

# Benefits of investing in family planning

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#### Question

What is the evidence on the health, economic and other benefits of investing in family planning? Please provide evidence of benefits at the individual, household, community, country and global level.

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#### 1. Overview

This report focuses on the evidence on the health, economic and other benefits of investing in family planning. Family planning allows people to attain their desired number of children and determine the spacing of pregnancies. It is achieved through use of contraceptive methods and the treatment of infertility (WHO 2015). A large and growing body of literature explores the social and economic benefits of women's ability to use reliable contraception to plan whether and when to have children (Sonfield et al 2013). Compared to other interventions, investments in family planning have been shown to be highly cost effective. It is inexpensive and the return on investment is high. Family planning interventions have powerful poverty reduction effects in addition to providing health and human rights benefits (Bongaarts and Sinding 2011).

Cleland et al (2006) explains that the promotion of family planning in countries with high birth rates has the potential to reduce poverty and hunger and prevent 32% of all maternal deaths and nearly 10% of childhood deaths. It would also substantially contribute to the empowerment of women, achievement of universal primary schooling, and long-term environmental sustainability. Over the last 40 years, family planning programmes have played a key part in raising the prevalence of contraceptive practice from less than 10% to 60% and reducing fertility in developing countries from six to about three births per woman. However, in half of the 75 larger low-income and lower-middle income countries (mainly in Africa), contraceptive practice remains low and fertility, population growth, and unmet need for family planning are high (Cleland et al 2006).

This report presents the benefits of family planning on different levels into the following sections:

#### Individual level benefits (section 2) including:

- Empowering women enabling them to plan the size and timing of their families
- Saving women's lives enabling them to avoid unwanted pregnancies; and, avoid unsafe abortions
- Improving infant and child health spacing between births, limiting births to heathier years

#### Household level benefits (section 3) including:

- Increasing household savings
- Increasing investment in individual children children in smaller families are better educated
- Increasing work productivity, in particular female work participation

#### Community/country level benefits (section 4) including:

- Increasing the size of the labour force (demographic dividend), and, domestic savings
- Reducing poverty, and, accelerating the demographic transition

#### Global level benefits (section 5) including:

- Slowing down population growth and reducing pressure on the environment and natural resources
- Making progress towards a sustainable human population

Additionally this report has a section on value for money (section 6) and safe abortion (section 7).

# Contraceptive use (WHO 2015)

Africa's population will reach 2 billion by 2050. To get a sense of this kind of increase, consider that in 1950 there were two Europeans for every African; by 2050, on present trends, there will be two Africans for every European (The Economist 2009).

Contraceptive use has increased in many parts of the world, especially in Asia and Latin America, but continues to be low in sub-Saharan Africa. Globally, use of modern contraception has risen slightly, from 54% in 1990 to 57.4% in 2014. Regionally, the proportion of women aged 15–49 reporting use of a modern contraceptive method has risen minimally or plateaued between 2008 and 2014. In Africa it went from 23.6% to 27.6%, in Asia it has risen slightly from 60.9% to 61.6%, and in Latin America and the Caribbean it rose slightly from 66.7% to 67.0%. Use of contraception by men makes up a relatively small subset of the above prevalence rates. The modern contraceptive methods for men are limited to male condoms and sterilisation (vasectomy).

#### Global unmet need for contraception (WHO 2015)

An estimated 225 million women in developing countries would like to delay or stop childbearing but are not using any method of contraception. Reasons for this include:

- limited choice of methods;
- limited access to contraception, particularly among young people, poorer segments of populations, or unmarried people;
- fear or experience of side-effects;
- cultural or religious opposition;
- poor quality of available services;
- users and providers bias
- gender-based barriers.

The unmet need for contraception remains a concern. This inequity is fuelled by both a growing population, and a shortage of family planning services. In Africa, 23.2% of women of reproductive age have an unmet need for modern contraception. In Asia, and Latin America and the Caribbean – regions with relatively high contraceptive prevalence – the levels of unmet need are 10.9 % and 10.4%, respectively (World Contraceptive Reports 2013, UNDESA).

#### 2. Individual level

Family planning allows people to attain their desired number of children and determine the spacing of pregnancies. It is achieved through use of contraceptive methods and the treatment of infertility (WHO 2015).

# Saving women's lives and preventing pregnancy-related health risks in women

A woman's ability to choose if and when to become pregnant has a direct impact on her health and well-being. Family planning allows spacing of pregnancies and can delay pregnancies in young women at increased risk of health problems and death from early childbearing. It prevents unintended pregnancies, including those of older women who face increased risks related to pregnancy. Family planning enables women who wish to limit the size of their families to do so. Evidence suggests that women who have more than 4 children are at increased risk of maternal mortality. By reducing rates of unintended pregnancies, family planning also reduces the need for unsafe abortion (WHO 2015).

Increasing contraceptive use in developing countries has cut the number of maternal deaths by 40% over the past 20 years, merely by reducing the number of unintended pregnancies. By preventing high-risk pregnancies, especially in women of high parities, and those that would have ended in unsafe abortion, increased contraceptive use has reduced the maternal mortality ratio—the risk of maternal death per 100 000 livebirths—by about 26% in little more than a decade. A further 30% of maternal deaths could be avoided by fulfilment of unmet need for contraception (Cleland et al 2012).

The benefits of modern contraceptives to women's health, including non-contraceptive benefits of specific methods, outweigh the risks (Cleland et al 2012).

At the household level, controlled trials in Matlab, Bangladesh, and Navrongo, Ghana, have shown that increasing access to family planning services reduces fertility and improves birth spacing. In the Matlab study, findings from long-term follow-up showed that women's earnings, assets, and body-mass indexes, and children's schooling and body-mass indexes, substantially improved in areas with improved access to family planning services compared with outcomes in control areas (Canning et al 2012).

# Reducing infant mortality

Family planning can prevent closely spaced and ill-timed pregnancies and births, which contribute to some of the world's highest infant mortality rates. Infants of mothers who die as a result of giving birth also have a greater risk of death and poor health (WHO 2015).

Contraception can also improve perinatal outcomes and child survival, mainly by lengthening inter-pregnancy intervals. In developing countries, the risk of prematurity and low birthweight doubles when conception occurs within 6 months of a previous birth, and children born within 2 years of an elder sibling are 60% more likely to die in infancy than are those born more than 2 years after their sibling (Cleland et al 2012).

The children of women who have had frequent home access to family planning and health services are healthier and better educated children than are those of women without such access (Canning et al 2012).

## **Helping to prevent HIV/AIDS**

Family planning reduces the risk of unintended pregnancies among women living with HIV, resulting in fewer infected babies and orphans. In addition, male and female condoms provide dual protection against unintended pregnancies and against STIs including HIV (WHO 2015).

## **Empowering people and enhancing education**

Family planning enables people to make informed choices about their sexual and reproductive health. Family planning represents an opportunity for women to pursue additional education and participate in public life, including paid employment in non-family organisations. Additionally, having smaller families allows parents to invest more in each child. Children with fewer siblings tend to stay in school longer than those with many siblings (WHO 2015).

The ability and freedom of individuals and couples to choose when and how often to become pregnant is rightly regarded as a fundamental human right (Baird, 1965). Exercise of this right is crucial for empowerment of women. In the absence of contraception, a woman's prime adult years are dominated by incessant cycles of pregnancy, breastfeeding and child care. As the number of pregnancies falls, women are able to participate more fully in public life including paid employment (Bloom et al., 2009).

Promotion of family planning – and ensuring access to preferred contraceptive methods for women and couples – is essential to securing the well-being and autonomy of women (WHO 2015).

# Reducing adolescent pregnancies

Pregnant adolescents are more likely to have preterm or low birth-weight babies. Babies born to adolescents have higher rates of neonatal mortality. Many adolescent girls who become pregnant have to leave school. This has long-term implications for them as individuals, their families and communities (WHO 2015).

#### 3. Household level

# Increased household savings

To estimate the empirical importance of increased access to family planning and reproductive health resources it is important to identify variation in fertility and family health that is attributable to the effects of the family planning programme or policy rather than parents' preferences, economic and social endowments, opportunities, or unobservable determinants of the family's labour supply, investment behaviour, and other outcomes of interest. Outcomes in areas where family programmes have been implemented versus control areas provide the best available evidence for the causal effect of family planning programmes (Bloom and Schultz 2012).

Microeconomic evidence derived from survey and census data at the household level in areas where family planning and reproductive health programmes have been implemented as social experiments helps to assess the expected effects of these programmes. In these areas, household savings in the form of adult human capabilities might increase for women, the human capital of children would tend to rise, and physical capital might be accumulated for retirement. Increases in women's health and productivity would give families more resources for their

children than they would have in areas without a family planning and reproductive health programme, and the resulting investments in child health and education should increase prospects for the next generation, alleviating poverty by boosting labour productivity and capital accumulation, which adds to aggregate economic growth (Bloom and Schultz 2012).

One case study showed that women of childbearing age in the outreach programme area were also healthier and more productive if they were part of the paid labour force than were those in the comparison area that did paid work. This advantage remained after correction for characteristics of women with paid jobs. Married women in programme villages reported 25% more physical assets per adult in their household than did those in control areas, and the composition of household assets in programme villages had shifted away from livestock, which depends on the availability of child labour, towards housing and financial assets, consumer durables, and Jewellery. Homes in villages with a family planning programme were more likely to have access to water for drinking and cleaning than were those in control areas, saving the time and effort of women and children (Bloom and Schultz 2012).

#### Increased investment in individual children

The benefits of having a smaller family are experienced by children. Children of smaller families receive more attention of higher quality from their parents, resulting in higher achievements. Having smaller families allows parents to invest more in each child. Children with fewer siblings tend to stay in school longer than those with many siblings (WHO 2015).

Having fewer children in order to be able to educate them all can be understood as follows: firstly, from the necessity to find more viable means of survival for their children, and secondly, that the trajectory currently available to girls and boys to access development and escape the harsh lives their parents have lived is through education (Mjaaland 2014).

#### Increased work productivity, in particular female work participation

Family planning represents an opportunity for women to pursue additional education and participate in public life, including paid employment in non-family organisations (WHO 2015). One case study showed that women in villages with an outreach programme reported monthly earnings that were 40% higher than earnings in comparison villages (Bloom and Schultz 2012).

# 4. Community/country level

# Increasing size of the labour force (demographic dividend), and, domestic savings

As societies become wealthier, and start to move from high fertility to low, the size of their working-age population increases. This means that there are fewer children; the grandparents' generation has already died and therefore there are disproportionately large numbers of working-age adults. Bloom et al (2007) found that the share of the working-age population will rise in 27 of 32 African countries between 2005 and 2015.

The demographic transition creates a window of opportunity during which economies may benefit from a temporary increase in the working age share of the population. While many economies have already enjoyed these benefits, they remain a promising opportunity for much of Sub-

Saharan Africa. Sub-Saharan Africa adheres to the same principles as the rest of the world with respect to the determinants of economic growth, including particularly the effects of demographic change. Assuming a policy and institutional context that is conducive to economic growth, most Sub-Saharan countries have the potential to reap a sizable demographic dividend (Bloom et al 2007).

The result is a 'demographic dividend', which can be cashed in to produce a virtuous cycle of growth (The Economist, 2009). A fast-growing, economically active population provides the initial impetus to industrial production; then a supply of new workers coming from villages can enable a country to become more productive. China and East Asia are the models. On some calculations, demography accounted for about a third of East Asia's phenomenal growth over the past 30 years (The Economist, 2009).

However, there is nothing inevitable about the ability to cash in the demographic dividend. For this to happen in Africa it will have to choose the right policies and overcome its many problems. If a country fails to address those problems, then the demographic dividend could become a burden. One article in The Economist goes as far as to write that 'instead of busy people at work, there will be restless, jobless young thugs; instead of prosperity, there will be crime or civil unrest' (The Economist 2009).

## Improving quality and quantity of infrastructure

Family planning contributes towards slower population growth. This can help mitigate the effects of rapidly expanding populations on the amount of infrastructure in health and education to meet the needs of the population. Population growth creates enormous challenges in the education sector. For example, in Niger (where The United Nations Population Division estimated that Niger's total fertility rate will reach 8 children per woman in 2000-2005, making it the highest in the world), even assuming a gradual decrease in fertility, the number of children 6 to 12 years old and thus eligible for primary school, will increase dramatically in the coming years-from an estimated 2.2 million in 2000, to 3.3 million in 2010, and 4.5-5 million in 2020. Such an increase in the number of school-age children, and because no more than one-third of school-age children currently goes to school, will make the fundamental objective of universal school enrollment for boys and girls very difficult to achieve despite efforts to accelerate enrolment (the World Bank, 2005).

The health sector is also threatened by too-rapid population growth. Shortages of medical personnel and insufficient funding for the sector are already difficult issues to resolve. They will become almost insurmountable if the population quintuples by 2050. The World Health Organization (WHO) recommends one doctor for every 10,000 people, but Niger has only one doctor for every 47,531 people. In 2050, with five times today's population, Niger will need 25 times its current number of doctors to reach the ratio recommended by WHO. Training needs for paramedical personnel are similar in scope (The World Bank 2005).

# Reduces poverty, and accelerates demographic transition

Family planning is considered a tool to reduce population growth and effect demographic change, and many countries have adopted population policies to encourage this (Foster et al 2014). In Mali, a population reduction policy was adopted in 2003 as part of a poverty reduction strategy (UN DESA, 2009). Likewise, Mauritania seeks to reduce fertility to 4 births per woman by 2015 as a measure to reduce widespread poverty (UN DESA, 2009). Cambodia's National

Population Policy of 2003 acknowledged the negative effects of fast population growth on health, the environment and policy and implemented a National Birth Spacing Programme to reduce total fertility rates (UN DESA, 2009). Promotion of family planning and ensuring access to preferred contraceptive methods supports the health and development of communities (WHO 2015).

Reduced fertility and child mortality lead to an increased proportion of working-age people within the population, with positive outcomes for economic growth (Canning et al 2012).

#### 5. Global level

# Slowing population growth/Demographic transition

Family planning is key to slowing unsustainable population growth and the resulting negative impacts on the economy, environment, and national and regional development efforts (WHO 2015).

In 2012, the UN revised its projections for world population growth upwards. Population growth in the developing world, where numbers will rise from 5.9 billion in 2013 to 8.2 billion in 2050, is driving this increase, and this has been revised from the 2010 prediction of only 8 billion. Population growth and fertility rates have substantial effects on the economic circumstances of individual regions and countries, partly because they determine the ratio of the working age population to the dependent young and old population. There are wide variations in fertility levels with 48% of the world's population living in low fertility areas, where women have fewer than 2.1 children; a further 43% live in intermediate fertility countries where women have between 2.1 and 5 children, and the final 9% are in high fertility countries where women have 5 or more children (Foster et al 2014).

Potential adverse effects of rapid population growth and high dependency ratios include slow economic growth and widespread poverty, poor health among women and children, unsustainable strain on existing education, health and employment infrastructure, and the depletion of environmental resources (Bongaarts and Sinding, 2009; Eastwood and Lipton, 2011; UN DESA, 2009). Furthermore, high levels of youth unemployment, exacerbated by rapid rises in the number of school leavers, can contribute to political instability (Bongaarts et al., 2012).

Population transitions from a state of high mortality and high fertility to low mortality and low fertility include a period where fertility per person decreases but the population continues to grow as a legacy of previous high fertility rates (Bongaarts et al., 2012; Eastwood and Lipton, 2011; Higgins and Williamson, 1997). Nevertheless, a sustained decrease in fertility will promote further demographic transition and eventually result in population stabilisation. Family planning is considered a tool to reduce population growth and effect demographic change, and many countries have adopted population policies to encourage this.

There are synergistic effects between longer inter-birth intervals and lower fertility with other development goals, for example health and education targets, and the speed at which demographic transition occurs within individual countries is affected by in-country demographic diversity between educated and uneducated, rich and poor, and urban and rural residents (Eastwood and Lipton, 2011; UN DESA, 2009).

## **Environmental concerns/Global warming**

Environmental concerns provide a further justification for family planning promotion (Foster et al 2014). Growing population together with rapid increases in consumption have led to a realisation that humanity is approaching limits to our exploitation of the planet. Global warming, due to CO2 emissions, ocean acidification, unsustainable depletion of aquifers, land use change and its effects on bio-diversity, are among the concerns. Rich nations bear the prime responsibility for these trends; poor countries, where further population increase will be concentrated, have contributed little to CO2 emissions or ocean acidification. However, population growth is the main driver of increased demand for food and the likely consequences of this increased demand include further loss of bio diversity and natural habitats, degradation of fragile ecosystems due to over-cropping and grazing, and acute problems of fresh water availability (Royal Society, 2012).

Canning et al (2012) consider the evidence for the effect of access to reproductive health services on the achievement of Millennium Development Goals 1, 2, and 3, which aim to eradicate extreme poverty and hunger, achieve universal primary education, and promote gender equality and empower women. At the macroeconomic level, reductions in fertility enhance economic growth as a result of reduced youth dependency and an increased number of women participating in paid labour.

Household-level behavioural effects on the female labour supply, child health, and education can lead to large macroeconomic demographic benefits (Canning et al 2012).

#### Making progress towards sustainable human population

Decreases in fertility deliver defined socio-economic benefits (Eastwood and Lipton, 2012). These include:

- Potential for higher spending per head on the health and education of children (UN DESA, 2009).
- Greater educational opportunities for children born into smaller families (UN DESA, 2009)
- More years of education for girls, leading to an average higher age of marriage (UN DESA, 2009)
- Higher female workforce participation (Eastwood and Lipton, 2012).

Population growth also effects economic growth through the idea of capital dilution and the 'carrying capacity' of global natural resources (Bloom et al., 1998). The rise in prosperity that was seen in the developed world following the industrial revolution was also due to a simultaneous rapid capital accumulation. This also helped to drive recent prosperity in East Asia (Case study 1). However, in the least developed countries of the world, population is increasing rapidly without necessarily any increase in capital accumulation (Pritchett, 1996). The population in the least developed countries is still young, with children under 15 accounting for 40% of the population (UN DESA, 2011). In sub-Saharan Africa, where the majority of the least developed countries are located, there is: a low ratio of reproducible capital to natural capital; rapid population increases; and low net savings as a share of income (Bloom et al., 1998). Therefore there is a large savings gap, which means that the total available capital will be diluted as the population continues to increase (World Bank, 2006).

High fertility rates and poor family planning lead to reduced opportunities for girls to attend school and for women to join the labour force, which enable them to contribute at both the household and macroeconomic levels (Foster et al 2014).

#### **Demographic transition in East Asia**

Between 1970 and 2005, East Asia experienced what has been described as an economic 'miracle'. The increase in economic prosperity occurred in the wake of rapid demographic transition that began in the 1950s. A dramatic decrease in child and infant mortality in 1965-1970 led to a rapid expansion in the proportion of young dependents in the population, and by 1980 the dependency ratio peaked at 80% of the total population. Post-1980, the dependency ratio fell to less than 50% in 2010 and there was significant growth in labour, human capital per head of population, and the savings ratio. The economic result was an increase in GDP of 6.1% per head between 1965-2005, of which 1.37-1.87% of GDP, and 20% of the increase in the savings ratio, has been attributed to the change in the age structure of the population (Bloom and Williamson, 1998; Schultz, 2004). Therefore, although East Asia can attribute a significant fraction of its increase in economic prosperity to demographic transition, it cannot necessarily be used as a model for other areas of the developing world (Bloom and Williamson, 1998).

# 6. Value for money

Investments in family planning are highly cost effective, as family planning is very inexpensive and the return on investment is high. They have powerful poverty reduction effects in addition to providing health and human rights benefits (Bongaarts and Sinding 2011).

The population of many countries will double or even treble in size in the coming decades. A convincing case can be made that investment in family planning should have a higher priority than investment in HIV prevention and treatment. Yet, current priorities are the reverse. For instance, in Ghana, one study stated that 'HIV/AIDS is sucking funds, staff, and political energy from family planning, and this is a country where women are more likely to die of unsafe abortion than of AIDS' (Cleland et al 2006, Mayhew 2012).

Providing both modern family planning and the recommended standard of maternal and newborn care is synergistic in terms of health and cost benefit. Helping all women who wanted to avoid unwanted pregnancies through using modern contraceptives would reduce the cost of providing the recommended standard of maternal and newborn care by US\$5.1 billion. This means that for each additional dollar spent to provide modern contraceptives, US\$1.40 would be saved in costs of medical care because of fewer unintended pregnancies (Singh et al., 2009). As a result of pregnancy-related causes, the WHO estimated that 38 million disability-adjusted life years (DALYs) were lost among women globally in 2004 (WHO, 2009). About 40% of pregnancy related DALYs lost worldwide are in sub-Saharan Africa, and another 36% are in South Central Asia.

A Disability-Adjusted Life Year (DALY) is a commonly used measure of the burden from mortality and morbidity and can be thought of as one lost healthy year of life. DALYs can be used to measure the burden of disease, and indicate the gap between current health status and an ideal health situation. Providing both modern family planning and the recommended standard of maternal and newborn care would reduce the number of DALYs lost because of pregnancy-related illness and premature death by 66% (Singh et al., 2009). Savings would also accrue from

fulfilling unmet need in terms of obstetric care, immunisation, and, after a lag, primary schooling. A study of 16 countries in sub-Saharan Africa shows that US\$3,700 would be saved in meeting the Millennium Development Goals for every US\$1,000 spent on family planning (Moreland and Talbird, 2006). When the benefits of increased contraception in terms of DALYs are combined with the probable effects of reduced fertility on economic growth per head, the economic rationale for investing in family planning is further strengthened (Kohler, 2012).

Focusing on HIV, the annual cost of providing family planning for all HIV-infected women who wish to prevent unintended births is over US\$33 million globally. If all unmet need for family planning were met for women living with HIV, it is estimated that the cost for each unintended pregnancy prevented to women with HIV is US\$63 globally (Halperin et al., 2009). Contraception is a cost effective form of HIV prevention. Integrating family planning and the prevention of mother-to-child transmission of HIV (PMTCT) services would save an estimated US\$660 for each HIV infection averted compared with US\$1300 per infection averted with treatment alone (Stover et al., 2003). Thus, family planning is also cost-effective for preventing HIV transmission (Wilcher et al., 2003). It is essential to examine the impact of integrating any component of STI or HIV prevention, care, and treatment into a family planning setting in developing countries. The weight of evidence demonstrates that integrated services can have a positive impact on client satisfaction, improve access to component services, and reduce clinic-based HIV-related stigma, and that they are cost effective.

Integrated services are thought to expand access to and coverage of critical services and to improve their efficiency and cost-effectiveness by reducing duplication of service delivery functions and delivering more services per client contact. However, the cost of adding routine clinical screening for STIs among family planning clientele may not be justified by the number of infections detected and treated. There is an argument that sexually active, unmarried young people are at disproportionately high risk, both of unplanned pregnancy and of STI and HIV infection. So youth-friendly services in settings with a high prevalence of STIs or HIV should consider offering the full range of reproductive health services, with the clear understanding this is likely to increase operating costs. The cost of saving one DALY through family planning and maternal and newborn care (US\$62) (Singh et al., 2009) compares favourably with the cost-effectiveness of other common widely accepted health interventions, such as antiretroviral therapy (US\$150 to US\$547) (Bertozzi et al., 2006), BCG tuberculosis vaccination of children for tuberculosis (US\$48 to US\$203) (Dye and Floyd, 2006) and oral rehydration therapy (US\$1,268) (Keusch et al., 2006). Family planning is therefore considered good value for money in global health because of its relative cost effectiveness.

Research suggests that understanding the level of demand for family planning and better specification of both the gender barriers and pathways could help to make interventions more cost effective and strategic (Sills et al., 2012). There are some examples of efforts to cost 'rights' and measure the impact of interventions to change gender norms and outcomes for family planning (UNFPA, 2012).

Key messages (from Foster et al 2014)

- Compared to other health interventions, it is cost-effective to provide family planning and the recommended standard of maternal and newborn care to all women of reproductive age in low income countries.
- Integrating family planning services with other health programmes to reduce transmission of infections such as HIV could also be a cost effective service delivery method.

 Fulfilling the unmet need of family planning is cost effective in preventing unwanted pregnancies, spacing childbirth and reducing the cost of providing the recommended standard of maternal and newborn care. Integrating with other services, such as HIV programmes, is also good value for money in preventing HIV infection. However, funding must be sustained to ensure ongoing progress.

#### 7. Safe abortion

The HEART Family Planning topic guide includes a chapter on abortive technology. It includes the WHO definition of unsafe abortion as a procedure for terminating an unintended pregnancy, carried out either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both. Unsafe abortions are characterised by the lack of or inadequacy of skills of the provider, hazardous techniques and unsanitary facilities (WHO, 1992). In 2008, an estimated 21.6 million unsafe abortions took place worldwide, almost all in developing countries. This is an increase from the 19.7 million unsafe abortions in 2003. It was estimated that 14 of 1,000 women of reproductive age (15-44 years) had an unsafe abortion (Foster et al 2014).

Despite efforts to achieve Millennium Development Goal 5 Target 5A – reduce by three quarters the maternal mortality ratio between 1990 and 2015 – deaths due to unsafe abortion remain close to 13% of all maternal deaths. It is likely that the numbers of unsafe abortions will continue to increase unless women's access to safe abortion and contraception – and support to empower women (including their freedom to decide whether and when to have a child) – are put in place and further strengthened. Unsafe abortions are preventable, yet they continue to pose undue risks to a woman's health and may endanger life (WHO, 2011).

WHO (2011) listed the following as conditions that may (either individually or jointly) characterise an unsafe abortion:

- no pre-abortion counselling and advice
- abortion being induced by an unskilled provider, frequently in unhygienic conditions, or by a health practitioner outside official/adequate health facilities
- abortion is provoked by insertion of an object into the uterus by the woman herself or by a traditional practitioner, or by a violent abdominal massage
- a medical abortion is prescribed incorrectly or medication is issued by a pharmacist with no or inadequate instructions and no follow-up
- abortion is self-induced by ingestion of traditional medication or hazardous substances.

Further hazardous features of unsafe abortion are:

- the lack of immediate intervention if severe bleeding or another emergency develops during the procedure
- failure to provide post-abortion check-up and care, including no contraceptive counselling to prevent repeat abortion
- the reluctance of a woman to seek timely medical care in case of complications because of legal restrictions and social and cultural beliefs linked to induced abortion.

Evidence presented by WHO (2012) suggests that a reliance on abortion can be greatly reduced when:

- women can plan pregnancies through effective contraception
- counselling and services meet the unmet need for family planning, and appropriate
  method-mix of contraception (including the promotion of long acting and/or permanent
  contraception methods) is offered to all women, including those both married and
  unmarried. Additionally, available evidence underlines the importance of promoting
  access to the full range of abortion technologies, removing barriers to medical abortion,
  training providers, removing procedural barriers and ensuring adequate funding for both
  medical and surgical abortion (Center for Reproductive Rights, 2005).

In the meantime, ill-effects of unsafe abortion should be prevented by:

- making safe abortion services available and accessible where abortion is not against the law
- ensuring that permitted reasons for abortion are supported by the national legislative process and health systems
- granting access to services for the management of complications arising from unsafe abortion
- providing post-abortion counselling and offering contraceptive services, which will also help to avoid repeat abortion (WHO, 2012).

#### Key messages (from Foster et al 2014)

- Deaths attributable to unsafe abortion can be prevented by effective contraception, safe abortion services, and post-abortion services (Ahman and Shah, 2011).
- Ending the silent pandemic of unsafe abortion is an urgent public health and human rights imperative.
- Despite its frequency, unsafe abortion remains one of the most neglected global public health challenges, with an estimated 68,000 women dying every year.
- Access to modern contraception can reduce but never eliminate the need for abortion.
- Legalisation of abortion is a necessary but insufficient step toward eliminating unsafe abortion.
- When abortion is made legal, safe, and easily accessible, women's health rapidly improves. By contrast, women's health deteriorates when access to safe abortion is made more difficult or illegal.
- Treating complications of unsafe abortion overwhelms impoverished healthcare services and diverts limited resources from other critical healthcare programmes (Grimes et al., 2006)

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