Factors Affecting the Chance Mechanism of Maternal Deaths in Africa

In the 20th century, the health of mothers was transformed from a purely domestic concern into a public health priority with corresponding responsibilities for the state. In the opening years of the 21st century, the Millennium Development Goals place it at the core of the struggle against poverty and inequality, as a matter of human rights. This shift in emphasis has far-reaching consequences for the way the world responds to the very uneven progress in different countries.

The healthy future of society depends on the health of the children of today and their mothers, who are guardians of that future. Of the estimated 529,000 maternal deaths in 2000, 95 per cent occurred in Africa and Asia, while only 4 per cent (22,000) occurred in Latin America and the Caribbean, and less than one per cent (2,500) in the more developed regions of the world. This paper assesses the role of different covariates viz., adolescence birth, delivery services, abortion policy, HIV-infected adult women, practice of contraceptives, TFR, literacy among females, work-status of women on life-time risk of dying from maternal causes. The data for this analysis has been taken from National DHS survey reports and Population Reference Bureau data charts. This study makes an attempt to study for all 52 African countries. About 48% African women belong to reproductive age group (15-50) years. Only in nine African countries viz., Algeria, Egypt, Libya, Morocco, Tunisia, Cape Verde, Kenya, Mauritius, and South Africa reproductive age group of females constitute more that fifty percent of total female population. Female youth (ages 15-24) literacy rate in Africa is about 70 per cent while it is 81 per cent in less developed region of the world. Only one third of all African countries this rate is higher than 80 per cent. About two third of African population lives below the international poverty threshold of $2 a day ($730 annually).

All these 52 countries are classified either as high risk or as low risk groups according to lifetime chances of dying from maternal causes. Lifetime chances of dying from maternal causes less than 1:100 is classifies as high risk group otherwise it is low risk group. Then logistic regression analysis is done to find out the degree of impact of different factors under this study. All North African countries save Sudan belongs to low risk group. Other which are also in low risk category are Mauritius, Reunion, Botswana and South Africa. In Guinea-Bissau, Liberia, Mali, Niger, Sierra Leone, Somalia, Uganda, Angola and Congo Democratic Republic more than one-fifth adolescent girls aged (15-20) gave birth in one year. Mauritius (TFR=1.9) and Tunisia (TFR=2.0) are two countries in Africa which have below replace level fertility. Other four countries viz., Algeria, Morocco, Reunion, and South Africa have TFR less than 3.0. The fertilities of the rest African countries have much above the replacement level. Except Algeria and Egypt almost all other African countries more than half of the adult females are HIV-infected. Of course we do not have correct information on female HIV status for as many as 11 African countries. Out of 52 African countries under this study only in 10 countries viz., all North African countries save Sudan, Cape Verde, Reunion, Zimbabwe and South Africa more than 50 per cent of married women uses any contraceptive methods.

In Africa 55 per cent delivery took place in the absence of any skilled personnel. Percentage of births attended by skilled personnel is very poor in Equatorial Guinea (5), Ethiopia (10), Chad (14) and Niger (16).

In Africa maternal mortality rate (MMR) per 100,000 live births is 830 as compared to that of 440 in less developed countries and 400 in the whole world. Only in 12 African countries it is less than 400 per 100, 000. These twelve countries are Algeria, Egypt, Libya, Morocco, Tunisia, Cape Verde, Mauritius, Reunion, Botswana, Namibia, South Africa, and Swaziland. In Africa MMR is highest in Sierra Leone (2000) and it is least in Mauritius (24).

Lifetime chance of dying from maternal causes 1 in 20 in Africa in comparison it is 1 in 2,800 in more developed countries. This chance of dying is lowest in Mauritius among all countries in Africa and it is highest in Niger, Malawi and Angola. A woman living in sub-Saharan Africa has a 1 in 16 chance of dying in pregnancy or childbirth. Low contraceptive use, poor availability of skilled birth attended personnel, and high HIV-infection are strongly associated with high risk of dying from maternal causes in African countries. Gross National Income purchasing power parity (GNI ppp) per Capita is $2,480 for Africa in comparison to that of $4,950 for less developed region. For Sub-Saharan Africa it is $1,970. As many as forty four countries have GNI-ppp per Capita less than $2,480. This indicates very poor economic conditions in most of the African state which have definite impact not only in general health but also in reproductive health. These 44 countries are categorized as low per capita income group and the rest is termed as high per capita income group. It is found that low per capita country has high risk of dying from maternal cause. It is also observed that fertility level and employment status of female has significant impact on the chance mechanism of surviving during pregnancy and child birth.

National abortion policy has a direct impact on reproductive health. It is seen that countries viz., Tunisia, Cape Verde, Reunion, Zambia, and South Africa having very liberal abortion policies have lower chances dying from maternal causes. Unsafe abortion is one of biggest causes of maternal deaths. Anti-Abortion Policies take heavy toll in Africa. AIDS is on the rise and is now one of the highest causes of death for pregnant women in many African countries. Most African nations, however, are struggling to provide such basic care as skilled birth attendants and access to family planning services.

Efforts to reduce maternal mortality are hampered not only by lack of funds, but also by strong opposition to family planning by conservative forces such as the Catholic Church--which continues to oppose any contraception even when it is intended to prevent the spread of HIV/AIDS. The need to educate women in pregnancy-related aspects is more pronounced and established beyond any doubt. A number of studies carried out across the world have shown that education not only equips women to take better care of themselves but also their families

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 present at every delivery. Also, these skilled attendants must be supported by the right environment that enables life-saving interventions such as antibiotics, surgery, and transportation to medical centers. Many women may lack the money for health care and transport, or they may simply lack their family's permission to seek care. If reproductive health services were widely available, maternal death would be as rare in Africa as it is today in the

United States and Europe. The Millennium Development Goals cannot be achieved in most of African countries unless reproductive health is guaranteed.