## Reproductive Risk: A 2007 Assessment

Nada Chaya\* and Sarah E. Haddock\*\*

April 30, 2007

Extended abstract submitted to Fifth UAPS African Population Conference Arusha, Tanzania, 10-14 December 2007

In 1987, the global Safe Motherhood Initiative was launched in Kenya with a goal of halving maternal deaths by 2000. A series of global initiatives and conferences that followed in the 1990s repeated the call for significant reductions in maternal morbidity and mortality. Maternal mortality was since incorporated into the Programme of Action of International Conference on Population and Development (ICPD) in 1994 and into the Millennium Development Goals (MDGs) in 2000, with the fifth goal aiming to reduce maternal mortality by 75 percent between 1990 and 2015.

Still, every year, a quarter of a million women – typically poor, uneducated, and living in rural areas or urban slums – die during pregnancy and childbirth in sub-Saharan Africa. Risks associated with childbearing vary tremendously globally and locally within countries, reflecting differences in access to and use of health services, social and cultural practices affecting access to healthcare, socio-economic levels and public health policies. What is the combined effect of these factors on reproductive health in various countries? This comparative study gauges the current levels of reproductive risk that countries face based on variables for which data is available. The aim of this analysis is to provide a snapshot of where countries currently stand on a range of indicators that are ICPD goals and MDGs and to render the group of indicators into one measure that is useful for policymakers.

## **Methodology**

The study classifies over 100 countries into five categories from highest to lowest reproductive risk based on a Reproductive Risk Index (RRI) constructed of indicators of access to reproductive health services, gender equality, and health outcomes for which comparable national data are available. The indicators include the proportion of births attended by skilled health personnel, prenatal care coverage, postnatal care coverage, ratio of female to male literacy rates, ratio of female to male primary education enrolment rates, ratio of female to male secondary education enrolment rates, share of women in non-agricultural wage employment, percent of parliamentary seats held by women, contraceptive prevalence, unmet need for family planning, maternal mortality ratio, maternal mortality rate, infant mortality rate, percent girls married before age 18, adolescent fertility, and HIV/AIDS prevalence among women and men. Each of the indicators is scored on a 100-point scale. Scores are then averaged to yield an overall country score which is the Reproductive Risk Index on which countries are ranked.

## **Findings**

In measuring current reproductive risk, we found that countries in the first quintile -- Highest Risk -- share the same risk factors. Likewise, countries falling in the last quintile -- Lowest Risk -- share the same risk factors as the first quintile but in the opposite direction. However, risk factors varied more widely among countries in the other three quintiles.

Countries at highest reproductive risk have very low incomes and are mostly in sub-Saharan Africa. Early fertility, together with limited skilled care during pregnancy and childbirth, contributes to extremely high levels of maternal mortality. East, West and Middle Africa have particularly low rates of skilled attendance at delivery. Levels of contraceptive uptake remain extremely low in sub-Saharan Africa and there is high unmet need for family planning. Overall fertility remains high, especially as compared to other parts of the world. HIV/AIDs prevalence is high. Levels of school enrolment are low for both girls and boys and large gaps in enrolment ratios remain prevalent in Western Africa and South-eastern Asia. In some countries, education may be equally accessible to boys and girls, but still largely unavailable. For example, Rwanda has achieved gender parity, but at low enrolment levels. Moreover, gender parity in education does not necessarily reflect training in access to equal opportunities for women within society. With regard to women's equality in the public sphere, most countries now allow women to vote and be elected to national office, but few have succeeded in truly enabling women to exercise these rights. Africa and Western and South-central Asia have the lowest rates in the world. It should be noted, however, that the ratio of women to men in governing bodies is not always linked with their autonomy and equal status at the level of the household or community.

By contrast, all countries in the lowest reproductive risk category have high incomes, including all Nordic countries and Western Europe, Japan and the industrialized countries of Northern America and Oceania, and many countries in Southern, Eastern and Northern Europe. Cuba is the only country in the developing world in this category. Access to reproductive health services and health outcomes are generally very good in these countries. They also fare well, though not perfectly, on most indicators of gender equality. The Nordic countries have the highest rates of female participation in the political process.

Where available, disaggregated data show that the lack of health and social services disproportionately affect the poor and those in remote areas placing them at higher reproductive risk. Ethiopia, for example, has significant regional and urban-rural disparities in access to services and in health outcomes. A substantial portion of the population lives in remote areas that are too far from a road, let alone a health facility offering emergency obstetric care.

Three similar country-level reproductive risk assessments PAI conducted in 1995, 2001 and 2004 <sup>1,2,3</sup> show a similar clustering of countries, especially for high and low

reproductive risk categories. The 2004 and 2007 assessments of reproductive risk differ from the two previous ones in that they include measures of gender equality. The 2004 paper also assessed country progress made in the decade since ICPD. Obviously, despite some improvements in access to health services, many countries still face major hurdles in achieving the ICPD agenda.

## **Conclusions**

This analysis provides a wealth of country-specific information and regional trends in access to reproductive health services, health outcomes and gender equality. Economic, social and reproductive health outcomes are interrelated and so are the interventions needed to address them. Increasing women's access to life-saving reproductive health care and services is as important as expanding life choices available to women, especially in sub-Saharan Africa – in education, labor force and political processes. These broader measures enable women to access health care and by extension help women and men achieve their desired family size, and avoid illness, disability and death.

Better measurement of reproductive health is crucial for evidence-based programming at the local level, better monitoring of progress, evaluation of programmes, and policy-setting at the national level. However, reproductive health remains difficult to measure, especially in sub-Saharan Africa. Definitions vary from one country to another, and can often vary within countries. Statistical measures do not necessarily reflect real opportunities afforded to women, and data is scarce and outdated for some key indicators. The national level statistics used in this analysis, while they elucidate the differentials between poor and rich countries, also mask socio-economic differentials in reproductive health within countries. Among the recommendations is the need for (1) disaggregated data and improved surveillance of reproductive health and social inputs and outcomes to help identify risk factors among population groups, prioritize investments, and effectively target service delivery; and (2) more research on the relationship between poverty and women's empowerment and reproductive health, especially at the household-level.

\* Senior Research Associate, Population Action International, 1300 19th Street, NW, Second Floor, Washington, DC 20036, USA.

\*\* Research Assistant, Population Action International, 1300 19th Street, NW, Second Floor, Washington, DC 20036, USA.

\_

<sup>&</sup>lt;sup>1</sup> Population Action Inernational. 1995. Reproductive Risk: A Worldwide Assessment of Women's Sexual and Maternal Health. Washington, DC: Population Action International.

<sup>&</sup>lt;sup>2</sup> Population Action International. 2001. A World of Difference: Sexual Reproductive Health and Risks. Washington, DC: Population Action International.

<sup>3</sup> Chaya, Nada and Jennifer Dusenberry. 2004. ICPD at ten: Where are we now? Washington DC: Population Action International.