

GROUP IV

AVOIDABLE FACTORS IN MATERNAL MORTALITY

Reviewed by

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PATTERN OF MATERNAL MORTALITY AVOIDABLE FACTORS IN MATERNAL DEATHS

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POST MORTEM OF MATERNAL MORTALITY

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A dialogue on maternal deaths serves a very useful purpose. This is specially so in a developing country where many of the maternal deaths are preventable. A wife or a mother is a stabilising personality in the home and therefore no society can afford to lose a woman in her prime of life, who is responsible for moulding the character of the children.

The study of maternal deaths could show the need for improvement in the antenatal and intranatal care. The avoidable factors could be reduced to the irreducible minimum. A post-mortem helps in arriving at a diagnosis more precisely. It is neces-

sary to know the exact cause of deaths before we can prevent the mortality. Such autopsy studies are a routine procedure in many countries. Unfortunately, post-mortems are not so commonly done in India. We plan to review maternal deaths under the heads—Pattern of maternal mortality.

Meaningful comparison of maternal deaths cannot be made between two institutions but it should be for the whole city, district or the country. The institutions which cater for booked cases coming from higher social strata are likely to have lower mortality figures than the institutions

which cater for the emergency and the neglected cases. In India, maternal death is not notifiable and so a medical certificate is not necessary before disposing of the dead body. This is more likely in the rural areas.

Maternal deaths at General hospitals in Baroda and Calcutta are shown in Table I. However, such

are more or less similar. The incidence of sepsis is different in the two city hospitals. Haemorrhage is the most common cause of death not only in our country but in all countries. It is the general opinion that availability of adequate blood in time can prevent 80 per cent of deaths due to haemorrhage. Provision of efficient

TABLE I
Incidence

Year	BARODA. Bhatt et al			CALCUTTA. Dawn et al		
	Confine-ments	Obstet. death.	Asso. deaths.	Confine-ments.	Obstet. deaths	Asso. deaths.
1956—66	5165	64	18	12857	74	34
1966—68	8205	80	36	13330	58	22

figures are not comparable as we said earlier. Bhatt *et al* found that two thirds of the maternal deaths at S.S.G. Hospital, Baroda, were in women below the age of 30 years. This may be due to early marriages and childbearing. Maternal mortality in the European countries rises with age but in India more deaths occur in the younger age group. Table II

blood transfusion service becomes essential for reducing maternal deaths due to haemorrhage. It is a sad commentary that we lose between 11-17 per cent of women due to accidents of labour, viz. misuse of oxytocics, unnecessary interference, failure to recognise malpresentation or disproportion. Countries with adequate antenatal and intranatal services

TABLE II
Cause of Death

Cause.	S. S. G. Hospital Baroda, Bhatt et. al.	N. R. S. Med. College Hospital, Calcutta. Dawn. et. al.
Haemorrhage	27.2%	27.5%
Toxaemia	14.1%	14.5%
Sepsis	12.5%	3.75%
Obst. labour	17.5%	11.2%
Assbciated causes.	28.7%	27.5%

compares the causes of maternal deaths at Baroda and Calcutta. In spite of the wide dimensions of the country and variations in the facilities available the causes of death

have been able to reduce maternal mortality due to accidents of labour and we can do likewise if accidents of labour are to be prevented. Toxaemia does not account for many mater-

nal deaths in India. Chun reported 54.8 per cent maternal deaths in Hong Kong due to toxæmia.

Anaemia in the mother is the most common single factor which increases the mortality. Anaemia is the common denominator in most of the maternal deaths in our country and it is the direct cause of death in about 15-20 per cent of cases. Anaemia is a national problem related to the economy of the country. It is mostly nutritional in origin. Reducing the class of multiparity by family planning services, improving the diet and routine use of iron during pregnancy could certainly reduce the incidence of anaemia in our country.

Study of Table III shows beyond

human life as it has always done. Infective hepatitis is preventable.

Dawn *et al* studied the avoidable factors in maternal deaths at N.R.S. Medical College hospital and concluded that 92 per cent of the maternal deaths were due to avoidable causes. They further observed that the patient and her relatives were responsible in 50 per cent cases, failure of the doctor care was responsible in 43 per cent cases and lack of hospital amenities was present in 7 per cent of cases. Dawn *et al* and Bhatt *et al* have stressed the point that improvement of obstetric services alone would not give the desired results. There is greater need for improvement in public health services and a better

TABLE III
Deaths due to Jaundice

Author	Institution	Percentage mortality
Bhatt <i>et. al.</i>	S. S. G. Hospital, Baroda. 1956-68.	7.2
Dawn <i>et al.</i>	N. R. S. Med. College Hospital Calcutta 1956-68.	10
Motashaw	N. W. Maternity Hospital, Bombay, 1958.	11.3
Shastrakar	Gen. Hospital, Nagpur, 1958	6.2
Sheth <i>et. al.</i>	K. E. M. Hospital, Bombay, 1964-68.	12

doubt that next to anaemia, infective hepatitis is the most common cause of maternal death due to associated causes. The consensus of opinion is that infective hepatitis runs a more severe course during pregnancy. Infective hepatitis is endemic in most parts of the country and assumes an epidemic form every year or two. Infective hepatitis is more often water-borne. Unless clean water supply is assured, these endemic foci would continue to take a heavy toll of

liaison between physician, surgeon and obstetrician.

Paucity of autopsy studies in our country is responsible for the failure to arrive at the exact cause of death. The doctors show great reluctance to persuade the relatives and relatives are more often adamant in not allowing an autopsy. The clinical diagnosis which is given out of necessity is grossly inadequate and often wrong. Sheth *et al* carried out a very useful study at Bombay. They analysed 175

maternal deaths at autopsy and came to conclusions which are revealing. They found that in 35-40 per cent of the maternal deaths, the clinical cause of death was different from the post-mortem cause of death. The post-mortem cause of death was tuberculosis when the clinical cause of death was variously labelled as congestive cardiac failure, gastro-enteritis or post-abortal shock. Two cases clinically labelled as gastro-

enteritis finally turned out to be cases of peritonitis at autopsy. A case of chorionepithelioma with secondaries was clinically diagnosed as hepatic failure.

We feel that autopsy studies are very useful because it helps in arriving at a correct diagnosis. An attempt should be made to increase the number of post-mortems, by persuasion, by law and careful presentation of facts to the relatives.