table>
<thead>
<tr>
<th>Type of hospital</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>12</td>
<td>10</td>
<td>10.5</td>
</tr>
<tr>
<td>Govt. doctor</td>
<td>10.2</td>
<td>6.7</td>
<td>7.5</td>
</tr>
<tr>
<td>Other public</td>
<td>1.8</td>
<td>3.3</td>
<td>3</td>
</tr>
<tr>
<td>Private</td>
<td>35.6</td>
<td>24.1</td>
<td>26.9</td>
</tr>
<tr>
<td>Private doctor/nurse</td>
<td>32.3</td>
<td>20.4</td>
<td>23.4</td>
</tr>
<tr>
<td>Other private</td>
<td>3.3</td>
<td>3.7</td>
<td>3.5</td>
</tr>
<tr>
<td>NGO worker</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>None</td>
<td>55.3</td>
<td>68.8</td>
<td>65.5</td>
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Source: (International Institute for Population Sciences, 2000)

The for-profit private maternity care sector is dominated by clinical services rendered around the time of pregnancy. The private sector accounts for around 47% of institutional deliveries and 40% of antenatal care (Peters, Yazbeck et al., 2002)^5. Much of this provision is from unqualified practitioners: dais and other indigenous practitioners make up 36%, private doctors 21% and chemists and other providers 14%. Recent surveys of the quality of obstetric care in two districts of AP found that the majority (65 percent) of private rural clinics had the capability to provide emergency obstetric care (Sridhar, 2001a^6; Sridhar, 2001b^7).
The sector also provides majority of terminations. In Rajastan, for example, the nongovernment sector accounts for more than 70 percent of all abortions (Chhabra and Nuna, 1993). The private sector, as might be expected, is far less active in areas of education and extending reproductive choice where the public and NGO sector is dominant.

At least 80% of consultations by young married women are with private providers, 26% of these episodes are for reproductive illnesses. Evidence from exit interviews indicate that maternity care is the main reason (28 percent) for obtaining services from small and second most likely reason (24 percent, after general medicine) in medium size hospitals. (Mahapatra, P., P. Sridhar and K. T. Rajshree 2002)

Use of private sector for delivery also varies markedly by standard of living with 17 percent of the poorest and more than 70 percent of the richest group using this type of facility (IIPS/Measure_DHS+, 2000). The dominant reasons for use of private reproductive health services appear to be related to convenience, quality and availability of female staff. A study in AP found that the main reason for obtaining private obstetric service was the fact that a lady doctor was available (61% of respondents), availability of any doctor (49%), availability of emergency services (42%) and good facilities (45%) (George, 1998). Conversely, the things patients most disliked about the private services were that the fee was high (15%) and attitude of nurses' poor (9%).

Like public sector, private sector can be divided into tiers of care ranging from small private nursing homes, some with fewer than 10 beds, to medium sized hospitals with 50 to 100 beds up to large facilities with several hundred beds. The latter often provide tertiary services. Most maternity services are provided locally in small and medium sized facilities.
Where women require more specialist services, for example special care for low birth weight babies, or premature babies, they appear to almost always turn to tertiary public facilities even when the birth is conducted at a private facility. In Kerala, even this is not found happening—new borns with severe problems are found being referred by the public hospitals to private hospitals with ultra modern facilities. Maternity services are a very small proportion of the total service that such hospitals provide.

**Cost of Maternity Services**

Across India there is evidence that all social groups are willing to spend considerable sums of money on maternity care, A study conducted in Ahmedabad found that even the poor in slums spent at least INR 500, for a normal delivery (Chavda, 1998)\(^\text{11}\). This was more than 25% of the average per capita monthly income and much more for poorer groups.

In Andhra Pradesh a study conducted in 1993 and 1994 across three districts of 357 facilities, which included 244 private hospitals and clinics, found a wide range of prices for both a normal delivery and a caesarean section - 60 fold in the case of a normal delivery and 48 fold in the case of a caesarean section (Table 4.2). (Mahapatra, Sridhar, Rajshree, 2002)\(^\text{12}\) This appears to reflect both a large difference in the quality of services offered, quality and experience of medical practitioners and also the purchasing power of the areas in which the facility is situated. The study only enquired about official prices in public facilities and, not surprisingly since maternity should be a free service, no charges were reported.
Table 4.2
Mean Private Charges for Delivery Services in Rupees, 1993/94 (range in brackets)

<table>
<thead>
<tr>
<th>Hospital type</th>
<th>Normal delivery</th>
<th>Caesarean section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clincs</td>
<td>465 (100-1,000)</td>
<td>2,310 (250-4,000)</td>
</tr>
<tr>
<td>Small hospitals</td>
<td>1,060 (150-6,000)</td>
<td>3,676 (500-8,000)</td>
</tr>
<tr>
<td>Large hospitals</td>
<td>1,843 (300-6,000)</td>
<td>3,708 (250-12,000)</td>
</tr>
<tr>
<td>All</td>
<td>1,053 (100-6,000)</td>
<td>3,574 (250-12,000)</td>
</tr>
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Relevance of Taking Obstetric Care as the Focus

Maternal mortality claims 514,000 women’s lives each year. Nearly all these lives could be saved if affordable, good quality obstetric care were available 24 hours a day, seven days a week. Most of the deaths are caused by hemorrhage, obstructed labour, infection (sepsis), unsafe abortion and eclampsia (pregnancy induced hypertension). Indirect causes like malaria, HIV and anaemia also contribute to maternal deaths.

For every woman who dies, an estimated 15 to 30 women suffer chronic illnesses or injuries as a result of their pregnancies. Obstetric fistula is a serious and isolating injury that could be significantly be prevented through proper emergency obstetric care.

Statistics show that about 15% of all pregnancies result in complications. Most complications occur randomly across all pregnancies, both high and low-risk. They cannot be accurately predicted and most often cannot be prevented, but they can be treated.

It is essential that for a facility to meet these standards, all six or eight of the following functions must be performed regularly and assessed every three to six months. (Engender Health, 2002)
Basic EmOC functions
(Prefomned in health center without the need for an operating theatre)
1. IV/IM antibiotics
2. IV/IM oxytoxics
3. IV/IM anticonvulsants
5. Assisted vaginal delivery
6. Removal of retained products

Comprehensive EmOC functions
(Requires an operating theatre and is usually performed in referral units in the case of public services).

It includes all six basic EmOC facilities plus:
7. Caesarean section
8. Blood transfusion

A Basic EmOC facility is one that is performing all six of the functions listed above. This does not mean that other functions are not important. But for the purposes of monitoring, these six functions are considered sufficient to identify the kind of facility that can perform most, but not all, EmOC activities. At a Comprehensive EmOC facility, the ability to perform surgery entails a number of other capabilities, e.g., administering anaesthesia.

A reasonable (even conservative) estimate of the minimum proportion of pregnant women who will require a Caesarean section is 5 per cent. As already discussed, a number of authors have estimated the proportion of pregnant women who develop serious complications to be at least 15 per cent. Since it is assumed that about 15 per cent of pregnant women will develop serious complications, then we can estimate that one third (5/15 = .33) of
women with complications will require treatment in a Comprehensive EOC facility.

Theoretically, all women who need Basic EOC could be treated in a single facility. This kind of arrangement, however, would ignore problems of access. Even in a city, one facility may not be easily accessible to everyone. The minimum acceptable level for this indicator has been defined in relation to population rather than births because most health planning is done in relation to population. However, if it is judged more appropriate to assess the adequacy of EOC services in relation to births, the comparable minimum acceptable level would be one Comprehensive EOC facility and four Basic EOC facilities for every 20,000 annual births.

The goals of a provider of emergency obstetric care (EmOC) are to save the lives of women and their babies and to prevent injury to them. Quality EmOC involves a state of readiness that will enable the provider's team to respond appropriately to obstetric emergencies in a way that fulfills the needs and rights of clients.

**Readiness:** Achieving and maintaining a state of preparedness in the facility to provide quality EmOC. This includes staff available with requisite skills and a willingness to respond to clients 24 hours a day, 7 days a week, and available and functional equipment and supplies.

**Response:** Providing prompt, appropriate care when emergencies arise, according to accepted clinical standards and protocols.

**Rights:** Providing services in a manner corresponding to the rights and needs of all clients.

Clients have the right to quality care, and staff have specific needs to be met so they are able to provide this care. Specifically, they need facilitative
supervision and reliable management for a positive work environment; information, training, and development to maintain skill levels; and functional and adequate supplies, equipment, and infrastructure to provide correct and complete treatment.

If, in the aggregate, there are not four Basic and one Comprehensive EOC facilities per 500,000 population, the overall minimum acceptable level of EOC services is not met for the country. In this case, a high priority is to bring the amount of EOC services at least up to the minimum acceptable level. This may be done in different ways — i.e., by upgrading existing facilities, building new facilities or some combination of the two. If the minimum acceptable level for the indicator of all births in Basic and Comprehensive EOC facilities is not met — i.e., fewer than 15 per cent of all births in the population take place in EOC facilities — one can conclude with reasonable certainty that some women who need life-saving EOC services are not receiving them. In this case, the reasons for underutilization need to be explored and addressed. Of course, in seeking to increase utilization, the emphasis should be on encouraging women with complications to use EOC facilities, and not simply on increasing the number of normal deliveries taking place in facilities. As discussed in earlier chapters, the goal is to have 100 per cent of women with obstetric complications delivering in EOC facilities, not 100 per cent of all pregnant women.

Meeting the minimum criteria as mentioned above is the fundamental duty of the government and enjoying the care is the right of every woman. Just the establishment of infrastructure, is, probably not the answer. The clients have to be educated on the necessity of utilization of such services. Only a well-informed client can assure that whatever infrastructure is provided, is utilized without under-consumption.
References

1. GOI, 1946, Report of the Health Survey and Development Committee (Bhore Committee)
10. IIPS/Measure_DHS+, 2000, op.cit
'Emergency Obstetric Care – A Leadership Manual for Improving Quality of Services', (Working Draft), 2002, paper published by Engender Health and Mailman School of public health, Columbia University