

2012 World Health Organization Safe Abortion Guidance:  
THE NEED FOR MONITORING AND EVALUATION

By

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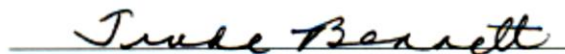
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## ABSTRACT

Unsafe abortion persistently ranks as one of the highest predictors of maternal death. Complications from unsafe abortion account for 13 percent of global maternal mortality, and have remained unchanged from 2003 to the present. A need for hope, resolve, research, and legalization of safe abortion policies within developing countries must be a global priority. Negative health consequences exist when restrictive practices and policies limit a woman's right and access to safe abortion, to reproductive autonomy, and to health. Access to family planning methods and contraceptive education are essential elements to decrease the need for abortion; however, these tools will not eliminate the need for safe abortion. As one of the global leaders in the creation and publication of clinical and technical guidelines, the World Health Organization (WHO) issued their second edition in 2012 of *Safe Abortion: Technical and Policy Guidance for Health Systems* to promote access and provide guidance to improve safe abortion services for all women and adolescents. This paper explores the dissemination and application strategies of WHO's Guidance for Safe Abortion through the *WHO Strategic Approach to Strengthening Sexual and Reproductive Health Policies and Programmes* and attempts to examine common barriers countries experience when implementing the Guidance. Currently, the Guidance is not monitored or evaluated, which demonstrates a serious gap in implementing safe abortion practices. In conclusion, the paper offers the preliminary development of an implementation tool to assist countries in adopting WHO safe abortion recommendations and bridge the gap between safe and unsafe practices.

## THE SILENCED EPIDEMIC: Unsafe Abortion

In 2008, an estimated 21.6 million unsafe abortions were performed worldwide according to the World Health Organization,<sup>1</sup> up from 19.7 million in 2003, see Figure 1 below.<sup>2</sup> A projected 48,000 women die every year from complications due to unsafe abortion and an additional 5 million are left disabled.<sup>1</sup> This devastatingly large number of deaths corresponds to one of the leading causes of maternal mortality. Worldwide, 13 percent of all maternal deaths are due to unsafe abortion practices.<sup>1,3</sup> The consequences of unsafe abortion are a public health problem in developing countries, highlight grave social injustices, and violate human rights for women seeking access to health care. Of these unsafe abortions, 98 percent occur in developing countries.<sup>2</sup> Without addressing the steady rise in unsafe abortion, priority countries will not reach their Millennium Development Goal (MDG) targets of reducing maternal mortality by 75 percent.<sup>4</sup>

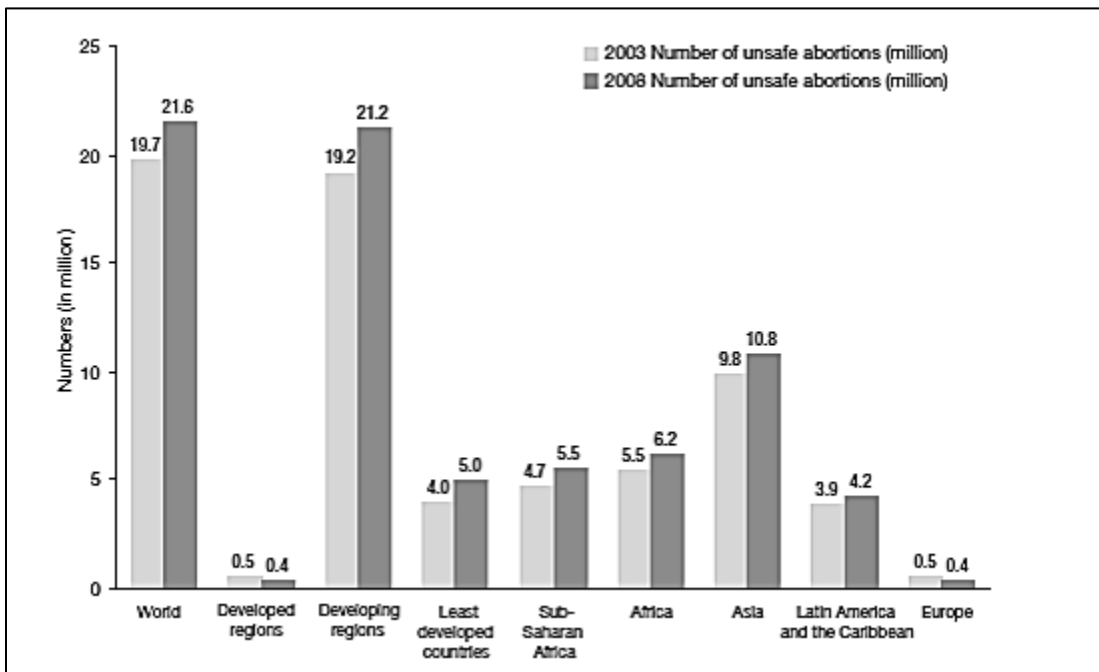


Figure 1: Estimated annual number of unsafe abortions, globally and by major regions, 2003 and 2008.

Source: *Unsafe Abortion: Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008*. World Health Organization, 2011. Page 1.

The WHO defines unsafe abortion as “a procedure for terminating an unintended pregnancy that is carried out either by a person lacking the necessary skills or in an environment that does not conform to the minimal medical standards, or both”.<sup>5</sup> Studies show that morbidity and mortality due to unsafe abortion are highly preventable. Safe abortion is proven to be one of the safest medical procedures.<sup>6</sup> It is necessary to advocate for preventive services for unwanted pregnancies, promote better access to sex education and family planning methods, and increase access to safe abortion services.

Two main factors trigger this high rate of unsafe abortion: access to safe, legal abortions and unplanned pregnancy. The *rate* of unsafe abortions has remained steady over the past fifteen years, particularly in developing countries where abortions are highly restricted by law, or in countries where abortion is legal but accessing quality care is impossible.<sup>7</sup> For example, in India, a liberal abortion law exists, allowing abortion on several grounds; however, access to and affordability of safe abortion services are quite poor. In 2002, a study indicated 6.4 million abortions took place in India, but only 2.4 million were considered safe.<sup>8</sup> Globally, women experiencing unintended pregnancy still attempt to self-induce an abortion or obtain illegal abortions by medical providers. There are various reasons women choose to abort, some include: poverty and socioeconomic distress, parity and birth spacing, partner abuse, maternal or fetal health, rape, and incest. However, factors such as policy, law, and finances place impenetrable obstacles on women’s reproductive rights, particularly in developing nations. The following sections explore how these factors severely limit a woman’s right to safe reproductive health and autonomy.

Legally restricted or narrow abortion policies are associated with higher morbidity and mortality in women.<sup>7,9</sup> Over 61 percent of the world's population lives in countries with unrestricted legal access to abortion, while 26 percent of the world's population resides in countries where abortion is highly restricted.<sup>6</sup> Where abortion is illegal and highly policed, 23 unsafe abortions are performed for every 1,000 women aged 15-49; conversely, the rate of unsafe abortion in countries where abortion is legal is two for every 1,000 women.<sup>6</sup> Legal restrictions placed on abortion seriously affect a woman's ability to access and procure a safe abortion. Maternal deaths are intrinsically linked to unsafe abortions in nations where abortion laws and practices are highly restricted.<sup>6</sup> Due to the size of the population, the South-Central Asia Subregion has the highest number of unsafe abortions of any region in the world.<sup>1</sup> In 2008, an estimated 6.8 million unsafe abortions were performed, or 17 unsafe abortions performed for every 1,000 women of reproductive age, contributing to the large number of unsafe abortions.<sup>1</sup>

Legalizing, safeguarding, and promoting safe access to abortion does not lead to an increase in the number of women pursuing abortion. Countries that legalized abortion laws such as Barbados, Canada, South Africa, Tunisia, and Turkey did not have an influx of women seeking abortions after countries liberalized laws.<sup>6</sup> Further, the Netherlands, which has highly liberal abortion laws, has the lowest abortion rate in the world.<sup>10</sup> However, if countries only focus on legalizing abortion, they will be unsuccessful in preventing unsafe abortions and decreasing maternal mortality.<sup>2</sup> In both India and Zambia, abortion was legalized in the 1970s, but finding and accessing safe abortions remain difficult. In India, abortion is mostly confined to urban areas where only 20 percent of all health facilities offer abortion services, despite the nationwide mandate.<sup>6</sup> Many of these clinics lack necessary equipment for abortion procedures and adequately trained staff.<sup>6</sup>

Women's misperceptions of abortion laws also intervene in the attempt to access appropriate, safe care.<sup>2,6</sup> Lacking knowledge and awareness about abortion legislation makes women vulnerable to unsafe practices, financial exploitation, and legal prosecution.<sup>6,11</sup> In numerous countries and cultures, the stigma attached to abortion affects women's interpretation of the law. In some Asian countries, extramarital affairs and pregnancies resulting from these relationships as well as the abortions performed to terminate these pregnancies are illegitimate or illegal.<sup>6,11</sup> Women's misunderstanding and misperceptions of the law can create false barriers to accessing care, such as the need for spousal approval, forcing women to find unsafe alternatives.<sup>6</sup>

Socioeconomic disparities among women are an underlying factor in obtaining unsafe abortions in nations where abortion is rigidly policed or where abortion is legal but access to safe services is highly restricted. Financially stable women are able to afford and receive safe, clandestine abortions in most situations. Poor and other disadvantaged women, such as adolescents and women in rural communities, find unqualified medical providers to perform the service or attempt to self-abort the fetus, resulting in major health complications and sometimes death.<sup>3</sup> Thus, economic disparities put disadvantaged women in an increasingly vulnerable state.

Further, the cost of maintaining the health of women who suffer from unsafe abortion complications financially burdens countries, especially developing nations which already lack resources. Some hospitals in both low and middle-income countries dedicate 50 percent of their budget towards treating complications of unsafe abortions.<sup>11</sup> Directly, costs include hospital personnel, medications, supplies, equipment, and overnight hospital stays.<sup>3</sup> In South Africa, a study conducted in 1997 estimated the yearly cost of treating complications due to unsafe abortion equaled about US \$1.4 million.<sup>12</sup> In the public sector, the burden of cost is immense;

privately, the cost of abortion for women and households can push families into debt and poverty.<sup>3</sup>

Although much harder to define, verify, or measure, indirect costs of unsafe abortion include: loss of productivity in a household due to maternal death or morbidity; negative effects on children's health and education if a mother dies or is severely disabled; diversion of medical resources for abortion complications; complications with subsequent pregnancy; infertility; stigma; and other psychosocial problems.<sup>3,6</sup>

Mortality and morbidity of unsafe abortion are two indicators used to inform researchers and health professionals who attempt to develop policies and programs to minimize the effects of this global issue.

Recent data (2008) indicate that 48,000 women died from unsafe abortions.<sup>1</sup> This number corresponds to an estimated 13 percent of all maternal deaths. Sadly, more than half of these preventable deaths occurred in Sub-Saharan Africa and one-third in South Central Asia.<sup>3</sup> Contrastingly, in developed countries, abortion-related deaths are rare because many of these countries have legal abortion policies providing safe accessible ways to find a skilled professional, trained to use safe methods in a hygienic environment.<sup>13</sup> The abortion maternal mortality ratio (number of unsafe abortion deaths per 100,000 live births) varies across developing regions.

Morbidity is a common negative health outcome from unsafe abortion practices. About 20-50 percent of women who experience unsafe abortion are hospitalized for health-related complications.<sup>6</sup> It is estimated that in 2005, 5 million women in developing countries were hospitalized to treat complications from unsafe abortions.<sup>3</sup> The breakdown of developing countries follows: 2.3 million women in Asia, 1.7 million women in Africa, and 1.0 million



women in Latin America and the Caribbean were treated for negative health outcomes of unsafe abortion.<sup>3</sup> Unfortunately, of the women who experience medical complications and require medical attention, only 25 percent receive necessary treatment in a medical facility. The remaining women who have complications, ranging from minor to severe, never seek or obtain the care they need.<sup>3,7</sup> Types of complications include: hemorrhage; sepsis; peritonitis; and trauma to the cervix; vagina; uterus; and other abdominal organs.<sup>14</sup> Life-threatening infection or hemorrhage can result in emergency hysterectomy. Also, gangrene is commonly attributed to abortions caused by the insertion of foreign objects into the uterus or vagina.<sup>6</sup>

Although measuring acute and immediate effects of unsafe abortion is easier, reporting, recording, and assessing long-term effects of unsafe procedures are also necessary. The WHO estimates that 20-30 percent of unsafe abortions result in prolonged reproductive tract infections.<sup>1</sup> Out of these reproductive tract infections, 20-40 percent progress to upper genital tract infections and, potentially, infertility.<sup>6</sup> The WHO also estimates that 2 percent of women of reproductive age (15-44) are infertile and 5 percent have chronic infections due to unsafe abortion procedures. Numerically, these percentages correspond to 1.7 million women experience secondary infertility and 3 million women suffer from prolonged reproductive tract infections.<sup>3,6</sup> In some regions, particularly in sub-Saharan Africa (SSA), cultural and social effects of infertility stigmatize and complicate women's lives. Childbearing is highly valued in SSA and is essential to establish a woman's status within a community, attain emotional fulfillment, and secure economic stability.<sup>15,16</sup> Infertility can shatter a woman's social network, marital stability, economic well-being, and mental health.<sup>15,17</sup> In Tanzania, a study cited divorce, disinheritance, poor relations with in-laws, and physical violence and abuse as consequences of infertility in women.<sup>15,18</sup> The effects of infertility in regions that strongly value childbearing

further highlight the negative factors that result from unsafe abortion practices that can indefinitely compromise women's health and vitality.

Other medical complications and negative outcomes develop when a woman attempts to seek professional care for follow-up treatment after an unsafe abortion.<sup>6</sup> Several delays might occur when seeking care: not recognizing the need for treatment, lacking transportation to a medical facility, and not being able to finance either the medical treatment or transportation to the hospital. After reaching the medical facility, women are often scorned, mistreated, and met with hostility. Occasionally, treatment for these women is delayed and at times they are never treated. Women who are lucky enough to receive some type of antibiotic must wait until a clinician deem them "stable" for surgery; many of these women needlessly die waiting for the antibiotics to take effect. Such delays are notoriously dangerous for women who undergo unsafe abortions.<sup>6</sup>

The severity of health complications due to unsafe procedures are a result of the type of abortion method used. Several thousand years ago, traditional Chinese methods for inducing abortion included the use of mercury.<sup>11</sup> Today, several methods are used to induce abortion. Unsafe methods can be divided into several comprehensive categories: oral and injectable medications, intrauterine foreign objects, uterine injections, enemas, and abdominal trauma.<sup>6</sup> In some developing countries, historical traditions are still commonly used and involve home remedies, such as teas, plant or root concoctions, and animal excrement. Foreign bodies inserted into the uterus puncture the uterus or other abdominal organs. In the South Pacific and in some parts of Africa, some women use vigorous abdominal massage to disrupt the pregnancy. Providers pummel the lower abdomen to induce abortion, but can simultaneously burst the uterus and kill the woman.<sup>6</sup>

These extreme measures illustrate a woman's desperate attempt to disrupt pregnancy. Even in different cultural, global, and environmental contexts, self-induced unsafe abortion remains a pervasive problem that threatens lives of women and girls. As discussed above, abortion techniques vary across time and culture and include a variety of abortifacients, mechanical devices, strenuous physical activity, excessive abdominal massage, and starvation.<sup>13</sup> This story rings true, even in developed countries. Prior to legalized abortion in the United States, women in New York were surveyed and asked about techniques used for self-induced abortion.<sup>18</sup> Of the 899 respondents, 74 tried to abort one or more pregnancies and 338 women reported they knew someone who attempted to self-abort. Out of the attempts to terminate a pregnancy, 80 percent tried to perform the abortion themselves.<sup>18</sup> Other self-reported techniques included: the insertion of tubes or liquids into the uterus; coat hangers; knitting needles; and slippery elm bark (the bark expands when moistened, causing the cervix to open). Injection of toxins and medications into the uterus was another common practice and performed with douche bags or turkey basters. Women surveyed noted the use of placing potassium permanganate tablets in the vagina; however, this method was not effective at inducing abortion, but did cause severe chemical burns to the vagina and would occasionally burn through the bowel.<sup>18</sup>

To grasp the pervasiveness of the problem, it is important to understand the methodology used to evaluate the number of unsafe abortion-related deaths and injuries. Although the maternal mortality and morbidity reports are striking, scholars think the numbers are not good representations of the true deadly nature of unsafe abortion—that the numbers are an underestimation.<sup>2,14</sup> Reporting abortion-related deaths can be difficult and quantitatively inaccurate. Most unsafe abortion procedures are performed in clandestine environments by untrained personnel, who discourage and de-incentivize reporting abortion-related deaths.<sup>6</sup> One

concern about missing data is the representation or misrepresentation of data from all women who seek abortions.<sup>3</sup> Some of the numbers assessed and evaluated are gathered from medical facilities which have some capacity to treat unsafe abortion complications. Unfortunately, not all women who attempt to terminate pregnancy are counted or heard.

Imprecise measurements are also reflected in death classifications of abortion-related mortality.<sup>8</sup> This could be due to medical staff's lack of knowledge about death classifications, inaccurate conclusions about cause of death, and uncertainty about a woman's pregnancy status at time of death.<sup>3</sup> Clinicians who declare maternal deaths might be unwilling to state the death was due to an abortion, especially in areas where abortion is illegal and stigmatized. When abortions are clandestine, women are also reluctant to report having one, due to social and legal implications.<sup>2</sup>

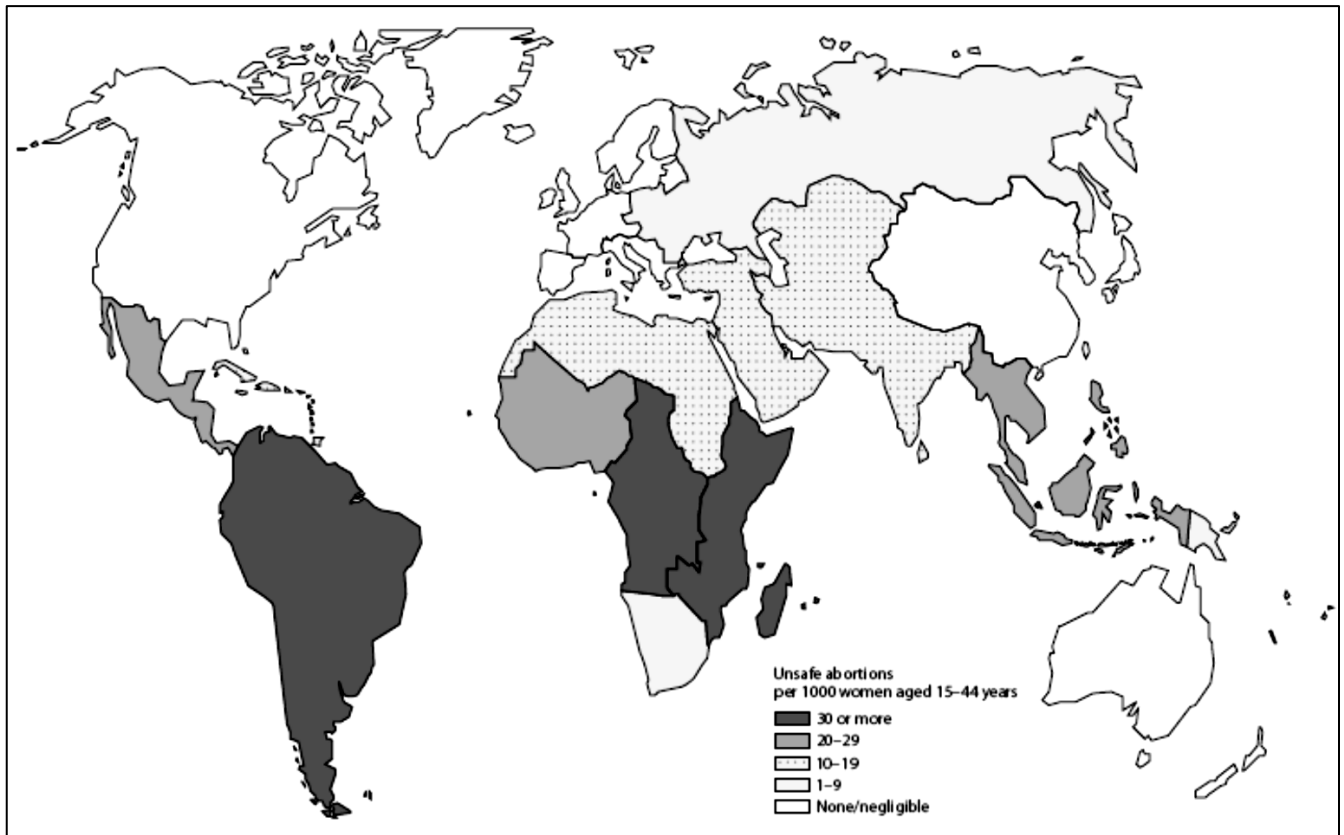
In some regions of the world, measurements of morbidity have not been assessed or reviewed for precision or quality, making them estimations. Lack of information on trends of severity of morbidity limit conclusions about the care women receive. However, those limited data indicate women seek the same amount of post abortion care in medical facilities as in the past. For example, national study data from Mexico and Peru from 1990-2006 show no decrease in women seeking post-abortion medical care at a hospital.<sup>3</sup> Although the number of women who seek medical attention has not decreased, clinicians note in the past two decades the severity of cases has declined.<sup>3,6</sup> These numbers are not exact, and evidence of the severity of cases is limited. One way to quantify trends in severity is evaluating the types of symptoms, outcomes, and diagnoses of women entering the hospital.

However, researchers and health organizations continually try to address the challenges of accurately measuring the severity of abortion-related complications. The WHO developed a

study design in 1986 to help researchers measure these consequences. The study attempted to collect data about symptoms and diagnoses and classify women according to certainty of abortion (whether women certainly had an induced abortion, probably or possibly had an induced abortion, or whether the abortion was spontaneous).<sup>19</sup> Since the WHO study, other scholars have been building, tweaking, and adding to the literature base. For example, researchers developed a standardized questionnaire allowing clinicians to classify the complication as severe, moderate, or mild.<sup>3</sup> These methods of evaluating severity of post-abortion complications have significantly evolved from the early 1980s when the only quantifiable distinction was between miscarriage and induced abortion. Currently in the literature, severity of post-abortion complications is distinguished from all pregnancy losses.<sup>3</sup>

### **Trends in unsafe abortion: A Global Epidemic**

As stated earlier, the WHO estimates that in 2008, 21.6 million unsafe abortions happened worldwide, up from 19.7 million in 2003. The WHO attributes this rise to an increase in the number of women of reproductive age.<sup>1</sup> However, the unsafe abortion *rate* from 2003-2008 remained steady.<sup>1</sup> An estimated 48,000 women died from unsafe abortion in 2008 compared to 56,000 in 2003 and 69,000 in 1990.<sup>1</sup> Almost all abortion-related deaths are in developing regions. Discussing trends in unsafe abortion requires accurate comparisons and knowledge of abortion rates (the number of unsafe abortions per 1,000 women aged 15-44) and the unsafe abortion ratio (the number of unsafe abortions per 100 live births). Nearly all unsafe abortions (98 percent) occur in developing regions of the world and the unsafe abortion rates are higher in the least developed countries.<sup>6</sup> Please see Figure 2 for an illustration of the distribution of the number of unsafe abortions.



**Figure 2: Estimated annual number of unsafe abortion per 1000 women aged 15-44 years, by subregion, 2008.**  
 Source: *Unsafe Abortion: Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008*. World Health Organization, 2011. Page 20.

Abortion trends in several countries are consistent with the accessibility and utilization of contraception, which is evident in the number of unsafe abortions in regions where contraception is not widely used. For example, unsafe abortion and contraceptive use differ extensively in African regions and sub-regions. Rates of unsafe abortion range from 9 percent in Southern Africa to 36 percent in Eastern and Middle Africa; further, contraceptive use in Eastern and Middle Africa is low, 26 percent and 19 percent, respectively.<sup>1,2</sup> However, in Southern and Northern African regions, contraceptive use is high and safe abortion is easier to access; therefore, unsafe abortion in these regions is low.<sup>2</sup> In 2008, the abortion rate in Central America

was 29 per 1,000 women and in the Caribbean the rate was 18 per 1,000 women; this includes Cuba, where abortion is legal and easily accessible.<sup>1</sup>

Asia's unsafe abortion rate is estimated at 11 per 1,000 women.<sup>1,2</sup> South Central Asia has the highest number of unsafe abortions of any sub-region in the world, most likely due to the large population. South East Asia has the highest unsafe abortion rate at 22 per 1,000 women, compared with the worldwide unsafe abortion rate of 17 per 1,000 women.<sup>1,2</sup> These high rates occur even though 53 percent of women in the region use reversible contraceptives and 47 percent use any family planning method.<sup>2</sup> These data further indicate that contraceptive use does not eliminate the need for abortion, but highlight the significance of accessing and procuring safe abortion in South East Asia. Little change in unsafe abortion rates was found between 2003 and 2008; however, comparing developed regions to less developed regions is striking—rates range from over 30 per 1,000 in less developed regions of SSA and Latin America, to 20 per 1,000 in Asia, to 6 per 1,000 in more developed regions.<sup>1,2</sup>

## **Reducing need, promoting access—Introduction of WHO guidance**

In order to facilitate and implement quality health care for any procedure, illness or disease, professional guidelines and recommendations are written, critiqued, evaluated, and disseminated through professional circles. The case for clinical guidance and policy recommendation for abortion should be no different. However, it wasn't until 2003, three years after the Millennium Development Goals were ratified, that the World Health Organization developed and disseminated the first technical guidance on norms and standards for quality abortion care, *Safe Abortion: Technical and Policy Guidance for Health Systems*. WHO's clinical and policy guidance was intended to aid governments, nonprofit organizations and other

agencies to reduce unsafe abortion practices by informing safe clinical abortion procedures where lawful.<sup>20,21</sup> In July 2012, the WHO released the Second Edition of the safe abortion guidance that updates and reflects more evidence from clinical trials on new methods and techniques for safe abortion procedures.<sup>22</sup>

For centuries, women always found a way to abort regardless of legal status, financial and social circumstances, or religious views.<sup>13</sup> Researchers, clinicians, public health providers, and legal communities must join together to prevent these useless deaths. Currently, tangible preventive strategies exist in both developed and developing countries. These measures include: contraceptive use; advanced medical technologies; and safe, effective post-abortion treatment. Preventing unsafe abortion complications requires fast and effective treatment. Techniques are continuing to improve the safety of abortion procedures, and these methods must be disseminated throughout political and professional health channels to prevent women from premature death and disability. As discussed in the 2012 WHO Safe Abortion Guidance, clinical management of safe abortion starts before, during, and after the procedure, making the procedure safe, effective, and efficacious.<sup>22</sup> Prevention of unsafe abortion starts with the correct determination of the woman's gestational age, followed by routine use of antibiotics to reduce infection after a surgical procedure. Throughout the initial stages of safe abortion care, correct, accurate, and easy-to-understand informational materials about the procedure should be accessible and provided by the clinician or provider.<sup>22</sup> During the procedure, clinicians should follow evidence-based, clinical guidelines to ensure quality care during the abortion; safe methods save lives. Following the abortion procedure, safe post-abortion care and follow-up with contraceptive information should be routine for every woman undergoing an abortion procedure.<sup>22</sup>



## **HISTORY OF WHO ABORTION GUIDANCE: From Cairo to the present**

In the early 1990s, abortion data started being collected by WHO and other global health organizations and the negative health effects of unsafe abortion became increasingly well documented.<sup>23,24</sup> Consequently, WHO crafted managerial guidelines that promoted quality and availability of abortion care in primary health care systems around the world, and formulated guidelines for emergency abortion care in multiple levels of health care systems.<sup>23,25</sup> Up to this point, WHO failed to issue any substantive guidance for safe abortion provision; these published guidelines were the first major hurdle to advance abortion care and endorse the idea that abortion can and should be safe. However, this first managerial guidance failed to include information for health care providers regarding training to provide safe abortion and follow-up post-abortion care.<sup>23</sup> The intergovernmental nature of WHO did not give the WHO Secretariat the political authority to mandate that all abortions should be safe and legal for every member state, which left WHO in a precarious position to provide guidance on a highly politicized, legal issue.

One year after WHO published the managerial guidelines for abortion, the United Nations convened 179 governments in Cairo to adopt the Programme of Action (POA) that laid a foundation for women's rights as human rights, changing the face of family planning and reproductive health from 1994 to now. The 1994 United Nations International Conference on Population and Development (ICPD) held in Cairo was a seminal moment in global population policy and politics.<sup>26</sup> An impressive mix of professional groups, NGOs, and 180 government bodies attended the conference and agreed on a Program of Action. The Cairo POA redefined population policy by announcing the end of divisive demographic targets and implored public health professionals to focus on women's reproductive health and human rights.<sup>26</sup> The POA is the first UN document that acknowledges family planning and reproductive health as a human

right.<sup>27</sup> The declaration replaced the demographic rationale for family planning by providing a broader definition of reproductive health, establishing women's status as a central part of development.<sup>26,28</sup> Although the POA is hailed by scholars as a necessary reversal to anti-natalist policies, the consensus was finalized under contentious circumstances, creating a uniquely diverse document that reflects all parties involved in its ratification.<sup>29</sup> For example, the POA identifies that individuals have the right to freely decide the number and spacing of children and have the information to do so, the right to attain the highest standard of sexual and reproductive health, and the right to make reproductive health decisions free from discrimination, coercion or violence.<sup>30</sup>

It is necessary to acknowledge Cairo's lasting effect, shifting away from Malthusian principles and putting women's health at the center of development and human rights policies. The POA dedicates an entire paragraph to abortion and, in so doing, recognizes that unsafe abortion is a major public health problem that should be reduced by providing better family planning health services and increasing the quality of training for providers.<sup>23</sup> The POA adds a caveat for countries and governments where abortion has narrow legal indications—even though abortion is illegal for many indications, all abortions that occur should still be safe.<sup>23</sup> The Cairo conference was not just a paradigm shift for reproductive health and women's rights, but the POA gave significant weight to an issue largely ignored by much of the global health community—abortion was now on center stage.

A major breakthrough in recognizing the need for safe abortion technical guidance came at the five year review of ICPD POA. At the 1999 meeting, the POA was updated to reflect that:

*In circumstances where abortion is not against the law, health systems should train and equip health-service providers and should take other measures to ensure that such*

*abortion is safe and accessible. Additional measures should be taken to safeguard women's health.*<sup>31 para8.5</sup>

This addition to the POA gave WHO, the primary international health standard-setting organization, a mandate to elaborate and conduct further research updating the 1995 WHO managerial guidelines. Several international organizations and invested governments encouraged WHO to elaborate the guidance to include any “additional measures to safeguard women’s health”.<sup>23</sup>

Because both legal and health systems factors affect the provision of safe abortion services, WHO wrote the abortion guidance to include technical guidelines for clinicians, requirements for safe abortion services, and legal and policy recommendations to improve women’s access to safe abortion services.<sup>21,23</sup> The guidance began with an extensive review of evidence-based safe abortion methods that was ultimately evaluated and finalized by technical experts and legal scholars. Finally, after successive revisions, the WHO safe abortion guidelines were announced at the “Action to Reduce Maternal Mortality in Africa: A Regional Consultation on Unsafe Abortion” in Addis Ababa, Ethiopia in 2003. The guidance was subsequently translated into all official UN and other languages.<sup>21,23</sup>

Disseminating the guidance and promoting its use to amend national clinical and policy guidelines took several years and multiple national and international workshops and activities to create awareness of the 2003 Safe Abortion Guidance. WHO promoted the 2003 Safe Abortion Guidance through the Department of Reproductive Health and Research’s framework, *WHO Strategic Approach to Strengthening Sexual and Reproductive Health Policies and Programmes*, which will be discussed in a later section. As of February 2013, 13 countries participated in the

WHO Strategic Assessment, Part One of the Strategic Approach, including Moldova, Mongolia,<sup>32</sup> Romania,<sup>33</sup> Viet Nam, and Malawi.<sup>34</sup>

## **CHANGING GUIDANCE: More evidence, better techniques, safer methods**

The ongoing need for evidence-based global guidance on promoting safe abortion practices and policy recommendations to liberalize abortion laws prompted WHO to revise the WHO Safe Abortion Guidance in July 2012. As new evidence from clinical trials advanced safe abortion methods and practices, the Reproductive Health and Research Department revised and reissued new safe abortion guidance for policy-makers, providers, and health program managers, reflecting new medical advances. Additionally, new literature on health service delivery and improvements in human rights law and policy also influenced the nature and construction of the 2012 Safe Abortion Guidance.<sup>23,35,36</sup> Updated estimates of unsafe abortion were reported and are also reflected in the Guidance. The 2012 Safe Abortion Guidance was updated in accordance with strict WHO standards for technical guideline publication and dissemination and extensively reviewed by experts in several fields. The 2012 Guidance was initially published in English, and French; Russian; and Spanish versions will shortly follow.<sup>23</sup>

The 2012 Safe Abortion Guidance focuses primarily on promoting quality abortion care through the use of new technology and medical advances, targeting barriers to accessible and high quality care by promoting the provision of affordable abortion services for all women, and imploring legal and policy change to liberalize abortion restrictions. There are 14 recommendations in the 2012 Safe Abortion Guidelines, some are highlighted below. Key clinical recommendations include:<sup>22,37</sup>

- Using vacuum aspiration or medical abortion (mifepristone followed by misoprostol) instead of dilation and sharp curettage;
- Avoiding unnecessary ultrasonography and laboratory testing;
- Administering perioperative antibiotics;
- Using cervical preparation for all surgical procedures beyond 12-14 weeks gestation;
- Adequately informing women of symptoms following abortion procedures;
- Recognizing the need to treat incomplete abortions;
- Following abortion procedures, counseling women on family planning methods and contraception.

The 2012 Safe Abortion Guidance is broken down into three distinct categories: clinical care for safe abortion, service delivery and management, and legal and policy considerations. Chapter 2 addresses clinical and technical guidance for safe abortion care and will be accompanied by a handbook for abortion providers, *Clinical Practice Handbook for Safe Abortion Care*, publication forthcoming. Some of the clinical recommendations from Chapter 2 have been listed above, but another important change issued in the 2012 Guidance is that safe abortion is not limited by gestational age.<sup>38</sup> The 2003 Guidance listed safe abortion methods up to 22 weeks gestation, implying that safe abortions could not happen beyond that age due to patient safety. Consequently, the 2012 Guidance indicates that appropriate abortion methods differ due to duration of pregnancy and offers abortion methods after 22 weeks gestation.<sup>22,38</sup>

Planning and managing safe abortion care is addressed in Chapter 3 and focuses on health systems and delivery of services encouraging them to be readily available and accessible to all women and adolescents.<sup>19</sup> Chapter 3 highlights the need to streamline abortion care and recommends further exploration to de-medicalize abortion, framing safe abortion as a non-

medical procedure that can be provided by non-physicians using medications and not intrusive surgical techniques. Additionally, this chapter identifies policies and restrictive practices that limit a woman's right to safe abortion and indicates measures essential to increase safety and provision of services by eliminating restrictions, implementing inclusive policy, and advocating that women's rights be the driving force for change.<sup>38</sup>

Legal issues and policy considerations are discussed in Chapter 4 through the use of evidence-based systematic reviews and human rights standards in relation to abortion restrictions. The inextricable link between human rights, law, and women's health is systematically dissected and recommendations are made based on evidence showing the effects of policy, not the intended effects of policy.<sup>38</sup> The Guidance establishes broad interpretations of the legality of abortion and encourages amending laws to reflect WHO's definition of health: "a state of complete physical, mental, and social well-being".<sup>38</sup>

The recommendations in the 2012 Guidance not only encourages the use of new methods and modernized techniques for abortion, but acknowledges that abortion is and should be a deeply personal choice. The most poignant recommendations underline the importance of giving voice to the female patient, giving her the autonomy to make the best choice for her abortion procedure, pain management, and post-abortion contraception.<sup>36</sup> The 2012 WHO Safe Abortion Guidance goes well beyond the clinical aspects of abortion care by dedicating several chapters of the 123-page document to the impact of restrictive abortion policy on health and well-being of women—indicating that legal and policy change is often the first, if not the most important, step to reduce unsafe abortion.

## **ASSESSING and DISSEMINATING THE GUIDANCE: WHO Strategic Approach to Strengthening Sexual and Reproductive Health Policies and Programmes**

Two years after the 2003 WHO Safe Abortion Guidance was published, 20,000 printed copies were distributed and 5,000 copies were downloaded from the WHO website. However, counting the number of distributed and downloaded copies fails to address the implementation of recommendations to promote safe abortion practices. As stated in the Introduction to the 2012 Guidance, dissemination of the recommendations will mirror those of the 2003 guidelines. Dissemination of the Guidance includes the distribution of the print version and application of the WHO Strategic Approach to Strengthening Sexual and Reproductive Health Policies and Programmes to several country and regional workshops.<sup>22</sup> The rationale of the workshops is to strengthen safe abortion care based on WHO Safe Abortion Guidance within sexual and reproductive health programs.<sup>22</sup>

The WHO Strategic Approach to Strengthening Sexual and Reproductive Health Policies and Programmes is built on the premise that in order for countries to carry out the mission of the Millennium Development Goals and global health treaties, decision-makers and reproductive health managers must be responsible to improve access to family planning and quality of reproductive health services, including safe abortion care.<sup>39</sup> The Strategic Approach is intended for public sector health care programs and entails three processes to assist countries that want to assess reproductive health needs, test existing policies and interventions, and potentially scale up successful programs and policies.<sup>39</sup>

The first step in the Strategic Approach process is an extensive assessment of the current health situation by a multidisciplinary team, which includes gathering data and analyzing

existing sources.<sup>39</sup> The team conducts field work in the country to capture qualitative data that leads to recommendations to improve new policies, health services, delivery, and interventions. The second step includes further development and adaptation of the recommended health service interventions for reproductive health problems which could include: enhanced community participation, tools and guidelines, training materials and sessions, and policy implementation.<sup>39</sup> Following research, analysis, and implementation of programs or interventions, the third step includes developing a strategy for scaling up a successful intervention in coordination with the on-site team and other organizations to ensure fidelity. All three steps of the Strategic Approach depend on the nature of the community, characteristics of the health sector, and political and social will of the governing body.<sup>39</sup> An enabling environment where governing bodies and decision-makers accept responsibility for the lives of and health of women is of the utmost importance regarding access to safe abortion care.

Throughout the Strategic Approach, WHO grounds each step in a framework that promotes quality of care and equitable access to care. These goals are achieved through several interventions, including training, supervision, monitoring systems, introduction of technical guidelines, and policy change.<sup>39</sup> WHO assumes that these steps create consensus to implement recommendations and ideas to scale up reproductive health services by planting the Strategic Approach in the country, giving ownership to policy-makers, community members and organizations, health managers, health care providers, and technical experts. WHO maintains that building a sustainable, country-specific process by incorporating various elements of the health sector—from the community health worker to the Minister of Health—leads to the improvement of reproductive health services.



Several countries have participated in the WHO Strategic Approach, but only 13 have requested assistance implementing the Safe Abortion Guidance.<sup>40</sup> Of the countries that requested assistance, WHO Secretariat and others involved in the approach have only published on three countries that participated: Romania (2004), Mongolia (2008), and Malawi (2011). Countries requesting assistance implementing the WHO Safe Abortion Guidance have only proceeded through Step 1 of the Strategic Approach, the Strategic Assessment. Currently, no country has progressed to Step 2 of the Strategic Approach. Although the Strategic Approach calls for follow-up assessments, follow-up data have not been published.

## **USAFE ABORTION IN AFRICA: 28,000 deaths and counting**

As stated earlier, the estimated number of unsafe abortions continues to rise, almost all in developing countries, and almost all in Sub-Saharan and East Africa. For the purpose of this paper, it is important to examine the political and social context of abortion in Sub-Saharan Africa, the most concentrated area of maternal deaths due to unsafe abortion procedures. Restrictive abortion law and policy creates a void for the provision of safe abortion services, which is increasingly problematic for the growing number of women of reproductive age. Several WHO Strategic Assessments have been conducted in African countries to fill this void and implore Ministers of Health, policy-makers, health program managers, and providers to act and implement the WHO Safe Abortion Guidance. This section tracks progress that some African countries have made implementing the 2003 WHO Safe Abortion Guidance and demonstrates the need for further assessment and implementation in Africa.

Following the ratification of the ICPD Program of Action in 1994, a primary public health system focus in Africa was to provide safe post-abortion care interventions, which

includes care for post-abortion complications, provision of post-abortion contraception, and other reproductive health services.<sup>41</sup> One year after the ICPD in Cairo, the Fourth World Conference on Women in Beijing beseeched governments to review punitive abortion laws.<sup>41</sup> Between 1994 and 2003, Benin, Burkina Faso, Chad, Guinea, Mali, and Ethiopia expanded the legal indications for abortion to include rape, incest, fetal impairment, or threats to maternal health.<sup>41-43</sup>

After the 2003 WHO Safe Abortion Guidance was published, several high level meetings were planned and the Ministry of Health (MOH) and policy-makers convened to discuss the implications of the guidance. Following the Safe Abortion Guidance announcement, the African Union adopted the Protocol on the Rights of Women in Africa which gives women the right to safe abortion for a wide range of health implications.<sup>41</sup> As of October 2006, 21 African countries signed and ratified the Protocol. Additionally, the 2003 WHO Guidance was disseminated through several regional policy venues that advocated for member states to implement abortion services to the full extent of the law and liberalize abortion law and policy. In September 2006, reproductive health experts gathered in Maputo, Mozambique to discuss integrating safe abortion into sexual and reproductive health services for women as part of their commitment to improve women's and maternal health.<sup>41</sup> This conference, the Special Session of the Conference of African Union Ministers of Health, implored MOH to adhere to the commitment they made in Cairo, to protect the lives of women and promote human rights by providing safe abortion care to the full extent of the law.<sup>41</sup>

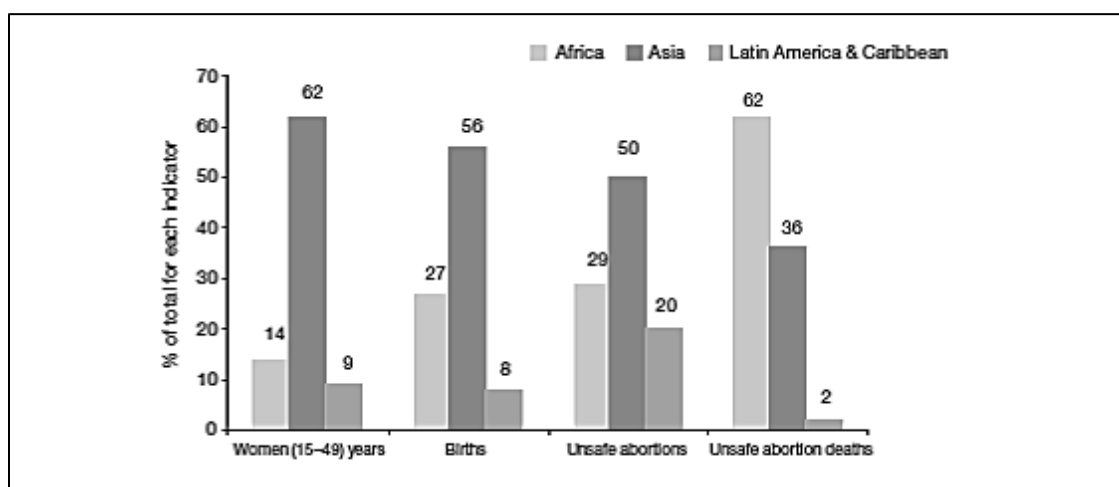
The dissemination of the 2003 WHO Safe Abortion Guidance and ratification of the African Union protocol had significant effects in several African countries. In 2003, Ethiopia was already in the process of reforming and reviewing broader legal indications for abortion. This process was strengthened and reinforced by the publication of the WHO Safe Abortion

Guidance and mobilized key stakeholders to amend abortion policies.<sup>41</sup> The law allows for abortion in the case of rape or incest; pregnancy endangering the life and/or health of the mother; indications of fetal abnormality; if the woman is physically disabled; and in cases where a minor is physically or psychologically not prepared to have a child.<sup>41,43</sup> In 2006, the Ethiopian MOH finalized and implemented the new law and also included the adoption of several recommendations from the 2003 WHO Guidance: protocols for medication abortion; requirements to allow nurses and midwives to provide abortion care; and enhance the role of lay community health workers and traditional birth attendants in abortion care.<sup>41</sup>

Ghanaian leaders who attended the 2003 regional meeting expanded the 1985 abortion law to ensure women have access to reproductive health care including safe abortion to the full extent of the law.<sup>41</sup> After ratification of the new law, national workshops were organized for health care providers to inform them of the new law and begin implementation of WHO recommendations.<sup>41</sup> An important step in this process was the involvement of WHO and Ipas in conducting the WHO Strategic Assessment in collaboration with local entities and organizations to analyze the availability and quality of safe abortion care and services.<sup>41</sup> Ipas is a global non-governmental organization based in Chapel Hill, NC that works to eliminate deaths and disabilities due to unsafe abortion practices. Following the WHO Strategic Assessment, Ghanaian MOH implemented the recommendations from the Strategic Assessment, liberalizing a once very restrictive abortion law.<sup>41</sup>

Although several African countries have implemented certain protocols and parts of the Safe Abortion Guidance, the unsafe abortion situation in Africa remains a serious public health problem—even in Ethiopia and Ghana where Ministries of Health have amended policy to increase availability and acceptability of abortion. Figure 3 below depicts the percentage of

women, births, unsafe abortions, and deaths due to unsafe abortions by developing region, Africa, Asia, and Latin America and the Caribbean in 2008. As demonstrated in Figure 3, women in Africa make up 14 percent of women in developing countries, even though 62 percent of all unsafe abortion deaths in developing countries occur in Africa.<sup>22</sup> This stark contrast between percent of women of reproductive age and percent of deaths due to unsafe abortion highlights the need for additional abortion law and policy reform, capacity building, provider training, and health systems strengthening in Africa.



**Figure 3: The percentage distribution of women, births, unsafe abortions and related deaths, by developing region, 2008.**

*Source:* Safe Abortion: Technical and Policy Guidance for Health Systems. World Health Organization, 2012. Page 20.

According to the 2011 WHO Unsafe Abortion report, the number of induced abortions in Africa rose from 5.6 million in 2003 to 6.4 million in 2008. Although the increase in number of abortions is attributed to the increasing number of women of reproductive age, this increase highlights the importance of making safe abortion accessible to this growing population. WHO must build collaborative relationships with Ministers of Health, policy-makers, providers, and health program managers to engage and encourage countries in Africa with high rates of unsafe abortion to adopt evidence-based methods and new techniques to provide safe abortions, reduce

maternal mortality, and legislate women's rights as human rights. Of the 6.4 million abortions provided in 2008, only a mere 3 percent were conducted safely, further inciting the need to encourage implementation of the Safe Abortion Guidance within African countries.<sup>44</sup>

It is important to highlight that the rate of unsafe abortion has remained unchanged in Africa since **2003**, when the first WHO Safe Abortion Guidance was published. Although it is impossible to attribute the stagnant rate of unsafe abortion in Africa to the lack of implementation of WHO's Safe Abortion Guidance, it should be noted that of the thirteen countries that requested the assistance of WHO to conduct a WHO Strategic Assessment in unsafe abortion, five were in Africa: Malawi, Ghana, Guinea, Senegal, and Zambia. Other African countries have participated in regional workshops to promote the implementation of the Guidance. In April 2007, four Anglophone countries participated in a WHO Strategic Assessment Workshop: Malawi, Nigeria, Uganda, and Zambia.<sup>45</sup> In March 2008, five Francophone countries attended a Strategic Assessment Workshop: Benin, Burkina Faso, Guinea, Mali, and Senegal.<sup>45</sup> Additionally, in October, 2011, Ipas conducted a Strategic Assessment Workshop in Sierra Leone.<sup>46</sup> As discussed earlier, in both Ethiopia and Ghana, abortion laws and policies were amended to reflect the 2003 WHO Safe Abortion Guidance; however, as of 2007, unsafe abortion remains the second leading cause of maternal mortality in Ghana where 11 percent of maternal deaths are due to unsafe abortion practices.<sup>47</sup> One study conducted in 2010 estimated the rate of unsafe abortion in Ethiopia concluding that mortality and morbidity due to unsafe abortion was still a major public health concern.<sup>3</sup> Health professionals interviewed in the study estimated that in 2008, half of the induced abortions were conducted in unsafe conditions resulting in loss of life and severe morbidity.<sup>3</sup>

## **IMPLEMENTATION BARRIERS: ADOPTING THE 2012 WHO SAFE ABORTION GUIDANCE**

It is well documented that disseminating clinical recommendations and guidelines can improve clinical care and provider practice, especially if accompanied by a robust implementation strategy.<sup>48,49</sup> The WHO *Safe Abortion: Technical and Policy Guidance for Health Systems* serves as a necessary reference to provide evidence-based guidance for decision-makers, policy writers, and providers. However, implementation of WHO guidance and uptake of clinical and policy recommendations is not comprehensively monitored or assessed. As one Senior Policy Advisor at Ipas mentioned, “the guidance is only a document, and its ultimate impact depends on whether additional steps are taken to create an enabling environment” for the implementation of safe abortion guidelines.<sup>41</sup>

As stated in the 2012 WHO Guidance, monitoring the use of published guidelines is difficult, particularly assessing global distribution patterns and implementation.<sup>22</sup> However, WHO purports they will monitor the implementation of the 2012 Guidance by: (1) counting the number of requests from countries that need assistance to implement and adopt the recommendations; (2) following-up with countries that apply for the WHO Strategic Approach; (3) counting the number of countries that amend their abortion policies and guidelines.<sup>22</sup> As mentioned above, WHO strategic assessments have been conducted to review and analyze countries’ adherence to the WHO recommendations. However, the feasibility of conducting a Strategic Assessment in all countries with high rates of unsafe abortion has not been explored as an effective or cost effective strategy supporting dissemination or implementation.

WHO Strategic Assessments for unsafe abortion are guided by basic questions that WHO and other partners attempt to answer and address by tailoring WHO safe abortion

recommendations to the needs of the country.<sup>32,33,40</sup> These questions are decided on by MOH officials and represent the needs of the country conducting the assessment. Some examples of questions used in-country include: “What strategies could be used to reduce the demand for abortion and mitigate complications arising from abortion?”; “How can the quality of abortion services be improved in different types of service delivery?”; and “What options are available for improving the delivery of family planning in order to meet the needs of women from all socio-economic and demographic groups, including adolescents?”<sup>32</sup> In countries that requested WHO assistance, members of the government, professional associations, non-governmental organizations, and inter-governmental organizations conduct observations, qualitative interviews, and conduct fieldwork in hospitals, abortion clinics, and other public and community-based institutions to gain an understanding of why unsafe abortion practices continue to take women’s lives and leave women disabled.<sup>32,33,40</sup>

Safe abortion procedures and effective policy are not the only barriers in reducing health effects from unsafe abortions—there are also gaps in assessing country policies and technical guidelines. Several journal articles summarize the new 2012 Safe Abortion Guidance and conclude that all published WHO material is evidence-based and *should be* required reading for all health officials, providers, and health program managers.<sup>23,35</sup> Additionally, many experts agree that in order to reduce maternal mortality and reach MDG targets, countries must make abortion safe and accessible by adopting WHO Safe Abortion recommendations.<sup>23</sup> It is widely acknowledged that the guidelines are merely a blueprint for providers and policy-makers. Providers are encouraged to tailor the clinical guidelines to their specific local context and envision the applicability of safe abortion care by providing competency-based training to professionals, assess the availability of services, medications, and equipment for women seeking

safe abortion care. After such evaluation is complete, providers can make adjustments as needed.<sup>35</sup>

Most UN member states have adopted national guidelines and ratified several human rights-based treaties that commit themselves to protect and promote women's rights as human rights. Such treaties and policies are steeped in language that legally binds countries to achieve the highest attainable health for all citizens without discrimination.<sup>36</sup> In so doing, member states obligate themselves to adopt evidence-based clinical practice of safe abortion within health systems and to write liberal abortion policy that incorporates human rights language. Some countries have amended their clinical guidelines and abortion policies and others are in the process of revising them; many other countries lag behind. Outlining the underlying legal, policy, and health systems barriers is essential to understand the complex nature of adopting WHO abortion guidance into member state's policies.

Unfortunately, capturing the specific barriers countries and providers face to implement the WHO guidance is beyond the scope of this paper. Research and analysis must be conducted to capture the dimensions and barriers that impede country's progress to implement the 2012 WHO Safe Abortion Guidance and reduce the incidence of unsafe abortion. The WHO Strategic Assessments conducted in Romania, Moldova, and Malawi shed some light on potential barriers to implement the WHO Safe Abortion Guidance. Using these assessments to highlight obstacles faced by several countries might illuminate common obstacles providers, policy-makers, and health program managers face during the implementation phase of the Guidance.

Below is a list of potential barriers to implementing the WHO Safe Abortion Guidance as discussed in the Strategic Assessments and in Leila Hessini, et al, *Global Policy Change and*



*Women's Access to Safe Abortion: The Impact of the World Health Organization's Guidance in Africa*, published in 2006.

- **Unreliable supply of medical equipment, availability of contraception, and abortion services**

Several barriers to improve access and quality of abortion care lie within the inability for resource-poor countries to rely on a constant supply of safe technologies. Providers who are trained and have the skill to perform safe abortion procedures often lack the appropriate medical equipment necessary to deliver services; thus, providers who have no other alternative, fail to offer safe abortion services giving desperate women no safe option.<sup>41</sup> The safety and efficacy of medical abortions are well documented. (WHO Safe Abortion 2012 guidelines); however, the cost and availability of mifepristone and misoprostol limit the effectiveness of medical abortion in countries. Additionally, these medicines must be registered in member states for the use of the medication to be legal. Many countries, particularly in Africa, do not have mifepristone registered on their list of Essential Medicines, as recommended by the WHO Essential Medicines List.<sup>50</sup>

Stock-outs (exhaustion of inventory) of contraceptive supplies were also common in clinics and the procurement and distribution of contraceptives were complicated in nearly every level of the health system, particularly around abortion clinics.<sup>32</sup>

- **Provider knowledge and attitudes**

Not only must providers of abortion services be professionally trained, but must also be knowledgeable about abortion policy and interpretation according to current law. Additionally, some providers may not willingly provide abortion services due to religious

or personal views, presenting a serious challenge to the implementation of new policy, safe abortion services, and introduction of new safe abortion techniques and technology.

- **Political and social will**

The most essential, yet challenging, barrier to implementing liberal abortion laws and policy is mobilizing governments, Ministers of Health, and high-level policy-makers to understand the immediacy of enacting better, less restrictive law and health policy. Offering political support to abortion providers and clinics that provide safe abortion services is a crucial step that gives weight to the public health problem and human rights violation of unsafe abortion.

Therefore, an integrative, modifiable, tool could be designed to assist countries through the implementation process. This implementation tool could have dual functionality that could be used to foster and encourage countries to amend their policies and clinical guidelines. Data could be collected and analyzed by the MOH and then reported back to WHO personnel, increasing quality abortion data from previously inaccessible health systems. Quality health statistics and health systems data on abortion-related indicators is anemic. This implementation tool could build a robust store of abortion-related data for future research. If this implementation tool is governed and managed by the MOH, the MOH ownership would give the tool legitimacy and sustainability.

## Implementation Tool for the WHO Safe Abortion Guidance: mHealth for Safe Abortion?

To assess the completeness of the implementation of the 2012 WHO Safe Abortion Guidance in abortion law, policy, and health systems planning and management in all member states, a basic checklist could be crafted for use. Safety checklists have been used to mitigate unsafe practices ranging from flight take-off and landings to surgical safety techniques.<sup>48</sup> WHO recommends the use of patient safety checklists to reduce mortality and morbidity through various medical interventions and methods to ensure good clinical practice, standardize care, and improve reliability of users.<sup>51</sup> Technical officers at WHO are working to expand patient safety checklists to incorporate childbirth, neonatal care, trauma care, and other medical specialties. Including safe abortion clinical care, planning and management of health systems into a type of patient safety checklist would reinforce the WHO's call to reduce disease burden and ensure safe abortion standards are set for each patient.

The premise of an implementation tool is to advise and assist Ministers of Health, policy-makers, advocates, and other stakeholders on how to implement the 2012 WHO Safe Abortion Guidance into country policies, health systems, and clinics. WHO has issued a handbook for providers that accompanies the Guidance, *Clinical practice handbook for safe abortion care*, publication forthcoming; therefore, this sample implementation tool will not encompass the technical care for women undergoing abortion.<sup>22</sup> Alternatively, this implementation tool will assess basic knowledge of abortion law, availability of supplies, and other general knowledge about safe abortion, see Appendix A for a detailed list of potential questions. The intended audience of an implementation tool for safe abortion ranges from health managers of clinics who oversee the planning and management of safe abortion care in member states, providers in the

clinics, and policy makers. In largely decentralized health systems, it is essential to fully assess and collect data from the managers and providers who work in these systems understand barriers to implementation of the Guidance.

This tool could be adapted for mobile phone use, whereby a user answers one question in the checklist and is presented with recommendations and guidelines found in the WHO Safe Abortion Guidance on their mobile device. Mobile coverage now reaches 90 percent of the world's total population and 80 percent of people living in rural areas,<sup>52</sup> making mHealth for Safe Abortion a sustainable, justifiable mechanism to collect data on implementation of the guidelines. This real-time data could be collected by the MOH and analyzed by district or local health systems which would facilitate data collection and management by the Ministry.<sup>52</sup> Current research shows that the use of mHealth for preventive health services can also enhance the dissemination of training and promote the use of technical skills.<sup>52</sup> By examining provider and health manager responses, teams within the local health system and the MOH could reinforce and tailor certain guidelines to regions, districts, or clinics that need more support, training, or supplies.

The MOH has a legal obligation and moral responsibility to protect the health and rights of women in their country. In order to decrease rates of unsafe abortion and the negative health consequences from unsafe practices, government officials must harmonize their policies with human rights treaties they ratified and assist local clinics, providers, and health managers. As stated in Chapter 3 of the 2012 WHO Safe Abortion Guidance, strengthening existing health systems and services that provide safe abortion requires the use and adoption of the recommendations in the Guidance. The Implementation Tool for Safe Abortion aligns with the 2012 WHO Safe Abortion Guidance and closely resembles the assessment and evaluation

questions issued by WHO on page 76 and 77 in the 2012 Safe Abortion Guidance.<sup>22</sup> Please see Appendix A for a more complete view of the Implementation Tool.

## RECOMMENDATIONS: Where do we go from here?

<p><i>Analyzing barriers to implementation</i></p>	<p>Until an extensive review of barriers to implementing the WHO Safe Abortion Guidelines is complete, the extent of the adoption of the guidelines cannot be realized. A large body of literature discussing and analyzing clinical guideline dissemination and implementation exists, but fails to address the adoption of safe abortion guidance. This scenario is particularly true in countries with decentralized health systems, restrictive laws and policies, and lack of political and social will.</p> <p>Examining barriers to implementation of best practices must encompass all levels within the health system—from monitoring stockouts of contraceptives to the political willingness and commitment of the Minister of Health. Understanding gaps in knowledge, processes, and policy could encourage: adaptation of safe abortion guidelines to local regulations; recognition that aspects of the health system need fortifying, such as provider training; and investment from organizations dedicated to eliminating unsafe abortion.</p>
<p><i>Piloting a Mobile Health Implementation Tool for Safe</i></p>	<p>As discussed earlier, an implementation tool to enforce the adoption of safe abortion guidelines could assist providers, policy-makers, and MOH officials, but ultimately benefit the women who seek safe, accessible abortion care. Currently, no such tool exists to help in this process.</p>

<i>Abortion Care</i>	Through various implementation channels and research, a Mobile Health Implementation Tool for Safe Abortion could be piloted in districts willing to integrate safe abortion care and practices in all health facilities.
<i>Cost effective analysis</i>	Calculating the cost of writing the WHO Safe Abortion Guidance and disseminating the guidelines through the WHO Strategic Approach could be another measure to determine the effectiveness of implementation. It would be helpful to compare the cost of writing the guidelines, inviting technical experts from all over the world to consult with WHO Secretariat, publishing the Guidance, and conducting several WHO Strategic Assessments, to the cost of health outcomes after guideline dissemination. If WHO and other organizations that work with countries to implement the Guidance invest and spend an inordinate amount of money on the guidelines, and if data suggest no health impact, is the time and money spent worthwhile?

Without proper implementation of safe abortion procedures and liberalization of abortion law and policies, desperate women will continue to die. We have the medical knowledge, human capacity, and technical competencies to reduce unsafe abortion and in turn, reduce maternal mortality. Let this be a call for action, a call for advocacy, a call to make things right. Evidence-based clinical guidelines and policy recommendations exist, but the global and reproductive health community must ask themselves if the lack of oversight, assessment, and monitoring of this guidance renders them useless.

## APPENDIX: A

### IMPLEMENTATION TOOL: Sample Questions

All monitoring questions below are reported in the 2012 WHO report, *Safe Abortion: Technical and Policy Guidance for Health Systems*, except the questions highlighted in gray.

#### *Access to abortion services*

1. In your clinic/district hospital/etc., do you use the WHO Safe Abortion Guidelines?
2. Are the Guidelines written in a language that you can interpret or understand?
3. What are the legal grounds for induced abortion in your country/district?
  - a. On request;
  - b. Socioeconomic reasons;
  - c. Health;
  - d. Mental health;
  - e. Physical health;
  - f. Rape;
  - g. Incest;
  - h. Save life of the mother.
4. What are the costs of abortion services to women?
  - a. Official fees:
    - i. Provider fees;
    - ii. Facility fees;
  - b. Informal fees for health care providers;
  - c. Transportation costs;
  - d. Opportunity costs;
  - e. Private insurance coverage;

- f. Social welfare coverage.
5. Is permission required from a third party before performing the abortion?
- a. Parental/guardian or spouse/partner authorization;
  - b. Authorization of medical commissions;
  - c. Authorization by more than one specialist or physician.

*Availability of safe abortion services*

1. Are there enough facilities to provide safe care for all women seeking abortion?
- a. Yes
  - b. No
2. What are the facility costs of providing safe abortion care?
- a. Provider time;
  - b. Equipment/instruments and supplies;
  - c. Medications;
  - d. In-service training;
  - e. Other recurring costs.
3. What abortion statistics do you collect in your clinic?
- a. Total number of obstetric/gynecological admissions;
  - b. Total number of induced abortions;
  - c. Total number of immediate and delayed complications;
  - d. Percentage of complications requiring hospitalization;
  - e. Total number of presenting complications (as a result of unsafe or spontaneous abortion).



4. What abortion methods are available and used by providers in the clinic?
  - a. For pregnancies of gestational age <12-14 weeks:
    - i. Vacuum aspiration;
    - ii. Mifepristone and misoprostol
    - iii. Misoprostol alone;
    - iv. Dilation and curettage.
  - b. For pregnancies of gestational age >12-14 weeks:
    - i. Dilation and evacuation;
    - ii. Mifepristone and misoprostol;
    - iii. Misoprostol alone;
    - iv. Instillation with hypertonic saline;
    - v. Ethacridine lactate.

*Quality of abortion care*

1. Do abortion providers have the competencies required to perform safe abortion?
  - a. Confirmation of pregnancy;
  - b. Estimation of gestational age;
  - c. Appropriate surgical procedure technique;
  - d. Appropriate pain management;
  - e. Appropriate medical abortion regimen;
  - f. Appropriate follow-up
2. Are good infection-prevention practices routinely followed in your clinic?
  - a. Standard precautions routinely followed;

- b. No-touch technique employed for surgical methods;
  - c. Initial soaking of used instruments;
  - d. Instrument cleaning;
  - e. High-level disinfection or sterilization of medical instruments;
  - f. Prophylactic antibiotics administered for surgical methods.
3. What pain-management options are available and what pain management is actually provided?
- a. Verbal relaxation techniques;
  - b. Analgesia;
  - c. Local anesthesia;
  - d. Sedation;
  - e. General anesthesia.
4. What contraceptive methods are available and what methods are provided?
- a. Barrier methods:
    - i. Condoms;
    - ii. Cervical barriers.
  - b. Fertility-based awareness methods:
  - c. Hormonal methods:
    - i. Pills;
    - ii. Vaginal ring;
    - iii. Skin patches;
    - iv. Injectables;
    - v. Implants.

- d. IUDs;
- e. Sterilization;
- f. Emergency Contraception.

5. Do you have stockouts of contraceptive methods in your clinic? For which methods?

a. Barrier methods:

i. Condoms;

ii. Cervical barriers.

b. Fertility-based awareness methods:

c. Hormonal methods:

i. Pills;

ii. Vaginal ring;

iii. Skin patches;

iv. Injectables;

v. Implants

d. IUDs;

e. Sterilization;

f. Emergency Contraception.

6. What information, education and communication material is available and what information is routinely provided?

- a. For the procedure;
- b. For the follow-up care;
- c. For contraception;
- d. For other needs.

7. Are services managed effectively and efficiently?
  - a. Is in-service training routinely provided?
  - b. Is there an adequate supply of supervision?
  - c. Is there sufficient financing?
  - d. Is there sufficient procurement, distribution, and restocking of:
    - i. Instruments;
    - ii. Medication;
    - iii. Supplies
  - e. Adequate management of information systems;
  - f. Mechanism for quality improvement/assurance;
  - g. Mechanisms for monitoring and evaluation of services.
8. Is an adequate referral system in place for:
  - a. Induced abortion (especially in the case of conscientious objection to service provision);
  - b. Management of complications;
  - c. Contraception;
  - d. Reproductive tract infections;
  - e. Gender-based violence.
9. Are all aspects of a woman's privacy maintained regarding her abortion?
  - a. Visual privacy during examination and procedure;
  - b. Auditory privacy during counseling, examination, and procedure;
  - c. Non-essential staff excluded from the room during the procedure;
  - d. Offer of home use of misoprostol following provision of mifepristone;

- e. Adequate toilets with privacy;
  - f. Discreet signage for location of abortion services.
10. Is a woman's confidentiality protected regarding her abortion?
- a. Access to medical records restricted;
  - b. Confidentiality maintained for all women, including adolescents.
11. Are delays for seeking care minimized?
- a. No mandatory waiting periods;
  - b. Time required between requesting and scheduling the procedure;
  - c. Time waiting for the procedure;
  - d. Total time in hospital/clinic.
12. Do other potential service-delivery barriers exist?
- a. Requirements for HIV and other tests that are not clinically indicated;
  - b. Mandatory counseling beyond provision of adequate information relevant to the woman's abortion care;
  - c. Requirement for mandatory ultrasound prior to abortion;
  - d. Requirement for women to listen to fetal heartbeat prior to abortion;
  - e. Requirement for listing induced abortion on permanent medical records, where confidentiality cannot be assured.

*Women's perspectives about abortion services*

13. Were the abortion provider and clinic staff friendly and professional?
14. Was sufficient information provided about:
- a. The procedure?
  - b. Contraception?

c. Follow-up?

15. Did you have an opportunity to ask questions?
16. Were questions appropriately answered by clinic staff?
17. Was your privacy protected?
18. Would you recommend this facility to other women seeking abortion?
19. Would you recommend the provider to other women seeking abortion?

*Provider perspectives*

20. Does the organization meet evidence-based standards?
21. Do the abortion services meet evidence-based standards?
22. Is the quality of care sufficient?
23. Could your job satisfaction improve?
24. Is your supervisor support adequate?
25. Are your work incentives sufficient?
  - a. Salary?
  - b. Fees?
  - c. Professional development opportunities?

## BIBLIOGRAPHY

1. World Health Organization. Unsafe abortion. global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008. . 2011.
2. Shah I, Åhman E. Unsafe abortion in 2008: Global and regional levels and trends. *Reprod Health Matters*. 2010;18(36):90-101. doi: 10.1016/S0968-8080(10)36537-2.
3. Singh S. Global consequences of unsafe abortion. *Womens Health*. 2010;6(6):849-860. <http://dx.doi.org/10.2217/whe.10.70>. doi: 10.2217/whe.10.70.
4. Sedgh G, Singh S, Shah IH, Åhman E, Henshaw SK, Bankole A. Induced abortion: Incidence and trends worldwide from 1995 to 2008. *The Lancet*. 2012;379(9816):625-632. doi: 10.1016/S0140-6736(11)61786-8.
5. World Health Organization. The prevention and management of unsafe abortion: Report of a technical working group. . 1992.
6. Grimes DA, Benson J, Singh S, et al. Unsafe abortion: The preventable pandemic. *The Lancet*. 2006;368(9550):1908-1919. doi: 10.1016/S0140-6736(06)69481-6.
7. Berer M. Making abortions safe: A matter of good public health policy and practice. *Bull World Health Organ*. 2000;78(5):580-592.
8. Sedgh G, Henshaw S, Singh S, Åhman E, Shah IH. Induced abortion: Estimated rates and trends worldwide. *The Lancet*. 2007;370(9595):1338-1345. doi: 10.1016/S0140-6736(07)61575-X.
9. Khan KS, Wojdyla D, Say L, Gülmezoglu AM, Van Look PF. WHO analysis of causes of maternal death: A systematic review. *The Lancet*. 2006;367(9516):1066-1074. doi: 10.1016/S0140-6736(06)68397-9.
10. Alan Guttmacher Institute. Sharing responsibilities: Women, society and abortion worldwide. . 1999.

11. Ganatra B, Hirve S. Induced abortions among adolescent women in rural maharashtra, india. *Reprod Health Matters*. 2002;10(19):76-85. doi: 10.1016/S0968-8080(02)00016-2.
12. Kay BJ, Katzenellenbogen J, Fawcus S, Abdool Karim S. An analysis of the cost of incomplete abortion to the public health sector in south africa--1994. *S Afr Med J*. 1997;87(4):442-447.
13. Bernstein PS, Rosenfield A. Abortion and maternal health. *International Journal of Gynecology & Obstetrics*. 1998;63, Supplement 1(0):S115-S122. doi: 10.1016/S0020-7292(98)00193-3.
14. Haddad LB. Unsafe abortion: Unnecessary maternal mortality. *Reviews in obstetrics and gynecology*. 2009;2(2):122.
15. Fledderjohann JJ. 'Zero is not good for me': Implications of infertility in ghana. *Human Reproduction*. 2012;27(5):1383-1390. doi: 10.1093/humrep/des035.
16. Kirk D. Demographic transition theory. *Popul Stud (Camb)*. 1996;50(3):361-387. doi: 10.1080/0032472031000149536.
17. Dyer SJ. The value of children in african countries – insights from studies on infertility. *J Psychosom Obstet Gynaecol*. 2007;28(2):69-77.  
<http://dx.doi.org.libproxy.lib.unc.edu/10.1080/01674820701409959>. doi: 10.1080/01674820701409959.
18. Polgar S, Fried ES. The bad old days: Clandestine abortions among the poor in new york city before liberalization of the abortion law. *Fam Plann Perspect*. 1976;8(3):125-127.
19. Figa-Talamanca I, Sinnathuray TA, Yusof K, et al. Illegal abortion: An attempt to assess its cost to the health services and its incidence in the community. *Int J Health Serv*. 1986;16(3):375-389.



20. Cook RJ, Dickens BM, Horga M. Safe abortion: WHO technical and policy guidance. *Int J Gynaecol Obstet.* 2004;86(1):79-84.  
<http://linkinghub.elsevier.com/retrieve/pii/S0020729204001122?showall=true>.
21. World Health Organization. Safe abortion: Technical and policy guidance for health systems. . 2003.
22. World Health Organization. Safe abortion: Technical and policy guidance for health systems. . 2012.
23. Van Look PF,A., Cottingham J. The world health organization's safe abortion guidance document. *Am J Public Health.* 2013;103(4):1204-1206.  
[https://auth.lib.unc.edu/ezproxy\\_auth.php?url=http://search.ebscohost.com/login.aspx?direct=true&db=s3h&AN=85594435&site=ehost-live&scope=site](https://auth.lib.unc.edu/ezproxy_auth.php?url=http://search.ebscohost.com/login.aspx?direct=true&db=s3h&AN=85594435&site=ehost-live&scope=site).
24. Dixon-Mueller R. Abortion policy and women's health in developing countries. *Int J Health Serv.* 1990;20(2):297-314.
25. World Health Organization. Complications of abortion: Technical and managerial guidelines for prevention and treatment. . 1995.
26. Cohen SA, Richards CL. The cairo consensus: Population, development and women. *Fam Plann Perspect.* 1994;26(6):272-277.
27. Barbara K. Organising and financing for sexual and reproductive health and rights: The perspective of an NGO activist turned donor. *Reprod Health Matters.* 2004;12(24):14-24. doi: 10.1016/S0968-8080(04)24159-3.
28. Cleland J. Family planning: The unfinished agenda. *The Lancet (British edition).* 2006;368(9549):1810-1827.

29. DeJong JJ. The role and limitations of the Cairo international conference on population and development. *Soc Sci Med*. 2000;51(6):941-953.
30. AbouZahr C. Some thoughts on ICPD+5. *Bull World Health Organ*. 1999;77(9):767-770.
31. United Nations. Key actions for the further implementation of the programme of action of the international conference on population and development. . 1999;Resolution S-21/2.
32. Tsogt B, Seded K, Johnson BR. Applying the WHO strategic approach to strengthening first and second trimester abortion services in Mongolia. *Reprod Health Matters*. 2008;16(31, Supplement):127-134. doi: 10.1016/S0968-8080(08)31383-4.
33. Johnson BR, Horga M, Fajans P. A strategic assessment of abortion and contraception in Romania. *Reprod Health Matters*. 2004;12(24 Suppl):184-194.
34. Jackson E, Johnson BR, Gebreselassie H, Kangaude GD, Mhango C. A strategic assessment of unsafe abortion in Malawi. *Reprod Health Matters*. 2011;19(37):133-143. doi: 10.1016/S0968-8080(11)37563-5; 10.1016/S0968-8080(11)37563-5.
35. Kapp N, Whyte P, Tang J, Jackson E, Brahmi D. A review of evidence for safe abortion care. *Contraception*. 2012(0). doi: 10.1016/j.contraception.2012.10.027.
36. Fathalla M, F., Cook R, J. Women, abortion and the new technical and policy guidance from WHO. *Bull World Health Organ*. 2012;90(9):712-712.  
[https://auth.lib.unc.edu/ezproxy\\_auth.php?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2011692182&site=ehost-live&scope=site](https://auth.lib.unc.edu/ezproxy_auth.php?url=http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=2011692182&site=ehost-live&scope=site). doi:  
<http://dx.doi.org/10.2471/BLT.12.107144>.
37. Kapp N, Glasier A. WHO technical and policy guidance emphasises the health systems' responsibility to provide safe abortion services. *Contraception*. 2013(0). doi: 10.1016/j.contraception.2013.02.002.

38. Erdman JN, DePiñeres T, Kismödi E. Updated WHO guidance on safe abortion: Health and human rights. *International Journal of Gynecology & Obstetrics*. 2013;120(2):200-203. doi: 10.1016/j.ijgo.2012.10.009.
39. World Health Organization. The WHO strategic approach to strengthening sexual and reproductive health policies and programmes. . 2007.
40. Jackson E, Johnson BR, Gebreselassie H, Kangaude GD, Mhango C. A strategic assessment of unsafe abortion in malawi. *Reprod Health Matters*. 2011;19(37):133-143. doi: 10.1016/S0968-8080(11)37563-5.
41. Hessini L, Brookman-Amissah E, Crane BB. Global policy change and women\'s access to safe abortion: The impact of the world health organization\'s guidance in african. *Afr J Reprod Health*. 2007;10(3):14-27.
42. Center for Reproductive Rights. Abortion and the law: Ten years of reform. . 2005.
43. The Federal Democratic Republic of Ethiopia. The criminal code. . 2005.
44. The Guttmacher Institute. Facts on abortion in africa. . 2012.
45. World Health Organization. WHO strategic assessment workshop.  
[http://www.who.int/reproductivehealth/topics/unsafe\\_abortion/countries/en/](http://www.who.int/reproductivehealth/topics/unsafe_abortion/countries/en/). Accessed March/15, 2013.
46. Sierra Leone News Hunters. Unsafe abortion assessment underway.  
<http://www.sierraleonewshunters.com/content/unsafe-abortion-assessment-underway>. Accessed March/15, 2013.
47. Sundaram A, Juarez F, Bankole A, Singh S. Factors associated with abortion-seeking and obtaining a safe abortion in ghana. *Stud Fam Plann*. 2012;43(4):273-286. doi: 10.1111/j.1728-4465.2012.00326.x.

48. Foy R, Walker A, Ramsay C, Penney G, Grimshaw J, Francis J. Theory-based identification of barriers to quality improvement: Induced abortion care. *Int J Qual Health Care*. 2005;17(2):147-155. doi: 10.1093/intqhc/mzi017.
49. Grimshaw JM, Russell IT. Effect of clinical guidelines on medical practice: A systematic review of rigorous evaluations. *The Lancet*. 1993;342(8883):1317-1322. doi: 10.1016/0140-6736(93)92244-N.
50. World Health Organization. WHO model list of essential medicines. . 2011;17.
51. World Health Organization. The checklist effect.  
<http://www.who.int/patientsafety/implementation/checklists/background/en/index.html>.  
Accessed March/12, 2013.
52. Tamrat T, Kachnowski S. Special delivery: An analysis of mHealth in maternal and newborn health programs and their outcomes around the world. *Matern Child Health J*. 2012;16(5):1092-1101. <http://dx.doi.org/10.1007/s10995-011-0836-3>. doi: 10.1007/s10995-011-0836-3.