

Reproductive Health: The Issues Of Maternal Morbidity And Mortality

M Takrouri

Citation

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Abstract

Background: Worldwide, more than 50 million women are estimated to suffer from poor reproductive health and serious pregnancy-related illness and disability. Every year near to 600,000 women die from complications of pregnancy and childbirth. Most of the deaths occur in Africa and Asia. Women in high-fertility countries in Sub-Saharan Africa have a 1-in-13 lifetime risk of dying from maternal causes, compared with women in low-fertility countries in Europe, and in North America, who have 1-in-2,000 and 1-in-3,700 risk of dying respectively.

Setting: Review of estimates and policy of key international bodies who are engaged in the follow up of the maternal and morbidity in the world.

Results: Most researches, link high maternal mortality rates in many countries to inadequate reproductive health care for women, and inadequately spaced births. The economic factors i.e. poor women, leads to ineffective health interventions, which, if it is available may be difficult to access or of low international standard.

Conclusion: Adoption of policies of a low fertility rate, the control of timing and spacing of pregnancies, and greater access to family planning can help to reduce the maternal mortality rate by reducing the number of pregnancies. Women need access to medical and social services. Interventional medicine is essential in order to provide rapid access to emergency obstetrical care, including treatment of hemorrhages, infections, hypertension, and obstructed labor. It is also important to ensure that skillful health care provider e.g. a midwife or doctor is attending every delivery. They should be supported by life-saving interventions, facilities like anesthesia and surgery and transportation to medical centers.

MAGNITUDE OF THE ISSUE OF MATERNAL DEATH

There is changing emphasis from the stress on maternal mortality rate (MMR) as measure of effective health services, to wider view of healthy motherhood. During the last six decades, improved understanding of maternal death progressively eliminates pregnancy risk factors. This supported the cause of improvement in maternal health care globally. The developed countries reached an outstanding level mother and child's welfare USA's MMR is 7.5 per 100,000 live births and has not changed for two decades [1,2,3]

Between 1994 and 1996 MMR in UK was 12.2 per 100,000 maternities, making a British woman's risk of dying as a result of a given pregnancy at around one in 10,000.[4,5] Similar low MMR were reported to Canada, rest of Europe, Australia. Other countries may have little higher what is

qualified as moderate MMR countries

The rest of the countries in the World are lacking such luxury. There were many efforts by international health agencies through researches, demonstrating wider high risk factors of motherhood especially in Africa and Asia. The study of such issues in developed countries is a matter of delivering "standard care" as compared to "substandard care" in case of complications during pregnancy or mortality (mother's death). The situation in developing countries, beside that, is question of literacy, social and economical development. Worldwide, it is a matter of political and military- population's war consideration paradoxically may affect minority poor populations. Population's war is a strategic concept developed by USA's Pentagon. [6] It touches on the issue of migration of population or having suppressed population by larger population with minimal

protection. This concept was developed with term of references to Africa, Middle East and other parts of Asia excluding India and China.

Women, who have education, work or financial independent, considered to be more able to protect their chance of having less children and subsequently less exposed to the risks of childbearing process. Countries which can not offer comprehensive health care are not able to improve living conditions and facility for access to mother welfare would loose a vital portion of their human resources in toll of mother and child lives. Many of these issues are mixed with background of religious, social and political flavors. A new plague haunted population of many countries HIV/AIDS lead to disastrous effect on mother and child. Poverty, lack of education, low status and restricted choice are added burden on developing countries pregnant women. [7]

War adds to the disastrous situation. Reports from war struck area like Afghanistan and Iraq indicated triple the rate of MMR of already high figures. Despite a three-fold increase since 1989, the current maternal mortality ratio in Iraq is still much lower than other conflict and post-conflict regions, where pregnancy-related deaths were around 1,300 out of 100,000 live births in both Sierra Leone and Afghanistan where the skilled attendance of health care personnel almost does not exist. It would be easy in the face of such overwhelming figures and insurmountable barriers to believe that nothing can be done to alleviate this grotesque state of affairs. [8, 9]

WHY DO MOTHERS DIE?

Many Agencies in United Kingdom, Europe, USA (Developed World), World Health Organization (WHO) and other agencies UNICEF/UNFPA (Undeveloped World) tried to ask this question and search for answers. Exploring the causes leading to bad outcome of the pregnancy would guide the way for better care through prevention of the cause. These agencies performed periodical adjustment and watch for the statistics of mothers' morbidity (Pregnancy and labor complications) and mortality (death). Their efforts improved generally, the professional understanding and raised the standard of care of health environment for mother and child. Nevertheless, the social and economical factors which made the difference in the outcome of childbirth are quite different among affluent and less affluent or poor societies.

Reduction of maternal mortality, today, is one of the major subjects of several recent international health groups. However, because measuring maternal mortality is difficult

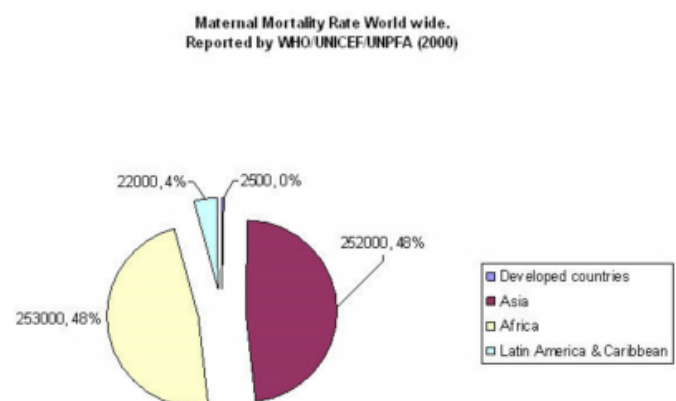
and complex, reliable estimates of the dimensions of the problem are not generally available and assessing progress in this the issue is difficult. In recent years, new ways of measuring maternal mortality have been developed, tailored to the needs and constraints of developing countries. As a result, there is considerably more information available today than was the case, few years ago. Underreporting and misclassification are endemic to all methods. Also, estimates that are based on household surveys are subject to uncertainty because of sample size issues. For all these reasons, it is difficult to compare data obtained from different sources and to assess the overall magnitude of the problem. [10,11,12,13,14,15,16]

Worldwide, the lower uncertainty bound is for a MMR of 210 per 100,000 live births, and an annual total of 277,000 maternal deaths, and the upper uncertainty bound is for a ratio of 620 per 100,000 live births, and an annual total of 817,000 maternal deaths. Therefore, when we perform comparisons, we should cautious, taking into account the large range of uncertainty around the point estimates. [16]

Worldwide, it is estimated that more than 50 million women suffer from poor reproductive health and serious pregnancy-related illness and disability; i.e. incidents of maternal morbidity (maternal health problems) annually [17]. As regard mother death related to motherhood; every year, it is estimated that just fewer than 600000 women die from complications of pregnancy and childbirth. [Fig. 1-]

Figure 1

Figure 1: The distribution of maternal deaths worldwide classified between developed Asia, Africa, Latin America and Caribbean. Main contributors to global MMR are Asia and Africa continents.



Most of the deaths occur in Africa and Asia, but the risk of dying is highest in Africa. Women in high-fertility countries in Sub-Saharan Africa have 1-in-16 (some places 1-in-13)

lifetime risk of dying from maternal causes, compared with women in low-fertility countries in Europe, who have 1-in-2,000 risk, and in North America, who have 1-in-3,700 risk of dying. [Table. 1-] [18]

Figure 2

Table 1: The risk of mother dying due to childbirth related complications lowest risk is in USA while the highest risk is that in some countries in Africa like Ethiopia, Rwanda. [Source: World Health Organization Revised 1990 Estimates of Maternal Mortality: A New Approach by WHO and UNICEFÂ. World Health Organization, Geneva, 1996.]

WORLD REGIONS	RISK OF MATERNAL DEATH
<i>All developing countries</i>	1 in 48
Africa	1 in 16 (1 in 13)
Asia	1 in 65
Latin America & Caribbean	1 in 130
<i>All developed countries</i>	1 in 1800
Europe	1 in 1400
North America	1 in 3700

High maternal mortality rates in many countries are the result of inadequate reproductive health care for women, governmental or private, and inadequately spaced births. The serious shortage of women's reproductive health, particularly due to economic factors i.e. poorest women, and in such cases can lead to ineffective interventions, which anyway is of low international standard. The adoption of policies of a low fertility rate, the control of timing and spacing of pregnancies were major education objectives. Greater access to family planning can help to reduce MMR by reducing the number of pregnancies. In addition to contraception, women need access to medical and social services. The primary means of preventing maternal deaths is to provide rapid access to emergency obstetrical care, including treatment of hemorrhages, infections, hypertension, and obstructed labor. It is also important to ensure that a midwife or doctor is attending every delivery. In reality, about half of deliveries are attended by professional health staff in developing countries.

Skilled attendants must be supported by the right environment. Life-saving interventions – such as antibiotics, facilities for anesthesia and surgery, and transportation to medical centers – are unavailable to many women, especially in rural areas. These women may not have enough money for obstetrical, health care cost and fee to get transport to distant basic health facility during pregnancy and delivery of child, or they may in certain cases, simply lack their husbands' permission. [Fig. 2-]

Figure 3

Figure 2: Developed countries attained great standard of mother and child's care by making it possible for the mothers to obtain skillful health workers attending the peri-natal period i.e. prenatal care, supervised delivery in hospital or hostel then a fellow up post delivery period (Green column) Developing countries may have some care in the antenatal period but only 53% would have skill health personnel taking care of childbirth. And little post natal care. Some proportion of mothers may deliver alone without any care. In conflict area mothers may have little or no chance of skilled health personnel supervision. [Source: Coverage of Maternal Care: A Listing of Available Information, Fourth EditionÂ. World Health Organization, Geneva, 1997]

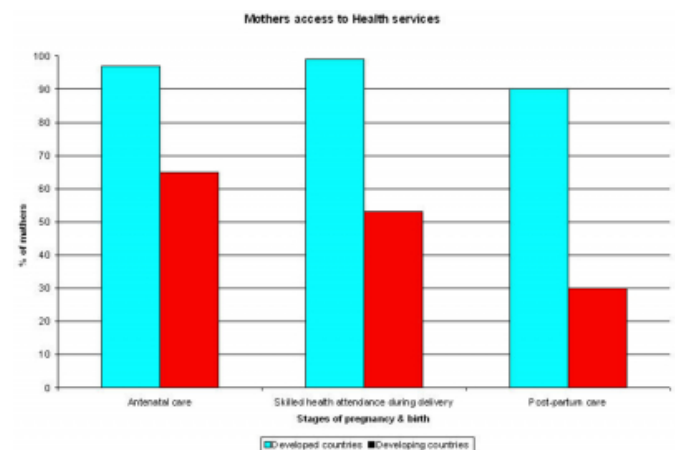


Figure 4

Figure 3: Bleeding diseases, infections, unsafe abortion and eclampsia constitutes major causes of global MMR in the community. Similar classifications can be described from hospital populations with little emphasis on interventional complications.[Source: Coverage of Maternal Care: A Listing of Available Information, Fourth EditionÂ. World Health Organization, Geneva, 1997]

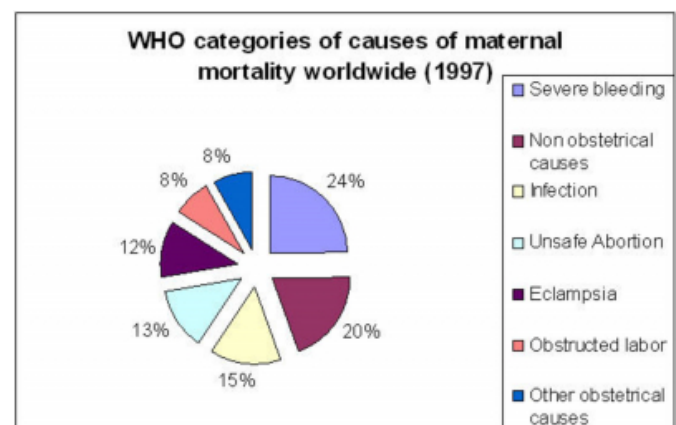
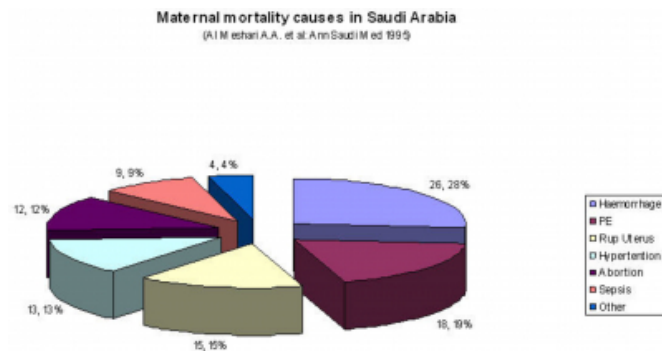


Figure 5

Figure 4: Example of hospitals based MMR which reflect rather different classification, which is special to those mothers who reach interventional medicine [Source: Al-Meshari A.A, Chattopadhyay S. K., Younes B., Anokute C. Epidemiology of Maternal Mortality in Saudi Arabia. Ann Saudi Med 1995;15(4)]



The WHO has attempted to face the challenge, however, and made 'Safe Motherhood' the theme of its World Health Day in 1998. The aims of the WHO are encapsulated in its Mother-Baby Package which is (rosy view) based on the 'four pillars of safe motherhood'.

1. Family Planning - to ensure that individuals and couples have the information and services to plan the timing, number and spacing of pregnancies.
2. Antenatal Care - to prevent complications where possible and ensure that complications of pregnancy are detected early and treated appropriately.
3. Clean/Safe Delivery - to ensure that all birth attendants have the knowledge, skills and equipment to perform a clean and safe delivery and provide postpartum care to mother and baby.
4. Essential Obstetric Care - to ensure that essential care for high-risk pregnancies and complications is made available to all women who need it.

WHO's view that the inevitable economic costs of this package are not an impossible obstacle. It has been estimated that about \$3 per person in low-income countries would - by providing basic maternal care for all pregnancies, including a skilled attendant (doctor or midwife) at birth, postpartum family planning and basic neonatal care - prevent most maternal deaths, millions of cases of disease and disability, and the deaths of at least 1.5 million infants each year. [16]

OBSTETRICAL CAUSES OF MATERNAL DEATH

In global estimates, causes are enumerated as follow:

Severe bleeding, indirect causes like co-existent diseases, infection, unsafe abortion, eclampsia (elevated blood pressure of pregnancy with kidney impairment and seizures in severe cases), obstructed labor and other obstetrical causes.

Hospital based studies would yield generally similar list but with special problems facing patient who reach the hospital and do not die in the community. American, British concentrates on hospital population studies. The Saudi study, in similar ways, is an example of hospitals based study. It showed the causes as follow: Hemorrhage (Severe bleeding), pulmonary embolism, ruptured labor, hypertension, abortion, sepsis and other causes including anesthesia.[19] This reflect special circumstances of the country and the degree of development of skilled helpers to the delivering mothers, transport to hospital and the availability of surgical and blood bank facilities. The proper antibiotics and health prevention education concerning AIDS will help modifying the profile of killer causes.

CONCLUSION

This picture leaves the reader with huge void. What on earth this? The division of the world in regard health care is proportional to financial power, social developments and free choice. International organizations can not have the full answer to the global health. More selectively, better health care to mother and child are important factors to measure the governmental power to act. Countries which are lacking development they will be source of frictions, wars and human misery. To insist on mother and child standard of care, giving women better choices regarding reproductive health, controlling their encounter with the high risk and reducing its number (Pregnancy) would save the life of the mother to care for her children. This choice is a vote for global development of economic and social front in these developing countries. Area of conflicts proved repeatedly to be source of anxiety regarding basic care and basic human rights. Affluent countries may watch and see but they can not ignore. Epidemic status of AIDS made mother and child and may be the whole family at higher risk of extinction. Although this picture is alarming it showed lake of genuine figures of independent bodies to round up the monitored real figures of MMR. More national and international independent bodies should undertake such task. Money spent on useless objectives may find its way to these needy women

to have chance of social development.

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Author Information

Mohamed Said Maani Takroui

Professor, Anesthesia Intensive Care Medicine Department, King Saud University Medical College