Prevention of maternal mortality

The untimely and needless death of pregnant women during or close to childbirth is a subject that is not very often spoken about in the world today, although when a woman living in one of the poorest countries of the world becomes pregnant her chances of dying are 100–200 times higher than those of a pregnant woman in an affluent society. WHO convened the First Interregional Meeting on the Prevention of Maternal Mortality on 11–15 November 1985 in Geneva to promote world awareness of this public health problem. World Health Forum interviewed four of the participants.

Maternal mortality is fifty times higher in developing countries than in the developed countries. Is this due to neglect of maternal health and, if so, why?

Dr Fathalla: I’m afraid that this question has been neglected, and for a number of reasons.

Firstly, it is not an acute problem. Women have been dying from childbirth and complications of pregnancy for a very long time; when you live with a problem for so long it becomes commonplace and you tend to give it less attention. Secondly, you cannot divorce this problem from the status of women, and in many parts of the world women are a socially disadvantaged group. Thirdly, the magnitude of the problem has been underestimated, and it is only recently that realistic estimates of its extent have been made. Lastly, it takes a lot more to reduce maternal deaths than to reduce mortality from other causes and the commitment to prevent these deaths has yet to be made.

Dr Rao: In this connection I should like to make the point that the funds available to developing countries are used on a priority basis which favours economic development rather than health development; indeed, per capita expenditure on health is only about 5–8% of the total budget. In addition, the problem is not attracting the attention it deserves, not only in the developing countries but also from international organizations. Although UNICEF and WHO have sponsored several national and international gatherings on perinatal and infant mortality, and there is a lot of documentation on the subject, the same amount of attention has unfortunately not been given to maternal mortality by national and international bodies.

Dr Harrison: We should not overlook the influence of the information media, which so far have not been sensitized to the situation. Most of the information media that we are familiar with are based in countries where maternal mortality is no longer a problem, and so they do not perceive the need to stress it.
The media can get very excited about child deaths. Why is it then that the health professionals dealing with women who die unnecessarily—gynaecologists and paediatricians—have not highlighted this problem before now?

Dr Rao: I think to some extent you are right, it is the commitment by the professionals to reduce maternal mortality that has not been given the priority it deserves. They have been more interested in clinical problems of certain diseases rather than the overall health situation.

Dr Kwast: For people who live in poverty in a society where their status is not recognized, death is a very tragic event, but it is accepted because of lack of development. It is my impression that if you go to very remote areas the tragedy and the grief are no less, although the inevitability of the event is culturally supported and endured.

When a baby dies it is very unfortunate for the family, but when the mother dies there are sometimes many orphans left and there is a tremendous impact on a whole group of people, economically, socially, and emotionally. Can you comment on this?

Dr Fathalla: This is perfectly true and has now been documented scientifically. There was recently a study in Bangladesh that showed that when the mother dies the infant she leaves has an 85% chance of death in the following year, so the impact of a maternal death is on the whole family. Not to mention the husband, as indeed there is evidence that widowers have a shorter life expectancy than married men.

Dr Harrison: Or looked at in another way, there is also evidence to show that a woman who has lost many children in the past is even more likely to lose her own life.

What about the causes of maternal mortality? Is there, on the global level, a handful of major causes? What are the
reasons behind the causes, and what are the risk factors?

**Dr Fathalla:** Rather than talk technically about clinical causes of death, we could consider what might be called a maternity "death road", presenting a sequence of stages and ending with death. At each stage the mother is subjected to certain risks, but she could leave the road at a safe turning. The first stage is linked with socioeconomic status and the underprivileged position of women. The next stage concerns reproductive behaviour; if she selects (voluntarily or involuntarily) a reproductive behaviour pattern that increases the risks, she takes a step further on the road to death. The third stage is due to the lack or inaccessibility of maternal health services and the final stage is connected with the quality of the medical care she receives. The absence or inadequacy of medical care services leads to the end of the road for many women.

*This leads me to think that if a woman dies because she has bled to death the clinical cause is haemorrhage, but the real cause is probably because there was no transport to take her from her home to a health centre.*

**Dr Fathalla:** Yes, indeed, and if pregnant mothers have a basic nutritional deficiency and severe anaemia their ability to withstand that attack of bleeding is much less than if they are healthy.

**Dr Harrison:** One can even extend the argument further and suggest that the basic thing about childbearing is this: it is perfectly safe for mothers in good health. In other words, wherever you have a large proportion of women who are free from disease throughout pregnancy the maternal mortality rate would be low, particularly if, in addition, there is a health care system that ensures that appropriate treatment is given promptly. For example, if some form of operative delivery is needed, it must be performed early before the baby dies in the womb. The major prerequisites for safe childbearing are a physically healthy mother and a health service structure that can deal promptly with complications.

**Dr Rao:** Regarding the causes behind the clinical factors responsible for maternal deaths, I would say that female literacy is closely related to maternal health and to the maternal mortality rate. In countries where the female literacy rate is high, the birth rate is low and the maternal mortality rate is also low. Similarly, from the cultural point of view, in some countries where women marry young and there is no restriction on the number of children they have, the mortality rate is higher than in societies where they marry later and have fewer children. In other words, we find mostly that the better the standard of living, the better the standard of education, and the lower the mortality rate. A general principle that is well recognized in the field of health is that in all countries where the birth rates are high the maternal, perinatal and infant mortality rates are also high, so that if the birth rates could be reduced the mortality rates would also be brought down.

*You have mentioned the interrelationship between the health of the mother and child and fertility behaviour—meaning the spacing between pregnancies, the number of pregnancies, and the age of the mother—but there still seems to be resistance among many people, even professional, to applying this knowledge in trying to reduce maternal deaths.*

**Dr Fathalla:** First of all, our realization of the relationship between family formation

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patterns and family health is relatively new, and it is only recently that we have scientifically documented information about it. May I add that there is not only resistance in the sociocultural aspect of family planning, what one could call the demand side, there are also considerable constraints on the supply side. Recent world fertility surveys have documented a very wide gap between the desire for contraception and its actual use. So, apart from resistance to family planning, even the present expressed needs of the people are not being fulfilled by the available services.

**Dr Kwast:** There is another factor here, which is directly related to government policies. Where governments have not formulated a population policy, information on the availability of services can only be disseminated on a limited scale. Uninformed people are therefore unable to use the existing services. Each government has a responsibility to make the available services known, whether it commits itself to a population policy or not.

*There is no doubt a great difference between countries, but would it be true to say that family planning as a health measure is not given priority?*

**Dr Fathalla:** I think I would agree that the defect lies with the health delivery system and the policy-making mechanism. There are many different constraints to family planning, but there are more constraints on the supply side and these are the ones that are more easily corrected: those on the demand side need sociocultural changes to rectify them.

**Dr Harrison:** Dr Rao made the point earlier about female literacy being important for maternal health, and I would even go so far as to say that maybe the best contraceptive agent is formal education for women. For example, a recent survey carried out in Zaria among women with the same cultural background showed that for women over the age of 30 the average number of births varied enormously depending on their educational level. Illiterate women who had not attended school had, on an average, six children each, whereas those who went to primary school had 4.9 and those with post-secondary education only 2.4. This shows the important impact that education has on childbearing. I think similar trends can be found in several countries. I am not aware of any stronger instrument for change in behavioural patterns on a national level than universal formal education. In the long run the majority of decision-makers are men; in matters of this sort that involve some form of social engineering, if I may call it that, the women are just as important as the men, so I would emphasize the need for universal formal education.

**Dr Fathalla:** There is always more than one road to reach a certain destination, and education is one that is very appropriate and straightforward. The only problem about education is that it takes a long time and time is a precious commodity. We should recognize the importance of education, especially of women. Out of every three illiterate people in the world, two are women. At the same time we should do our best in other shorter-term directions.

**Dr Kwast:** Yes, it takes a very long time to change behaviour and it depends very much on sociocultural settings. What are the marriage patterns? Is there polygamy? What are the religious teachings in relation to family planning? These are very important points that have to be acknowledged in the developing world.

**Dr Rao:** Education and development are the best methods of family planning. There
are no other incentives that help the promotion of family planning as much as education and development.

I think the discussion on family planning leads us to what I should like to call the result of the absence of family planning, namely, induced abortion. Is induced abortion an important element in maternal deaths?

Dr Fathalla: As health professionals we cannot close our eyes and say it is not; in fact, it is one of the important preventable causes of maternal death. The degree of importance varies from one situation to another according to a combination of factors. Suppose there is an increasing desire for smaller families with fewer children; add to that the non-availability of contraceptive services, or their defective functioning, and the fact that abortions are not allowed to be performed by trained professionals in proper circumstances, and you have abortion as a major public health problem. If only one of these factors is eliminated, then abortions would be fewer; but let us not forget that there are certain countries in Latin America where 50% of maternal deaths are due to abortion.

Dr Rao: I agree with Dr Fathalla on that. Unlike in the developed countries, where abortions and resulting deaths are mostly seen in unmarried teenagers, in the developing countries the demand for abortions is mainly from women who already have children. We found that 85% of the cases of abortion deaths were in women who had so many children that they chose this way of limiting their family. Nowadays in most countries when a woman comes for an abortion she will request sterilization at the same time. I think in the case of an unwanted pregnancy it is better to terminate the pregnancy and provide contraception than not to give the facility and lead the woman to seek induced abortion elsewhere and maybe find death.

Obstetricians and gynaecologists are sometimes accused of sitting in the towns, looking after the women who really need their services the least because they are those with the lowest risk factor.

Dr Rao: I am afraid that this is perfectly true. This happens in most countries whether developed or developing. It is all the more unfortunate in developing countries where there is a need for the obstetrician to be in the periphery as well.

Dr Kwast: I should like to put this into perspective by separating the developing world from the developed. In the developing world I think an obstetrician/gynaecologist is a relatively “new product”. There are still countries that do not train their own doctors. This means the doctors have to return from training abroad, they have to gain experience, and then they have to leave the country again to be trained for specialization, with another period to gain experience when they finally return. I think it is unfair to accuse the obstetrician/gynaecologist of being in the urban area where he is not needed. If there is only one gynaecologist for a population of six million people—which I know to be true in one country—then that person must be in the centre, where he can train other physicians to cope with the problem cases referred from the periphery.

Dr Fathalla: We have to look at the physicians, including the obstetricians/gynaecologists, not as individual healers who can work miracles but as leaders of the health team. As there are not enough
obstetricians in the world to attend all deliveries, their important role is actually to provide support to the health team in the way of training and supervision. There is a growing consciousness in the profession about their social responsibility, but the job cannot be done by obstetricians alone.

**Dr Harrison:** We must also see the obstetrician as a man who wants to make a living and is interested in providing adequately for his family, just like anybody else in a community. So the old question of development comes in, how to make the rural areas attractive to live in. I think it is the responsibility of the world at large to realize that rural development is a very important factor in ensuring health for all. Good leaders do not grow on trees; this is just as true for obstetricians as for political leaders. It takes time and maturity to produce good leadership.

**Do you feel that the majority of causes responsible for maternal deaths can be dealt with by other health personnel?**

**Dr Rao:** In developing countries a large number of maternal deaths could be prevented with the help of properly trained midwives, auxiliary nurse/midwives, and traditional birth attendants, particularly in the periphery, if women have access to their services during delivery.

**Some people seem to think that midwifery as a profession has been losing ground in the last few decades. What should be the role of midwives in the health team?**

**Dr Kwast:** Midwifery practice is changing, but I do not agree that it is losing ground. I think there are two very different elements involved here: midwifery in the developed world where obstetrics/gynaecology has become a highly technological practice and midwifery in the developing world. Even in Europe midwifery practice varies considerably between countries: in the Netherlands, one of the countries with the lowest perinatal and maternal mortality in the world, 45% of the deliveries take place at home, whereas in the United Kingdom deliveries are almost 100% hospitalized. In Africa the majority of deliveries are still conducted at home, with or without a traditional birth attendant, not only in the villages but also in the towns. In some urban communities 50% of women are still delivered by trained or untrained traditional birth attendants. We have discussed the role of the obstetrician and seen that he or she cannot possibly reach most of the rural areas. Where 80% of a population still live in a rural area a midwife is absolutely essential. In the last decade we have been putting a lot of emphasis on the training of the traditional birth attendant but this has not brought about a significant reduction in maternal mortality.

A maternity care service works in a complete vacuum without a midwife, so that there is no way whereby the registered or trained auxiliary midwife can be losing ground.
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