

final
Reports - Misc

PDWAGSIS

MATERNAL MORTALITY IN THE THIRD WORLD:

How Serious Is The Problem ?

How Can Family Planning Help ?

**Deborah Maine, M.P.H., Senior Staff Associate
Center for Population and Family Health,
Faculty of Medicine, Columbia University**

**Draft of article requested by People for Nairobi issue.
Due January 29, 1985.**

17

INTRODUCTION

The United Nations' Decade for Women was dedicated to the promotion of the rights of women. Fundamental to these rights are reproductive health and reproductive choice. True equality -- equality of opportunity -- cannot exist if women cannot decide when and whether to bear children, and if those who choose to become pregnant don't have a reasonable chance of surviving pregnancy and delivery. Unfortunately, for a large proportion of women in the Third World these conditions do not exist.

Too little attention has been paid to maternal mortality during the Women's Decade. For most countries we still have only scraps of information. But even from these we can tell that far too many women are dying as a result of pregnancy and childbirth, unnoticed by their governments and often by the medical profession as well. Studies in Africa and Asia found that one-quarter of all deaths among women of childbearing age were due to maternal mortality. 1,2/ In the United States, less than one percent of deaths among women 15-49 are maternal deaths. 3/ As tragic as the sheer number of maternal deaths is the fact that many women are dying as a result of pregnancies they did not want.

HOW SERIOUS IS THE PROBLEM ?

The World Health Organization gives the following regional ranges for maternal mortality: Latin America, 16-468 deaths per 100,000 live births; Asia, 7-1,000; Africa, 160-1,100; and North America, 7-15. 4/ Thus, in most poor countries, maternal mortality rates (MMRs) are probably 10-100 times as high as in

industrialized countries.

Such ranges are too wide to be meaningful. We can, however, narrow them down by looking at available information critically. Very low reported rates of maternal mortality in developing countries are usually government estimates, and these are notorious for being too low. For instance, a survey of deaths in the Egyptian governorate of Menoufia produced a maternal mortality rate of 190 in 1980-1982. 5/ The Egyptian government's most recent national estimate (for 1978) was 82 deaths per 100,000 births -- less than one-half that found by the survey. 6/

*

* Footnote:

Government estimates of maternal mortality are not only too low, they are also scarce -- only 23 Third World governments provided the United Nations with estimates of their national maternal mortality during 1977-1981. 6/

Some of the highest rates cited above (e.g., 1,000 or more) are probably not reliable either. Such extremely high rates usually come from studies of births and deaths in large hospitals. The problem with these studies is that in poor countries most women deliver at home unless they develop complications. Consequently, problem deliveries are over-represented in hospital data, and the mortality rates are too high.

Community surveys should give a more accurate picture. These are uncommon but a few have been done. For example, community studies in urban Ethiopia and rural Ghana yielded maternal mortality rates of 350 and 400, respectively. 7,8/ Rates of 500 to 700 are reported for Senegal. 9,10/

3x

A maternal mortality rate of 500 means that, on average, every birth carries a one in 200 chance of death. But that is only the one-time risk. If a woman has 10 children (as many African women do), then she runs this risk 10 times. Her lifetime risk, therefore, is at least one chance in 20 of dying as a result of pregnancy or delivery. To take a more moderate example, in an area where the MMR is 350, for a woman who has six children (the average in Africa) her chance of maternal death is one in 50.

Is it possible that maternal mortality rates can be this high? Consider the following facts: In the United States in 1920, life expectancy was 55 years, and the maternal mortality rate was 800 deaths per 100,000 live births. 11,12/ In 1982, life expectancy in most of SubSaharan Africa is estimated to be under 50 years.13/ Therefore, it does not seem unreasonable that maternal mortality rates in that region should be at least 400 deaths per 100,000 births -- one-half that in the United States in 1920. This estimate even allows for the possibility that many women in developing countries have benefited from such things as antibiotics that were not available in 1920 (a questionable assumption).

Maternal mortality is higher (and underreporting of deaths greater) in SubSaharan Africa than in other parts of the Third World. Nevertheless, the general point holds for other parts of the Third World: Maternal mortality is still quite common in developing countries.

This tragic situation has received relatively little

attention during the last decade. True, exhortations to improve maternal and child health are common at national and international meetings, but specific measures to reduce maternal mortality are rarely discussed. One reason for this might be that (unlike infant mortality) maternal mortality may not be greatly reduced by community-level and preventive measures. 14/ Without access to surgical services there may be no way to save the lives of many of the women who hemorrhage or develop obstructed labor (two of the most common complications). 15/

In the Third World, most women still deliver their babies at home, and go to the hospital (if ever) only when they have serious complications. According to the WHO, in Latin America more than one-third of women give birth without the help of any trained health worker. 4/ In Asia this is true of half of all births, and in Africa the proportion rises to almost three-quarters. Furthermore, in a great many communities, especially in rural areas, there is no place to go for medical care when serious complications do arise. It is difficult to see how deaths among women who suffer serious complications can be greatly reduced while these conditions prevail.

FAMILY PLANNING AS A PREVENTIVE MEASURE

Providing proper obstetrical care for all women is an important goal to work for. Unfortunately, judging from the last decade, reaching that goal will be neither easy or quick. In the meantime, what can we do to prevent maternal deaths in the Third World? One comparatively straightforward way is to help women avoid unwanted pregnancies.

A substantial proportion of married women in developing countries have already had all the children they want. Table 1 shows data from the World Fertility Survey for a variety of countries. The proportion of women who say they want no more children varies from 12 percent in Ghana to 61 percent in Colombia and Sri Lanka. The average (median) is 40 percent.

While women in SubSaharan Africa are the least likely to say they want no more children, even there the proportion is sizeable among older women and those with a number of living children. For example, among women aged 35 or older and/or with four or more living children, the following proportions of married women say they want no more children: Lesotho, 31 percent; Kenya, 47 percent; Sudan, 48 percent. (Not shown in Table.) 16/

For whatever practical or cultural reasons, many of these women are not currently using an efficient method of contraception, such as the pill or IUD. Table 2 shows the proportions of women who are exposed to the risk of pregnancy, want no more children, but are not using an efficient method of contraception. This figure ranges from 46 percent in Egypt to 85 percent in Lesotho. The average is 74 percent. In short, there is considerable unmet need for contraception in developing countries: Four in 10 currently married women say they want no more children, but the great majority of these women are not protected against unwanted pregnancy.

The reasons why so many women who do not want to become pregnant are not using contraceptives are varied. There may be no services available, or services may be too costly or far away.

More subtle barriers also play a part, such as familial pressure to have more children, insensitive behavior on the part of clinic staff, or fears about the effects of contraception. Whatever the barriers, we need to identify and remove them. Until this is done, women do not really have the freedom to decide the number and timing of their pregnancies that has been promised to them.

What effect would it have on maternal deaths if unwanted pregnancies were avoided? We can expect that the effect might be considerable, especially since the proportion of women who want no more children rises steeply with age and with the number of living children. This is important because older women and women who have already had many children are also more likely to die as a result of childbirth than are women in the 20s or those who have only had 2-4 children. 17,18/

Table 3 shows estimates of the proportions of maternal deaths that would be averted if women who say they want no more children (and are not protected by contraception) had no more children. These range from 14 percent of maternal deaths in Ghana to 42 percent in Pakistan. The median is 24 percent. Thus, if only unwanted pregnancies were averted, approximately one-quarter of all maternal deaths might be prevented.

These calculations do not take into account the fact that many women, faced with an unwanted pregnancy, resort to induced abortion. To most women in the Third World, because of financial or legal problems, this means an illegal abortion performed by an unqualified person. Information on deaths from such procedures is (understandably) scarce. One estimate is that as many as 168,000

women may die of illegal abortions in developing countries every year. 19/ Thus, by averting unwanted pregnancies -- and, consequently, illegal abortions -- family planning could certainly prevent hundreds of thousands of needless deaths each year.

Table 1. Proportion of currently married, fecund women who say they want no more children.

	%
Colombia	61
Dominican Republic	45
Egypt	53
Ghana	12
Indonesia	39
Jamaica	42
Kenya	17
Lesotho	15
Pakistan	49
Sri Lanka	61
Sudan	17
Syria	36

Source: World Fertility Survey First Country Reports.

9x

Table 2. Percent of women who say they want no more children that are not currently using an efficient method of contraception.

	%
Colombia	60
Dominican Republic	81
Egypt	46
Ghana	83
Indonesia	47
Jamaica	60
Kenya	83
Lesotho	85
Pakistan	83
Sri Lanka	66
Sudan	84
Syria	61

Source: World Fertility Survey First Country Reports.

Table 3. Percent of maternal deaths that would be averted if women who want no more children (and are not using efficient contraception) had no more children.

Country	Percent of Deaths Averted
Colombia	37
Dominican Republic	38
Egypt	28
Ghana	14
Indonesia	20
Jamaica	24
Kenya	15
Lesotho	15
Pakistan	42
Sri Lanka	40
Sudan	15
Syria	24

Sources: Population distribution, fertility data and those in Table 1, WFS First Country Reports; relative risks, ref. 17. For an explanation of the methodology used, see ref. 20, Appendix.

References

1. J.A. Fortney, S. Saleh, S. Gadalla and S.M. Rogers, "Causes of Death to Women of Reproductive Age in Egypt," paper presented at the annual meeting of the Population Association of America, Pittsburgh, April 14-16, 1982.
2. L.C. Chen, M.C. Gesche, S. Ahmed, A.I. Chowdhury and W.H. Mosley, "Maternal Mortality in Rural Bangladesh," *Studies in Family Planning*, 5(11):334-341, 1974.
3. National Center for Health Statistics, *Vital Statistics of the United States, 1979, Vol. II, Mortality, Part B, Public Health Service, Washington, D.C., 1984, pp. 242, 243, 284.*
4. World Health Organization, Maternal and Child Health Programme, "The Health of Mothers and Children: A Brief Overview," (Unpublished) Nov. 1983.
5. J.A. Fortney and S.M. Rogers, personal communication, October 1984.
6. United Nations, Department of International Economic and Social Affairs, Statistical Office, *Demographic Yearbook, United Nations, New York, 1984, p.341.*
7. B.E. Kwast, W.K. Mirian, I. Mohammed, F.G.R. Fowkes, "The Risk of Maternal Death in Addis Ababa," *International Epidemiological Association, The University of British Columbia, Vancouver, Canada, Xth Scientific Meeting, August 19-25, 1984.*
8. Department of Community Health, University of Ghana Medical School and UCLA School of Public Health, Division of Population, Family and International Health, University of California, "Health Status at Baseline," in *The Danfa Comprehensive Rural Health and Family Planning Project, Ghana. Final Report. Accra, 1979, pp. (5-9)-(5-12).*
9. B. Janowitz, J. Lewis, N. Burton and P. Lamptey, eds., *Reproductive Health in Africa: Issues and Options, Research Triangle Park, North Carolina, Family Health International, 1984, p. 20.*
10. Family Health International, "Study of Maternal Mortality in Senegal Planned," *Network*, 5(1):2, 1983.
11. New York, Commonwealth Fund, "Maternal Mortality in New York City: A Study of All Puerperal Deaths 1930-1932", *New York Academy of Medicine, Committee on Public Health Relations, Oxford University Press, Oxford, 1933, pp. 4-5.*
12. United States Bureau of the Census, "Infant, Maternal, and Neonatal Death Rates, and Fetal Death Ratios, by Race: 1940 to

12

1977," [Table No. 108], in **Statistical Abstract of the United States**, 100th edition, Washington, D.C., Government Printing Office, 1979, p. 75.

13. M.M. Kent, **1983 World Population Data Sheet**, Population Reference Bureau, Washington, D.C., April 1983.

14. A. Rosenfield and D. Maine, "The Neglected Tragedy of Maternal Mortality: Where is the M in MCH?" (Unpublished), Dec. 1984.

15. V.J. Hartfield, "Maternal Mortality in Nigeria Compared with Earlier International Experience," **International Journal of Gynaecology and Obstetrics**, 18(1):70-75, 1980.

16. D. Maine, M. Wallace and R. McNamara, **Reproductive Health in Africa: A Factsheet**, New York, Center for Population and Family Health, 1984.

17. D. Nortman, "Parental Age as a Factor in Pregnancy Outcome and Child Development," **Reports on Population/Family Planning**, No. 16, The Population Council, New York, August 1974.

18. D. Maine, **Family Planning: Its Impact on the Health of Women and Children**, Columbia University, Center for Population and Family Health, New York, 1981.

19. R.W. RoCHAT, D. Kramer, P. Senanayake and C. Howell, "Induced Abortion and Health Problems in Developing Countries," **The Lancet**, 2(8192):484, 1980.

20. D. Maine, R. McNamara, J. Wray and A. Farah, "Effects of Fertility Change on Maternal and Child Health: Prospects for SubSaharan Africa," paper prepared for the World Bank, (Unpublished) Nov. 1984.