

Service Delivery of Maternal Health Care in Urban India: Is the Millennium Development Goals achievable?

Introduction

The improvement of maternal health care through the reduction of maternal mortality by increasing institutional delivery, proportion of births attended by skilled health personnel and antenatal care coverage is an important objective of the Millennium Development Goals (MDG). The MDG has set the target of achieving 200 maternal deaths per lakh live births by 2007 and 109 per lakh of live births by 2015. Strengthening of the maternal health care services to ensure safe motherhood is one of the major focus of the Maternal and Child Health (MCH) services in India. The maternal health care services for antenatal care includes at least three antenatal care visits, iron prophylaxis for pregnant and lactating women, at least one dose of tetanus toxoid vaccine, detection and treatment of anaemia in mothers, and management and referral of high-risk pregnancies and natal care, that is encouragement of safe delivery, post-natal care and management of unwanted pregnancies. The National Population Policy (NPP) adopted by the Government of India in 2000, reiterates the government's commitment to the safe motherhood programme within the wider context of reproductive health. Among the national socio-demographic goals for 2010 specified by the policy, several goals pertain to safe motherhood, 80 percent of all deliveries should take place in an institutions by 2010, all deliveries to be attended by trained personnel, and the maternal mortality ratio should be reduced to a level below 100 per 1,00,000 live births. The actual performance in this regard in India and especially in urban India presents an entirely different picture from the set targets to be achieved by 2010.

The population of the Indian cities are growing at an alarming rate which results in rapid and unplanned urbanization as well as the growth of slums in the peripheries of the cities. Large proportions of the urban population are poor, unemployed and reside in the slums which constitute a considerable proportion of India's urban population. The urban advantage evades the urban poor. When infrastructure are lacking, the urban settlements are amongst the world's most life threatening environments. In spite of the fact that the services are more accessible to the urban population along with their higher level of awareness as compared to their rural counterparts, the performance with respect to maternal health is not at all encouraging in the Indian cities. The situation is especially alarming and requiring urgent attention in the urban areas of major states of Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan and Assam which are still lagging behind in maternal health care indicators as compared to the other states as well as the national averages. The present scenario of maternal health in urban India indicates a very stiff task ahead to meet the target of Millennium Development Goal of improvement of maternal health care by the year 2015. In this context the study tries to bring out the scenario of maternal health care in urban Indian along with highlighting on the fact that how far is the Millennium Development Goal of improving maternal health care really achievable in the Indian cities.

Data Source

The data for the study comes from the latest round of the District Level Household and Facility Survey -3 (DLHS-3) conducted during 2007-08. The DLHS -3 is one of the largest ever demographic and health surveys carried out in India, with a sample size of about seven lakh households covering 601 districts of the country. In DLHS-3, all eligible women whose last pregnancy terminated in still or live birth since January 1, 2004 were asked about the details of antenatal, natal and post-natal care they had received; pregnancy, delivery and post-delivery complications they had suffered and the treatment seeking behaviour in case of complications. The entire analysis is based on currently married women aged 15-49 years whose last pregnancy terminated in still or live birth since January 1, 2004

Methodology

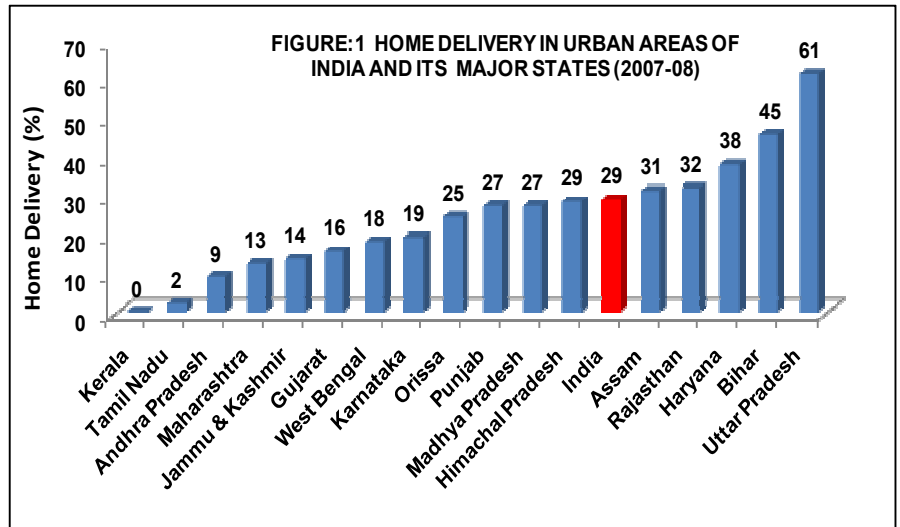
The present study is based on the currently married urban women, aged 15-49 years whose last pregnancy terminated in still or live birth since January 1, 2004. For the purpose of the study the dependent variables are percentage of women receiving any antenatal check -up (includes antenatal check-up done at home or outside), three or more antenatal care visits, at least one dose of tetanus toxoid vaccine, full antenatal check-up (defined as at least three ANC visits, one Tetanus Toxoid injection and 100 Iron Folic Acid (IFA) tablets/syrup consumed), institutional delivery, home delivery, home delivery assisted by trained personnel and the percentage of safe delivery. The independent variables used for the study are age of the women, children ever born, education, religious affiliation, caste and the economic status of the households. Bivariate and multivariate analysis has been utilised for the purpose of bringing out the situation of maternal health in India and the major factors affecting the utilisation of maternal health care services.

Results

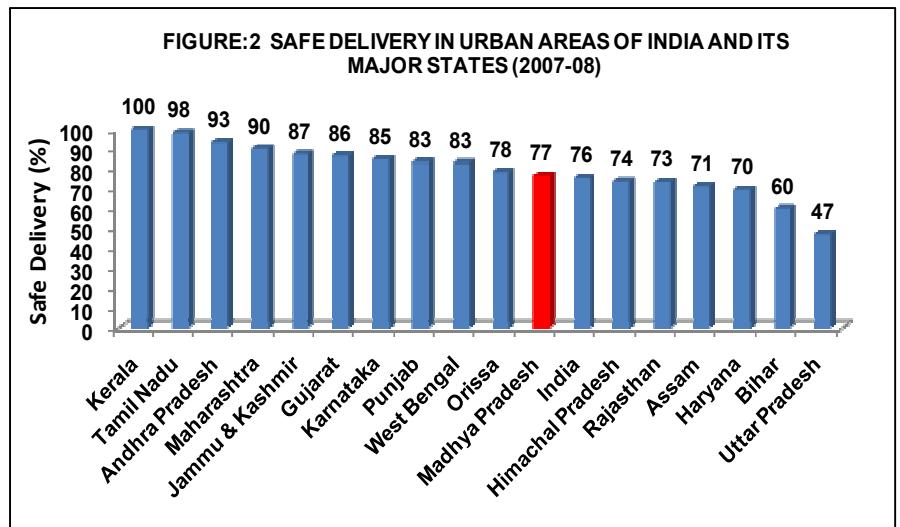
The study reveals poor scenario of maternal health in the Indian cities with the actual performance not at all encouraging as compared to the set targets. In the Indian cities out of the total pregnant women only sixty-eight percent received three or more ANC visits. It reflects the fact that around one third of the women even in the urban areas of India are not receiving the recommended three or more ANC visits, which provides essential services as well as information for the health of the mother as well as the child. Fifteen percent of the pregnant women did not receive any ANC at all. The coverage of full ANC (defined as at least three ANC visits, one Tetanus Toxoid injection and 100 IFA tablets/syrups consumed) is only thirty percent. Only thirty-four percent of the women had consumed 100 or more IFA tablets, which essential for preventing anaemia among the mother as well as the child. Out of the total deliveries in the urban areas only seventy percent had taken place in institutions, despite all efforts of government. Strikingly, thirty percent of the total deliveries in urban India had taken place at home and out of these only five percent were attended by skilled personnel, highlighting the danger to the mother and child. The proportion of women who received the maternal health care was higher among the women belonging to the 20-35 age groups, with higher education, belonging to the Hindu

households, other caste groups and to the highest wealth quintile households (Table 1). The major reasons for women not preferring institutional deliveries were they did not find it customary, poor quality services and the cost is too much. These reasons reflect that women even in the urban areas are not aware of the importance of institutional delivery and if they are aware the poor quality services and the high cost deter them from availing the services.

At the state level the situation is especially alarming in urban areas of Uttar Pradesh, Bihar, Haryana, Rajasthan and Assam where the maternal mortality is also high. At the national level 29 percent of the urban women have home delivery while the corresponding figure is more than two times in the state of Uttar Pradesh (61 percent) followed by Bihar (45 percent), Haryana (38 percent), Rajasthan (32 percent) and Assam (31 percent) (Figure 1). Such high level of



home delivery in the urban areas is a matter of serious concern and major impediment to the achievement of the target achieving 80 percent of all deliveries in institutions by the year 2010. It is an expected phenomenon to have majority of the deliveries as safe delivery in the urban areas but the situation in urban areas of Uttar Pradesh, Bihar, Haryana, Assam and Rajasthan contradicts this phenomenon. In case of Uttar Pradesh only 47 percent of the deliveries are safe as compared to the national average of 77 percent safe deliveries (Figure 2).



Conclusions

Therefore, the study reveals that even in the urban areas the situation of maternal health is quite poor especially in the five states of Uttar Pradesh, Bihar, Haryana, Assam and Rajasthan which reflects the fact that the achievement of the Millennium Development Goal of improvement of maternal health care is a difficult task even in the Indian cities. In spite of the efforts by the government and the better quality infrastructure and facilities in the urban areas, the situation with respect to maternal health is far from being satisfactory. The profit seeking private health sector is mushrooming in Indian cities which are beyond the reach of poor people.

Due to the unsatisfactory services of the government health facilities and the high cost of services at the private health facilities the urban women especially those belonging to the poor households and the illiterate ones are lagging behind in availing the maternal health facilities which are essential for the well being of the mother as well as the child. Women should be made aware of the importance of their health and should be encouraged to avail the maternal health services. Along with the quality of the services should be improved especially at the government health facilities so that more women are encouraged to utilize the maternal health services especially the poor urbanites. Therefore, what is required now for making the Millennium Development Goal achievable in the near future is the provision of quality services that is affordable and accessible to majority population, which constitute considerable proportion of slum dwellers.

Table

TABLE 1: SCENARIO OF MATERNAL HEALTH IN URBAN INDIA BY BACKGROUND CHARACTERISTICS, INDIA, 2007-08.

| Background characteristics | Any antenatal check-up | Three or more ANC visits | At least one tetanus toxoid injection | Consumed 100+ IFA tablets/ syrup | Institutional delivery | Home Delivery | Home delivery assisted by skilled personnel | Safe delivery | Number of women |
|----------------------------|------------------------|--------------------------|---------------------------------------|----------------------------------|------------------------|---------------|---|---------------|-----------------|
| Age group | | | | | | | | | |
| 15-19 | 85.0 | 62.2 | 76.7 | 23.9 | 63.2 | 36.5 | 5.8 | 69.0 | 1,601 |
| 20-24 | 88.5 | 78.5 | 81.0 | 31.5 | 70.3 | 29.2 | 5.6 | 75.9 | 12,763 |
| 25-29 | 88.4 | 74.6 | 81.3 | 35.9 | 72.8 | 26.6 | 4.9 | 77.7 | 15,122 |
| 30-34 | 86.2 | 60.7 | 78.6 | 36.5 | 71.0 | 28.6 | 4.8 | 75.8 | 7,423 |
| 35 + | 78.1 | 39.7 | 68.3 | 29.3 | 61.8 | 37.5 | 5.5 | 67.3 | 3,226 |
| Children ever born | | | | | | | | | |
| 0 | 82.6 | 62.2 | 78.6 | 29.0 | 66.8 | 31.4 | 9.1 | 75.9 | 143 |
| 1 | 93.7 | 78.5 | 87.8 | 41.6 | 83.2 | 16.3 | 3.8 | 87.1 | 13,506 |
| 2 | 91.2 | 74.6 | 83.3 | 39.3 | 76.7 | 22.9 | 4.8 | 81.5 | 13,099 |
| 3 | 84.4 | 60.7 | 75.7 | 26.2 | 62.1 | 37.2 | 6.5 | 68.6 | 6,530 |
| 4+ | 69.0 | 39.7 | 59.8 | 14.4 | 41.7 | 57.7 | 7.4 | 49.0 | 6,857 |
| Education | | | | | | | | | |
| Non-literate | 67.6 | 37.8 | 59.5 | 12.1 | 40.2 | 59.1 | 7.1 | 47.3 | 9,431 |
| Less than five years | 84.0 | 61.3 | 73.0 | 23.0 | 59.5 | 40.1 | 6.0 | 65.5 | 2,009 |
| 5-9 years | 90.0 | 69.7 | 81.3 | 31.5 | 71.1 | 28.4 | 5.6 | 76.7 | 12,398 |
| 10 or more years | 96.7 | 84.3 | 90.6 | 49.1 | 89.0 | 10.6 | 3.7 | 92.7 | 16,297 |
| Religion | | | | | | | | | |
| Hindu | 87.6 | 68.6 | 80.8 | 35.2 | 72.0 | 27.5 | 5.2 | 77.1 | 27,938 |
| Muslim | 83.3 | 60.3 | 76.4 | 26.1 | 61.5 | 38.1 | 5.2 | 66.7 | 8,491 |
| Christian | 94.4 | 78.2 | 69.8 | 47.0 | 83.2 | 16.6 | 3.2 | 86.4 | 1,937 |
| Sikh | 91.5 | 75.4 | 89.0 | 27.8 | 78.7 | 20.9 | 8.8 | 87.5 | 865 |
| Others | 88.6 | 75.8 | 77.5 | 33.6 | 74.7 | 24.9 | 6.4 | 81.1 | 904 |
| Castes/Tribes | | | | | | | | | |
| Scheduled Castes | 83.0 | 61.3 | 75.5 | 27.3 | 61.7 | 37.7 | 6.1 | 67.8 | 6391 |
| Scheduled Tribes | 87.2 | 68.8 | 67.8 | 37.4 | 69.9 | 29.6 | 4.5 | 74.5 | 3252 |
| Other Backward Classes | 85.0 | 64.9 | 78.5 | 33.1 | 68.1 | 31.4 | 5.3 | 73.4 | 16,957 |
| Others | 91.7 | 73.7 | 85.3 | 36.4 | 77.8 | 21.8 | 4.8 | 82.6 | 13,509 |
| Wealth index | | | | | | | | | |
| Lowest | 58.2 | 29.8 | 49.6 | 10.2 | 34.2 | 65.0 | 4.2 | 38.3 | 1,137 |
| Second | 65.6 | 38.1 | 57.8 | 15.0 | 38.1 | 61.4 | 5.9 | 44.0 | 2,283 |
| Middle | 76.0 | 52.0 | 66.8 | 20.3 | 51.8 | 47.5 | 6.8 | 58.6 | 4,806 |
| Fourth | 85.3 | 62.4 | 76.2 | 27.8 | 63.5 | 36.0 | 6.4 | 70.0 | 10,717 |
| Highest | 94.4 | 78.9 | 88.0 | 42.8 | 83.6 | 16.0 | 4.2 | 87.8 | 21,182 |
| India | 87.1 | 67.5 | 79.5 | 33.6 | 70.4 | 29.1 | 5.2 | 75.6 | 40,135 |