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Unsafe abortion still frequent across the world but less often fatal

Clémentine Rossier*

The number of induced abortions worldwide has barely fallen in recent years, and half of them are performed illegally. Yet the number of abortion-related deaths has declined substantially over the last two decades. Clémentine Rossier provides an overview of unsafe abortion across the world, and explains the reasons for this paradox.

The World Health Organization defines unsafe abortion(1) as "a procedure for terminating a pregnancy performed by persons lacking the necessary skills or in an environment not in conformity with minimal medical standards, or both." In estimating the frequency of the different types of abortion at the world level, the WHO has, until now, counted as safe all abortions done under the cover of liberal (or liberally interpreted) abortion laws; all other abortions have been ranked unsafe. Under this definition, only a small minority of abortions in developed countries are unsafe (6% in 2008) versus slightly over half (56%) in developing countries (Table).

The total number of abortions in the world, safe and unsafe together, has been estimated three times – in 1995, 2003 and 2008 – by the WHO and the Guttmacher Institute jointly (Box 1). Between 1995 and 2008, the abortion rate fell worldwide from 35 abortions annually per 1,000 women of childbearing age (15-44 years) to 28 per 1,000. However, it fell only during the first observation period, between 1995 and 2003. This overall trend reflects a change in abortion frequency in developing countries, where slightly over 80% of the world's population live. From 1995 to 2003, the abortion rate in those countries fell from 34 to 29 per 1,000, before stabilizing from 2003 to 2008. This stagnation is probably explained by a slackening of family planning efforts. The share of women in a union and using contraception in developing countries rose from 52% in 1990 to 60% in 2000 but stagnated after that, reaching just 61% in 2009. [1] In developed countries the proportion of women in a union and using contraception was already higher at the start of the period and rose slightly, from 69% in 1990 to 72%(2) in 2009.

Abortion rates fell more quickly in developed than developing countries, dropping from 39 to 24 per 1,000 from 1995 to 2008. That fall is primarily due to changed practices in Eastern European countries, where pregnancy termination was one of the main birth control methods up to the 1980s and where contraception did not become widespread until after the dissolution of the USSR. Abortion fell sharply in Eastern European countries over the 1990s, stabilizing between 2003 and 2008 at a level that was nonetheless higher than elsewhere in Europe.

The distinct trends observed in developed and developing countries raised the proportion of unsafe abortions across the world from 44% in 1995 to 49% in 2008.

* Institut National d'Etudes Démographiques and University of Geneva.

(1) Induced abortions only; spontaneous abortions and miscarriages are excluded.

(2) In a given country at any given time, the share of women using contraception seldom exceeds 80%, even when contraceptive use is widespread. A minority of women do not use contraception, either because they know they are sterile or because they are pregnant or wish to become so.

Table. Abortion rates and proportion of unsafe abortions by world region in 1995, 2003 and 2008

	1995		2003		2008	
	Abortion rate*	Proportion of unsafe abortions (%)	Abortion rate*	Proportion of unsafe abortions (%)	Abortion rate*	Proportion of unsafe abortions (%)
World	**35**	**44**	**29**	**47**	**28**	**49**
Developing countries	**34**	**54**	**29**	**55**	**29**	**56**
Africa	33	99	29	98	29	97
Asia	33	40	29	38	28	37
Latin America	37	95	31	96	32	95
Developing countries	**39**	**9**	**25**	**7**	**24**	**6**
Europe	48	12	28	11	27	9
North America	22	< 0.5	21	< 0.5	19	< 0.5
Oceania	21	22	18	16	17	15

Source: [2]
Note: Only induced abortions are counted (excluding spontaneous abortions).
* Annual number of abortions per 1,000 women aged 15-44 years.

Box 1. How is the number of abortions worldwide estimated?

The World Health Organization's Department of Reproductive Health and Research (RHR) in Geneva has been estimating the total number of unsafe abortions worldwide since 1990, and collaborates with the Guttmacher Institute in New York to produce world abortion statistics. Safe abortion figures are established on the basis of official statistics, or national surveys for countries that have no statistics or only incomplete data. These figures are adjusted to account for gaps in the data. Unsafe abortion figures, meanwhile, are estimated on the basis of hospital statistics and surveys of women. Local data are adjusted using multipliers and weighting to obtain estimates at the regional scale. Models are used for countries with no information. The ratio between total number of abortions and the population of women aged 15-44 years is calculated for each world region and sub-region to obtain annual abortion rates.

It is even more difficult to estimate the number of deaths resulting from unsafe abortion. Estimates are based primarily on information from hospitals, and in some cases population surveys that indicate the number of maternal deaths attributable to abortion. Models are also used to produce estimates for countries that provide no information.

Fewer deaths from unsafe abortions

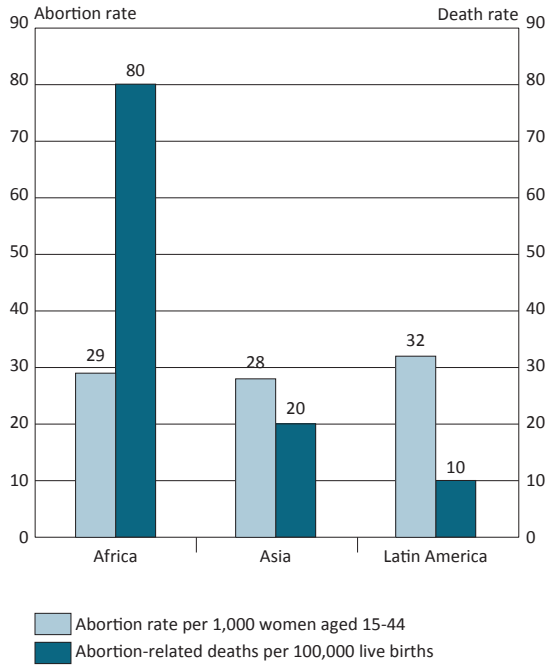
Abortions performed in unsafe conditions can cause haemorrhaging, septicaemia, peritonitis, and traumatic injury to the reproductive and abdominal organs, and these complications may lead to disability or death. The adverse effects of unsafe abortion on women's health vary in severity according to the termination method used, the qualifications of the person performing the operation, the gestational age, and the quality of the health system that treats the woman for any post-abortion complications. Whereas induced abortions in developed countries seldom result in death, approximately 0.22% of abortions in the developing world end tragically, according to a 2008 estimate. [3] In other words, for every 100,000 live births in developing countries there are 40 abortion-related deaths, amounting to 13% of all maternal mortality (1 maternal death in 8).

Abortion-related deaths have decreased in the last two decades, from 60 deaths per 100,000 live births in 1990 to 40 in 2008. [4] The downtrend is observed in all regions, but the fastest progress has been in Eastern European countries, followed by Latin America and, further behind, Asia and sub-Saharan Africa. These developments can be attributed in part to improved treatment of maternal health problems.

Yet disparities by region remain large

Abortion mortality varies widely today across developing regions despite their quite similar safe abortion rates (Figure). The relatively low mortality in Asia is probably due to the fact that only about one-third of abortions there (37% in 2008) are performed illegally (and therefore unsafely, according to the standard definition), in contrast to the situation in

Figure. Abortion rates and abortion mortality by continent in 2008



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Note: induced abortions only (excluding spontaneous abortions).
Source: [2] [3].

Africa and Latin America, where 97% and 95% of abortions, respectively, are clandestine. [2] Africa has an extremely high rate of abortion-related deaths compared to other regions. Its alarming figures are explained by the poverty endemic to this continent, and by its poorly resourced health systems (with less access to safe abortion methods, skilled practitioners and effective post-abortion care than in other regions), combined with an abortion rate as high as those in the other developing regions (Box 2).

Illegal medical abortions

Death following an abortion is much less frequent in Latin America than in the rest of the developing world, even though abortion is still strongly condemned in that region. What explains the difference? Moreover, the frequency of severe abortion complications requiring hospital treatment has also fallen there in the last two decades, along with the treatment cost per complication. These positive developments appear to stem from a rise in medical abortions. [5] Two drugs are used for this purpose: Mifepristone, which is still quite expensive and only authorized for sale in a limited number of countries, and Misoprostol, which is cheap,

Box 2. The example of abortion in Burkina Faso

It may seem surprising that abortion rates in Africa are as high as in the other regions of the developing world, as fertility on that continent is much higher than elsewhere. It has been estimated that in 2010-2015, women in sub-Saharan Africa have 5.1 children on average, as opposed to 2.2 in Asia and Latin America. In reality, the historical experience of the other continents shows that recourse to abortion rises when fertility starts to fall, i.e. when demand for birth control is increasing but access to contraception remains difficult. Abortion frequency only falls when contraceptive use spreads faster than birth control needs.

In sub-Saharan Africa, although information is lacking, abortion appears to be more frequent among subgroups of women who have fewer children than average, namely higher educated women and city-dwellers. However, these women seem to use abortion not at the end of their childbearing lives to limit their total number of children, but rather to avoid having a child in early adulthood.

In a national survey conducted in Burkina Faso in 2009, a sample of women were questioned on recourse to abortion among close family and women friends [6]. Each woman was asked to report not the abortions she herself may have had, but abortions among close female friends or relatives. This survey procedure, called "the confidants method," is an effective means of obtaining data in settings such as Burkina Faso where abortion is heavily stigmatized and women do not report their own abortions in surveys. Abortion there is illegal and difficult to obtain, so women turn to their network of family and friends to gain access to providers. The confidants method made it possible to collect information on 70% of the abortions undergone by women in the respondents' social networks.*

It was found that 65% of abortions in Burkina Faso are performed on women aged under 25 years, and 89% on women under 35. Two-thirds of induced abortions are performed on childless women, and one-fourth on women with one or two children. Half of induced abortions concern women who have gone to school (only 20% of women aged 15-49 attend school in Burkina Faso). More than one-third of all reported abortions are carried out in urban contexts (only 22% of the population of women aged 15-49 live in cities). Lastly, between half and two-thirds of these abortions are done by traditional practitioners or are self-administered using dangerous methods, and 4 in 10 of them result in complications. These findings highlight the need to intensify efforts to provide sex education and contraceptive information to young adults in the region.

* Figure estimated on the basis of the number of abortions in Burkina Faso, in turn estimated on the basis of post-abortion care statistics.

easy to obtain and authorized in many countries, including in Latin America. Although success is best guaranteed by combining the two, the second drug alone is enough to terminate pregnancy if the dose is right. In many Latin American countries, websites and toll-free numbers are now available for private individuals wishing to use Misoprostol, thereby facilitating access to safer abortion. However, if the dose is not correct, the abortion may be incomplete. Moreover, ill-informed women may go to hospital when the drug-induced bleeding begins, despite the fact that the abortion is proceeding normally, thereby increasing the number of registered "complications". Clearly, an effective system of post-abortion care needs to be in place in order for this model of illegal, yet safer, abortion to succeed. Misoprostol is now becoming more difficult to obtain in many countries in Latin America, a world region where opinion on the abortion question remains highly conservative.

These trends have recently led the WHO to revise its unsafe abortion criteria [7]. It now reasons in terms of a safety continuum rather than defining risk levels exclusively on the basis of the legality of the abortion procedure. For example, abortions performed legally by practitioners using curettage, a technique no longer recommended, occupy an intermediate position on the safety continuum, as do illegal but correctly administered medical abortions. Now that mortality from unsafe induced abortions is falling, it is important to take morbidity more systematically into account when examining the effects of abortion on women's health.

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Abstract

The frequency of induced abortions fell worldwide in the 1990s, from 35 abortions per 1,000 women of childbearing age (15-44 years) in 1995 to 29 per 1,000 in 2003. But it stabilized in the 2000s (28 per 1,000 in 2008) as the spread of contraceptive use slowed down in developing countries. The proportion of unsafe abortions, defined by the WHO as abortions "performed by persons lacking the necessary skills or in an environment not in conformity with minimal medical standards, or both," did not fall, however, and still represents nearly half of all elective terminations (49% in 2008).

Paradoxically, abortion-related mortality has been falling steadily for two decades, from 60 maternal deaths per 100,000 live births in 1990 to 40 per 100,000 in 2008. The drop has been particularly pronounced in Latin America, even though abortion is still strongly condemned there. This development is linked in part to the spread of medical abortion in countries where it nonetheless remains illegal. Today, illegal no longer systematically means unsafe.

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