Maternal Death Review - A tool for system strengthening: Gujarat Experience

National Rural Health Mission, Gujarat

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Background

- The latest estimate of MMR for Gujarat is 148 per 1 lakh live births (SRS 2007-09 report). The State has to achieve <100 MMR by 2015 to comply the MDGs.
- The importance of MDR lies in the fact that it provides detailed information on various factors at facility, district, community, regional and national level that are needed to be addressed to reduce maternal deaths.

Process of MDR in Gujarat:

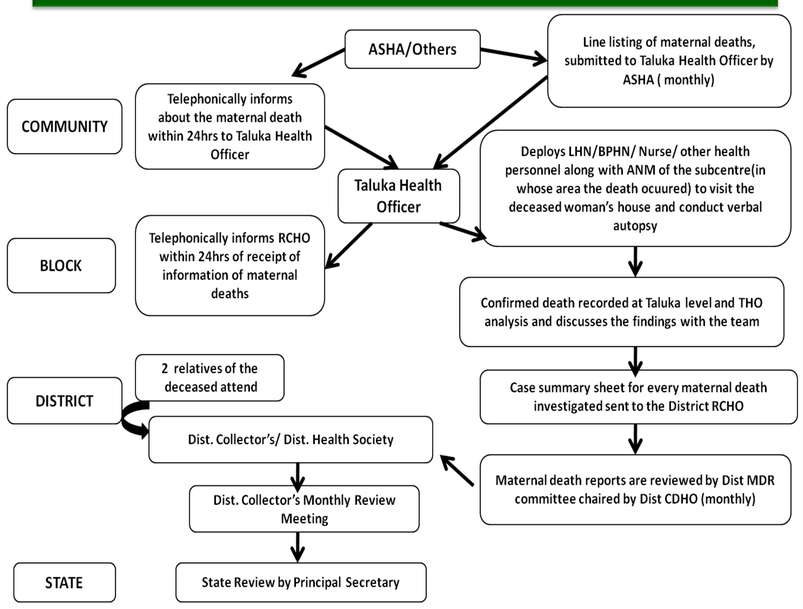

Fig. 1 Community Based Maternal Death Review Process Flow Chart in Gujarat

Observations: Maternal Deaths in Gujarat (April 2011-March 2012)

Process Indicators:

Summary Status of Maternal Deaths Reporting

✓ Out of Estimated Maternal deaths, the HMIS reported 806 deaths (55.6%), Verbal Autopsy of 686 maternal deaths (47%) was carried out, 601 (88%) maternal deaths reviewed by CDHO and 519 (76%) of Maternal Deaths reviewed by Collector.

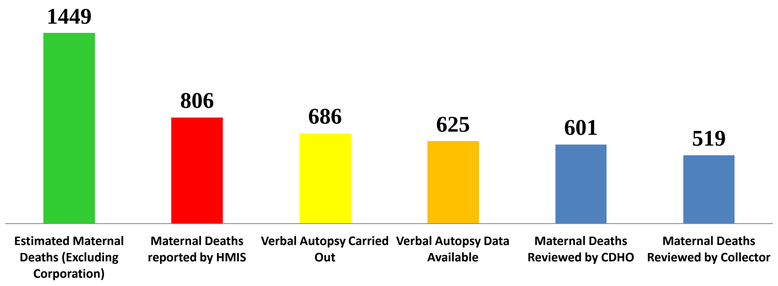

Fig. 2 Summary Status of Maternal Deaths Reporting in Gujarat

Taluka wise reporting of maternal deaths:

✓ Taluka wise data of maternal deaths was reported form 25 districts for the year 2011-12.

✓ Among 25 districts having 215 talukas, 31 talukas reported more than 7 maternal deaths, 39 talukas reported maternal deaths in the range 4-6 and 101 talukas reported maternal deaths in the range 1-3.

✓ It was noted that 54 talukas did not report any deaths in the year 2011-12.

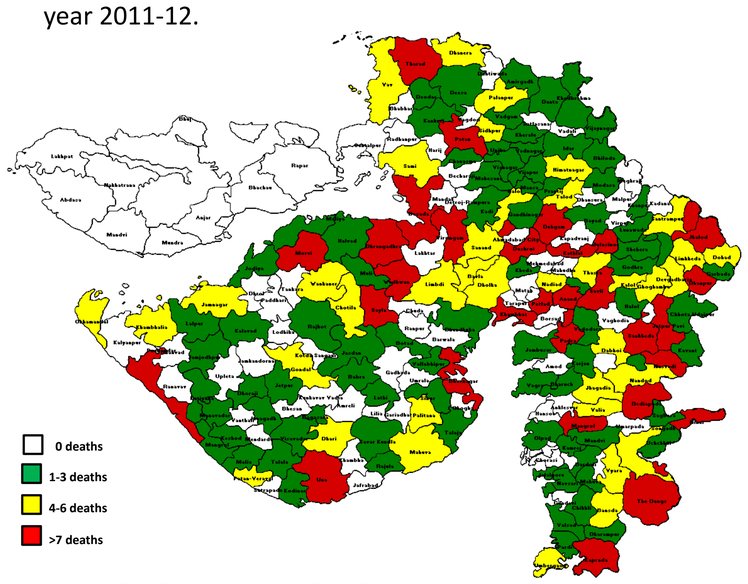

Fig. 3 Taluka wise Maternal Deaths Reported in Gujarat (April 11 to March 12)

District-wise reporting and review of maternal deaths in Gujarat (April 2011- March 2012):

✓ 11 out of 26 districts reported maternal deaths more than the State average of 47% reported deaths as compared to estimated deaths. 15 out of 26 districts reported less than the State average.

✓ As compared to state average of 88% of reported deaths reviewed by CDHO, 18 districts CDHO had reviewed more than state average and 8 districts less than state average.

✓ Except for Junagadh district, Collector of all the other 25 districts had reviewed the maternal deaths.

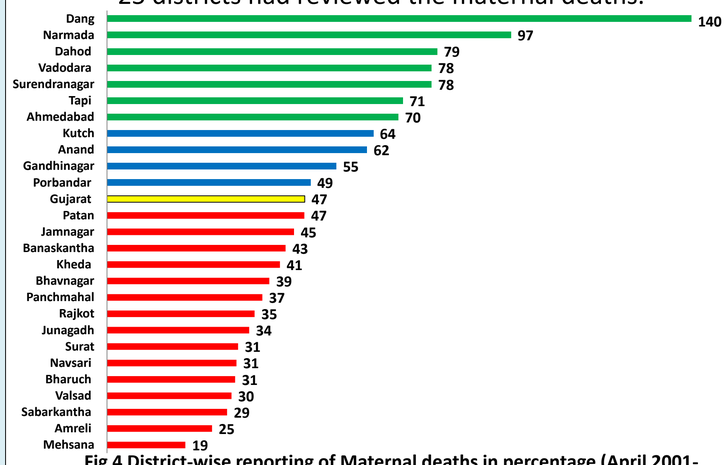

Fig 4 District-wise reporting of Maternal deaths in percentage (April 2001-March 2012) (% = Reported Deaths/Estimated Deaths*100)

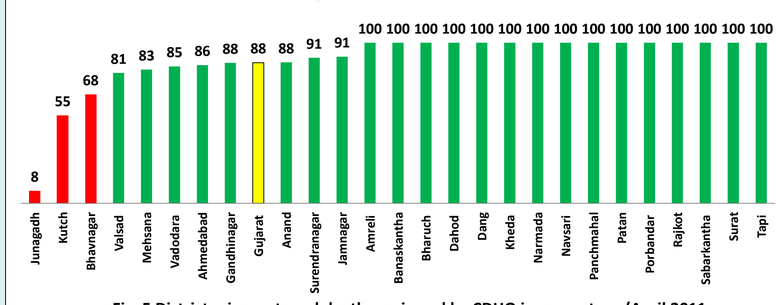

Fig. 5 District-wise maternal deaths reviewed by CDHO in percentage (April 2011-March 2012) (% = Deaths reviewed by CDHO/ Reported Deaths*100)

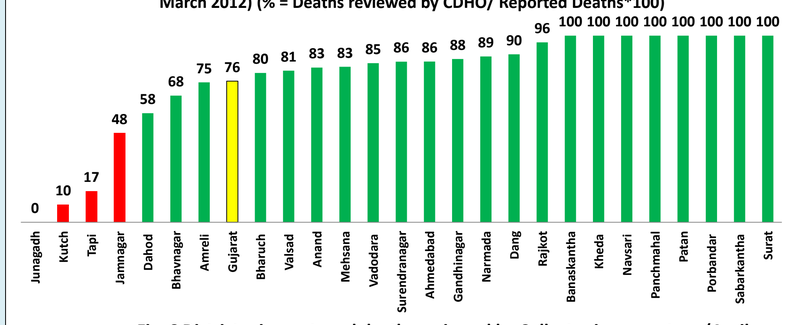

Fig. 6 District-wise maternal deaths reviewed by Collector in percentage (April 2011-March 2012) (% = Deaths reviewed by Collector/ Reported Deaths*100)

Program Indicators

Place of delivery of mothers who died:

✓ Out of 490 mothers who delivered before death 192 (39%) delivered in private hospital, 107 (22%) at home, 69 (14%) at district hospital.

Who conducted Home delivery?

✓ Among 107 females who delivered at home, 102(95%) were conducted by unskilled birth attendant.

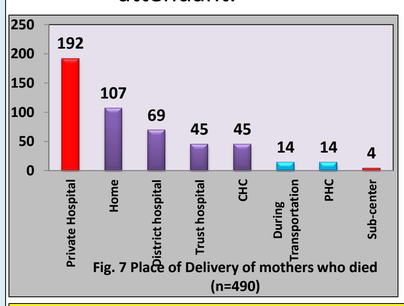

Fig. 7 Place of Delivery of mothers who died (n=490)

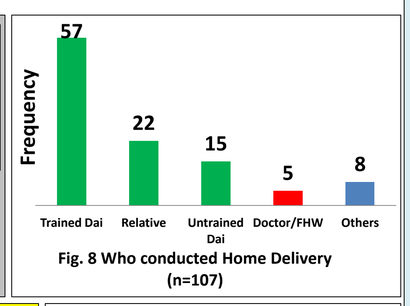

Fig. 8 Who conducted Home Delivery (n=107)

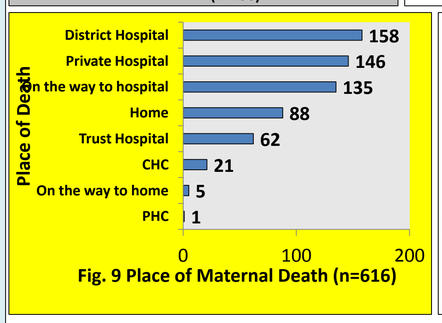

Fig. 9 Place of Maternal Death (n=616)

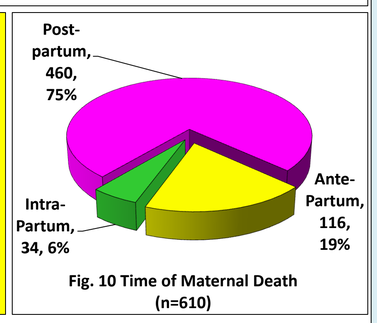

Fig. 10 Time of Maternal Death (n=610)

Place of Maternal Death: Eighty eight women (14.3%) died on the way to hospital. 146 (23.7%) females died in private hospital. 180 (29.2%) died at government health facility.

Time of Maternal Death: The majority of the maternal deaths (75%) occurred in the post partum period., followed by ante-partum period with 19% and intrapartum period contributed to 6% of maternal deaths. Within 48 hours of pregnancy the proportion of maternal deaths is very high contributing to 61% of total maternal deaths.

Causes of Maternal deaths

✓ PPH and Sepsis are the most common cause contributing to 34% (204) and 15% (89) of total maternal deaths in Gujarat respectively.

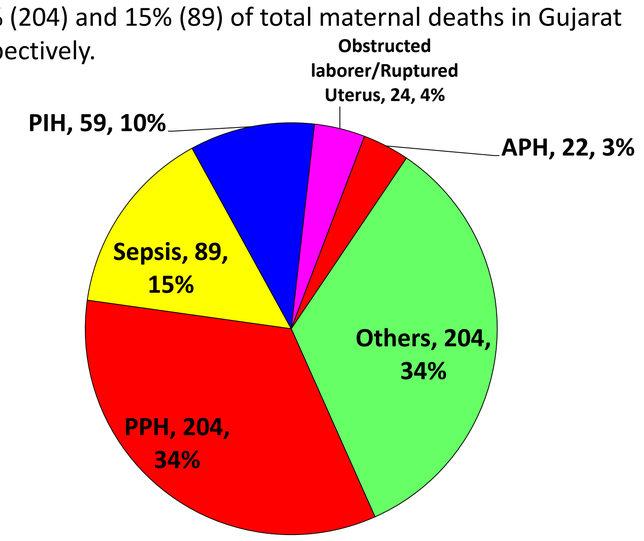

Fig. 11 Cause of Maternal Death (n=602)

Pathway Analysis:

✓ In Gujarat in the year 2011-12 out the data available for 616 maternal deaths only 7% (43) died at home without seeking any care at facilities and 5% (31) died on the way during transportation to the first facility of contact.

✓ 88% (542) of the pregnant women who died had sought care in 1 or more than 1 health facilities.

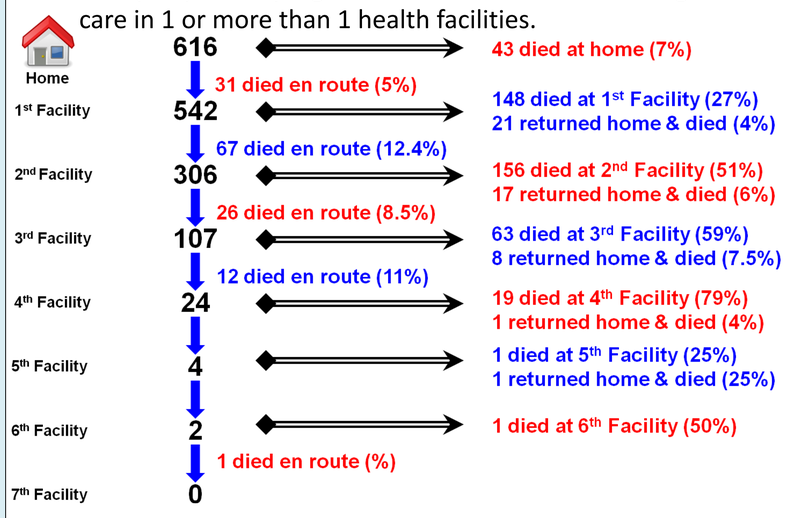

Fig. 12 Pathway Analysis (n=616)

MDR leading to State Level Actions

Followed by official order from Principal Secretary, all 26 District Collectors and CDHOs are reviewing all the maternal deaths in their respective districts regularly. This has resulted in series of corrective actions to avert maternal deaths.

Special 4 wheel drive vehicles launched to reach out to **geographically difficult terrains**(12 vehicles in five districts).

Inter-Facility Transfer (IFT) services launched to address referral services from one hospital to another further reducing transportation delays.

Essential drugs required for delivery and management of its complications made available in facilities conducting delivery

Districts were sensitized and directed to implement use of **partograph**.

Technical Series for capacity building initiated on Acute Management of Third Stage of Labor (AMTSL), Use of Partograph and Use of Magnesium Sulphate.

Pool of **30 MDR resource persons** created at State level who have trained over 300 mid level mangers from 21 districts.

Newer approaches to help to understand why women die: *Confidential Enquiries into Maternal Deaths* to be piloted

Scenario prior launch of 4WD

Scenario post launch of 4WD

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