

Maternal Mortality in Madhya Pradesh

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Summary:

Paucity of data on maternal mortality is one of the important reasons for failure to develop a strategy to reduce it. This study is the outcome of a process used to generate authentic data on maternal deaths at the village level through the ICDS reporting system. The results showed that only 17 percent projects were reporting maternal deaths in the MPR. The MMR ranged from 889 to 1198 per one lakh live-births. Details were available on 107 of the total 604 maternal deaths. Seventy eight percent deaths occurred in the age-group 20-30 years. One fifth were attended by untrained dais or village women. Seventy seven percent women died at home and 3 percent on way to hospital. This study highlights the need for carrying on a massive campaign to generate awareness on maternal mortality.

Maternal mortality is the health indicator which shows the greatest differential between developed and the developing countries. The lifetime risk of death related to pregnancies is estimated to be 500 times as high for women in Africa and large parts of Asia, as for those in the developed countries. Estimates for maternal mortality for India is nearly 570 per one lakh live-births. For the state of Madhya Pradesh this figure is 711 for every one lakh live-births (UNICEF, 1995). The unreliability of maternal mortality rates (MMR) round the developing world is notorious and most estimates are underestimates (Ramalingaswami, 1991). Maternal mortality accounts for 2.5 percent of all female deaths and 12.5 percent deaths among rural women in the 15 to 45 year age group (Ghosh, 1993). In a retrospective study from 1989 to 1993 MMR of 1650 per one lakh live-births has been reported (Sharma, 1994).

There is paucity of data on MMR at the state level. Primary health centres have figures of only those maternal deaths occurring in their institutions. These cannot be claimed to reflect the actual maternal mortality rate. Deliveries in the rural and tribal areas of the state are domiciliary. A study on 2269 deliveries in Kathiwada Block of Jhabua district revealed that 96.3 percent deliveries took place at home and 85.8 percent deliveries were attended by an untrained birth attendant (Taneja, 1993). One of the major reasons for lack of data is the weak system of registration of vital events — births and deaths by an illiterate kotwal. Another, equally important fact is the low social status of women, so that death of a woman in child-birth is not considered important.

Since, data on maternal mortality is not being

captured or being reflected in information reaching the state headquarters it was considered important to capture authentic data on maternal deaths in the state, if a realistic strategy is to be formulated. For the first time, an attempt has been made to capture data on maternal deaths, occurring at the village level through the ICDS Reporting System. This paper deals with the process and outcome of an effort which was an action research study undertaken at the level of the state headquarters.

As per norms laid down by the Government of India, one anganwadi centre (AWC) is opened per 1000 population in rural and urban areas and 750 population in tribal areas. In addition to delivery of services, each AWC generates a monthly progress report (MPR) in which among others there are columns for live-births and maternal as well as infant deaths. It is a fact that whenever a maternal or child death occurs it does not go unnoticed by the anganwadi worker, because she is a local resident. Also most of the pregnant women take supplementary nutrition from the AWC and also come for tetanus toxoid injections. Hence anganwadi workers were encouraged to make entries of maternal deaths in their coverage area. In the first instance, instructions were issued about accurate reporting of data on maternal deaths in the MPR which is initiated at the AWC. At a workshop organised for training field functionaries attention was drawn to the fact that the column on maternal deaths existing in the MPR is being left blank either inadvertently or purposively. They were asked to ensure that the anganwadi worker always recorded and reported death of a woman due to maternal causes both in the register of the anganwadi as well as in the

MPR. Field functionaries were reassured that reporting of maternal deaths would not in any way threaten them or their job. It is important to mention here that field officers of every level i.e. district, block as well as sector were sensitized in several rounds about this action research project and the need for authentic and accurate reporting of maternal deaths from every anganwadi centre in every MPR. District officers were instructed to ensure compliance of recording and accurate reporting. Child development project officers (CDPO) at the block level were instructed to ensure accurate reporting and to take strict action against false reporting. The stress always was that if a maternal death occurred it must necessarily be reported in the MPR. A separate proforma was also mailed to all CDPOs seeking detail information of the patient on her obstetric history and possible cause of death which was returned to state headquarters.

All MPR's received at the state headquarters were scrutinised every month for maternal deaths. Projects reporting maternal deaths were thus identified and relevant information contained in them was entered into master computed in the form of tables.

Table I gives information on the number of projects reporting maternal deaths, the total number of projects reporting every month, as well as the total number of deaths in this period. Thus it is seen, during the 10 months period, 1st August 1996 to 30th June 1997, 637 maternal deaths were reported. However, since 33 deaths could not be verified, only 604 deaths were considered. MPR's for the month of March 1997 were not accessible hence data of March 1997 is not included.

Table I Number of projects

Month	MPR	MPRs Reporting MM	No. of deaths reported	No. of deaths included
A	B	C	D	E
August 1996	245	31	41	41
September 1996	245	65	120	94
October 1996	220	46	80	80
November 1996	245	57	102	95
December 1996	265	43	65	65
January 1997	247	40	64	64
February 1997	289	34	44	44
March 1997				
April 1997	237	19	27	27
May 1997	264	29	39	39
June 1997	158	40	55	55
Total		404	637	604

Table II gives the percent of MPRs which were reporting maternal mortality every month. On an average only 17.1 percent projects were reporting maternal deaths in the MPR, the rest were either leaving the column blank or were crossing it out. The range varied from 8.02 percent to 26.53 percent. Certain projects were sending very high figures which were discarded after checking was done at the field level.

Maternal Mortality Rate (MMR) was calculated for every month for the projects which were reporting maternal deaths, from August 1996 to June 1997. It is evident from Table III that MMR in the projects which were reporting ranged from 889.5 to 1198.05 per one lakh live-births. The highest number of live-births during this period were reported in the months of September to December 1996, these are also the months showing the highest number of maternal deaths. The highest number of 9029 live-births in 65 projects was reported in the month of September '96, while the highest MMR of 1198.05 was reported in the month of January 1997. During this period of ten months, 604 maternal deaths and 57,304 live-births, were reported from the projects. The average MMR of this period works out to be 1054.02 per 1,00,000 live-births. A careful study based on hospital statistics and community surveys in Anantpur district of Andhra Pradesh gave MMR of 798 per 1,00,000 live-births (Bhatia, 1988).

Table II MPR's Reporting Maternal Mortality

Month	Total MPR's	MPR's MM	Percentage
August 1996	245	31	12.65
September 1996	245	65	26.53
October 1996	220	46	20.91
November 1996	245	57	23.27
December 1996	265	43	16.23
January 1997	247	40	16.19
February 1997	289	34	11.76
March 1997			
April 1997	237	19	8.02
May 1997	264	29	10.9
June 1997	158	40	23.31

Table III Maternal Mortality Rate

Month	MPR	No. of Projects reporting MM	No. of deaths reported	Live Births in these projects	MMR
August 1996	245	31	41	4609	889.5
September 1996	245	65	94	9029	1041.08
October 1996	220	46	80	7610	1051.28
November 1996	245	57	95	8036	1182.18
December 1996	265	43	65	6183	1051.26
January 1997	247	40	64	5342	1198.05
February 1997	289	34	44	4089	1076.05
March 1997					
April 1997	237	19	27	3130	862.61
May 1997	264	29	39	3683	1058.91
June 1997	158	40	55	5593	983.37

Detailed information was also sought from all CDPOs on the maternal deaths. It is noteworthy that in spite of repeated instructions only 36 projects in 22 districts reported the details of 107 maternal deaths which had occurred. The 107 deaths were reported from 95 villages. Fifty three percent of women who died were in the age-group 20-25 years while 25.2 percent deaths occurred between 26-30 years, i.e. a total of 78.2 percent deaths occurred in the age-group 20-30 years. 66.9 percent deaths were reported in the age-group 20-30 years in a study from a rural hospital (Sharma, 1994). Of the women who died 35.5 percent were ante-partum, 34.5 died during delivery, while 29.9 percent died in the post-partum phase. Thirty eight percent women were primipara, 18.7 percent second para, 16.8 percent were in their third pregnancy while 24 percent were in their fourth or more pregnancy. Information on who conducted the delivery was available only in 85 cases. Of these, 29 percent were attended by trained dais, 18 percent by a doctor and 6 percent by ANMS; 18 percent women were in the hands of untrained dais while in 8 percent women, relatives or other village women conducted the deliveries. The fact that 18 percent women were attended by Doctors, reflects that either these women reached the doctor very late or/and in addition, doctors did not have infra-structure facilities which were essential for obstetric emergencies. It seems that ANM's and trained dais who together attended 35 percent of the women did not possess appropriate skills to identify cases so that timely referral could be effected and lives saved. Very often even the trained dai does not see the women except at the time of delivery (Ramalingaswamy, 1991). It is known that

dais are being trained for several decades, but still a large number of deliveries are being conducted by untrained dais or family members. In this study nearly one-fifth women were attended by untrained dais. Data obtained on place of death shows that 77 percent of the women died at home, 20 percent died in hospital and 3 percent died on way to hospital. It is obvious life-saving measures were inadequate for 20 percent women who died in hospital. Commonly, it is observed that they are brought very late, however it is a fact that primary health centres are not adequately staffed or do not have infra-structure facilities to cope with obstetric emergencies.

It can be concluded from this research study that even though estimates of MMR in Madhya Pradesh are very high, it has not been a priority to generate accurate data. Paucity of data has resulted in neglect of planning a strategy on a priority basis to bring down MMR in the state. Even though, the figures in this study were obtained only from 17 percent ICDS projects it shows that it is possible to get authentic data through the MPRs. It also gives an idea of the real situation about safe deliveries at the ground level. There is therefore, an urgent need for carrying on a massive campaign to generate awareness on maternal mortality so that young women do not die during a normal physiological process. Rethinking on the available facilities at Primary Health Centres for dealing with obstetric emergencies is the need of the hour and needs to be tackled vigorously.

References

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