## Safe Motherhood: How Far Safe?

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#### Summary

This retrospective comparative analysis of maternal deaths of last two decades – from 1978 to 1987 and from 1988 to 1997 is carried out to compare the MMR, role of responsible factors and changes in causes and pattern of maternal deaths etc and to know our position, at an old & long journey of safe motherhood at the end of 20th century.

There is definite and drastic reduction in MMR from 662/1,00,000 live births in the earlier decade (1978 to 1987) to 388/1,00,000 live births in the later decade (1988 to 1997). More young and primiparae were lost in the last decade. Mortality of grand multiparae is less in the last decade. Probably due to effective family planning. Deaths due to abortion have decreased in the last decade. Deaths within 24 hrs. of admission are almost same in both the decades. Mortality due to direct causes has decreased.

Though mortality is still very high, there is definite decline in MMR and perhaps we are on a right pathway to safe motherhood, but we need to speed up to achieve our goal well before the turn of the century.

#### Introduction

The risks of pregnancy are present in every society and in every setting. In addition countries, where MMR is 10-31/1,00,000 live births, these risks have been largely overcome because every pregnant woman has access to special care during pregnany and child birth. Such is not the case in many developing countries where each pregnancy represents a journey into the unknown trom which many a women never return.

Study of maternal deaths periodically is not only an academic exercise, but provides considerable help and guidelines for planning strategies for improving maternal health and reducing MMR because majority of these deaths are preventable (Bhatt, 1997).

#### Material & Methods

A retrospective comparative analysis of two

decades is presented to compare, emphasize and observe the change in pattern and etiologic factors responsible for maternal deaths.

# Observation & Discussion Table-I Incidence of MMR

| Institution   | Study Period | MMR  |
|---|--------------|------|
| Safdarjang Hosp. New Delhi<br>(Roy Choudhury et al, 1990) | 1979-1987    | 6.38 |
| S. Kriplani Hosp. New Delhi<br>(Juneja and Rai, 1993)     | 1988-1992    | 371  |
| Present Study   | 1978-1987    | 662  |
|   | 1988-1997    | 388  |

MMR in the last decade is 58.9% of that in the earlier decade (Table I). This may be due to a better understanding of various problems and pathology, better availability of newer diagnostic modalities, newer antibiotics, blood and blood products and trained services

at distant and rural areas, etc. Though MMR is still high, this achievement of the last decade will definitely be a guide for the next decade.

More young and primiparae mothers were lost in the last decade compared to the earlier decade. Early marriage and immediate pregnancies without family planning knowledge is still responsible for this. Expectant mothers residing in urban area are also negligent about antenatal care & come to hospital only during an emergency. MMR in emergency cases is almost of same pattern. (Table II)

There is no significant change in mode of pregnancy outcome in two decades except that deaths

due to abortion related complications have decreased (Table III). But still there are deaths due to illegal abortions. Also government surveys report (WHO 1998; FRHS 1998) that more than 50% are home deliveries and 50% of them are without help of trained person. This only shows that still we have a very long way to safe motherhood.

Till today, as usual, about 80% maternal deaths are within 24 hrs of admission to hospital (Table-IV). 15-20% cases which are referred or brought by relatives directly are in moribund condition. Now this can be a breaking point to reduce the MMR.

Deaths due to direct causes have decreased but to indirect causes like hepatic diseases and acute renal failure, etc.

Table-II

Maternal deaths in relation to different factors

| Factors         |            | 1978 | -1987 | 1988 | -1997 |  |
|-----------------|------------|------|-------|------|-------|--|
| Age             | Years      | No.  | %     | No.  | %     |  |
|                 | 16-20      | 36   | 8.33  | 50   | 21.93 |  |
|                 | 21-30      | 350  | 81.02 | 139  | 60.96 |  |
|                 | 31 & above | 46   | 10.65 | 39   | 17.10 |  |
| Parity          | Primi      | 113  | 26.16 | 76   | 33.33 |  |
|                 | Multi      | 217  | 50.23 | 126  | 55.26 |  |
|                 | Grandmulti | 102  | 23.61 | 26   | 11.40 |  |
| Residence       | Rural      | 267  | 61.80 | 105  | 46.05 |  |
|                 | Urban      | 165  | 38.19 | 123  | 53.95 |  |
| Antenatal Care: | Emergency  | 404  | 93.52 | 215  | 94.29 |  |
|                 | Registered | 28   | 6.48  | 13   | 5.70  |  |

Table-III Mode of Pregnancy Outcome

| ,                    |           |       |           |       |  |
|----------------------|-----------|-------|-----------|-------|--|
| Spontaneous Delivery | 1978-1987 |       | 1988-1997 |       |  |
|                      | No.       | %     | No.       | %     |  |
| Home                 | 123       | 28.47 | 59        | 25.88 |  |
| Hospital             | 105       | 24.30 | 74        | 32.45 |  |
| Induced              | 28        | 6.48  | 10        | 4.38  |  |
| Operative            | 36        | 8.33  | 31        | 13.59 |  |
| Abortions            | 79        | 18.29 | 20        | 8.77  |  |
| Undelivered          | 61        | 14.22 | 34        | 14.91 |  |

Table IV Admission – death interval

| Time interval    | 1978-1987 |       | 1988-1997 |       |
|------------------|-----------|-------|-----------|-------|
|                  | No.       | %     | No.       | %     |
| within 1 hr      | 76        | 17.59 | 52        | 22.80 |
| 1-12 hrs         | 68        | 15.74 | 65        | 28.50 |
| 13-24 hrs        | 202       | 46.76 | 61        | 26.75 |
| 1-3 days         | 56        | 12.96 | 39        | 17.11 |
| 4-7 days         | 15        | 3.47  | 8         | 3.50  |
| More than 7 days | 15        | 3.47  | 3         | 1.32  |

Table-V: Causes of Maternal Mortality

|                           | 1978-1987 |       | 1988-     | 1988-1997 |  |
|---------------------------|-----------|-------|-----------|-----------|--|
| Direct                    | No.       | %     | No.       | %         |  |
| PIH                       | 98        | 22.68 | 50        | 21.92     |  |
| Haemorrhage               | 69        | 15.97 | 49        | 21.49     |  |
| Septicaemia               | 66        | 15.27 | 16        | 7.01      |  |
| Rupture uterus            | 11        | 2.55  | 05        | 2.19      |  |
| Inversion of uterus       | 08        | 1.85  | 00        | 0.00      |  |
|                           | 252       | 48.33 | 120       | 52.63     |  |
| Indirect                  |           |       |           |           |  |
| Anaemia                   | 117       | 27.08 | 55        | 24.13     |  |
| Hepatic Diseases          | 18        | 4.16  | 26        | 11.40     |  |
| ARF                       | 12        | 2.78  | 13        | 5.70      |  |
| Cardiac Diseases          | 10        | 2.31  | 03        | 1.32      |  |
| Malaria                   | 08        | 1.85  | <u>05</u> | 2.19      |  |
|                           | 165       | 38.19 | 102       | 44.74     |  |
| Unrelated                 |           |       |           |           |  |
| Pulmonary Embolism        | 07        | 1.62  | 04        | 1.75      |  |
| Anaesthesia Complications | 08        | 1.85  | 02        | 0.88      |  |
| •                         | 15        | 3.47  | 06        | 2.63      |  |

have increased. Deaths due to anaesthesia complications have decreased.

In developing countries, over and above the high mortality rate the maternal morbidity rates are 15-20 times higher than the mortality rates.

The risks that women face in bringing life into the world are not mere misfortunes or unavoidable natural disadvantages but injustices that society must remedy through its political, health and legal systems.

This situation cannot be allowed to continue. The interventions that make motherhood safe are known and the resources needed are obtainable. The necessary services are neither sophisticated nor very expensive. Access to family planning information and services can help to reduce unwanted pregnancies and their adverse consequences (Mukherjee, 1998).

Lack of antenatal and intranatal care is a very important cause of maternal deaths. Women seek help only during child birth. Antenatal care which is provided at present demands an urgent review (Clark et al, 1995). About 50% deaths were from urban area, where hospitals are nearby. But awareness of patients and their relative is most important. Provisions of legal actions and punishment against patients & relatives should be tried to cover and provide antenatal care to expectant mothers,

otherwise MMR will be maintained at the same level even after years. Unequal distribution of health personnel has to be rectified, referral hospitals should be equipped for emergency in rural areas; obstetric intensive care units and flying squads should be started.

Education of girls and community health education, manpower development for 100% coverage of maternity cases by a trained attendant, strengthening reproductive health care services, fund raising for improvement in transportation and communication services, avoidance of delay in reaching the hospital and above all a genuine commitment by the community, by the professionals and by the government is urgently needed to achieve the goal of safe motherhood.

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