Maternal-Newborn Health and Poverty
(MNHP Project, WHO)

Maternal and Neonatal Health: Surviving the Roller-Coaster of International Policy

Gita Sen, Veloshnee Govender and Jane Cottingham
ABSTRACT

The problems of maternal and newborn health are somewhat special. While there is a growing consensus about what will work to reduce the still appalling numbers of deaths of pregnant women and newborns, there has been in recent decades considerable confusion about the best policies to follow, not least because of the changes and shifts in the international economic and policy environment. This paper explores the intersections among the different elements of the international environment as well as the cross-connections between the technical, economic and political factors affecting maternal and newborn health policies. It argues that while the search for proximate solutions to maternal and neonatal illness and death is important, the presence of deeper, more socially ingrained problems and biases of gender, caste, race and poverty may itself limit the reach and workability of such solutions in actual situations. Tackling both proximate determinants and root causes is essential if solutions are to be workable and sustainable, and this requires advocates from both sides to work together.

Key words: maternal health, newborn health, human rights, child survival, equity, gender
EXECUTIVE SUMMARY

The path to maternal morbidity and mortality decline has been strewn with unfulfilled promises, and good intentions gone awry, and policies have been all too often caught up to their detriment in the larger ebbs and flows of the international economic and policy environment. While child health improvements have happened in a more focused way in the last few decades, the main area of relative stagnation so far as child health is concerned has been in neonatal mortality. It is not a coincidence that neonatal health is closely dependent on the health status of the mother.

This paper reviews historical and contemporary evidence as well as trends and changes in the international policy environment in order to explain why progress has been so slow and inconsistent. It has drawn on both historical and contemporary evidence to argue that how we treat pregnant women, mothers and their newborn children is influenced powerfully by the fact that many of them are poor, have lower social status because of caste or race / ethnicity, and because they are women. These root causes have been responsible for policy inattention until very recently, despite pronouncements to the contrary at different times.

But policy inattention has not been the only constraining factor. The lack of clarity about the relationships between root causes and proximate determinants, and how to deal with a situation where both need to be addressed has contributed its share to policy confusion and lack of effectivity. This has been intersected by the ups and downs in the economic environment and larger policy reforms that made it not only possible but also perhaps convenient to carry on with low-cost but ineffective approaches.

Maternal and neonatal health advocates, including importantly the women’s health and rights movement, have been making significant advances in recent years in changing this situation. There are a number of important developments, which can and are being used to promote and advance maternal and newborn health, and these are highlighted in the paper. However, it is essential that advocates for the health of newborns and for
the health of pregnant women and mothers work together at this stage. For both neonatal and maternal health, developing effective interventions that will tackle the proximate determinants of ill-health are essential. In both cases, however, we have argued that we will only be able to go a certain distance with this approach. Finding effective ways to deal with the root causes of under-nutrition, lack of quality and accountability of services, and gender power relations / bias in communities, laws, and health systems is critical for covering the rest of the distance. Particularly, issues such as unsafe abortion or poor feeding and health care for girls and young women are unlikely to be overcome without such an approach.
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“Women are not dying during pregnancy and childbirth because of conditions that are difficult to manage. They are dying because the societies in which they live do not see fit to invest what is needed to save their lives. It is a question of how much the life of a woman is considered to be worth.”

Mahmoud Fathalla

1. INTRODUCTION

The problem of maternal health is one with many special features. “Maternity”, as Professor Fathalla so simply puts it, “is not a disease…Pregnancy and childbirth are a privileged function of women, essential for the survival of our species…special in the sense that it should not be compared with other burdens of disease” (Fathalla 2004). It is also special in the sense that, while there is a growing consensus about what can work to reduce the still appalling numbers of maternal deaths, there has been considerable confusion about the best policies to follow. The path to maternal morbidity and mortality decline has been strewn with unfulfilled promises, and good intentions gone awry, and policies have been all too often caught up to their detriment in the larger ebbs and flows of the international economic and policy environment. Last but not least, key aspects of maternal health are embedded in the movement towards the realisation of women’s human rights, a terrain that is deeply politicised, if in different ways, in many countries and globally.

By contrast, while faced with some of the same international political and policy situations, child health improvements have happened in a more focused way in the last few decades. However, despite the remarkable declines in infant and child mortality over the past decades, we are already beginning to see a slow down and in some instances a

reversal of these trends. The main area of relative stagnation so far as child health is concerned, in addition to the impact of the HIV/AIDS pandemic, has been in neonatal mortality, which accounts for around 40% of all deaths in children under the age of five (Save the Children 2001), although there have been reductions in mortality rates of infants older than 1 month and other children under 5. It is not a coincidence that neonatal health, more so than any later period of child development, is closely dependent on the health status of the mother.

This paper starts with a short review of some of the conventional justifications for investing in maternal health in terms of the benefits to children’s health, education and the health system. It argues that these rationales while useful, must be viewed as supplementary to the main justification – the health of women themselves. It then goes on to explore the intersections among the different elements of the international environment as well as the cross-connections between the technical, economic and political factors affecting maternal and newborn health policies. It reviews the literature available and also develops a new approach to the problem with a view to explaining the roller-coaster of international policy in this field.
2. METHODOLOGY OF THE REVIEW

2.1 Overview of Search Strategy

The terms of reference called for analysis of the following:
1. International policy environment and commitment in relation to maternal and newborn health and poverty.
2. Non-economic burden on society of maternal and new born ill-health; and

With these terms of reference in mind, the following search strategy was adopted for identifying potentially relevant papers:

- Review of bibliographic databases, including Pubmed and Medline and online journals (e.g. Reproductive Health Matters).
- Survey of relevant websites
- Review of existing and known pertinent peer-reviewed articles, chapters in publications and policy guidelines.

2.2 Search Terms

Table 1 indicates the search terms used.

<table>
<thead>
<tr>
<th>Target Population</th>
<th>Terms of Reference</th>
<th>Terms of Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>non-economic burden on society</td>
<td>Non-economic benefits of investing in MNH</td>
</tr>
<tr>
<td>maternal mortality</td>
<td>child survival</td>
<td>empowerment</td>
</tr>
<tr>
<td>maternal health</td>
<td>girls' education</td>
<td>equity</td>
</tr>
<tr>
<td>safe motherhood</td>
<td>household impact</td>
<td>women's status</td>
</tr>
<tr>
<td>mother</td>
<td>social consequences</td>
<td>education</td>
</tr>
<tr>
<td>women</td>
<td>nutrition</td>
<td>child survival</td>
</tr>
<tr>
<td>newborn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>neonate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>baby</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.3 **Search Procedure**

2.3.1 *Review of the Bibliographic Databases*

The search strategy was carried out in the following steps:

- The bibliographic databases were first reviewed.
- A search was done for all key words in the target population and then in combination with the search terms in Columns 2, 3 and 4.
- The final step was to narrow down the articles to those in English, with an abstract available. For articles relating to the non-economic burden and benefits associated with maternal health, articles were limited to those appearing after 1990. This limitation in terms of year of publication was not placed with respect to those articles addressing questions of the international policy environment.
- Based on the relevance of the article title, the abstracts were reviewed.
- If considered relevant, the full text of the article was obtained.

2.3.2 *Survey of relevant websites*

All of the following websites were reviewed for UN publications, policy guidelines, fact-sheets and systematic analyses of topics relating to maternal and newborn ill/health. The documents were limited to those relevant to the terms of reference.
Websites:

- Addis Ababa Declaration for Global Newborn Health
- Averting Maternal Death & Disability
- Centre for Reproductive Health Rights
- Child Survival Partnership
- Family Care International (FCI)
- Healthy Newborn Partnership
- International Labour Organization
- International Perinatal Congress
- International Planned Parenthood Federation (IPPF)
- Mailman School of Public Health at Columbia University
- Partnership for Safe Motherhood and Newborn Health
- Saving newborn Lives, Save the Children
- UN Millennium Project
- White Ribbon Alliance for Safe Motherhood

2.3.3 Review of known documents.
Publications known to the authors and considered pertinent to the topic were systematically reviewed.

2.3.4 Use of Sources
The approach adopted for identifying potentially relevant papers was a combination of web searches and a review of international policy documents and articles that had been earlier identified and considered relevant to the question at hand.
3. MATERNAL HEALTH AND CHILD WELL-BEING

Traditional justifications for investing in maternal health have typically been in terms of the well-being of children. The best known and most extensive is on the impact of maternal health on the survival of their children. There is also some work on the impact on girls’ education, and on the health system more generally.

3.1 Impact of Maternal Health on Child Survival
The Safe Motherhood Inter-Agency Group (IAG) and Family Care International (FCI) (IAG/FCI 1998) highlight the following facts. Each year, approximately 4.3 million newborn infants die during the first month of life, and an additional 4 million are stillborn- many of these deaths are due to complications their mothers experience during pregnancy or childbirth. A million or more children are left motherless each year by the more than 500,000 women who die from pregnancy-related causes and these children are likely to get less health care and education as they grow up. Daughters who survive are less likely than sons to receive quality health care and adequate nourishment. In addition, girls are frequently forced to leave school to help at home, thereby restricting their own future (Save the Children 2001). Maternal death doubles or even triples the risk that children under age five will also die. A child whose mother dies in childbirth is 3 to 10 times more likely to die before his or her second birthday.

3.2 Life Cycle Approach and Intergenerational Benefits
It is increasingly evident that maternal deaths have both an immediate and long term (i.e. intergenerational) impact (Bell 2003, Bhargava 2000 and 2003, Johnson and Dorrington 2001, Manson 1997, UNICEF 1999, Martins 2003).

In the case of poor households, a maternal death is likely to reduce the resources both in terms of the costs of health care as well as those arising from the loss of productive labour, thereby deepening the level of poverty. Maternal health can also affect infants’ physical and mental development and their capacity to learn (Bhargava 2000). The death of a parent often demands that the older children look after the younger and engage in...
gainful employment, reducing their chances of attending school (Bhargava 2003). All of these factors contribute to increasing levels of stress and instability within the household.

An assessment by Bell et al (2003) indicates that orphanhood has important FIG (Forward Intergenerational Goods) implications. They include increased risk of economic and sexual abuse and exploitation (Manson 1997). When orphans are placed in foster care, it has been documented that they can be economically deprived by their caregivers, treated differently from the other children in the caregiver’s family, deprived of education and even sexually abused. (Johnson 2001).

3.3 The Interlinkages between Maternal Mortality and Girls’ Education
In the event of an adult death, and more so that of a mother, enrolment in school for younger children is delayed and older children often leave school to support the family. (WHO 1999). While a mother’s health is especially important for infants and young children, some evidence suggests that it is important for the well-being of adolescent children as well. Recent data from Tanzania show that adolescent girls are more likely to be withdrawn from schools when one of their parents become debilitated by or dies from HIV/AIDS. While this is largely in the context of HIV/AIDS, the implications are likely to be similar in the case of maternal mortality. (Ainsworth et al. 2002).

But women who have been to school are also less likely to die during childbirth. The effect of schooling in reducing the number of births means that for every 1,000 women every additional year of education will prevent 2 maternal deaths. Research has shown that maternal mortality is also reduced by better knowledge about health-care practices, use of health services during pregnancy and birth, improved nutrition and increasing the spacing between births: all factors that are fostered by being an educated woman (UNICEF 2004).

3.4 Maternal Health and the Health System
Safe motherhood interventions which are designed to provide comprehensive reproductive health care within a well functioning primary health care system with
referral links to a facility with emergency obstetric care can potentially bring about improvements that more broadly affect the health system, i.e. safe motherhood interventions can strengthen the performance of the health system (World Bank 1999).

IAG/FCI (1998) notes the following benefits to the health system. Firstly, by helping women prevent unwanted pregnancies and receiving early treatment for reproductive health problems, millions of premature deaths, illnesses and injuries can be averted. Secondly, improved maternal health services can strengthen the entire health system since health facilities equipped to providing essential obstetric care (blood transfusions, anaesthesia and surgery) can also manage other medical emergencies better. Thirdly, strengthening maternal health services can also promote preventive care services. Often a woman’s first point of contact with the health services is in the event of pregnancy and childbirth. This provides an opportunity to counsel women about family planning and sexually transmitted diseases and to treat other illnesses.

Although the case for maternal health has been made quite systematically in this manner in the last few decades, the question is why there has been so little sustained policy attention to the problem.
4  IGNORING THE PROBLEM

4.1  A Problem of the Poor

Maternal mortality is the death of a woman from causes linked to pregnancy and childbirth. The technical definition 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” (WHO 1992). The direct causes of maternal mortality include infection (15%), obstructed labour (8%), eclampsia (12%), unsafe abortion (13%), severe bleeding (24%), other direct causes (8%; which include ectopic pregnancy, embolism, anaesthesia-related) and indirect causes (20%; which include anaemia, malaria, heart disease, HIV/AIDS) (WHO/World Bank 1997).

Although maternity has been central to the reproductive lives of women in the world through history, not all women have had to face the implications of this centrality in the same ways. The history of maternal health during the 19th and early 20th centuries in the countries of Europe and the Americas evidences considerable variability. Some countries experienced significant declines even as maternal mortality ratios remained almost stagnant in others right until the 1930s. This historical divergence in the ratios and trends across the high income countries of the North disappeared during the next two decades. By the end of the Second World War, high rates of maternal death and illness were largely a poor country phenomenon (van Lerberghe and de Brouwere 2001a).

This situation of extreme divergence between high and low income countries has continued until today.

<table>
<thead>
<tr>
<th>UN region</th>
<th>Maternal mortality ratio (maternal deaths per 100,000 live births)</th>
<th>Number of maternal deaths</th>
<th>Lifetime risk of maternal death 1 in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Total</td>
<td>400</td>
<td>529,000</td>
<td>74</td>
</tr>
<tr>
<td>Developed regions</td>
<td>20</td>
<td>2,500</td>
<td>2,800</td>
</tr>
</tbody>
</table>

Table 2: Maternal mortality around the world
Even within countries, maternal ill-health tends to be associated with poverty. Graham et al (2004) used new methodology to track the links between poverty and maternal ill health at the level of individuals. Using data from 11 household surveys in 10 developing countries, they found significant associations between women’s poverty status measured by a set of robust indicators, and maternal survival. With increasing poverty, the proportion of women dying of maternal causes increased consistently. In one of the countries, Indonesia, 32-34% of the maternal deaths occurred among women in the poorest 20% of the population, with the risk of maternal death being 3-4 times higher in the poorest quintile as compared to the richest.

These differences are clearly not new. One must then ask whether and why maternal health got sucked for many decades of the 20th century into a kind of black hole of policy inattention, similar to that identified by the 10/90 Reports as affecting health research into the illnesses of poverty (Global Forum for Health Research 2004). As late as 1981, maternal mortality in low income countries was thought to be only around 300 per 100,000 live births (Rosa 1981). Underestimation of this order of magnitude suggests that policy interest may have been less than active in the intervening years after the Second World War, perhaps because the problem was by then practically non-existent in the North.

An examination of major international commitments appears to provide some corroboration for this surmise. Maternal health, as such, was not even on the policy anvil as a major issue until the 1970s. At least some of this lack of attention may be attributable to the fact that by the period after the Second World War, it had become a problem

<table>
<thead>
<tr>
<th>Developing regions</th>
<th>440</th>
<th>527,000</th>
<th>61</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>830</td>
<td>251,000</td>
<td>20</td>
</tr>
<tr>
<td>Asia*</td>
<td>330</td>
<td>253,000</td>
<td>94</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>190</td>
<td>22,000</td>
<td>160</td>
</tr>
<tr>
<td>Oceania*</td>
<td>240</td>
<td>530</td>
<td>83</td>
</tr>
</tbody>
</table>

*Japan and Australia/New Zealand were excluded from the regional averages and totals for Asia and Oceania.

Source: UN Millennium Project (2005), Table 3.7
affecting poor countries and poor women within them. When it finally began to receive attention, this new focus was justified and its directions driven largely by concerns about children’s health. Although this has changed somewhat in recent years, as discussed later, its overhang continues until today.

But, despite growing attention to the health of children, the main causes today of child mortality are still those that were present decades ago: neonatal disorders, diarrhoea, pneumonia and malaria. HIV/AIDS, the most recent threat in some African countries accounts for 3% of these deaths (Black, Morris, Bryce 2003). Furthermore, the focus on children’s health did not necessarily translate into policy attention to neonatal health. In countries that have made impressive gains in reducing child mortality (e.g. Bolivia and Egypt which experienced improvements of 29% between 1989 and 1998 and 47% between 1988 and 2000 respectively), the reduction in neonatal mortality lagged behind (Bolivia, 7%; and Egypt, 37%).

The World Health Organization has estimated that each year some four million babies die before they reach the age of one month (newborn period), and as many are stillborn (dying between 22 weeks of pregnancy and birth) (WHO 2001). Of newborn infants who die, up to 66% die in the first week, and of these, up to 66% die within the first day (Save the children 2001).

“Ninety-eight percent of these newborn deaths take place in developing countries, and, for the most part, these newborns die at home, in the absence of any skilled health care (WHO 1996). Enormous disparities exist between rich and poor countries. A mother in western Africa, for example, is 30 times as likely as a mother in Western Europe or North America to lose her newborn in the first month of life.” (Save the Children 2001). [See Tables 3 and 4]. Despite this overwhelming evidence of the magnitude of the burden, neonatal health has only recently begun to emerge as a global priority. The MDG goal of reducing child mortality by two-thirds in many parts of the world can only be achieved if there is a serious commitment to reducing neonatal mortality (Healthy Newborn Partnership 2002).
Table 3: Lifetime risks to mothers

<table>
<thead>
<tr>
<th>Region</th>
<th>Lifetime risk that a woman will lose a newborn*</th>
<th>Lifetime risk that a woman will die of maternal causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>1 in 5</td>
<td>1 in 19</td>
</tr>
<tr>
<td>Asia</td>
<td>1 in 11</td>
<td>1 in 132</td>
</tr>
<tr>
<td>Latin America</td>
<td>1 in 21</td>
<td>1 in 188</td>
</tr>
<tr>
<td>More developed countries</td>
<td>1 in 125</td>
<td>1 in 2,976</td>
</tr>
</tbody>
</table>

*Deaths to babies between birth and 28 days.

Source: Tinker and Ransom (2002).

Table 4: Selected Newborn and Maternal Indicators By Region, 1995-2000

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated number of live births per year (1000’s) 1999</th>
<th>Estimated neonatal mortality rate per 1000 live births 1999</th>
<th>Number of neonatal deaths (1000s) calculated</th>
<th>Lifetime risk of a mother experiencing a neonatal death (%) calculated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>28,685</td>
<td>42</td>
<td>1205</td>
<td>21</td>
</tr>
<tr>
<td>Asia</td>
<td>76,090</td>
<td>34</td>
<td>2561</td>
<td>9</td>
</tr>
<tr>
<td>Latin America</td>
<td>11,553</td>
<td>17</td>
<td>196</td>
<td>5</td>
</tr>
<tr>
<td>Oceania</td>
<td>225</td>
<td>34</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Less developed countries</td>
<td>116,550</td>
<td>34</td>
<td>3970</td>
<td>17</td>
</tr>
<tr>
<td>More developed countries</td>
<td>13,045</td>
<td>5</td>
<td>65</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>


4.2 A Problem of Information and Measurement

In addition to its having become increasingly a problem affecting poor women, maternal mortality and morbidity has been beset by a paucity of reliable information, and complexities of measurement. This has also militated against policy focus in an era when the call is for policy to become ever more evidence-based. Van Lerberghe and de Brouwere (2001a) highlight the different ways in which information has been a serious constraint. Until the DHS and other major surveys began in the 1980s, the only data available in developing countries was hospital data, since routine registration of deaths and of births was absent. Hospital data cannot of course be used to derive population estimates. Until 1996 WHO did not even provide country-level estimates for MMR. Even the data from the DHS surveys has fairly substantial sampling errors and therefore cannot be used for more than trends over ten-year intervals. This kind of information is hardly
sufficient for policy formulation or programme implementation. The fact, furthermore, that maternal death is a relatively rare phenomenon in large urban hospitals has also served to make the problem invisible.

This changed only as late as 1996 with the publication of the WHO/UNICEF revised estimates for 1990 (WHO/UNICEF 1996) that included global, regional and country estimates. According to AbouZahr (2001, p5), “The debate provoked by the new estimates was instrumental in ensuring that the issue of maternal mortality was given greater visibility and attention both at the national level and in international fora. Maternal mortality became a key indicator for assessing country eligibility for donor support.” But she warns that while helpful, this kind of numbers game can be a two-edged sword, because newer and newer numbers have to be produced to keep the issue alive in the public eye, and to convince policy makers that the problem merits attention.

On the surface, infants under one appear to run a much greater risk of dying than mothers when mortality rates are measured, because the maternal mortality rate relates to one pregnancy at a time. This problem has been partially resolved by measures of lifetime risk or by using maternal mortality ratios (MMRs) though the latter are harder to understand intuitively. The seeming discrepancy between numerator and denominator in MMRs can serve to dampen policy appetite. The half a million or so deaths each year due to maternal causes can appear to be small to a policy maker who compares it to deaths from malaria for instance. One attempt to get around this is to speak not only about maternal death but also illness; more than 300 million women in developing countries are afflicted with short- and long-term illness related to pregnancy and childbirth including fistulae, cervical tears, infections, incontinence, or nerve damage to name a few (IAG/FCI 1998).

Another tack is to point to the number of DALYs lost due to maternal causes. “…in terms of total loss of healthy years of life (Disability Adjusted Life Years or DALYs), maternal and perinatal conditions account for more of the total burden than malaria or TB and only a little less than HIV/AIDS” (AbouZahr, op cit). This can be seen in Figure 1 below.
Since maternity only affects women, the correct comparison is obviously with the DALYs for women due to the other causes as well.

*Figure 1: DALYs lost due to different causes*

<table>
<thead>
<tr>
<th>Disease</th>
<th>% Contribution to Global Burden of Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuberculosis</td>
<td>2.0</td>
</tr>
<tr>
<td>Malaria</td>
<td>3.2</td>
</tr>
<tr>
<td>Childhood diseases</td>
<td>3.5</td>
</tr>
<tr>
<td>Maternal conditions</td>
<td>5.0</td>
</tr>
<tr>
<td>Perinatal conditions</td>
<td>7.0</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>6.0</td>
</tr>
</tbody>
</table>

*Source: AbouZahr (2001), Figure 2.*

Graham and Campbell (1992) have also argued that there is a measurement trap that besets priority setting for maternal health. Policy neglect of maternal health and lack of information reinforce each other and constitute a measurement trap when focus and attention are pinned on indicators and measurement techniques. This has served, they argue, to narrow the conceptualisation to “…a discrete, negative state, characterised by physical rather than social or mental manifestations, and by a narrow time-perspective focusing on pregnancy, delivery and the puerperium”. They argue that operations research into what works to improve maternal health must be matched by methodological studies. Otherwise measurement problems can be a serious constraint on programme action.
Lack of data has also been adduced as being among the factors advanced for the neglect of neonatal health in the international agenda (Save the Children 2001). This has been in part attributed to the under-reporting of neonatal deaths and stillbirths particularly in those countries experiencing higher neonatal mortality. Within these countries, registers for births and deaths are often incomplete and are often drawn from urban-based centres and hospitals, with the result that under-reporting is likely even relative to other mortality indicators.

Neonatal mortality and stillbirths are even more likely to be under-reported in contexts where many women deliver outside of a health facility and would be unlikely to report such incidents unless specifically approached. The question of sample bias is also a contributing factor since surveys attempting to obtain such data are often carried out in urban populations and areas more accessible by roads. In addition, there is variation in the cultural understanding of definitions and this can affect measurement e.g. “live births” and “neonatal deaths” (Save the Children 2001). In some countries if a newborn dies within the first 24 hours, it is not considered to have been a live birth, and this can underestimate the neonatal mortality rate by as much as 40%. To get around this problem WHO estimates the global burden of neonatal mortality on the basis of mortality rates that are adjusted for estimated under-reporting of neonatal and foetal deaths. WHO produced the first global estimates in 1996 and the 2001 estimates were based on data collected around 1999 (WHO 2001).
5. GENDER POWER, ROOT CAUSES AND PROXIMATE SOLUTIONS

The previous section focused on two key reasons for insufficient policy attention – the fact that maternal and neonatal ill-health are overwhelmingly problems of the poor, and difficulties in measurement and information. This section addresses a third reason – the role played by gender power relations, and the distance between root causes of the problem and its proximate solutions.

5.1 Intersections of Poverty with Gender Power

It is now widely accepted that poverty and gender bias within households are root causes for many elements of the vulnerability to maternal ill-health that women endure. Household poverty, acting by itself or in association with gender bias has an impact on many factors affecting the health of pregnant women including women’s nutritional status and education levels, as well as the household’s ability to afford health care or access it. While it is obvious that only women can suffer from maternal ill-health, gender power relations can have a significant impact on other aspects of the health of women (Cottingham and Myntti 2002, Garcia-Moreno 2002, Sen, George and Ostlin 2002). Gender bias within households and communities can manifest in a variety of different ways, many of which work to the detriment of women and girls, and negatively affect maternal health.

Poor nutrition for girls and women leads to anaemia that is exacerbated by menstruation and carries over into pregnancy. Numerous studies have reported that the distribution of resources within households- food being an important resource- is not always equal among household members, but shows strong gender and age biases. In some regions, perhaps most markedly in South Asia, gender-based nutrition norms often result in boys being favoured over girls. This gender bias is apparent throughout a woman’s life cycle from infancy to early childhood through adolescence and childbearing.

Maternal mortality is higher among women who are severely anaemic. Several studies have shown an association between nutrition and two leading causes of maternal
mortality, namely haemorrhage and obstructed labour (Rush 2000). Many of the programmes seeking to redress these have tended to focus on pregnant and lactating women through the provision of iron and folic acid supplements. While this intervention can play an important role in improving pregnancy outcomes, it stops short of addressing the nutritional deficits of girls and young women, the roots of which can be traced to underlying gender biases. Addressing the nutritional needs of girls during their growing years can also have an impact on the problem of low birth weight, a major factor in neonatal survival risk.

Another form that gender bias takes is low educational attainment by girls, which is associated in turn with early marriage and early childbearing. Across much of the world, the education of boys continues to be favoured over girls. Moreover, girls are less likely to remain in school than boys because of gendered roles associated with household work and childcare. This is particularly disturbing when considered against the prevailing wisdom that the denial of educational opportunities for girls is associated with early marriage and early childbearing both of which place numerous risks on the health of the adolescent mother and her baby. In India, the Indian National Family Health Survey (IIPS and ORC Macro 2000) has found that 63% of adolescent mothers experienced adverse pregnancy outcomes compared to 41% of mothers in the age group 20-29 years.

The numerous benefits arising from educating girls are well recognised and girls’ education has become a core strategy of development programmes across the world (UNFPA 1990). However, UNICEF (2005) reports that in spite of significant investments and policy attention towards education, particularly that of girls, three regions across the world (Middle East/North Africa, South Asia and West/Central Africa) face an uphill battle in achieving MDG 3 which calls for the elimination of gender disparities in primary and secondary education at all levels by 2015.

An important outcome of gender discrimination and disparities is weak control over economic resources and poor decision-making resulting in the woman having little say in matters of sexuality and reproduction including family planning, and unwanted
pregnancies. Disparities in the value placed on men versus women have important implications for their entitlements to resources (Hartigan, Price and Tolhurst 2002). The limited control and influence women have over economic resources, including often the cash incomes they themselves earn can result in their having little say in key household decisions. In particular, it can diminish their voice in matters of sexuality and reproduction.

Lack of sexual and reproductive agency for women is also experienced in the form of domestic violence, including during pregnancy. Violence, in all of its manifestations, perpetrated against both men and women, is globally pervasive and is rooted in power imbalances. Although both men and women experience violence, their experiences differ in a number of ways. Unlike men who generally experience violence primarily at the hands of other men and outside the home, women are most vulnerable to violence within their homes and the aggressors are often men familiar to them (Garcia-Moreno 2002).

There is mounting evidence that the incidence of domestic violence during pregnancy is high. INCLEN (2000), in a multi-site household survey study in India found that as many as 40% of women reported physical violence. Even more alarming was that 50% of these same women reported experiencing violence during pregnancy. Gazmararian (et al. 1996) in a review of thirteen studies examining the prevalence of violence against pregnant women in the United States reported a prevalence of violence during pregnancy ranging from 0.9% to 20.1%. A community based case control study of maternal mortality in the state of Maharashtra, reported that as many as 15% of maternal deaths were associated with the experience of violence (Ganatra, Coyaji, Rao 1998). While violence during any stage of a woman’s life poses numerous risks to her health and well-being, violence during pregnancy carries risks for both the woman and the foetus, by increasing the risk of miscarriage, pre-term delivery and low birth weight (McFarlane et al 1996, Jeejeebhoy 1998, Momeni et al 1999).
Each of the manifestations of bias described above, by itself and in combination with the others, elevates the risk of poor pregnancy outcomes including maternal morbidity, disability and death, and infant death and vulnerability to illness.

Nowhere is this clearer than in the case of unsafe abortion. There are an estimated 210 million pregnancies around the world each year of which almost 80 million are unplanned (Alan Guttmacher Institute 1999, WHO 2003). Unplanned pregnancies arise for two broad reasons; women who wish to avoid or delay pregnancy but are unable to use contraception, and secondly because of contraceptive failure (Safe Motherhood 1998). The inability to use contraception itself stems from two possible factors – lack of sexual and reproductive autonomy for women, and / or poor quality of family planning and reproductive health services. Women often do not control whether and when they have sex or whether they can use contraception because households are sites of gender power relations in which women (especially young women) tend to have little say in decision-making. Even when they have access to contraception, they may not be fully protected from pregnancy. An estimated 26 million unintended pregnancies occur annually from contraceptive failure or incorrect use (WHO 2003). The result is often an unwanted pregnancy. Unwanted pregnancy can also occur for other reasons such as a change in the woman’s life circumstances after she is pregnant. Sadly, when women need an abortion, they may find the services available for legal abortion to be inadequate, inappropriate, or insensitive. Where abortion is highly restricted, they may have no alternative but to undergo an unsafe abortion.

Those women wishing to terminate unplanned or unwanted pregnancies are often compelled to use unsafe abortion services, because access to safe abortion is constrained (Safe Motherhood 1998). The Alan Guttmacher Institute (1999) has estimated that of 80 million unplanned pregnancies, almost 46 million are voluntarily terminated. 19 million of these terminations occur outside the legal system, primarily in the developing world, and are often performed by unskilled providers or under unhygienic conditions or both. This means that around 9% of all pregnancies end in an unsafe abortion (WHO 2004). The unsafe abortion incidence rate in developing regions ranges from 20–30 unsafe
abortions per 1000 women of reproductive age. Complications of unsafe abortion account for approximately 13% of maternal deaths globally.

Table 5: Global and regional estimates of number of unsafe abortions and of mortality due to unsafe abortion, around the year 2000

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of unsafe abortions (1000s)</th>
<th>Unsafe abortions per 1000 women aged 15-44</th>
<th>Number of maternal deaths due to unsafe abortions</th>
<th>% of all maternal deaths</th>
<th>Unsafe abortion Deaths to 100,000 Live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>19 000</td>
<td>14</td>
<td>67 900</td>
<td>13</td>
<td>50</td>
</tr>
<tr>
<td>Developed countries*</td>
<td>500</td>
<td>2</td>
<td>300</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Developing countries</td>
<td>18 400</td>
<td>16</td>
<td>67 500</td>
<td>13</td>
<td>60</td>
</tr>
<tr>
<td>Africa</td>
<td>4200</td>
<td>24</td>
<td>29 800</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>Asia*</td>
<td>10 500</td>
<td>13</td>
<td>34 000</td>
<td>13</td>
<td>40</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>3700</td>
<td>29</td>
<td>3700</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td>Europe</td>
<td>500</td>
<td>3</td>
<td>300</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>Oceania*</td>
<td>30</td>
<td>17</td>
<td>&lt;100</td>
<td>7</td>
<td>20</td>
</tr>
</tbody>
</table>

1. Figures may not exactly add up to totals because of rounding.

*Japan, Australia and New Zealand have been excluded from the regional estimates, but are included in the total for developed countries.

Source: WHO (2004), Tables 3 and 4

The absolute number of unsafe abortions is highest in Asia (10.5 million a year). If Eastern Asia (China and Japan), where abortion services are available and there is little unsafe abortion, is excluded, the rate of unsafe abortion in Asia is as high as 21 per 1000 women of reproductive age. In India, in spite of liberal legislation on abortion for more than 30 years, unsafe abortions in India continue to be prevalent particularly due to the lack of safe services for poor women (Hirve, 2003).

Africa accounts for over 4 million unsafe abortions and the unsafe abortion rate is 24 per 1000 reproductive age women. Because of low fertility and legal barriers the relative risk of death from unsafe abortion is highest in South America where the rate of unsafe abortion is as high as 29 per 1000, and the percentage of all maternal deaths due to unsafe abortion is 17% (WHO 2004).
Of additional concern from a public health perspective is the fact that 2.5 million, or over 13%, of all unsafe abortions in developing countries are among women under 20. Africa has the highest proportion of unsafe abortions among young women; such abortions among women under 25 account for 60% of the total number of unsafe abortions, and the figure is 80% for women under 30. The picture is different in Asia: 30% of unsafe abortions are in women under 25 and 60% in women under 30. In Latin America and the Caribbean almost 70% of unsafe abortions are in women below 30 (WHO 2004).

It is also known that, when abortion is unsafe, the burden of risk is typically higher for poorer women whose ability to “buy” safe services is constrained (Mundigo and Indriso 1999). Unsafe abortion is evidently a leading cause of maternal death and illness; its proximate determinants are legal barriers and poor quality of services in some instances where it is legal. But its deeper roots are gender biases and patriarchal ideologies that militate against the realisation of women’s human rights.

5.2 Root Causes – Some Key Questions

Understanding the root causes of a public policy problem does not always give us solutions that will be effective in the short or medium term. This disjuncture between the causes of a public policy problem and the search for actions that will resolve it comes into play whenever long term, societally driven forces underpin those causes. Such forces typically involve powerful social structures such as economic class, race, caste or gender that are seldom susceptible to rapid change.

For instance, the roots of violence among young African-American men lie in a complexity of economic, social and historical factors, which cannot themselves be changed very quickly or easily. Effective solutions to the problem of violence cannot wait, however, for the slow pace of change in the root causes. Proximate determinants such as poor schools and lack of jobs, and the presence of drugs and guns in their neighbourhoods must be identified and addressed if a dent is to be made in the problem. However, short-term solutions focused on proximate determinants themselves face many barriers and may not be sustainable or workable in the presence of the deeper causes. The
challenge for policy therefore is whether it is possible to find solutions that will address the proximate determinants while also tackling the root causes in a manner that will bring about improvements in the short or medium term, while laying the basis for sustained change.

It is obvious that the class of problems being discussed here is likely to be inherently more complex to resolve, and may therefore require special policy attention. In public health, this class of problems typically includes those where social or economic inequity plays a major role. Ironically, the actual technical solutions to such problems may be simple and quite easy to implement in controlled situations. But the larger problem may remain intractable long after its technical solutions have been discovered.

A number of questions typically come up in these cases. Does knowing the root cause help in addressing the problem in the short run or does one have to look for proximate solutions? Looking at the chain from root causes to final consequences, where can policy most effectively attempt to break the chain? What is the time element that is involved? Are there inherent limitations to policies depending on where exactly one tackles the chain?

Where maternal health is concerned, the proximate determinants cover a range of factors including maternal age, parity, access and utilization of antenatal care services, availability of emergency obstetric care and skilled attendance at delivery. Root causes relate to a range of underlying social and economic factors including gender inequality and poverty, which increase the vulnerability of women to maternal ill-health and death. Particularly in low income settings, the pool of women with elevated risks from the root causes of gender bias and poverty can be quite large. These causes clearly need to be addressed both in themselves and as reasons for elevated risks of maternal ill-health. However, the process is likely to require prolonged and sustained effort. In the meanwhile, many women die or are rendered chronically ill.
Public health policy has therefore attempted to discern elements of improvement in health services that could provide effective solutions in the short run. Barring attempts to tackle iron deficiency anaemia through supplements, there has been little attempt until recently to address the other sources of bias listed above as part of maternal health policy. Instead much of the debate around maternal health policy has focused on the immediate environs of pregnancy – ante-natal care, safe delivery, and post-natal care. The attempt has been to break the chain of cause and consequence near its very end. The growing technical consensus is that the combination of professional delivery in situ backed up by effective referral and availability of emergency obstetric care is the best solution (Wagstaff and Claeson 2004).

But can these measures be actualised in the presence of the deeper biases that underpin elevated risk in many circumstances? There is considerable potential for difference of opinion on this score, and the jury is probably still out. When gender bias exists in the forms identified above, it often also manifests in poor quality of care, and callous treatment by service providers. Unless these are addressed, the hopes pinned on professionalising delivery care and institutional backup may evaporate. Even if it can be implemented, how long can the proximate solution be sustained without a change in root causes?

George, Iyer and Sen (2005) argue that a major barrier to safe delivery and effective postnatal care in a backward district in India is insensitivity by health providers to poor, lower caste women. This results in women dying even when there has been no delay in their reaching out for help, in reaching care, or even in getting treatment. Getting treatment is not helpful unless it is effective, but effectiveness is only partly determined by such things as the qualifications and knowledge of the provider. The other part is governed by the extent of the gender, caste, and economic class chasm between providers and patients. Perfectly well-trained providers let women die or provide poor quality care that can result in long term morbidity and disability because of the yawning gap between ‘us’ and ‘them’.
Looking at the history of maternal health policies and their evolution through this lens provides us with a fresh perspective for understanding the historical conundrum of ultimate cause versus proximate solution.
5.3 History’s Lessons

‘Natural’ maternal mortality, i.e., when nothing is done to avert it, is likely to be of the order of 1500 deaths per 100,000 live births. There are few development indicators that evidence such wide inter-country differences as the MMR, ranging from around 5 deaths in high income countries to around the ‘natural’ ratio in some poor countries.

In Sweden, the number of maternal deaths had fallen to 228 per 100,000 live births by the beginning of the 20th century, and similarly in the Netherlands, Norway and Denmark the MMR had fallen below 300 by 1920. By contrast, ratios in the United States hovered between 600 and 800 well into the 1930s. What is striking is that, barring a few countries such as these, the decline in maternal mortality ratios even among the high income countries only happened well into the 20th century. In the USA, for instance, the ratio was around 700 as late as 1930 but fell sharply to below 100 in the next two decades (van Lerberghe and de Brouwere 2001a). The decline in maternal mortality began somewhat earlier in England and Wales but even there, the rate hovered around 400 up until the Second World War. Equally striking is the large range among low and lower-middle income countries themselves. Some countries such as Cuba, Costa Rica, Sri Lanka, Thailand and Malaysia achieved sharp declines within 3 decades or less in the second half of the last century, while others with similar income levels have tended to remain at significantly higher ratios (van Lerberghe and de Brouwere 2001a).

Table 6: Recent declines in MMR

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Country 1</th>
<th>Country 2</th>
<th>Country 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 11-12 years</td>
<td>Thailand ‘62-‘74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In 9-10 years</td>
<td>Sri Lanka ‘56-‘65</td>
<td>Honduras ‘68-‘78; Malaysia ‘65-‘75</td>
<td></td>
</tr>
<tr>
<td>In 7-8 years</td>
<td></td>
<td>Sri Lanka ‘66-‘74; Thailand ‘74-81</td>
<td>Malaysia ‘75-‘83</td>
</tr>
<tr>
<td>In 4-6 years</td>
<td></td>
<td>Chile ‘71-‘77</td>
<td>Thailand ‘81-‘85</td>
</tr>
</tbody>
</table>

Source: Van Lerberghe and de Brouwere (2001b), Table 1.

Van Lerberghe and de Brouwere (2001a) provide a compelling explanation for the divergences among countries in terms of the presence of different combinations of
technical and political factors – the extent of available information about the dimensions of maternal mortality, the commitment of public officials to public health and their willingness to act on the available information, and the choice of a combination of professionally attended deliveries in the community backed up by effective referral. In fact, where the first two factors combined with the availability of trained professional midwives in the community as in Sweden, the MMR began to decline even before hospital care (including the use of antibiotics, blood transfusions and c-section) and referral became effective.

Is this then the magic combination that will help countries to tackle the problem? Another reading of this evidence is possible in terms of the root causes, without disputing the importance of the proximate factors that Van Lerbergh and de Brouwere identify. In many of the success stories, whether the early transformers in Europe or their counterparts in low income countries, certain ingredients appear to have been present that broke down the barriers to effective maternal health policy.

In the Northern European countries, it is impossible to explain the changes in maternal health outside the larger context of social democratic politics in the 19th century and the emerging public agreement on the constituent elements of a just society. Class and gender barriers, and the rural versus urban divide were broken through sustained public engagement not only with reference to maternal health, but a host of other social concerns (Kjeldstad 2001). In England and the USA by contrast, deep class and gender divisions continued to make most public health advances slow to reach those who were less privileged until the era of the New Deal and the advent of modern hospital technology². By then, populations in these countries were also more urban and had higher levels of education, not to mention higher levels of average income, and these factors undoubtedly affected the speed of the decline in MMR.

² This is not to minimise the impact of factors such as the rift between professional midwives and doctors in the US, but places it within the larger context.
On the other side, in many of the low and lower-middle income countries that have seen rapid declines in maternal mortality in recent decades – Thailand, Sri Lanka, the state of Kerala in India, Costa Rica, Cuba, China – one of two factors appears to have been at work. Either the country had a major revolution with a strong socialist commitment to improving public health, or these were countries where gender barriers were not so strong traditionally. These were also countries, not surprisingly, where the overall commitment to health, education, and human development more generally was high.

By contrast, if we examine countries where progress in reducing maternal mortality has been slow, we find a combination of the following barriers at work: acute poverty (combined with low education; predominantly rural populations); strong gender biases in families / communities including among service providers (sometimes compounded by race, ethnicity, or caste biases); and poor policy development and implementation capacity (sometimes as a result of public sector weaknesses, and in other cases as a result of economic reforms that have gutted the finances, staff and morale in public health). In the successful cases above, at least two and sometimes all three of these barriers have either not been strong to start with or have tended to break down prior to or concomitant with public health improvements. This created the basis for policy reformers to swing into action to push for the proximate solutions that became thereby easier to implement.

In sum, a reading of the successes and failures in reducing maternal mortality helps to identify not only the proximate solutions, but also the root causes that explain failure. It implies furthermore that getting the proximate solutions to work may itself require addressing some of the root causes as well. This suggests that it may be insufficient to address only proximate solutions, but there may be a need for a judicious mix of policies that tackle both. Addressing the conundrum of root causes versus proximate solutions needs the protagonists of each to come together to define the strategic policy agenda.

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3 The Gender Development Index (GDI) for China, Costa Rica, and Sri Lanka in 2003 was 0.718, 0.824, 0.724 respectively, which corresponded to a ranking of 83, 41 and 80 respectively (Source UNDP 2003)
5.4 Root Causes and Interventions in Neonatal Health

The main proximate determinants of newborn deaths are neonatal sepsis (24%), birth asphyxia (29%), complications associated with preterm delivery (24%) and tetanus (7%) (Save the Children 2001). Infections, including tetanus and sepsis, are often the result of unhygienic delivery or poor cord care and pneumonia. Asphyxia most commonly results from delayed or obstructed labour, or from a failure of a birth attendant to adequately resuscitate or assist after birth. Prematurity is a major risk to a newborn infant. Being born a month and more before the due date greatly increases the newborn’s risk of death in communities where special care for low birth weight (LBW) babies is not available (IDS 2003).

Importantly, the health and well-being of the mother are key requirements for the survival and well-being of her new born. In many parts of the developing world, the death of a woman in childbirth often results in the death of her newborn (Tinker and Ransom 2002). The rate of neonatal death is thus high in regions where the risk of maternal death is high (see Tables 3 and 4). Tinker and Ransom (2002) identify the following ways in which maternal conditions influence the health and well-being of their newborns: 1) birth spacing and maternal age, 2) childbirth complications (e.g. asphyxia arising from obstructed labour, 3) maternal infections (e.g. STIs, malaria) and 4) nutritional status.

Babies born to women who are poorly nourished, and receive inadequate prenatal and delivery care, are more vulnerable to premature death. The nutritional status of the mother is an important determinant of child development and survival, so much so that almost one-quarter of all infants are born with impaired growth and micronutrient status, which predispose the infant to low birth weight (ACC/SCN 2000). It has been estimated that 25% of all babies born in South Asia, 12% in Latin America, and 10% in Africa have low weights at birth (Shrimpton 2003). The significance of this is apparent when it is considered against the fact that an increase of 100 grams in mean birth weight has been associated with a 30-50% reduction in neonatal mortality (Shrimpton 2003).
WHO (1995) concluded on the basis of a large meta-analysis of data from more than 100,000 women that pre-pregnancy weight predicted the risk of LBW, intrauterine growth restriction (IUGR) and prematurity with odds ratios of 2.3, 2.5 and 1.4 respectively (Table 7). Stated simply, this means that for a unit decrease in pre-pregnancy weight, the likelihood of a woman giving birth to a baby with IUGR increases by 2.5 times. This strongly points to the fact that neonatal health is inextricably linked to pre-pregnancy maternal health and nutrition. Ramakrishnan (2004) argues that more than 50% of low birth weight cases are attributable to maternal nutritional factors.

Approximately, 40% - 80% of all neonatal deaths occur among those with LBW, making it one of the most important indirect causes of neonatal mortality (Save the Children 2001). Anaemia, arising from iron deficiency continues to affect almost 50% of women in developing countries. “Mothers with severe anaemia are at increased risk of maternal death, stillbirth, and early neonatal death; and their infants are at increased risk of low birth weight, prematurity, and/or cognitive impairments” (Tinker and Ransom 2002, p5).

There is thus growing evidence that the health and nutritional status of the mother before, during, and after pregnancy is closely linked to the survival, well-being and nutritional status of the newborn in its infancy and later years (Oniang’o, Mukudi 2002, Save the Children 2001, UNICEF 2001). In developing countries, malnutrition often occurs within the broader context of poverty and follows an intergenerational cycle, where “a malnourished girl becomes a malnourished mother, who will give birth to an underweight baby” (UNICEF 2001, p33). But female under- and malnutrition can also result, particularly in South Asia, from gender biased practices where girls and women eat last and get the least nutritious and least amount of food.

In developing countries, of those newborns who survive, almost one quarter of them start life with some degree of impaired growth and micronutrient status (Davidson 2002). As a result they are at increased risk of infectious disease as well as compromised cognitive and behavioural development (e.g. poor attention span). Also, they are more likely to experience growth failure (including stunting) which has its origins in the
neonatal period. In addition, they often bear a much higher burden of disease and often
die earlier than those born with normal weight (Save the Children 2001).

Davidson (2002) maintains that those affected by foetal malnutrition can in later life be
predisposed to hypertension, coronary heart disease, and diabetes. “The double burden of
early under-nutrition and later over-nutrition is especially evident in countries undergoing
rapid economic development, where chronic disease rates are showing alarming
increases. The WHO estimates that by 2025 the prevalence of non-insulin-dependent
diabetes will have increased by 170 percent in developing countries.” (Davidson 2002,
p2).

Table 7: Pre-pregnant nutritional status of mother and risk of low birth weight (LBW),
intrauterine growth restriction (IUGR), and prematurity in infants

<table>
<thead>
<tr>
<th>Pre-pregnancy indicator for mother</th>
<th>LBW</th>
<th>IUGR</th>
<th>Preterm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (cm)</td>
<td>1.7</td>
<td>1.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>2.3</td>
<td>2.5</td>
<td>1.4</td>
</tr>
<tr>
<td>BMI (kg/m2)</td>
<td>1.8</td>
<td>1.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Midupper arm circumference (cm)</td>
<td>1.9</td>
<td>1.6</td>
<td>1.2</td>
</tr>
</tbody>
</table>

1 Odds ratios are presented for each outcome per unit decrease in each indicator.


With the recent growing interest in neonatal mortality, many researchers are searching for
interventions that can tackle the proximate determinants. In the Lancet series on child
survival, Jones et al (2003) list twenty-three interventions (15 preventive and 8 curative)
that are most likely to have an impact on childhood mortality, several of which relate
directly to causes of neonatal morbidity and mortality (neonatal sepsis, birth asphyxia,
preterm delivery and tetanus). The interventions are at the primary health care level
during pregnancy, childbirth, and the postnatal period.
In their evaluation of these interventions, Jones et al. distinguish between those having sufficient evidence of effect, from those with limited evidence. Of those interventions that may have a potential for reducing neonatal mortality, there is sufficient evidence for breastfeeding, insecticide-treated materials, clean delivery, antenatal steroids, tetanus toxoid, antimalarial intermittent preventive treatment in pregnancy, and antibiotics for neonatal sepsis. There is at present insufficient evidence for newborn temperature management, antibiotics for premature rupture of membranes and newborn resuscitation. The authors point out that “…neonatal deaths have only recently been identified as a global priority and there is urgent need for further research in this area”. Moreover, they go on to argue that breast-feeding in combination with existing neonatal survival interventions described earlier could bring about a dramatic 55% reduction in neonatal deaths, which is approximately 18% of all under-5 deaths.

Assessments such as these are useful. However, the poor health of the mother and the linkage between the infant and its mother may continue to account for a significant number of newborn deaths even with these interventions. Considering the intergenerational impact of women’s health and nutrition on neonatal survival, and in later years on child development and predisposition to chronic diseases, measures to tackle the proximate determinants may well increase neonatal and infant survival without breaking the intergenerational cycle that has its roots in poverty and gender inequities. These intergenerational links would then continue to result in significant numbers of avoidable deaths and illness in infants, children and adults.

This section has argued that, while the search for proximate solutions to maternal and neonatal illness and death is a legitimate one, the presence of deeper, more socially ingrained problems and biases of gender, caste, race and poverty may itself limit the reach and the workability of such solutions in actual situations. Tackling both proximate determinants and root causes is essential if solutions are to be workable and sustainable. In the next section we examine how the international policy environment has evolved in this light, and whether current agendas reflect such an understanding.
6 INTERNATIONAL POLICY ENVIRONMENT FOR MATERNAL AND CHILD HEALTH

6.1 International Commitments Related To Maternal Health

In the late 19th century and first part of the 20th century in Western Europe and North America, institutions and authorities engaged in health care (medical and lay, charitable and governmental) began to openly recognise the importance of safeguarding mothers and children. Maternal and child programmes were set up, mostly in a framework of charitable services (Van Lerberghe and De Brouwere 2001a). This welfare approach to maternal health must be seen within a broader context of widespread state control over morality, particularly through the prohibition of birth control and abortion, and through penalizing and stigmatizing certain forms of sexual behaviour (Cook, Dickens, Fathalla 2003). This is important, because it means that the welfare emphasis of the early part of the 20th century based on the need to help and save mothers (which continues today in many countries of the developing world), was not accompanied by a concomitant recognition that there has to be a larger framework of rights that support women’s ability to go through pregnancy safely. While the past 50 years have seen a major shift in this thinking, particularly due to the extraordinary activism of the international women’s movement, the realisation that punitive control of reproduction and sexuality has had (and continues to have) a harmful effect on the health and welfare of individuals has a long way to go before becoming the accepted norm.

6.1.1 The Evolution of Safe Motherhood

The evolution of policy thinking on Safe Motherhood has had two interlinked dimensions: a slow and as yet incomplete shift from welfarism to human rights; and greater clarity about the efficacy of different proximate interventions. During the first half of the 20th century, there were only about 60 recognised nation states, most of the other parts of the world being colonies or protectorates of colonising countries. Campbell (2001) argues that there was very little attention to maternal health in the colonies except when it seemed to be affecting the size of the ‘native’ workforce, or as a spinoff of health services provided to the wives of colonists, or of the activity of Christian missions.
An exception was in the area of employment, where the protection of maternity at work became one of the first six standards promulgated by the newly established International Labour Organization in 1919 (International Labour Organization 1919). The Convention covered all women - defined as any female person irrespective of age or nationality, whether married or unmarried - employed in a public or private industrial or commercial undertaking. It guaranteed six weeks' pre- and post-natal leave with paid benefits, breastfeeding breaks and protection against dismissal on grounds of pregnancy. It is probable that concern for protecting pregnant women in the formal employment sector was also related to ensuring that children survived (to be able to serve in the armed forces of their countries later) (Baker 1939).

The ILO Maternity Protection Convention was nonetheless an important landmark, providing the basis of the revised Convention in 1952 and a further revision in 2000 which went much further in scope, by specifying benefits to be paid, length of leave, and a framework to protect women's as well as infants' health. However, only 40 governments ratified the 1952 Convention, and only 12 have ratified the 2000 revised Convention, making national implementation of employment policies protecting maternity lag far behind international recognition (ILO 1952, ILO 2000, ILO 2005).

In 1948, the World Health Organization was founded. Its Constitution proclaims the right to the highest attainable standard of health, and lists, as part of the Organization's functions, the obligation “to promote maternal and child health and welfare and to foster the ability to live harmoniously in a changing total environment” (WHO 1948). A report of the first 10 years of WHO identifies maternal and child health as a key area of action and notes that WHO provided technical support for training personnel, creating administrative divisions of maternal and child health within national health systems, and integrating maternal and child health into general health services (Campbell op. cit.).

However, while WHO’s Constitution (WHO 1948) included promotion of maternal health, and technical support was provided during the 1950s to attempts to integrate
maternal health within national health systems, broader international cooperation for maternal health only began with the funding of MCH programmes in the mid-1960s. Even when this began to happen, child health was the engine driving attention to maternal health well into the 1970s and 1980s (Rosenfield and Maine, 1985). In the mid 1960s donor countries and international agencies started to fund maternal and child health programmes of different national Ministries of Health. However, in the report of WHO’s second 10 years, maternal health features much less than previously (Campbell op. cit.). In none of these early initiatives were human rights specifically mentioned in relation to maternal and child health.

By the 1970s the international family planning movement began to have an impact by drawing attention to the links between family planning and reduction in the risks associated with maternity. In response, WHO adopted a family planning strategy in 1974 (WHO 1974). However, attention to maternal health as a spinoff of advocacy for family planning proved to be a mixed blessing. There was a tendency to assume that family planning by itself would lead to reductions in MMR, and this affected policy stances and priorities as well as service delivery. It has also been argued that some excessively top-down family planning programmes with contraceptive method-specific targets have had distortionary impacts by creating incentives for frontline workers to prioritise family planning at the expense of other services supporting maternal and child health (Visaria et al. 1999, Sen 2003).

The 1980s and early 1990s did, nevertheless witness the evolution of greater clarity about which proximate solutions can be most effective. The Safe Motherhood Conference in Nairobi in 1987 led to the launching of the Safe Motherhood Initiative by five UN agencies (WHO, UNDP, UNFPA, UNICEF and the World Bank), the Population Council and IPPF. It was some time before there was clarity that safe delivery and professional care are essential, and that screening for high risk pregnancies and TBA training are not enough (this is discussed in more detail in section below). In 1994 WHO spelled out the Mother-Baby package including antenatal care, clean and safe delivery, emergency obstetric care (EmOC) and family planning (WHO 1994a). In 1996 the Inter-Agency
Group for the Safe Motherhood Initiative began a sustained campaign of advocacy, which culminated in the high level *Call to Action for Safe Motherhood* in 1998. The focus on effectiveness and high level involvement that characterised the *Safe Motherhood at 10* campaign “represented a major step forward in terms of visibility” (AbouZahr 2001).

The mid–1980s also saw the beginnings of a move towards greater emphasis on maternal health in terms of mothers themselves rather than through their children. The Safe Motherhood Conference of 1987, in addition to focusing on the efficacy of particular interventions, was important in building recognition that action needed to save women from dying had to take into account the causes deeply rooted in the adverse social, cultural and economic environments of society, and especially the environment that societies create for women. The *Safe Motherhood at 10* conference organized by the international agencies in Colombo, Sri Lanka in 1997, was also a major watershed through its recognition that one of the “lessons learned” from the previous ten years was that safe motherhood was a matter of human rights and social justice (WHO 1998, Safe motherhood information kit). It was thus able to underscore the need to integrate maternal health actions into a framework of women’s human rights.

### 6.1.2 Towards a Human Rights Frame for Maternal Health

The formation of the United Nations in 1947 in the aftermath of the atrocities of the Second World War saw the articulation of human rights in the international arena. The *Universal Declaration of Human Rights* (UDHR) adopted by the UN General Assembly in 1948 provided the basis for the development of a body of international human rights law covering all aspects of human life and endeavour. Article 25 of the UDHR states that “motherhood and childhood are entitled to special care and assistance” (United Nations 1948). From a late 20th/early 21st century perspective, this seems a very limited statement, highlighting the need for protecting women only as reproducers. But given that there are only 30 articles in the UDHR, and the entire document is only five pages long, this specific reference can be read as indicative of the recognition given by the international community to maternal and child health nearly 60 years ago.
The Universal Declaration of Human Rights provided the basis for the elaboration of legally binding treaties. The first two such treaties - the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR) – were adopted by the United Nations General Assembly in 1966. The ICCPR, which includes articles on the rights to survival, liberty and development, was initially used to hold governments accountable in areas related to, for instance, the arbitrary deprivation of life and liberty, of conditions of imprisonment, of torture and of due process under the law. While the social areas of education, employment and health care were examined under the ICESCR, little attention was paid initially to the specifics of women’s and maternal health.4

Two subsequent treaties, the International Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW, adopted in 1981) and the Convention on the Rights of the Child (CRC, adopted in 1989), gave more attention to health concerns. CEDAW, for instance, guarantees that states parties shall “ensure to women appropriate services in connection with pregnancy, confinement and the post-natal period, granting free services where necessary, as well as adequate nutrition during pregnancy and lactation.”5

It is the legally binding nature of these treaties that is important. It means that countries that have ratified them must report regularly (usually every 4 years) to the relevant treaty monitoring body on the progress they have made towards the respect, protection and fulfilment of the human rights guaranteed in the treaty. This reporting to the committees (consisting of independent experts in specific domains) constitutes an international legal monitoring mechanism, which, while not punitive in the way that a national mechanism could be, nonetheless provides an important basis for non-governmental actors and others

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4 The article dealing with the right of everyone to enjoy the highest attainable standard of health refers to reducing stillbirth and infant mortality, environmental and industrial hygiene, prevention, treatment and control of epidemic, endemic and occupational and other diseases, and the creation of conditions to assure access for all to medical services
5 Although CEDAW saw women’s health primarily in terms of motherhood, and linked this to the care of infants and children [United Nations 1981, Article 12.2], it was the first major international instrument that explicitly stressed that women have equal rights within the family (United Nations 1981).
to hold states accountable. It also provides a platform for a dialogue with states parties as to measures they should take to improve the situation in their countries. Over the past 2-3 decades, this process has been gaining more and more ground, being scrutinized and promoted by both national non-governmental organizations and international agencies and organizations.

In the 1990s, the treaty monitoring bodies started using the law in new ways to support women's reproductive rights. For instance, an analysis of the “concluding observations” (the recommendations made by the committees at the end of their dialogue with the reporting country and which each state party must report progress upon in subsequent reports), shows that a large number focus on aspects of sexual and reproductive health, particularly from CEDAW. Since 1994, in at least 12 cases the HRC have raised concerns about the high levels of maternal mortality particularly as a result of illegal abortion, with reference to the violation of a woman's right to life and putting her life in danger. The CESCR committee has raised similar concerns under the right to health, and recommended that states parties increase education on reproductive and sexual health as well as implement programmes to increase access to family planning services and contraception [CRR 2002 op. cit.]. As more detailed information about the sexual and reproductive health situation is provided to the monitoring bodies (through, among others, WHO), the concluding observations will become more and more specific, relating to internationally developed standards and guidelines in this regard. They can and should be used as an essential mechanism through which (a) the content of rights can be elaborated, and (b) countries can be held to account for their obligations in respect of maternal health.

More recently, the committees have started to elaborate “general comments” that describe in greater detail the standards implied in certain articles of the treaties. Thus, for instance, the Human Rights Committee (HRC), that monitors the implementation of the ICCPR, has elaborated a general comment on the equality of rights between men and women (article 3 of ICCPR). This specifies that, “when reporting on the right to life protected by article 6, States parties should provide data on birth rates and on pregnancy
and childbirth-related deaths of women. Gender disaggregated data should be provided on infant mortality rates. States parties should give information on any measures taken by the State to help women prevent unwanted pregnancies, and to ensure that they do not have to undertake life-threatening clandestine abortions…” (HRC 2000).

The Committee monitoring ICESCR, in its general comment on the right to the highest attainable standard of health, requires States parties to implement measures to: “improve child and maternal health, sexual and reproductive health services, including access to family planning, pre- and post-natal care, emergency obstetric services and access to information, as well as to resources necessary to act on that information.” (CESCR 2000).

The fact that the general comments include specific and sometimes elaborate reference to sexual and reproductive health is an effect in large part of two or three decades of feminist activism at national and international levels for the recognition, promotion and protection of women’s rights, which also had a major impact on the shape and content of the Cairo Programme of Action and the Beijing Platform for Action (Datta 1994). The 1970s had witnessed the rise of active campaigning by the international women’s health movement attempting to build on the declaration of the UN Decade for Women (1976-85). However while these campaigns mobilised and consolidated opinion among women themselves regarding maternal health, they did not as yet have much policy impact.

6.1.3 The Women’s Movement

It was CEDAW in 1981 that, despite its limitations, opened the floodgates of concern about women’s human rights. But it was not until well into the 1990s that this concern was translated into a new framework that would locate maternal health firmly within the context of women’s rights. The international women’s movement, consisting of loose coalitions and alliances of national, regional, and international women’s organizations,

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6 For further information, see: Center for Reproductive Rights. Bringing rights to bear: an analysis of the work of UN Treaty Monitoring Bodies on reproductive and sexual rights. New York and Toronto, Center for Reproductive Rights and University of Toronto International Programme on Reproductive and Sexual Health Law.
played a central role in this (Antrobus and Sen, forthcoming). Their involvement, both in the Safe Motherhood movement, and as advocates for women’s human rights through the UN conferences of the 1990s, was critical to winning global public attention and acknowledgement of women’s human rights.

This unprecedented action by civil society started in the early 1970s in various countries both in the developing and developed world. Following the organization of the first three "international women and health" meetings, the international women's health movement made a public outcry at the United Nations Population Conference in Mexico City in 1984 about the high levels of maternal mortality in the developing world. This was taken up again at the World Conference to Review and Appraise the Achievements of the UN Decade for Women (1976-1985) in Nairobi in 1985. Its “Forward Looking Strategies” specifically highlighted the need to strengthen efforts to reduce maternal mortality as one measure towards fulfilling women’s human rights.

In the same year that the Safe Motherhood Initiative was launched (1987), the international women’s health movement launched an international day of action focussed around maternal mortality, the success of which led to a 10 year campaign coordinated by the Women’s Global Network for Reproductive Rights to reduce maternal mortality. But there was ambivalence in the movement about the wisdom of focussing on maternal mortality, with the associate risk of falling back to a “welfare” stance or regarding women only as reproducers, versus reproductive health within a much broader women’s health and rights agenda [Campbell op. cit.].

These differences of perception within the international women’s movement took some time to iron out. Systematic attention was paid to this prior to the Cairo conference. The International Conference on Population and Development (ICPD) was held in Cairo in 1994, and marked a major paradigm shift in the population field towards a rights-based approach. It also consolidated the pathbreaking recognition of women’s rights as human rights that had occurred only a year earlier at the Vienna conference on Human Rights in 1993. The *ICPD Programme of Action* (PoA) provides a detailed description of
reproductive health and rights, which include “the basic right of all couples and individuals to decide freely and responsibly the number, spacing and timing of their children and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive health” (United Nations 1994, paragraph 7.2). They also include “the right of access to appropriate health-care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.” This was a major step forward, socially and politically in what one commentator has called the linking of “new conceptions of health to the struggle for social justice and respect for human dignity.” (Shalev 2000). This was further reinforced at the Fourth World Conference on Women, held in Beijing in 1995. Section C (“Women and Health”) of Chapter 4 of the Beijing Platform for Action solidified the support for sexual and reproductive health including all aspects of maternal health.

The ICPD Programme of Action and the Beijing Platform for Action were solidly rooted in women’s rights. A major but by no means the only instance is para 8.25 of the ICPD PoA that clearly recognised unsafe abortion as “a major public health concern” and declared that in all cases (regardless of abortion's legality), women should have access to quality services for the management of complications (United Nations 1994). This was repeated in Beijing where governments were also asked to consider reviewing punitive abortion laws. At the Five Year Review of the ICPD, in para 63(iii) of the Key Actions for the Further Implementation of the Programme of Action of the ICPD, governments agreed that health systems should train and equip health service providers and take other measures to ensure that abortion is safe and accessible wherever it (abortion) is not against the law.

WHO (2004) states “Restrictive legislation is associated with a high incidence of unsafe abortion. The outcome of complications of unsafe abortion will depend not only on the availability and quality of post-abortion services, but also on women’s willingness to turn to hospitals in the event of complications, and the readiness of medical staff to extend services. It is thus the number of maternal deaths, not abortions, that is the most visible
consequence of legal codes.” The UN Millennium Project (2005) points out that there has been an important reduction in unsafe abortions and abortion-related mortality arising from legal reform as improvements in the conditions under which abortions take place. Globally, all countries except three legally permit abortion for one or more indications (United Nations Population Division 2001)

Such consistent advances in a highly politicized area point to the efficacy and capacity of the women’s movement and its allies during this period. Although the outcomes of the conferences of the 1990s are not binding on governments in the same way as conventions and treaties, the mobilization of global and national opinion not only made them possible but also lend them great moral and political weight and authority. Professional organisations have also begun to play a role. FIGO, the international body of gynaecologists and obstetricians adopted a Code of Ethics relating to respecting and protecting women’s sexual and reproductive rights at their Congress in Chile in 2003 (FIGO 2005).

Now that there is much greater attention to human rights relating to both maternal health and to women's sexual and reproductive health more broadly, a crucial avenue has thus been opened up to bring much greater international pressure to bear on countries to fulfil their legal obligations along with their policy and funding commitments.

Considerable headway has clearly been made in putting women’s human rights at the base of the policy agenda. But what does this mean in practice? How has it been or can it be used and translated into concrete action? And has it had an effect on the international community’s approach to maternal health?

6.2 International Commitments related to Newborn Health

6.2.1 Alma Ata and Child Health

The convening of officials from over a hundred countries by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) in the city of Alma Ata culminated in the landmark Alma Ata Declaration which prioritised primary
health care (PHC) as the driving strategy for guiding public health efforts and achieving “Health for all by the Year 2000) (WHO 1978). Underlying this was the recognition of social and economic inequalities and the need for a transformation to a New International Economic Order, one that would be more just and equitable.

The health and well-being of children was central to the values underpinning Alma-Ata and one of the key points in the Declaration was that “PHC includes at least: education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs” (WHO 1978). This vision called for an intersectoral collaborative approach based on community participation.

However this comprehensive approach was soon abandoned in favour of a more selective disease-based one on the grounds that it was expensive and many of the countries it would be targeting, namely low income ones, would not be able to mobilise the resources to implement it (Campbell 2001). To the further detriment of the comprehensive approach, a global recession was beginning to take effect and a debt crisis was plaguing many developing countries that were being directed to structurally adjust their economies and curb their spending including that on the social sectors. It was within this context that “selective PHC” which emphasised reducing those diseases that are leading contributors to the burden of morbidity and mortality and would be the most cost-effective to control was adopted. This led to an expansion of vertical programmes aimed at specific diseases.

6.2.2 UNICEF and GOBI
Global economic events and the growing emphasis on selective primary care shaped UNICEF’s response to child health needs. The UNICEF strategy targeted the then leading causes of child mortality, namely diarrhoea, infectious diseases and malnutrition. UNICEF’s Child Survival and Development Revolution was launched in 1982 by its then
Executive Director, James P. Grant. It stressed “four simple interventions: growth monitoring, oral rehydration therapy, breastfeeding, and immunization.” that were collectively referred to as 'GOBI' (UNICEF 1996). Birth spacing/family planning (F), food supplementation (F) and the promotion of female literacy (F) were added subsequently. “This campaign reversed conventional wisdom. Rates of infant and young child mortality had previously been seen as measurements of a country's development. Now UNICEF suggested a direct attack on infant and child mortality as an instrument of development.” (UNICEF 1996). However, specific focus on the health of neonates was conspicuously absent in GOBI.

Through its vertical, targeted delivery systems GOBI made laudable gains in reducing child mortality. Oral rehydration therapy (ORT), which was and continues to be inexpensive and easy to use, has been responsible for significant reduction in diarrhoea related mortality. ORT and immunization programmes, often through donor-driven vertical systems, made impressive gains in child survival programs in the 1980s and early 1990s. Important gains were also made in reducing mortality through nutrition programmes, expanded growth monitoring, the promotion of exclusive breast-feeding for the first six months of life, and the use of vitamin A supplementation in areas with high childhood mortality.

But, while the gains were impressive in improving child survival, the impact has been most striking in those older than one month. Lawn et al (2001) point out that during the first month of life an infant’s risk of death is almost 15 times higher than at any other time during the first year. If child health is to be targeted during the period of greatest risk, strategies should target the newborn stage, the most vulnerable in a child’s development.

6.2.3 Convention on the Rights of the Child, 1989

The Convention on the Rights of the Child is considered the most widely ratified human rights instrument in history. Article 24 states, “Parties recognize the right of the child to the enjoyment of the highest attainable standard of health ...[and] Parties shall strive to
ensure that no child is deprived of his or her right of access to such health care services,” (United Nations 1989). Yinger and Ransom (2003) argue that although the text does not single out newborns, their right to health care is implicit.

6.2.4 World Summit for Children, 1990

An important milestone in child health and survival was the World Summit for Children in 1990. This was notable in that it was the single largest gathering of world leaders in history led by 71 heads of State. The outcome of this summit was the adoption of the Declaration on the Survival, Protection and Development of Children and a Plan of Action for implementing the Declaration in the 1990s (United Nations 1990a, United Nations 1990b).

Of relevance to this paper is the importance of neonatal health as a key determinant of child survival at this gathering. Neonatal health was noted in the Declaration as it relates to maternal health ““Half a million mothers die each year from causes related to childbirth. Safe motherhood must be promoted in all possible ways. Emphasis must be placed on responsible planning of family size and on child spacing” (United Nations 1990a).

Within the Plan of Action, while the listing of preventable childhood diseases (section 9) does not make any special reference to neonatal and newborn health, its importance is addressed in two other sections relating to Women, Maternal Health and Family Planning (sections 16 and 17), and Actions at the National Level (section v and vii) (United Nations 1990b).

6.2.5 UN Special Session on Children in May 2002

In the End-decade review of the follow-up to the World Summit for Children, the General Assembly pointed out that “At the global level, the burden of childhood mortality is still high; more than two thirds of the infant deaths that occur each year are neonatal deaths.” Key actions for addressing this were spelled out. “Services for mothers and newborns must also be reinforced. These include: Antenatal services, including
malaria prevention, tetanus immunization, food and micronutrient supplements and measures for the prevention of MTCT of HIV; [and] Skilled attendance at and after birth to identify and refer obstetric complications, prevent tetanus, prevent asphyxia and infections in newborns and ensure birth registration.” (United Nations 2001)

The resolution of the UN General Assembly Special Session on Children (2002) gave a call to “Ensure that the reduction of maternal and neonatal morbidity and mortality is a health sector priority…”. Newborn health is high on the agenda of the Partnership for Safe Motherhood and Newborn Health, post-Bellagio child survival initiatives, the Road Map for the Attainment of the MDGs Related to Maternal and Newborn Health in Africa, the Newborn Health Strategic Framework for the South East Asia Region, and UN Millennium Project activities.

The World Health Report 2003 underlines the need for action to improve the health and survival of newborns and their mothers, and the World Health Report 2005 was devoted specifically to Maternal Health and Child Survival. Most significantly, many governments are taking policy and program initiatives to address newborn health challenges in their countries. A recommendation of the UN Millennium Project (UN Millennium Project 2005) is that neonatal mortality should be an additional indicator for gauging progress towards the MDG of reducing child mortality.

It is clear from the previous sections that, as with maternal health, while international policy commitment to neonatal health is stronger now than it has ever been, it has been slow in coming, and this may have been for some of the same reasons – that it is a problem of poverty, that there are problems of measurement, and because root causes especially the social consequences of gender power relations, appear to play a central role.
7. UPS AND DOWNS IN THE ECONOMIC ENVIRONMENT

The factors cited in the previous section have been major reasons for the lack of policy clarity in the field of both maternal and newborn health. But the ups and downs in the economic environment globally, and the shifts in the development agenda have intersected with these factors in complex ways.

Globally, the period from the end of the Second World War until around the end of the 1960s was a period of a long economic boom that witnessed high and steady growth rates in most of the OECD countries (Howes and Singh 1995). The emergence of many new countries from the shackles of colonial rule and significant investments by them in building physical capital and infrastructure had a boosting effect on aggregate demand and growth rates in developing countries as well.

Some countries, notably in the Socialist bloc, parts of sub-Saharan Africa, East and Southeast Asia and Latin America also invested during this period in elements of human development such as education and health services. The 1960s were the heyday of economic planning with governmental and international agency support. By the 1970s the long post-War economic boom was over as far as the OECD group of countries was concerned; the weakening of the US dollar’s link to gold was both symbol and evidence of this. On the other hand, the 1970s for the developing world was still a period of optimism fuelled in part by the OPEC experience, and hopes for a New International Economic Order were in the air.

The 1970s were also the period when the global development agenda shifted from a belief that economic growth would ‘trickle down’ to strategies to directly address issues of redistribution and equity. Initiated by the ILO, the emphasis on ‘basic needs’ including health became part of the policy agenda espoused by the World Bank among others. Concerns around equity were at the forefront in Alma Ata with primary health care as the vehicle for achieving “Health for All”.

Where maternal care was concerned, this emphasis on primary health care appeared to be the right approach at the time. “…the 1974 WHO document also makes the statement that ‘the training of traditional birth attendants for home deliveries is recommended rather than trying to persuade rural women to go to hospitals or trying to train enough professional midwives’. This policy shift may have been a pragmatic response to the growing observation that professional midwives and obstetricians were reaching very few women and that hospitals gobbled up huge portions of national health budgets but it was also clearly thought that training TBAs could improve equity in access to health care, one of the key features of the PHC ideology that was emerging at this time” (Campbell 2001).

This approach has been challenged as not having been very effective and as having diverted policy focus at a critical time. “The resistance (or inability) to change of TBAs, their lack of credibility in the eyes of health professionals, the de facto impossibility to organise effective and affordable supervision, all have discredited training of TBAs. Whatever its other merits, it is now considered an ineffective strategy to reduce maternal mortality” Van Lerberghe and De Brouwere 2001a). It could be argued that the intent of the PHC approach was never to pit TBAs against effective referral and supervision by better trained professionals. However the weakening economic climate of the late 1970s and 1980s with a ballooning debt crisis and fiscal constraints narrowed PHC considerably and focused maternal care on what was believed to be both cheap and effective – antenatal care and TBA training.

As Campbell (2001) puts it, “By the late 1970s and early 1980s implementing PHC for maternal health in a cost constrained environment translated into a limited set of activities, none of which were particularly effective…As part of this trend, support for the training of traditional birth attendants (TBAs) increased, whereas training of specialist cadres, those most necessary for preventing maternal deaths, decreased. For example, in the mid 1970s, the Bangladesh government discontinued training women who were in effect specialist community midwives…Similarly, in Egypt, midwifery schools were closed in the 1970s, and the current shortage of trained personnel with midwifery skills is a consequence that many other countries share today…”
The challenges posed to human development strategies generally and health systems in particular by the economic climate and structural reforms of the 1980s and 1990s are well known. Very early UNICEF pointed out that economic adjustment needed a human face that was lacking at the time, and that child health improvements were already beginning to falter (Cornia, Jolly and Stewart, 1987). AbouZahr (2001) has argued that child health advocates were more focused and effective in their policy advocacy than women’s health advocates for maternal health. However, even within child health, neonatal health did not do very well in this period.

More fundamental than the effectiveness of policy advocacy per se might be the fact that both maternal and newborn health depend for their improvement on strong health systems with good outreach to the community and effective referral on a sustained basis. Neither can be handled effectively through targeted interventions such as GOBI where the required health system response is limited to actions such as immunisation that can be undertaken in a campaign mode. The ‘alphabet soup’ (PHC, MCH, SMI, MMR, MBP, MSM, SRH, MNH, PMM and MPS, all referring to projects and programmes linked to pregnancy and childbirth) that AbouZahr (2001) speaks about could be seen as a sign of growing desperation and confusion as maternal and neonatal mortality remained stubbornly high and health systems continued to crumble.

Professional care at the community level through well-trained midwives backed up by functioning referral for emergency obstetric care are the proximate interventions of choice that are gaining wide acceptance today in relation to maternal health. But, as we have argued earlier, even these require tackling the deep anti-poor, anti-women and other biases that are often built into health systems and communities.

Health sector reforms (HSR) and sector-wide approaches (SWAPS) represent other attempts to fix the problem. But gender analysts have only partly entered this terrain. As Standing (2002, p370-371) observes, “Gender analysis of health sector reform programs stresses the importance of understanding women’s role as both producers and consumers
of health care, of identifying inequalities in health resources and health needs between women and men, and of ways in which institutional reforms can have gender implications...For this kind of policy analysis to be carried out, a shift must be made from bureaucratic approaches…to one that engages actively with stakeholders in households and communities. This means more use of participatory and other qualitative approaches to understanding demand-side behaviour, and greater willingness to develop political engagement with civil society stakeholders and advocacy groups in planning the health sector.”

The HIV/AIDS pandemic adds to the problem by posing a very major challenge not only for maternal and newborn health directly, but also through its implications for economic growth and health systems in the affected countries. In this context, the Report of Task Force 4 on Child Health and Maternal Health of the UN Millennium Project focuses on the importance of health system strengthening and improvement as essential to tackling the problem of maternal and child health – see Text Box 1 below.

**Text Box 1: UN Millennium Project Task Force 4’s Approach to Health Systems**

<table>
<thead>
<tr>
<th>Item</th>
<th>Conventional approach</th>
<th>Task force 4 approach</th>
</tr>
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<tbody>
<tr>
<td>Primary unit of analysis</td>
<td>Specific diseases or health conditions, with focus on individual risk factors</td>
<td>Health system as core social institution</td>
</tr>
<tr>
<td>Driving rationale in structuring the health system</td>
<td>Commercialization and creation of markets, seeking financial sustainability and efficiency through the private sector</td>
<td>Inclusion and equity, through cross-subsidization and redistribution across the system</td>
</tr>
<tr>
<td>Patients/users</td>
<td>Consumers with preferences</td>
<td>Citizens with entitlements and rights</td>
</tr>
<tr>
<td>Role of state</td>
<td>Gap-filler where market failure occurs</td>
<td>Duty-bearer obligated to ensure redistribution and social solidarity rather than segmentation that legitimates exclusion and inequity</td>
</tr>
<tr>
<td>Equity strategy</td>
<td>Pro-poor targeting</td>
<td>Structural change to promote inclusion</td>
</tr>
</tbody>
</table>
“The conventional approach and the task force approach are not mutually exclusive. The task force approach does not claim that burden of disease assessments are useless, that market forces are irrelevant to healthcare, or that citizens with rights are not also consumers with preferences. Rather, this report sketches the framework of basic principles that the task force believes must inform—not dictate—policy, as decision makers at each level consider the changes necessary to meet the Goals in their specific contexts”.

Source: UN Millennium Project 2005, Table1.1, p23
8. CONCLUSION

This paper has looked at maternal and newborn health through multiple lenses. Its attempt was to review trends and changes in the international policy environment in order to explain why progress has been so slow and inconsistent. It has drawn on both historical and contemporary evidence to argue that how we treat pregnant women, mothers and their newborn children is influenced powerfully by the fact that many of them are poor, have lower social status in terms of caste or race / ethnicity, and because they are women. These root causes have been responsible for policy inattention until very recently, despite pronouncements to the contrary at different times.

But policy inattention has not been the only constraining factor. The lack of clarity about the relationships between root causes and proximate determinants, and how to deal with a situation where both need to be addressed has contributed its share to policy confusion and lack of effectivity. This has been intersected by the ups and downs in the economic environment and larger policy reforms that made it not only possible but also perhaps convenient to carry on with low-cost but ineffective approaches.

Maternal and neonatal health advocates, including importantly the women’s health and rights movement, have been making significant advances in recent years in changing this situation. However, it is essential that advocates for the health of newborns and for the health of pregnant women and mothers work together at this stage.

For both neonatal and maternal health, developing effective interventions that will tackle the proximate determinants of ill-health is essential. In both cases, however, we have argued that we will only be able to go a certain distance with this approach. Finding effective ways to deal with the root causes of under-nutrition, lack of quality and accountability of services, and gender power relations / bias in communities, laws, and health systems is critical for covering the rest of the distance. Particularly, issues such as unsafe abortion or poor feeding and health care for girls and young women are unlikely to be overcome without such an approach. Furthermore, the presence of these root causes
may make it difficult to get even the proximate solutions to work in different circumstances and contexts.

Unfortunately, policy makers and programme implementers in recent times have tended to throw up their hands whenever the question of root causes and their solutions comes up. Yet, in many instances, what may be needed to determine what can work could simply be good operations research. Here are some examples. How much impact for instance could supplemental feeding (e.g. a noon meal scheme) for adolescent girls or pregnant women have on their nutritional status and that of newborns? How effective can public campaigns around the feeding and treatment of pregnant women be, and what kinds of campaigns could be most effective? How can gender biases in medical education and training, particularly as they affect the responsiveness of health workers and medical staff to the needs of pregnant girls and women, be most effectively overturned? Importantly, how can senior policy makers be made to understand the nature of the links between maternal and child health and the actions they need to take, particularly in view of their human rights commitments?

Questions such as those above are eminently practical ones. Nor are they the only ones. Such questions are particularly important to address in the current climate of renewed high-level concern around maternal and newborn health. This appears to be the right time for advocates for women’s rights and the needs of newborn children to come together to channel this concern in the needed direction.
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APPENDIX 1: MATERNAL AND NEONATAL HEALTH MILESTONES

1919 International Labour Organization. Maternity Protection Convention, No. 3 (ILO 1919)
The Convention was largely an outcome of women's role in the workforce in World War I and addressed issues of women's employment, before and after childbirth, including the question of maternity benefit.

Article 3(c) states that a “woman shall, while she is absent from her work in pursuance of paragraphs (a) and (b), be paid benefits sufficient for the full and healthy maintenance of herself and her child, provided either out of public funds or by means of a system of insurance, the exact amount of which shall be determined by the competent authority in each country, and as an additional benefit shall be entitled to free attendance by a doctor or certified midwife; no mistake of the medical adviser in estimating the date of confinement shall preclude a woman from receiving these benefits from the date of the medical certificate up to the date on which the confinement actually takes place”.

1948: The Universal Declaration of Human Rights (United Nations 1948)
Adopted and proclaimed by General Assembly Resolution 217 A (III) of 10 December 1948. The Declaration paid special attention to health care, but viewed motherhood mainly as a vehicle for child health.
Article 25: “Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.”

1948: WHO Constitution (WHO 1948)
Article 2 (l) “to promote maternal and child health and welfare and to foster the ability to live harmoniously in a changing total environment”

1952: The General Conference of the International Labour Organization (ILO 1952)
Adopted the Maternity Protection Convention number 103. (Revised).
Article 4 (1): “While absent from work on maternity leave in accordance with the provisions of Article 3, the woman shall be entitled to receive cash and medical benefits.”
Article 4(3): “Medical benefits shall include pre-natal, confinement and post-natal care by qualified midwives or medical practitioners as well as hospitalisation care where necessary; freedom of choice of doctor and freedom of choice between a public and private hospital shall be respected.”

Principle 4: “The child shall enjoy the benefits of social security. He shall be entitled to grow and develop in health; to this end, special care and protection shall be provided both to him and to his mother, including adequate pre-natal and post-natal care. The child shall have the right to adequate nutrition, housing, recreation and medical services.”

Rights relating to life, survival and security.
The right to life (Article 6) can be applied to protect a woman at the risk of dying in childbirth due to lack of obstetric care. Beginning to be applied to health through addressing the positive nature of the right. The Human Rights Committee has extended this to pregnancy and child-related deaths of women by requiring State Parties to provide data on the afore-mentioned (WHO, 2001).

Article 3: “Men and women have an equal right "to the enjoyment of all civil and political rights."

Article 6: “Every human being has the inherent right to life.”

Article 7: No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment. . . .”

Article 9: “Everyone has the right to liberty and security of person.”

Article 18: “Everyone shall have the right to freedom of thought, conscience and religion.”

Article 19: “Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers. . . .”

Article 23: “‘No marriage shall be entered into without the free and full consent of the intending spouses.”


Amongst others, the Economic Covenant relates to the right to marry, the obligation of states to protect the family, and the right to the attainable standard of health.

Article 10 (1). "The widest possible protection and assistance should be accorded to the family, which is the natural and fundamental group unit of society, particularly for its establishment and while it is responsible for the care and education of dependent children. Marriage must be entered into with the free consent of the intending spouses."

Article 10 (2): "Special protection should be accorded to mothers during a reasonable period before and after childbirth. During such period working mothers should be accorded paid leave or leave with adequate social security benefits."

Article 12(1). “The States Parties to the present Covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.”

Article 12(2). “The steps to be taken by the States Parties to the present Covenant to achieve the full realization of this right shall include those necessary for:
(a) The provision for the reduction of the stillbirth-rate and of infant mortality and for the healthy development of the child;
(b) The improvement of all aspects of environmental and industrial hygiene;
(c) The prevention, treatment and control of epidemic, endemic, occupational and other diseases;
(d) The creation of conditions which would assure to all medical service and medical attention in the event of sickness.”

1978: Declaration of Alma-Ata (WHO 1978)

The Declaration placed comprehensive PHC within a broader political and economic development agenda for transforming society. PHC became a core concept for WHO as a result of the Declaration of Alma-Ata (1978), giving rise to WHO’s goal of Health for
All. Five guiding principles: equitable distribution, community involvement; focus on prevention, appropriate technology and multi-sectoral approach. Relevant sections from the 10 points of the Declaration:

"II) The existing gross inequality in the health status of the people-particularly between the developed and developing countries as well as within them-is politically, socially and economically unacceptable and is, therefore, of common concern to all countries.

III) Economic and social development, based on a New International Economic Order…

VII) Primary health care: Includes at least: … maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs”

The Women’s Convention is the primary human rights treaty concerning women's rights. Enjoins States Parties to ensure to women appropriate services in connection with pregnancy, confinement and the post-natal period (WHO, 2001).

"It reaffirms the determination of States parties which adopt the protocol to ensure the full and equal enjoyment by women of all human rights and fundamental freedoms and to take effective action to prevent violations of these rights and freedoms."

Article 5b: "To ensure that family education includes a proper understanding of maternity as a social function and the recognition of the common responsibility of men and women in the upbringing and development of their children, it being understood that the interest of the children is the primordial consideration in all cases." (Recognizes the special role that woman make to society through maternity and motherhood).

Article 12 (2)." ...States Parties shall ensure to women appropriate services in connection with pregnancy, confinement and the post-natal period, granting free services where necessary, as well as adequate nutrition during pregnancy and lactation." (Rights relating to maternity; tends to link protection of women's health to motherhood and care of infants and children).

Article 16 (1) stresses the importance of equal rights within the family. "States Parties shall take all appropriate measures to eliminate discrimination against women in all matters relating to marriage and family relations and in particular shall ensure, on a basis of equality of men and women:

(a) The same right to enter into marriage;
(b) The same right freely to choose a spouse and to enter into marriage only with their free and full consent;
(c) The same rights and responsibilities during marriage and at its dissolution;"

1987: Call to Action for Safe Motherhood
The Call to Action by the Safe Motherhood Initiative like the Alma Ata Declaration before it linked health to broader social inequalities: "In addition to a lack of good quality, accessible, and affordable safe motherhood services, a range of social, economic, and cultural factors contribute to women’s poor maternal health, and to their low use of existing health services. These include women’s disproportionate poverty, unequal access
to education, low social status, discrimination, and lack of income and employment opportunities (Safe Motherhood 3).

The Children’s Convention guarantees children's right to the highest attainable standard of health. States Parties commit themselves to ensure appropriate prenatal and postnatal care for mothers. Most widely ratified convention in history. Like those specific articles in the Women's Convention, tends to link protection of women's health to motherhood and care of infants and children.

**1990: UN World Summit for Children.** United Nations 1990a and b) Government delegates declared their "joint commitment…to give every child a better future." The Plan of Action also recognized the intrinsic link between the advancement of women’s rights, including their reproductive rights, and the wellbeing of the world's children including newborns.

**1993: The Human Rights Committee**
Expresses concern over high rates of maternal mortality in the context of right to life. The Committee relates high maternal mortality rates to the inadequate availability of family planning services, early childbirth and harmful practices including child and forced marriage and female genital mutilation.

Unequivocally declare that women's rights are human rights.

The consensus documents signed by Governments at the 1994 United Nations ICPD and the 1995 United Nations Fourth World Conference on Women explicitly affirm women's right of access to appropriate health care services that will enable them to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.

**1995: Fourth World Conference on Women, Beijing.** (United Nations 1995)
See ICPD above.

**1999: The Un Sub-Commission on the Promotion and Protection of Human Rights (name changed from Sub-Commission on Prevention of Discrimination and Protection of Minorities).**
Established by the Commission on Human Rights to undertake studies, particularly in the light of the Universal Declaration of Human Rights, and to make recommendations to the Commission concerning the prevention of discrimination of any kind relating to human rights and fundamental freedoms and to the protection of racial, national, religious and linguistic minorities.
2000: The Human Rights Committee (HRC 2000)  
Relates to provision of information under article 3 of International Convenant on Civil and Political Rights where States Parties should provide data on birth rates and on pregnancy and childbirth-related deaths of women.

Revisions of the 1952 Convention to take into account the growing global commitment to the elimination of discrimination in the workforce. The following articles related to rights on health protection and leave in case of illness or complications.  
Article 3: “Each Member shall, after consulting the representative organizations of employers and workers, adopt appropriate measures to ensure that pregnant or breast-feeding women are not obliged to perform work which has been determined by the competent authority to be prejudicial to the health of the mother or the child, or where an assessment has established a significant risk to the mother's health or that of her child.”  
Article 5: “On production of a medical certificate, leave shall be provided before or after the maternity leave period in the case of illness, complications or risk of complications arising out of pregnancy or childbirth. The nature and the maximum duration of such leave may be specified in accordance with national law and practice.”