PART III

MATERNAL HEALTH AND MATERNAL MORTALITY: REDEFINING BIOMEDICAL FRAMES OF REFERENCE

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CHAPTER 8

THE CONSTRUCTION OF THE PROBLEM OF MATERNAL MORTALITY
IN INTERNATIONAL HEALTH DISCOURSE

8.1 THE WHO PROTOCOLS

In January, 1994, the WHO issued a press release about the health status of women and children and the current available statistics on maternal mortality and morbidity. The picture is grim, especially allowing for the fact that mortality data is fragmentary and incomplete, and therefore most probably an underestimate.1 Broken down by region, women aged between 15 and 44 years have a 1 in 23 lifetime risk of maternal death in Africa; 1 in 35 in South Asia; and a 1 in 131 lifetime risk of maternal death in Latin America. These figures compare with a 1 in 1825 lifetime risk in developed countries (MIDIRS, 1994a: 186). In 1991, it was estimated that the global death toll each year as a result of pregnancy and birth was 500,000 (Kwast, 1991a). In 1995, this estimate was increased to 509,000 and although the increase is due to more births, it is also an indication that despite the closely targeted efforts of national and international health programmes, circumstances for women have not improved dramatically (Kwast, 1995: S68). In Latin America, the annual death toll, including deaths as a result of unsafe abortion, is thought to be in the order of 34,000 women each year (Kwast, 1991a).2

The WHO definition of maternal mortality is:

‘the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes’ (Royston and Armstrong, 1989: 11)

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1 The reasons for underestimation are to do with factors like incorrect classification in registration systems; the vast number of births which occur outside state health care systems, where registration practices, if they exist, are not practicable or are not in line with the international classification of diseases but reflect local cultural interpretations. There can be strong cultural and religious reasons for not recording the deaths of unmarried women. Within state health care systems, there can be considerable disincentives to correctly ascribing the reason for a maternal death where health care personnel may be held responsible. There are also huge problems within and outside the state system in registering deaths from unsafe abortion, because of the illegality of abortion in so many countries (Royston and Armstrong, 1989).

2 This figure can be broken down again with the largest numbers of maternal deaths by far in tropical Latin America, 22,000, followed by 9,000 in Central America, with 1,000 maternal deaths annually in temperate regions of Latin America (see Royston and Armstrong, 1989: 31).
The principal reasons for direct maternal deaths are haemorrhage, induced abortion, hypertension, infection and obstructed labour and these are thought to contribute 50 to 80% of all maternal deaths. The direct causes of maternal death are few in number but they contribute to so many deaths because of the disproportionate and inter-related burdens women carry of poverty, malnutrition, too much childbearing, low social status, and concomitant ill-health (Kwast, 1991a).

Although the absolute numbers of women dying in childbirth are not especially great when compared to infant mortality rates, the international rates of maternal death are simply not acceptable. The estimated number of 509,000 annual deaths has as a backdrop perhaps 20 times that number of women who suffer from short-to long-term morbidity either in pregnancy, during labour or after the birth. Postpartum conditions such as puerperal hypertension, cardiac failure, uterine or cervical prolapse, fistulae, secondary postpartum haemorrhage, pelvic inflammatory disease and anaemia are serious complications with serious long-term sequelae for women (Royston and Armstrong, 1989).

Because these conditions occur far more frequently and in settings where the social and economic resources to deal with them effectively are not necessarily available, there is a far greater discrepancy between health outcomes in pregnancy and birth for women living in developing countries compared with those in developed countries than there is with infant death (Maine, 1991: 3). Whereas 25% of women of reproductive age live in developed countries, only 1% of the world-wide totals of maternal deaths occur in these countries. Latin America, where 8% of women of reproductive age live, contributes 7% to the international figures on maternal mortality annually (Maine, 1991: 6). Bolivia is the greatest single contributor to that 7% (Alcala and Murillo, 1993: 5).

According to the 1994 WHO press release, an estimated 51% of pregnant women globally suffer from chronic anaemia and this has shown no improvement whatsoever in the last ten years nor have low birthweight and perinatal mortality —the latter two being indirect indications of poor maternal health (MIDIRS, 1994a: 186). Insufficient access to health care and inadequate health care also contribute to this profile of maternal ill-health and death. It was previously thought that in countries where antenatal care is considered to be adequate and the coverage of births by attendants trained with-in the western biomedical obstetric model reached 70%, that maternal mortality rates were no higher than 150 per live 100,000 births. These rates have had to be revised dramatically upwards with studies in urban centres in Africa and Asia, suggesting a range of maternal death from 200 to 500 per 100,000 live births. The
WHO cited one evaluation study where 40% of state-trained health workers did not carry out their tasks correctly, if at all, and failure by doctors and midwives to diagnose and manage cases correctly was a factor in over 40% of maternal deaths. Member states of the WHO were urged to give priority to developing centres that can ensure a high level of midwifery care along with appropriate supplies, equipment and medications and a renewed commitment to the training of community-based health care workers (ibid.).

This summary from the WHO is so worrying because of the firm indications that its strategy on maternal mortality has not made significant headway in the last eight years. The official recognition of maternal mortality as a major international health problem in its own right was formally identified during the Nairobi Safe Motherhood Conference in 1987 and the Safe Motherhood Initiative was the policy programme for member states which was put in place with the backing of the World Bank, the United Nations Population Fund and the WHO. Its target was to halve the international figures on maternal mortality between 1987 and the year 2000. It will not reach that target.

Before this conference, the problem of maternal mortality was almost always linked to the problem of infant mortality in the dual approach of mother and child health care programmes. In a critical article in *The Lancet* in 1985, Deborah Maine pointed out that most of these programmes would do little to reduce maternal mortality because the measures to reduce infant mortality had no direct relevance for the issue of maternal mortality. The depressing reality was that the world’s obstetricians were ‘particularly neglectful’, rather than focus on women’s social needs and demand major programmes to favour women’s health, they chose instead at international gatherings to concentrate almost entirely on high-technology approaches which themselves were without clear focus or applicability to the problem (Rosenfield and Maine, 1985).

### 8.2 The Safe Motherhood Initiative

The rethink of priorities that Maine and others called for emerged as the Safe Motherhood Initiative with the central thesis that different sorts of strategies are needed which directly address women’s health and well-being, not just their role as children’s mothers. One way of making this point is to say that if women do not get pregnant, they automatically reduce their risk of dying from pregnancy-related or childbirth complications. To pose the issue in this way opens up all the possible reasons why women may experience morbidity and mortality, beginning with why women become pregnant. Because social, cultural and economic factors play such a huge part in maternal outcomes, it has been important to try to keep the debate on maternal mortality as wide-ranging as possible to account for all factors and not just
to focus on the immediate biomedical reasons for morbidity and mortality (Maine, 1991).

The Centre for Population and Family Health in Columbia University in New York has developed a model to represent the major aspects of maternal mortality so as to help determine how best resources are allocated in relation to immediate and root causes of maternal death. Its authors argue that the relationships and interactions which constitute possible pathways that end in maternal death cannot be viewed separately if there are to be effective pathways to prevention (ibid.). Thus in a schematisation of five factors and three outcomes, there are:

- Socio-economic status - a distant factor;
- Health and reproductive behaviour - an intermediate factor;
- Health status - an intermediate factor
- Access to health services - an intermediate factor
- Unknown factors - intermediate factors

and

- Pregnancy - outcome
- Complications - outcome
- Maternal mortality - outcome.

(Maine, 1991; see Appendix III to this report)

From this schematisation, they argue that in order to improve maternal outcomes, it has to be possible first to see the interrelationships, to trace the chain of effects which might end in death or disability, and to then support interventions which change those pathways. So for them, the primary questions to ask about any proposed programme are whether it will affect the incidence of pregnancy, the incidence of complications and the outcome of obstetric complications.

So for example, their model can be used to hypothesise how socio-economic status, reproductive behaviour and access to family planning services interact within a particular locality to reduce the number of times a woman becomes pregnant, thus reducing her exposure to maternal mortality. Every proposed intervention must operate in a specific social and cultural frame of reference and, as the authors point out, the medical causes of death vary most with socio-economic factors rather than say genetic or geographical factors. So this model helps to provide a corrective to the
western medical perspective which too often examines the process of pregnancy and birth as if it were a constant physiological given, unaffected by social context.\(^3\)

Thus the model identifies components which make sense to national and international health planners. However there remains a very considerable challenge to bring down or translate these components of maternal health, not just to individual programme level, but to where women are actually living, working and giving birth. A western-style health service which is a vertically-integrated one, based on the logic of the centralised pool of obstetric skills and medical technology found primarily in the hospital, makes little rational sense where a large proportion of the population is rural rather than urban-based. The rural population comprises 42% of the Bolivian population as a whole, for example, (UNDP, 1995: 166). Therefore centralised resources become an obstacle to women in need of emergency care. This is not just a matter of geographical distance, however. There are grave problems with the cost in time and resources, of transportation and the health services themselves, and the nature and quality of those services, all of which may prevent a woman receiving emergency help (Thaddeus and Maine, 1990).

The nature of state health services, how they are organised and how they are delivered, also create huge obstacles because they differ so radically from the values, beliefs and practices of women at the level of local community.

This can be seen by returning to Maine and McCarthy’s pathways to maternal death. They define socio-economic status to include:

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\text{income, education, access to food, the status of women, and other factors that may have local relevance} \quad \text{(Maine, 1991: 10).}
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However, these aspects are not operative in any transparent way when women must engage with or choose to engage with the state health system. For example, lack of education is not just a problem for the woman who has a life-threatening complication in childbirth. Education can mean and is most usually accepted by health planners to mean lack of state schooling and formal literacy skills on the part of the woman. However, health care workers, most especially doctors, who have these skills, do not necessarily have any education at all in local languages and customs. As a result, the woman who encounters these personnel may be severely disadvantaged by their lack of education as well as by her lack of social status if she tries to challenge them.

\(^3\) Any discussion of social context must also include the social setting of the hospital which, as the sociologist Elliott Freidson (1970) has argued, is a bureaucratic institution that demands the complete conformity of all its inmates within an identifiable hierarchy.
The Safe Motherhood Initiative, then, while continuing to expand data on the immediate causes of maternal morbidity and mortality, urgently needs to develop models of care which work from the communities where the need is greatest, utilising existing resources, most especially in the contexts of national economies where resources are extremely costly relative to the other burdens of the state (Thaddeus and Maine, 1990: iv).

8.3 CONCLUSIONS

The Safe Motherhood Initiative should also focus on how this can be accomplished by realistically taking account of the concrete circumstances of women. Birth requires a multidimensional approach because its biological variables are infinitely modified by a proliferation of different cultural practices (MacCormack, 1982). The western biomedical approach is conceptually completely unequipped to deal with or assess the value of local social systems and practices and thus loses valuable tools to support women. An excellent, if discouraging example of this comes from the work of Caldeyro-Barcia, the Latin American obstetrician who has done extensive research on the value of women being in the vertical position during labour. He comments that in all the western-derived training manuals for empirical midwives or traditional birth attendants involved in state retraining programmes to upgrade their skills, they are taught to use the supine or lithotomy position for birth. When they then try to enforce this practice on local women, it arouses hostility, and leads to an outright rejection of the western package in addition to losing vital physiological advantages for the woman giving birth, advantages which reinforce good maternal outcomes and help prevent complications such as postpartum haemorrhage (Caldeyro-Barcia, 1980).

Determining all the factors on the pathways to either good or fatal outcomes is indeed very complex and cannot be accomplished programmatically without scrupulous attention to social systems and to the centrality of women as the principal actors all aspects of prenatal, birthing and afterbirth care. Having put the ‘M’ back into maternal and child health programmes, it is now essential that the Safe Motherhood initiative and maternal health planners secure ‘the significant, if not dominant, involvement of women in health care policy on social reproduction’ (Wagner, 1994: 77).

Hence the starting point for this project on appropriate birth practices in Bolivia is this principle of empowerment so that women’s skills, knowledges and perceptions are incorporated into any approach to the reduction of maternal morbidity and mortality which hopes to be successful.