

ICPD Beyond 2014 Expert Meeting on Women's Health - rights, empowerment and social determinants 30th September - 2nd October, Mexico City

# Improved Maternal Health Since the ICPD: 20 Years of Progress

Samantha Radcliffe Lattof, Tim Thomas, Mary Nell Wegner, Annie Kearns, Ana Langer

Background paper # 4

<sup>\*</sup>Created under the auspices of the ICPD Secretariat in its General Assembly mandated convening role for the review of the ICPD Action Programme.

# **Table of Contents**

1. Introduction	1
2. Definitions	2
3. Global, Regional and Country Trends Since 1995	2
a. Estimates and Targets	2
b. Approaches	4
i. Adolescent Girls	5
ii. Family Planning	5
iii. Gender	5
iv. HIV and AIDS	6
v. Quality of Care	7
vi. Skilled Attendance	7
vii. Unsafe Abortion	8
c. Policies and Structures	9
4. Challenges and Recommendation	10
a. Accountability	10
b. Commodities	11
c. Health Systems	11
d. Measurement	12
e. Morbidities	12
f. Poverty	13
g. Social Determinants	13
5. Looking Forward	14
Annex I. Case Studies	Annex 1

#### 1. Introduction

When 179 countries adopted the International Conference on Population and Development (ICPD) Program of Action (PoA) in Cairo, Egypt in 1994, a hard-won section specific to "Women's health and safe motherhood" was included. (Chapter 8, Section C) Since 1994, the PoA has been affirmed at every session of the UN Commission on Population and Development, and cited in policy-making and programming throughout the world.

The health of the mother during pregnancy and childbirth was not a focus for policy-making, research and programming until 1985, when a seminal paper provocatively entitled "Maternal health – a neglected tragedy: Where is the M in MCH (Maternal and Child Health)?" was published by two researchers at Columbia University in New York, Allan Rosenfield and Deborah Maine, who posited that the global policy and programmatic focus on newborn and child health, while essential and worthy, neglected the health of the mother. In the paper, they called on multi-lateral agencies, particularly the World Bank, *to prioritize maternity care*, *considerably reduce maternal morbidity and mortality and perinatal mortality, and encourage contraceptive practice.* Also in 1985, the first International Decade for Women culminated with widely cited WHO estimates that approximately 500,000 women die annually from obstetric complications.<sup>2</sup> In 1987, the Safe Motherhood Initiative (SMI) was born at the International Safe Motherhood Conference in Nairobi and the Preventing Maternal Mortality program (now known as the Averting Maternal Death and Disability program) was established at Columbia University. Most experts agree that 1987 is the year when the field of maternal health was firmly established in the global and health and development sector.

Two ensuing global U.N. conferences included strong affirmations of the basic human right for mothers to have access to quality and comprehensive maternal and reproductive health care: the 1994 ICPD<sup>3</sup> and the Fourth International Conference on Women in 1995.<sup>4</sup> Both conferences identified maternal health as a priority component of global health and development, and the 1994 ICPD produced the PoA that mandated measurement of global progress on maternal health. Although the ICPD expanded the concept of maternal health as a human right, it wasn't until a 2012 Resolution of the UN Commission on the Status of Women that an intergovernmental instrument was adopted to push legislatively for the reduction of maternal mortality and morbidity.

Since ICPD, maternal health has been a core component of a range of global policy frameworks, most notably the Millennium Development Goals established in 2000. The fifth MDG, Improve Maternal Health, set a target to reduce maternal mortality ratios (MMRs) by 75% by 2015. In 2007, a target on reproductive health was added after some controversy. MDG5b called for universal access to reproductive health care; it explicitly merged the ICPD platform for action with the MDGs.¹ Although widely deemed unattainable by countries with the highest maternal mortality rates, the act of setting MDG5 as a global goal based on the ICPD PoA laid down the gauntlet to policy-makers at all levels.

<sup>1</sup> MDG target 5a is measured by two indicators: the maternal mortality ratio and the proportion of births attended by skilled health personnel. MDG target 5b is measured by four indicators: contraceptive prevalence rate; adolescent birth rate; antenatal care coverage; and unmet need for family planning.

<sup>\*</sup>Created under the auspices of the ICPD Secretariat in its General Assembly mandated convening role for the review of the ICPD Action Programme.

#### 2. DEFINITIONS

According to the WHO, maternal health refers to the "health of women during pregnancy, childbirth and the postpartum period." For too many women, pregnancy, childbirth, and the postpartum period can lead to death, in most cases as a result of complications that can be prevented or effectively managed. A maternal death, by definition, is a preventable death.

Maternal morbidity, or maternal ill health, is less well defined. The absence of an internationally supported definition for maternal morbidity contributes to poor estimations of prevalence, making maternal mortality the indicator that is more commonly used to assess maternal health. A promising recent initiative at WHO is the Maternal Morbidity Working Group (MMWG) charged with "improving the scientific basis for defining, measuring and monitoring maternal morbidity." <sup>5</sup>

Relevant definitions of maternal death, from the 10<sup>th</sup> revision of the *International statistical* classification of diseases and related health problems (ICD-10), are detailed in table 1 below.

# Table 1: Relevant maternal death definitions from the ICD-10 6

## Maternal death (also referred to as maternal mortality)

The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes

Depending on their causes, there are two types of maternal deaths: direct and indirect:

#### Direct maternal death

Deaths resulting from obstetric complications of the pregnancy state (pregnancy, labor, and the puerperium), from interventions, omissions, incorrect treatment, or from a chain of events resulting from any of the above *Examples include:* hemorrhage, infection, preeclampsia and eclampsia, complications of abortion, and obstructed labor.

### **Indirect maternal death**

Deaths resulting from previous existing disease or disease that developed during pregnancy and which was not due to direct obstetric causes, but which was aggravated by physiologic effects of pregnancy

*Examples include*: hepatitis, anemia, malaria, cardiovascular disease, HIV/AIDS, diabetes, tuberculosis, and psychiatric illness.

#### Pregnancy-related death

The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death

#### Late maternal death

The death of a woman from direct or indirect obstetric causes, more than 42 days, but less than 1 year after termination of pregnancy.

# 3. GLOBAL, REGIONAL, SUB-REGION LEVELS AND TRENDS SINCE 1995

# a) Estimates and Targets

In 1994, when the IPCD PoA was written, the most recent global figures estimated 543,000 annual maternal deaths and an MMR of 400 deaths per 100,000 live births. The PoA called for a reduction in MMRs by 75% between 1990 and 2015.

The PoA urged governments to narrow disparities in maternal mortality within countries and among geographical regions, socioeconomic, and ethnic groups: "... all countries should reduce maternal morbidity and mortality to levels where they no longer constitute a public health problem." The PoA proposed a MMR of 60 deaths per 100,000 live births for countries with intermediate levels of maternal mortality and a MMR of 75 deaths per 100,000 live births for countries with the highest levels of maternal mortality by 2015. These numbers were directly transferred to the fifth Millennium Development Goal established in 2000, also set for fruition in 2015.

Of the eight MDGs, MDG5 lags furthest behind and has made the least progress, with only 24% of developing countries currently on track to reduce their MMRs by 75% by 2015. The MMR for women living in developed regions is 16 deaths per 100,000 live births; yet, the MMR for women living in developing regions is 240 deaths per 100,000 live births. The lifetime risk of a woman dying as a result of a maternal health complication in Somalia is 1 in 16; Nigeria, 1 in 29; United States, 1 in 2,400; and Greece, 1 in 25,500. Similar differences exist among socioeconomic and ethnic groups within countries, and most maternal deaths are concentrated among women with the fewest resources.

Maternal mortality also remains high in conflict-affected countries, where more than a third of global maternal deaths occur.<sup>11</sup> In times of protracted crises and recovery, women and girls commonly lack access to sexual and reproductive health services, including skilled attendance at delivery, basic and comprehensive emergency obstetric services and contraception. Gender-based violence often rises during crises, conflicts, and post-conflicts.

While India and Nigeria do not have the highest MMRs in the world, they contribute more maternal deaths each year to the global burden than any other countries. India's 56,000 and Nigeria's 40,000 maternal deaths comprise one-third of the global burden of maternal deaths. The other highest-burden countries are Pakistan, Afghanistan, Ethiopia, and Democratic Republic of Congo.

There have been some welcome surprises, however. Over the last several years, safe and effective interventions for the major causes of maternal mortality and morbidity have been developed, evaluated and determined to be effective. However, women's access to these life-saving interventions remains limited.

A full analysis of the status of the 75 countries that account for 95% of the world's maternal and child deaths is found in the latest Countdown 2015 report, which shows several instances of MDG5 being met in countries where maternal mortality burdens historically have been highest. Vietnam, for example, had a maternal mortality ratio (MMR) of 240 per 100,000 live births in

1990; by 2010 the MMR was 59 per 100,000; the country has already surpassed its 2015 target of 60.<sup>13</sup> Similarly, Nepal had an MMR of 770 in 1990; by 2010, it had met and surpassed its MDG5 goal when it reached 170.<sup>14</sup>

Even though MDG5 is unlikely to be met in 2015, the number of maternal deaths globally has declined significantly since ICPD, according to the most recent estimates of global, regional, and country-level maternal mortality published by the World Health Organization (WHO) and, independently, by the Institute for Health Metrics and Evaluation (IHME). Between 2005 and 2008, maternal deaths declined 36% from 535,900 to 342,000. From 2008 to 2011, maternal deaths decreased an additional 20% to 273,500. As noted above, these global figures mask vast disparities among and within the majority of high-burden countries; large declines in central Europe and south Asia are overshadowed by negligible progress in all regions of sub-Saharan Africa.

Measuring maternal mortality and morbidity is notoriously difficult for many reasons. The lack of vital registration, early pregnancy reporting and weak health information systems can skew even the best estimate methodology. In an analysis of 2010 measurements, experts noted that "Current national MMR estimates are generated by United Nations agencies and academia ... These estimates use aggregated national figures, which lack precision; are not timely, referring to the past; and are often not readily available in formats like simple maps or trend diagrams. Current methods in many developing countries use large-scale periodic surveys (national censuses, Demographic and Health Surveys, Multiple Indicator Cluster Surveys, etc.), which are expensive and data are retrospective and not released in a timely manner. These estimates carry wide confidence intervals and often provide no clues for action." <sup>18-20</sup>

When the Commission on Information and Accountability of the Global Strategy for Women's and Children's Health in 2011, they were charged with developing an accountability framework based on national oversight, accurate and comprehensive monitoring of results, and regular multi-stakeholder review of data and responses -- all key features of traditional surveillance and response systems. A maternal death surveillance and response (MDSR) Technical Working Group has been established and chaired by the World Health Organization. The objectives of the MDSR are: "1) To provide information that effectively guides actions to eliminate preventable maternal mortality at health facilities and in the community; and 2) To count every maternal death, permitting an assessment of the true magnitude of maternal mortality and the impact of actions taken to reduce it." <sup>21</sup>

#### b) Factors influencing maternal health

One of the breakthroughs of the ICPD PoA was a clarion call for client-centered services that provide quality and accessible care. Rolling maternal health into a strong continuum of sexual and reproductive health services pointed the way to strengthening health systems overall, with women at the center.

The ICPD PoA expanded global thinking about rising fertility rates and demographic targets. Instead of relying solely on data to assess needs, create programs, and measure progress, the ICPD PoA called for more integrated and inter-related approaches to providing comprehensive sexual and reproductive (including maternal) health care to those who need it most. Several

factors have emerged over the 20-year life of the PoA that illuminate where the causes of maternal mortality and morbidities are rooted, and where effective and sustainable solutions may be derived.

Early age of childbearing: Girls experience a disproportionate burden of maternal ill health, accounting for 11% of global births but 23% of all disability adjusted life years and 13% of deaths. As their bodies are still maturing, girls are at greater risk of pregnancy complications. Among girls aged 15 to 19 in developing countries, poor maternal health is the largest cause of mortality and disability; girls aged 15 to 19 are two times more likely to die during childbirth than women in their 20-30s, while girls younger than 14 are five times more likely to die. The babies born to adolescent mothers are also at increased risk of infant death.

Numerous factors contribute to maternal mortality and morbidity among adolescent girls: child marriage, poor nutrition, low social status of women, female circumcision, illiteracy, and many others. <sup>24, 25</sup> Nearly 90% of adolescent births occur within marriage. <sup>22</sup> Since girls are less likely to refuse sex or be able to negotiate sex, much less condom usage, they are at increased risk of not only pregnancy but also of sexually transmitted infections (STIs), including HIV. HIV/AIDS is an increasingly important indirect cause of maternal death within this population, especially in sub-Saharan Africa, where women aged 15-24 are three times as likely to be infected as men in that age group. <sup>24</sup> Family planning and comprehensive sexuality education are key tools in the reduction of adolescent pregnancy and transmission of HIV. The feminized HIV/AIDS epidemic among young women in particular is one factor limiting progress in the reduction of maternal mortality overall. <sup>19</sup>

Unmet contraceptive need: With increased access to and use of contraception, more women are able to delay and limit their fertility. Between 1960 and 2007, contraceptive use in developing countries increased from 8% to 62%. 26 While celebrating this success is warranted, significant unmet need for comprehensive family planning and reproductive health services (currently estimated at 222 million women) has impeded efforts to improve maternal health. 27 There are 75 million unintended pregnancies each year worldwide, which place women at greater risk of maternal death and disability. Meeting the unmet need for family planning would significantly reduce the number of unintended pregnancies. 28 The logic is simple: the fewer pregnancies a woman has, the lower her risk for maternal mortality or morbidity.

*Gender disparities:* 

Deeply entrenched gender disparities are common in many developing countries where maternal mortality is high and health service utilization is low. Gender inequality and women's low social status and disempowerment have significant impact on access to and demand for maternal health care services.<sup>29</sup>

In 1994 and before, the role of men in maternal health care was nominal at best. Another precedent set by the PoA 20 years ago was its emphasis on men's roles and responsibilities throughout the continuum of sexual, reproductive and maternal health care. Chapter 4, section C of the PoA, "Males responsibility and participation" gave member states a clear challenge to address traditional gender norms that compromise the health of their nations' wives and daughters.

Although it is difficult to measure or evaluate progress with the constructive involvement of men in maternal health, a range of NGOs in various settings around the globe have been trying since the mid-1990's when attention to this issue was raised. Using a variety of mechanisms, these programs help men to identify their influence on reproductive health options and decisions and enable them to understand the value of supporting women's choices. They also often encourage men to discuss issues such as contraception, emergency plans for labor and delivery, HIV counseling and testing, and post-abortion counseling with women. Often, approaches go beyond reproductive health to engage men in wider issues, such as intimate partner violence and female genital mutilation/cutting.

HIV/AIDS:

The PoA in 1994 was notably prescient when it stated: "The world-wide incidence of sexually transmitted diseases is high and increasing. The situation has worsened considerably with the emergence of the HIV epidemic." Indeed, the HIV and AIDS pandemic raged through the developing world in the coming decade and by 2000, in many places the infection rate was much higher in women than men. <sup>31</sup> By 2011, some 56,100 maternal deaths were attributed to HIV/AIDS mostly in sub-Saharan Africa. <sup>15-17</sup>

Widely available antiretroviral therapy for the prevention of mother-to-child transmission (PMTCT) of HIV/AIDS was called for in the 2000 International AIDS Conference in Durban, South Africa, responded to in the Declaration of Commitment that emanated from the 2001 UN General Assembly Special Session on HIV/AIDS. HIV & AIDS had fast become a women's epidemic, especially in sub-Saharan Africa, and preventing mother-to-child transmission was deemed a priority.

A WHO endorsed approach to holistic prevention and treatment programs for mothers and their families, MTCT Plus, was launched at Columbia University in New York in 2003. The MTCT-Plus Initiative provided both mothers and their families with lifelong care and treatment in resource-poor settings while strengthening the capacity of health care workers.

A nascent approach to providing lifelong ART coverage for HIV+ pregnant women has been coined "Option B+" which promises simpler messaging and treatment regimens, and reliable supply chains. For countries with limited resources and high fertility, Option B+ may be a promising tool. Research gaps remain, however, along with concerns about ethics, medical safety and benefits, program feasibility, and economics. The limited evidence on Option B+ does not currently show that it decreases PMTCT or that the increased risk of side effects and ART resistance compromises overall maternal health. ART

Quality of Care:

The importance of the quality of maternal health care has risen since the ICPD. The coverage and reach of maternal health services have increased dramatically in some high-burden countries, but the content and quality of those services (both institutional and at the community level) have not improved at the same pace. In order to reduce maternal mortality and morbidity, it is becoming clear that policies and programs need to improve the quality on the supply side of the service delivery equation. Experts have identified quality of care—including technically sound and respectful care—as a critical gap that must be addressed.<sup>35</sup>

Disrespect and abuse during childbirth is not a new phenomenon. Evidence of poor and undignified patient-provider interactions have been documented for decades in a variety of settings. In 2010, <u>a landscape analysis</u> was published that renewed international attention to the importance of dignified interpersonal care during pregnancy and childbirth.<sup>36</sup>

Beyond the implications for skilled birth attendance and clinical quality improvement efforts, respectful maternity care is a complex matter. It incorporates areas of social justice, human rights, social norms, and empowering female decision-making. A key challenge for all involved in the field will be to ensure continued dialogue on providing and advocating for respectful maternal health care at both the local and global levels.

Skilled Attendance:

When the ICPD PoA was reviewed at its 5-year point, four *Key Actions* for the Further Implementation of the ICPD Programme of Action were agreed, one of which set targets for improving skilled attendance at birth. It set a 2015 target for 90% of all births "where the maternal mortality rate is very high" to be "assisted by skilled attendants." According to the 2013 Countdown report, data from 2007 to 2012 showed "the median coverage of skilled birth attendance is slightly more than 60% for the countries studied, but the coverage between these countries ranges from 10% - 100%." The 2005 target is unlikely to be met in 2015, and these numbers are more evidence of disparate and inequitable coverage, which should mandate urgent and sustainable responses.

There has been much debate about what skills a skilled attendant must have, and the proximity of that skilled attendance to a delivering mother. The International Confederation of Midwives, a venerable organization since 1919, has facilitated and summarized the definition of midwifery, which is consistent with that of a "skilled birth attendant". The ICM's definition is as follows: "The midwife is recognised as a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births on the midwife's own responsibility and to provide care for the newborn and the infant. This care includes preventative measures, the promotion of normal birth, the detection of complications in mother and child, the accessing of medical care or other appropriate assistance and the carrying out of emergency measures."<sup>39</sup>

The UNFPA page on skilled attendance expands on the importance of midwifery in the community: "Historical as well as contemporary evidence from many countries, most notably China, Cuba, Egypt, Jordan, Malaysia, Sri Lanka, Thailand and Tunisia, indicate that skilled midwives functioning in or very close to the community can have a drastic impact on reduction of maternal and neonatal mortality. This is why the proportion of births attended by a skilled health provider is one of the two indicators for measuring progress toward the fifth MDG, improving maternal health." 40

*Unsafe abortion* 

In the PoA, states agreed that where abortion is legal, it should be safe and accessible through the primary health care system. The PoA recognized that unsafe abortion is a leading cause of maternal mortality and morbidity, with harmful effects on women and their families.

Yet statistics as of 2008 show that each year 47,000 women die as a result of unsafe abortion, accounting for 13% of all maternal deaths worldwide. Almost all of these deaths occur in developing countries. Another 5 million women suffer maternal disabilities as a result of unsafe abortion. In the developing world, 56% of all abortions are unsafe, compared with 6% in the developed world."<sup>41</sup>

WHO has been publishing and updating their <u>Safe Abortion Technical</u> <u>Guidelines</u> since 2003, and there are proven, effective methods to safely terminate a pregnancy, both medically and surgically.<sup>42</sup> Unfortunately, medical abortion (mifepristone plus misoprosotol or misoprostol alone) and manual vacuum aspirators for abortion are in short supply in most areas of the world where unsafe abortion is endemic.<sup>43</sup>

Progress in eliminating unsafe abortion has been slow mainly due to societal stigmas associated with abortion generally. Deeply entrenched

cultural values and norms about abortion must be addressed before safe abortion is deemed a viable option for all women who need it.

# c) Policies and Structures

While the ICPD PoA set the stage for increased action on maternal health, MDG5 was instrumental in building a sense of urgency and encouraging funding among global and national partners to accelerate implementation of proven interventions, at scale where possible. Several donors increased their bilateral funding for maternal health post-2000, especially the Bill & Melinda Gates Foundation, the UK's Department for International Development, the United States Agency for International Development, the Norwegian Agency for Development Cooperation, the Swedish International Development Agency and the Canadian International Development Agency.

During the U.N. MDG Summit in September 2010, the <u>Every Woman Every Child</u> campaign was launched by UN Secretary General Ban Ki-moon to raise awareness and new funding, and accelerate action to improve maternal, newborn and child health based on a new <u>Global Strategy for Women's and Children's Health</u> which aims *to save 16 million lives by 2015 in the world's 49 poorest countries.* Governments, civil society, multilaterals and the private sector made pledges amounting to \$40 billion in response to the EWEC campaign.

A key recommendation from <u>The Commission on Information and Accountability for Women's and Children's Health</u> was establishing an independent Expert Review Group (iERG) to monitor global commitments to improving maternal and child health under the Global Strategy.<sup>45</sup> The iERG released its first report in 2012,<sup>46</sup> and the second report is under development. Annual reports are expected through and including 2015.

Uneven access to proven, safe and effective interventions explains to a great extent the persisting high levels of maternal mortality in certain settings and the inequalities among and within countries and population groups. Helping to fill this gap, WHO published <a href="Essential Interventions">Essential Interventions</a>, <a href="Commodities and Guidelines for Reproductive">Commodities and Guidelines for Reproductive</a>, <a href="Maternal">Maternal</a>, <a href="Newborn and Child Health">Newborn and Child Health</a> in 2011 to guide well-intentioned and low-resourced programs toward improving their quality of care and saving lives. <a href="#">47</a>

Although most maternal health medicines and treatments are included on the WHO Essential Medicines List, access and quality are often wanting. In 2012, the first <u>U.N. Commission on Life Saving Commodities for Women and Children</u> convened, and the Commissioners made improved access to essential, high quality maternal health commodities intrinsic to the success of global efforts to attain MDG5. The influential public-private <u>Reproductive Health Supplies Coalition</u>, which primarily focused on contraceptives in its first ten years, has includede maternal health supplies in their advocacy and coordination activities. The commodities that have been prioritized in the Commission and the RHSC to improve maternal health are oxytocin and misoprostol for post-partum hemorrhage, and magnesium sulfate for eclampsia. Health commodities, infrastructure and systems are all receiving significant attention in the maternal health movement currently.

The ICPD PoA framed maternal health within the context of human rights, women's empowerment, and gender equality and equity.<sup>3</sup> The PoA established three wider goals that would contribute substantially to improving maternal health, including universal access to reproductive health services (family planning, maternity care, safe abortion as allowed by law, prevention and treatment of STIs and HIV); universal education; and the promotion of child health and survival.

The integration of maternal health into its closely allied fields was formalized in *The Partnership for Maternal, Newborn and Child Health*, established at WHO in 2005, with the mandate to shed new light and emphasis on maternal health in the continuum of care. Although each element of the continuum is now a discrete field of study and practice, the interdependency of challenges and solutions to improve MNCH is widely accepted. From conception to birth and beyond, the health of mothers and their children are inextricably linked. Integrating service delivery for mothers and children across the lifecycle can improve coverage and save lives.

#### 4. CHALLENGES & RECOMMENDATIONS

Efforts to improve maternal health are finally paying off, as the declining trends of maternal mortality illustrate at the global, regional, and, in some cases, national level, but challenges remain. Some of the challenges described and envisioned in the ICPD PoA to improve maternal health have been met and others persist; still more have emerged since then. Following are several enduring and new challenges to eradicating preventable maternal mortality and morbidities, with brief recommendations for immediate and sustained action.

#### Accountability

Challenge: Global accords, like the ICPD PoA, are vulnerable to political winds and their sustained relevance requires detailed monitoring, and timely and accurate evaluations. There have been 5, 10 and 15 year reviews of ICPD; Countdown 2015 has tracked a range of maternal health indicators germane to the PoA; and billions of dollars have been pledged through the Every Woman Every Child Campaign. Continuing to track targets and pledges is essential to keeping the focus on the most important challenges of eradicating preventable maternal mortality.

#### Recommendations:

- Ensure the sustainability and relevance of the <u>The Commission on Information and Accountability for Women's and Children's Health</u> and the findings from the subsequent independent Expert Review Group (iERG) that monitors global commitments to improving maternal and child health under the <u>Global Strategy on Women's and Children's Health</u><sup>45</sup>
- Launch community-based national accountability mechanisms like those espoused by the
   <u>International Budget Partnership</u>, to create upward pressures on policy-makers through
   grass-roots budget advocacy.

# Commodities

Challenge: The two leading causes of maternal mortality are post-partum hemorrhage (PPH), and pre-eclampsia/eclampsia (PE/E). These complications need not be fatal. PPH can be prevented and treated using uterotonic medicines such as oxytocin and misoprostol, while magnesium sulfate is the most effective drug available for managing PE/E. All three medicines now appear on the WHO Model Lists of Essential Medicines (EML) as well as in many national policies and clinical protocols. However, weak logistical capacity within health systems causes stock-outs and shortages, and government oversight often falls short of assuring quality. Although these medicines are comparatively cheap, the heavy reliance on out-of-pocket spending put medicines beyond the reach of poor women. In addition, shortcomings in health worker training, widespread fears of side effects, and the inability of women, their families, or health workers to recognize complications in time to seek treatment also contribute to the confluence of barriers that continue to keep these medicines from having full impact. <sup>48</sup>

#### Recommendations:

- Implement the recommendations of the <u>UN Commission on Lifesaving Commodities for Women and Children</u> when its work is presented at the 68th session of the General Assembly
- Participate in the <u>Maternal Health Supplies Caucus</u> housed at the Reproductive Health Supplies Coalition and run by <u>PATH</u>.
- Advocate for all maternal health commodities that can reduce the direct causes of maternal mortality to be included on national EMLs.
- Strengthen supply chains and train providers on the use of these and other life saving maternal health drugs.

#### Health Systems

Challenge: The pivot point that the maternal health field sits at today is clear. Most experts agree: "We know what to do, we just don't know how to do it at scale and with limited human and financial resources." So the focus will shift from the phenomenon of maternal mortality (who dies? why does she die? what can be done to save her?) to the pragmatics of improving maternal health (skilled attendance, proper referral, post-natal care, family planning counseling, and quality respectful care).

The continuing epidemics of communicable (e.g. HIV/AIDS and malaria) and non-communicable chronic diseases (e.g. cardiovascular disease, diabetes) threaten pregnant women in increasing numbers around the globe. <sup>49</sup> But most health systems in resource-poor settings are ill-equipped to address direct causes of maternal mortality and include prevention, early detection and care services for indirect causes of maternal mortality in their existing health care delivery platforms.

#### Recommendations:

- Develop and evaluate innovative strategies to deliver proven solutions at scale in disparate contexts.
- Fully integrate services for all the direct and indirect causes of maternal mortality and morbidity within national health systems.

### Measurement

*Challenge:* Maternal mortality and morbidity are difficult to measure for a variety of reasons. Under-reporting and misclassification of maternal deaths is all too common. In remote and rural places, data collection is difficult and motivation may be low to capture failures of health systems to save women's lives. Clinical records are incomplete or non-existent. As a result, registration systems are often fraught with missing or poor quality data, making it difficult to compile evidence and assure confidence in the existing data. In order to improve the reporting and classification of maternal deaths, health information systems must be strengthened and measurement in general needs to be improved.<sup>50, 51</sup>

#### Recommendations:

- Train health workers on the *International Classification of Diseases* cause-of-death coding
- Prevent health workers from becoming overburdened
- Address stigma around conditions such as obstructed labor and HIV/AIDS.
- Advocate for adoption by all of the WHO's new maternal death classification system so that reliable comparisons may be made within and between countries.
- Evaluate, introduce and scale-up new information technology for field-based data collection and analysis.

#### Morbidities

Challenge: For every woman who dies of pregnancy-related causes, approximately 20 others face serious or long-lasting morbidities (e.g. anemia, maternal depression, infertility, fistula, uterine rupture and scarring, uterine prolapse, chronic infection, and perineal pain).<sup>52</sup> Data on maternal morbidities is scarce and unreliable, mainly due to women's limited access to or utilization of services and the poor quality of clinical records. Women who survive severe, life-threatening complications from pregnancy and childbirth often face lengthy recovery times and may experience long-term physical, psychological, social and economic consequences. The chronic ill-health of a mother puts her surviving children, who depend on her, at great risk. There is a dearth of research on morbidities affecting women in pregnancy and childbirth, and few large-scale initiatives underway or in development to tackle enduring yet preventable conditions.<sup>53, 54</sup>

#### Recommendations:

- Develop and reach consensus on definitions for maternal morbidities and strengthening health systems' capacity to collect the necessary information to identify and classify morbidities.
   Maternal morbidities should be used as indicators for assessing quality of maternal health care.<sup>55</sup>
- Monitor and contribute to the recently established four-year Maternal Morbidity Working Group (MMWG) at WHO, charged with *improving the scientific basis for defining*, *measuring and monitoring maternal morbidity*.<sup>5</sup>
- Establish referral systems for women seeking treatment for morbidities
- Invest in training health care providers to recognize, screen and treat common morbidities, and to offer alternative therapeutic options when treatment is not possible.

#### **Poverty**

*Challenge* The documented evidence showing a correlation between poverty and poor maternal health is abundant. One analysis across 10 developing countries reveals that the proportion of

women dying of maternal causes increases consistently with increasing poverty.<sup>56</sup> Poverty alleviation efforts are crucial to improving maternal health, and vice versa. When women survive, communities thrive. "The regions with the highest mortality burdens, sub-Saharan Africa and south Asia, face massive deprivation in access to such care and the sheer scarcity of staff and the excessive costs of care to mothers are substantial barriers to progress."<sup>57</sup>

#### Recommendations:

- Continue innovating, evaluating, fine-tuning and advocating for policies and programs that
  help to narrow socio-economic gaps such as conditional cash transfer projects like <u>Janani</u>
  <u>Suraksha Yojana</u> in India and <u>Oportunidades</u> in Mexico. Focus on improving supplies and
  infrastructure ahead of stimulating demand.
- Demonstrate the core value maternal health can add to the post-2015 health and development architecture, which will be debated following the opening of the 68<sup>th</sup> General Assembly.

#### Other Social Determinants

Challenge: In many places girls and young women do not enjoy basic rights: they are restricted from voting and education; they have no inheritance rights; their access to primary quality health care is limited; they have little or no sexual and reproductive autonomy; and they are denied justice within an enabling legal system. Girls die needlessly in pregnancy and childbirth mostly because sex is forced upon them and their bodies are not developed enough for healthy pregnancy and childbirth. Girls lack knowledge and societal respect, which makes them vulnerable to unintended and unwanted pregnancies.

# Recommendations: 27,58

- Provide girls with secondary and advanced education
- Enable girls and women to participate in formal and informal economic activities
- Educate girls and women on their sexual and reproductive rights
- Provide safe and confidential services to counter harmful traditional practices

# 5. Looking Forward

The principles of the ICPD PoA have been a guiding light since 1994, and maternal health is now widely recognized as a human right, which nations and communities must guarantee to all citizens.<sup>3</sup> Improvements in maternal health globally and nationally since the ICPD PoA are evident. Maternal mortality ratios have fallen dramatically, funding has increased, and there is new global attention on saving mothers' lives from all quarters. Research, policies and interventions have expanded and ameliorated, and the stage is set for the elimination of preventable maternal mortality in this generation.

As the challenges set forth above suggest, the climb toward elimination is steep. Reinvigorated political will is needed to address the socio-cultural and economic factors that prevent women and girls from accessing routine, high-quality and affordable maternal health care, from conception through post-partum.

The impact of the PoA on maternal health promises to continue beyond 2014, but the MDGs will end in 2015. Over the past few years, health and development policy analysts have had robust debates about the successor framework to the MDGs. In late May 2013, a report by a High Level Panel (HLP) commissioned by the UN Secretary General on the options for a post-2015 development agenda was released. Titled A New Global Partnership: Eradicate Poverty and Transform Economies Through Sustainable Development, the report frames the next set of global goals with economic development and the threats of global climate change. The report proposes 12 illustrative goals, each supported by five targets. Of these, Goal 4, "To Ensure Healthy Lives," builds on the health Millennium Development Goals. New targets propose to:

- 4c. Decrease the maternal mortality ratio to no more than x per 100,000.
- 4d. Ensure universal sexual and reproductive health and rights.<sup>2</sup>

New and more ambitious maternal health targets for the future are being proposed by a group of experts representing WHO and the US Government to be considered in the new global development goal-setting. These experts suggest that an absolute reduction of MMRs to less than 50 per 100,000 live births by 2035 is realistic. Setting an absolute target raises the bar significantly on the MDG relative target of a 75% MMR. They also propose a method of measuring and tracking individual countries' progress every five years, and weighting support towards those countries with higher MMRs. Should these absolute targets be adopted, those countries with the highest maternal mortality burdens will require substantially expanded infrastructure, human resources, commodities and services.

As the maternal health field looks beyond the ICPD and beyond the MDGs, it is essential to emphasize the inextricable links between the health of mothers and the economic development of families, communities and nations. Using evidence generated by the Partnership for Maternal, Newborn and Child Health, the Guttmacher Institute, and UNFPA, a strong case can be made that the health of every mother is directly tied to the advancement of her family and community. Ending preventable maternal mortality could be the change agent that accelerates the attainment of all global health and development goals, from ICPD to the MDGs to whatever new framework may emerge.

-

<sup>&</sup>lt;sup>2</sup> The High Level Commission report calls for universal targets that account for individual countries' unique challenges in meeting them, so the "x per 100,000" in 4c remains undefined until experts can create a realistic consensus target.

<sup>\*</sup>Created under the auspices of the ICPD Secretariat in its General Assembly mandated convening role for the review of the ICPD Action Programme.

# References

- 1. Rosenfield A, Maine D. Maternal mortality--a neglected tragedy. Where is the M in MCH? *Lancet* 1985; **2**(8446): 83-5.
- 2. WHO. Maternal mortality rates: a tabulation of available information. Geneva: WHO, Division of Family Health, 1985.
- 3. United Nations. Report of the International Conference on Population and Development. ICPD; 1994 5-13 September; Cairo; 1994.
- 4. United Nations. Platform for Action. Fourth World Conference on Women. Beijing; 1995. p. 36.
- 5. Firoz T, Chou D, von Dadelszen P, et al. Measuring maternal health: focus on maternal morbidity. *Bulletin of the World Health Organization* 2013.
- 6. World Health Organization. International statistical classification of diseases and related health problems, tenth revision. Geneva: World Health Organization; 2010.
- 7. Langer A, Knight H, Charnock A, Wegner M, Villar J. Implementing clinical interventions within maternal health programmes. In: Hussein J, McCaw-Binns A, Webber R, eds. Maternal and Perinatal Health in Developing Countries; 2012: 96-113.
- 8. World Health Organization, UNICEF, UNFPA, The World Bank. Trends in Maternal Mortality: 1990 to 2010. Geneva: WHO; 2012.
- 9. World Bank, International Monetary Fund. Global Monitoring Report 2011: Improving the Odds of Achieving the MDGs. Washington, D.C., 2011.
- 10. WHO, UNICEF, UNFPA, Bank W. Lifetime risk of maternal death. 2012 (accessed 30 May 2013 2013).
- 11. World Health Organization, UNFPA, Escuela Andaluza de Salud Publica Consejeria De Salud. Granada Consensus on Sexual and Reproductive Health in Protracted Crises and Recovery. 2009.
- 12. Countdown to 2015, WHO, UNICEF. Accountability for maternal, newborn and child survival: The 2013 Update. Geneva: WHO, 2013.
- 13. Countdown to 2015, WHO, UNICEF. Countdown to 2015: Maternal, Newborn, & Child Survival: Vietnam profile. Geneva: WHO, 2013.
- 14. Countdown to 2015, WHO, UNICEF. Countdown to 2015: Maternal, Newborn, & Child Survival: Nepal profile. Geneva: WHO, 2013.
- 15. World Health Organization, United Nations Children's Fund, United Nations Population Fund, Bank. W. Trends in maternal mortality: 1990 to 2008. Geneva: World Health Organization; 2010.
- 16. Hogan MC, Foreman KJ, Naghavi M, et al. Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5. *The Lancet* 2010; **375**(9726): 1609-23.
- 17. Lozano R, Wang H, Foreman KJ, et al. Progress towards Millennium Development Goals 4 and 5 on maternal and child mortality: an updated systematic analysis. *The Lancet* 2011; (0).
- 18. Hounton SH, Sombie I, Townend J, Ouedraogo T, Meda N, Graham WJ. The tip of the iceberg: evidence of seasonality in institutional maternal mortality and implications for health resources management in Burkina Faso. *Scandinavian journal of public health* 2008; **36**(3): 310-7.
- 19. Hogan MC, Foreman KJ, Naghavi M, et al. Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5. *Lancet* 2010; **375**(9726): 1609-23.
- 20. Graham WJ, Braunholtz DA, Campbell OM. New modelled estimates of maternal mortality. *Lancet* 2010; **375**(9730): 1963; author reply 8.
- 21. WHO, CDC. Maternal deaths surveillance and response: technical guidance (forthcoming). Geneva: WHO.
- 22. World Health Organization. Adolescent Pregnancy. Making Pregnancy Safer Notes; 2008.

- 23. WHO. Adolescent pregnancy: unmet needs and undone deeds: a review of the literature and programmes. Geneva: WHO, 2007.
- 24. Quinn TC, Overbaugh J. HIV/AIDS in Women: An Expanding Epidemic. *Science* 2005; **308**(5728): 1582-3.
- 25. Capes T, Ascher-Walsh C, Abdoulaye I, Brodman M. Obstetric fistula in low and middle income countries. *Mt Sinai J Med* 2011; **78**: 352-61.
- 26. United Nations. World contraceptive use 2007. New York: United Nations, 2008.
- 27. Singh S, Darroch J. Adding It Up: Costs and Benefits of Contraceptive Services: Estimates for 2012. New York: Guttmacher Institute UNFPA, 2012.
- 28. United Nations. The Millennium Development Goals Report 2010. New York, 2010.
- 29. Shen C, Williamson JB. Maternal mortality, women's status, and economic dependency in less developed countries: a cross-national analysis. *Social science & medicine* (1982) 1999; **49**(2): 197-214.
- 30. UNFPA. State of World Population 2005: The Promise of Equality- Gender Equity, Reproductive Health and the Millennium Development Goals. New York: UNFPA, 2005.
- 31. UNAIDS. Report on the global HIV/AIDS Epidemic. Geneva: UNAIDS, 2000.
- 32. United Nations General Assembly. Declaration of Commitment on HIV/AIDS: "Global Crisis Global Action". Twenty-sixth Special Session; 2001 2 August; New York; 2001.
- 33. UNAIDS. A progress report on the Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive. Geneva: UNAIDS, 2012.
- 34. Coutsoudis A, Goga A, Desmond C, Barron P, Black V, Coovadia H. Is Option B+ the best choice? *The Lancet* 2013; **381**(9863): 269-71.
- 35. Souza JP, Gulmezoglu AM, Vogel J, et al. Moving beyond essential interventions for reduction of maternal mortality (the WHO Multicountry Survey on Maternal and Newborn Health): a cross-sectional study. *Lancet* 2013; **381**(9879): 1747-55.
- 36. Bowser D, Hill K. Exploring Evidence for Disrespect and Abuse in Facility-Based Childbirth. Washington, DC: USAID-TRAction Project, 2010.
- 37. United Nations General Assembly. Key actions for the further implementation of the Programme of Action of the International Conference on Population and Development. New York: UN, 1999.
- 38. Countdown to 2015. 2013 Report: Remarkable Progress in Reducing Child Mortality and Improving Maternal Health. *Countdown to 2015*, 27 May 2013, 2013.

http://www.countdown2015mnch.org/countdown-news/50162-remarkable-progress-in-reducing-child-mortality-and-improving-maternal-health (accessed 27 July 2013).

- 39. International Confederation of Midwives. ICM International Definition of the Midwife. The Hague: ICM, 2011.
- 40. UNFPA. Skilled Attendance at Birth. http://www.unfpa.org/public/mothers/pid/43832013).
- 41. Sedgh G, Singh S, Shah IH, Ahman E, Henshaw SK, Bankole A. Induced abortion: incidence and trends worldwide from 1995 to 2008. *Lancet* 2012; **379**(9816): 625-32.
- 42. WHO. Safe Abortion Technical Guidelines. Geneva: WHO, 2012.
- 43. Cohen S. Facts and Consequences: Legality, Incidence and Safety of Abortion Worldwide. *Guttmacher Policy Review* 2009; **12**(4): 2-6.
- 44. Ki-Moon B. Global Strategy for Women's and Children's health. New York: United Nations, 2010.
- 45. WHO. Keeping Promises, Measuring Results. Geneva: The Commission on Information and Accountability for Women's and Children's Health, 2011.
- 46. WHO. Every woman, every child: from commitments to action: the first report of the independent Expert Review Group (iERG) on Information and Accountability for Women's and Children's Health. Geneva: WHO, 2012.

- 47. WHO, Aga Khan University, PMNCH. Essential Interventions, Commodities and Guidelines for Reproductive, Maternal, Newborn and Child Health. Geneva: PMNCH, 2011.
- 48. Maternal Health Task Force GHV. U.N. Commission on Life Saving Commodities for Women and Children: Country Case Studies: MHTF, 2012.
- 49. Cross S, Bell J, Graham W. What you count is what you target: the implications of maternal death classification for tracking progress towards reducing maternal mortality in developing countries. *Bulletin of the World Health Organization* 2010; **88**: 147-53.
- 50. Lozano R. Data sources for measuring maternal mortality. IHME; 2010.
- 51. Hill K, Thomas K, AbouZahr C, et al. Estimates of maternal mortality worldwide between 1990 and 2005: an assessment of available data. *Lancet* 2007; **370**(9595): 1311-9.
- 52. United Nations Population Fund. Surviving Childbirth, But Enduring Chronic III-Health. 2013. http://www.unfpa.org/public/mothers/pid/4388 (accessed 30 May 2013).
- 53. Koblinsky M, Chowdhury ME, Moran A, Ronsmans C. Maternal morbidity and disability and their consequences: neglected agenda in maternal health. *Journal of health, population, and nutrition* 2012; **30**(2): 124-30.
- 54. Hardee K, Gay J, Blanc AK. Maternal morbidity: neglected dimension of safe motherhood in the developing world. *Global public health* 2012; **7**(6): 603-17.
- 55. Cecatti JG, Souza JP, Parpinelli MA, de Sousa MH, Amaral E. Research on Severe Maternal Morbidities and Near-Misses in Brazil: What We Have Learned. *Reproductive health matters* 2007; **15**(30): 125-33.
- 56. Ensor T, Cooper S. Overcoming barriers to health service access: influencing the demand side. *Health policy and planning* 2004; **19**(2): 69-79.
- 57. Filippi V, Ronsmans C, Campbell OM, et al. Maternal health in poor countries: the broader context and a call for action. *Lancet* 2006; **368**(9546): 1535-41.
- 58. Levine R, Lloyd C, Green M, Grown C. Girls Count: A global investment & action agenda. Washington DC: The Center for Global Development, 2009.
- 59. UN High-Level Panel of Eminent Persons on the Post-2015 Development Agenda. A New Global Partnership: Eradicate Poverty and Transform Economies Through Sustainable Development. New York: United Nations, 2013.
- 60. Bustreo F, Say L, Koblinsky M, Pullum T, Temmerman M, Pablos-Méndez A. Ending preventable maternal deaths: the time is now. *The Lancet Global Health* 2013.

# Improved Maternal Health since the ICPD: 20 Years of Progress Annex I: Country Case Studies

# Afghanistan

In 1990, the MMR in Afghanistan was 1,300 per 100,000 live births. By 2010, that number had been cut by more than two-thirds to 460 per 100,000 live births. While the country still has not met their MDG5 target of 325, its progress is impressive. The fall of the Taliban in 2002 was an important political change resulting in a decrease in maternal mortality. Under Taliban rule, besides being forbidden to work outside the home, attend school, or be in public without a burqa, women were not allowed to be treated by male doctors without a male chaperone. Just one hospital in Kabul was available to women. While many women still live with the fear that the Taliban will return, the official restrictions on health care have been lifted, and the number of facilities accessible to women is increasing; almost 60% of health centers have at least one woman who can provide health care.

In addition to a relative liberalization of society, much of the decline in MMR is due to training programs, which have increased the number of skilled birth attendants and community health workers trained to provide antenatal care. Since the revitalization of the Ministry of Public Health in 2002, maternal health has been a priority; crucial partnerships with international organizations have helped make improvements in maternal health a reality. By 2005, the National Midwifery Education Accreditation Board had been established, which allowed the profession to be regulated and quality of care to be monitored. Numerous training programs, including the USAID-funded Rural Expansion of Afghanistan's Community-based Health Care (REACH) Program, Jhpiego's Health Services Support Program (HSSP), and the Community Midwifery Education programs across the country have expanded national midwifery education, improved access to skilled delivery care, and increased the number of midwives in Afghanistan from 467 in 2002 to 2,167 in 2008. 5,6

## Nepal

Nepal is one of just nine countries that are on track to meet their MDG5 target. In 1990, Nepal's MMR was 790 per 100,000 births; by 2010, that number was 170, already below the 2015 target of 193.7 Much of the reduction in MMR is due to increased access to skilled birth attendants and intensified government focus on maternal health. In 1991, the Government of Nepal identified maternal health as a priority area in the National Health Policy; by 1997, the country had launched the Safe Motherhood program, increasing the resources available for maternal health services. 8 In 2002, the country introduced a more comprehensive 15-year plan which focused on improving access to basic obstetric services for all pregnant women, minimizing the three delays to receiving maternal health care, and introducing community-based maternal and child health workers who can provide antenatal care and skilled delivery attendance. 8 The plan included legalizing abortion, improving community-based education initiatives on maternal health complications, and establishing support and training resources for maternal health care providers. 8 A 2006 national policy led to the official recognition and development of professional midwives, the expansion of birthing centers, and more emergency obstetric and newborn care facilities. In 2009, the government introduced the 'Aama' policy with financial support, providing women with free delivery care in 1000 health facilities around the country, from central hospitals to primary health care centers. Institutional deliveries have increased,

household costs have declined, and facilities are able to hire more staff using the Aama funds, which has increased their capacity across the country. Altogether, these policies have led to an increase in skilled delivery attendance from just 9% of all births in 1996 to 29% in 2009. 11

# <u>Uganda</u>

While Uganda is making progress towards its MDG5 target, the country still has a ways to go. In 1990, its MMR was 600; in 2010, the country had almost halved its MMR to 310, but was still far from the target of 150 by 2015. The country's modest progress can be attributed to supportive policies, which have encouraged better health care and financial support for pregnant women. Per capita health spending has increased substantially since the mid-1990s, from about \$30 to \$115 (in international dollars). In 2006, Uganda's Parliament passed a resolution to improve registration of maternal deaths, establish blood banks, and improve obstetric care; the 2007 national budget expanded on this by funding emergency obstetric care and family planning provision at local health centers. In

But based on the annual rate of decline, in fact, Uganda will not reach the MDG5 target until 2031. <sup>15, 16</sup> Uganda has banned traditional birth attendants (TBAs), rather than integrating them into the health system, even though they are popular with many Ugandans. <sup>13</sup> The referral system for maternal health complications remains poor, health facility staff is often absent, and health centers are overcrowded. Staff is underpaid, and the lack of performance incentives leads many health workers to open private clinics. <sup>13</sup> Health professionals are also clustered in the urban areas: in 2002, 71% of doctors and 64% of nurses practiced in the Kampala region, which contains just 27% of Uganda's population. <sup>17</sup> While task-shifting has been implemented, it often occurs without proper planning and monitoring and evaluation is often neglected. <sup>17</sup> Community health workers are not paid or adequately incentivized to provide cost-effective interventions. <sup>17</sup>

### Central African Republic

The Central African Republic (CAR) has made very little progress towards MDG5: in 1990, the MMR was 930, while in 2010 it had only slightly declined to 890. CAR has seen years of political and military conflict; poverty and unemployment are rampant. The country is ranked 180th on the Human Development Index. A report from Médecins Sans Frontières (MSF) states that CAR is in a "state of chronic medical emergency," with excess mortality above "what is considered to be the 'emergency threshold,'" even as the government and international community have been decreasing their financial commitments to the country's health infrastructure. Health facilities in the capital city are almost entirely funded and staffed by international organizations; health care in rural areas is often limited to basic first aid. Political turmoil has led to an increase in internally displaced populations, who often face food insecurity and malnutrition, which can intensify maternal health complications. There is only one midwifery training program in the country, which graduated just 30 people in 2006. Midwives have yet to be fully integrated into the national health system; trained midwives have trouble finding employment with the government, limiting their accessibility.

A recent coup in March 2013 has led the prime minister to refer to CAR as an "anarchy, a non-state." With this in mind, it is unlikely that CAR will be able to make further progress towards MDG5 without targeted outside assistance.

#### Somalia

Unfortunately, Somalia has regressed in regards to MDG5. Its MMR in 1990 was 890; by 2010, the MMR had increased to 1000.<sup>24</sup> Somalia has been without a central government for more than 2 decades, making the development of coherent plans to improve maternal health difficult. By 2010, 80% of the population was without access to even basic health services.<sup>25</sup> Numerous international organizations work to provide health care within Somalia, but their efforts are often hindered when workers are kidnapped or killed.<sup>26</sup>

But conditions may be improving. In late 2012, a fledgling federal government was formed. In March 2013, the government announced a series of new Health Sector Strategic Plans, which aim to provide universal basic health care by 2016.<sup>27</sup> The focus will be on health system financing, human resources, access to drugs, and infrastructure development, and the HSSPs are expected to cost about US\$350 million. The government has also established the Somali Reproductive Health National Strategy and Action Plan 2010-2015, which aims to improve birth spacing, increase access to safe delivery practices, and reducing female genital mutilation.<sup>25</sup> The Directorate of Health has been working with the WHO and other UN agencies to focus on training midwives and improving access to family planning.

# South Africa

Despite being the wealthiest country in Africa and having fairly substantial investments in health system improvements, South Africa has seen an increase in its MMR in recent years. In 1990, the country's MMR was 250 per 100,000 live births; in 2010, the number was 300, far from the MDG5 target of 63.<sup>28</sup> National policies have provided an expansion in basic services particularly in primary health care, and per-capita health expenditure (\$748) is the highest in sub-Saharan Africa.<sup>29</sup> Abortion has been legalized and user fees for maternal and child health services have been eliminated.<sup>30</sup> But poor handling of the HIV epidemic has led to very high transmission rates and poor access to anti-retrovirals; health care is dominated by AIDS care.<sup>31</sup> Poor control has also led the number of HIV-positive pregnant women to increase substantially,<sup>32</sup> and these women have an MMR almost ten times that of HIV-negative women.<sup>33</sup> An increase in HIV-focused vertical programs is leading to a 'brain drain' from other programs, and precluding overall health system strengthening.<sup>34</sup> While total health expenditure is high, more than 30% goes to tertiary facilities in the urban areas, which limits the funds available for the primary facilities, which are key to reducing maternal mortality.<sup>30</sup>

# **Annex References**

- 1. Countdown to 2015, WHO, UNICEF. Countdown to 2015: Maternal, Newborn, & Child Survival: Afghanistan profile. Geneva: WHO, 2013.
- 2. Physicians for Human Rights. The Taliban's War on Women: A health and human rights crisis in Afghanistan. Boston: Physicians for Human Rights, 1998.
- 3. Acerra JR, Iskyan K, Qureshi ZA, Sharma RK. Rebuilding the health care system in Afghanistan: an overview of primary care and emergency services. *International journal of emergency medicine* 2009; **2**(2): 77-82.
- 4. UNICEF. Afghanistan: Afghanistan's Community Midwives. 2008. http://www.unicef.org/devpro/46000 46782.html (accessed 3 September 2013).
- 5. UNICEF. Panel: Midwifery in Afghanistan. State of the World's Children 2009: Maternal and Newborn Health. New York: UNICEF; 2009.
- 6. Jhpiego. Jhpiego in Afghanistan. Baltimore: Jhpiego, 2010.
- 7. Countdown to 2015, WHO, UNICEF. Countdown to 2015: Maternal, Newborn, & Child Survival: Nepal profile. Geneva: WHO, 2013.
- 8. Government of Nepal. National Safe Motherhood Plan. Kathmandu: Government of Nepal, Family Health Division, 2002.
- 9. Minca M. Midwifery in Nepal: In-depth country analysis. 2011.
- 10. Witter S, Khadka S, Nath H, Tiwari S. The national free delivery policy in Nepal: early evidence of its effects on health facilities. *Health policy and planning* 2011; **26 Suppl 2**: ii84-91.
- 11. Government of Nepal. Family health survey 1996. Kathmandu: Family Health Division, Ministry of Health, 1997.
- 12. Countdown to 2015, WHO, UNICEF. Countdown to 2015: Maternal, Newborn, & Child Survival: Uganda profile. Geneva: WHO, 2013.
- 13. Overseas Development Institute. Delivering maternal health: Why is Rwanda doing better than Malawi, Niger and Uganda? London: ODI, 2012.
- 14. Sibbald B. Ugandan government resolves to make safe motherhood a priority. *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne* 2007; **177**(3): 244-5.
- 15. Wallace A. Political and social challenges facing the reduction of Uganda's maternal mortality rates. Waterloo, Ontario: CIGI, 2012.
- 16. Lozano R, Wang H, Foreman KJ, et al. Progress towards Millennium Development Goals 4 and 5 on maternal and child mortality: an updated systematic analysis. *The Lancet* 2011; (0).
- 17. Nabudere H, Asiimewe D, Mijumbi R. Task shifting to optimise the roles of health workers to improve the delivery of maternal and child healthcare. Kampala: REACH, Uganda Task Shifting Working Group, 2010.
- 18. Countdown to 2015, WHO, UNICEF. Countdown to 2015: Maternal, Newborn, & Child Survival: Central African Republic profile. Geneva: WHO, 2013.
- 19. UNHCR. 2013 UNHCR country operations profile Central African Republic: Working environment. 2013. <a href="http://www.unhcr.org/pages/49e45c156.html">http://www.unhcr.org/pages/49e45c156.html</a> (accessed 3 September 2013).
- 20. UNDP. The Rise of the South: Human progress in a diverse world. New York: UNDP, 2013.
- 21. MSF. Central African Republic: A state of silent crisis. Amsterdam: Médecins Sans Frontières, 2011.
- 22. Green A. The Central African Republic's silent health crisis. *Lancet* 2012; **380**(9846): 964-5.
- 23. Nossiter A. Violent and Chaotic, Central African Republic Lurches Toward a Crisis. New York Times. 2013 6 August.
- 24. Countdown to 2015, WHO, UNICEF. Countdown to 2015: Maternal, Newborn, & Child Survival: Somalia profile. Geneva: WHO, 2013.

- 25. WHO. Midwives at the heart of Somalia's new reproductive health strategy. 2013. <a href="http://www.who.int/features/2013/somalia\_skilled\_birth\_attendants/en/">http://www.who.int/features/2013/somalia\_skilled\_birth\_attendants/en/</a> (accessed 3 September 2013).
- 26. MSF. The risks of childbirth in Somalia. 2012. <a href="http://www.doctorswithoutborders.org/news/article.cfm?id=6052&cat=field-news">http://www.doctorswithoutborders.org/news/article.cfm?id=6052&cat=field-news</a> (accessed 3 September 2013).
- 27. New plan to ensure universal healthcare in Somalia. IRIN News. 2013.
- 28. Countdown to 2015, WHO, UNICEF. Countdown to 2015: Maternal, Newborn, & Child Survival: South Africa profile. Geneva: WHO, 2013.
- 29. Human Rights Watch. "Stop Making Excuses:" Accountability for Maternal Health Care in South Africa. New York: Human Rights Watch, 2011.
- 30. Chopra M, Lawn JE, Sanders D, et al. Achieving the health Millennium Development Goals for South Africa: challenges and priorities. *Lancet* 2009; **374**(9694): 1023-31.
- 31. Chigwedere P, Seage GR, 3rd, Gruskin S, Lee TH, Essex M. Estimating the lost benefits of antiretroviral drug use in South Africa. *Journal of acquired immune deficiency syndromes (1999)* 2008; **49**(4): 410-5.
- 32. Chopra M, Daviaud E, Pattinson R, Fonn S, Lawn JE. Saving the lives of South Africa's mothers, babies, and children: can the health system deliver? *Lancet* 2009; **374**(9692): 835-46.
- 33. Patrick M, Stephen C. Saving Children: 2005- A survey of child healthcare in South Africa. Pretoria: MRC Unit for Maternal and Infant Health Care Strategies, 2007.
- 34. Schneider H, Blaauw D, Gilson L, Chabikuli N, Goudge J. Health systems and access to antiretroviral drugs for HIV in Southern Africa: service delivery and human resources challenges. *Reproductive health matters* 2006; **14**(27): 12-23.