Chapter 9

Unsafe abortion and strategies to reduce its impact on women's lives

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Introduction

Harrowing stories of women seeking abortion are universal and commonplace. Take, for example, the story of a Nicaraguan girl who, at 8 years old, became pregnant, raped by her neighbour.[1] Without the help of her family, international attention and several months of hard fighting, this young girl could have become another faceless statistic in the pandemic of unsafe abortion. The outrage many feel in reaction to this and other similar stories has been insufficient to end the political struggle over abortion. What is more, that young girl was fortunate, as one woman dies every 8 minutes from an unsafe abortion somewhere in the world, most likely south of the equator. The greatest tragedy is that unsafe abortion is largely, if not entirely, preventable and yet remains one of the most neglected public health challenges.

Millennium Development Goal (MDG) 5, announced in 2001, is an internationally agreed-upon imperative to reduce maternal mortality by 75% from its 1990 level by the year 2015. As a significant proportion of mortality is due to unsafe abortion, this goal probably cannot be met without specific and direct programmatic efforts to reduce the impact of unsafe abortion. Thousands of publications trace efforts to reduce mortality due to other significant contributors, yet few, if any, papers highlight efforts designed specifically and directly to reduce the impact of unsafe abortion. Additionally, many Safe Motherhood Initiatives ignore altogether the problem of unsafe abortion because of the difficult political issues involved.

Despite the continued absence of abortion in serious policy discussion, a common goal has been to make abortion 'safe, legal and rare'.[2] Global statistics published in 2007[3] showed that it is possible to reduce the need for abortion by wider access to contraception. However, while the need for abortion can be reduced, it can never be eliminated entirely, as there will always be circumstances in which even wanted pregnancies cannot be carried to term. Nonetheless, nearly half of all countries still highly restrict abortion, often including pregnancies arising from rape. Even where abortion is legal, the procedure can remain highly inaccessible and unavailable, regardless of its technical legality.

By and large, the reasons why unsafe abortions happen are known, if not perfectly, at least to a degree sufficient for developing effective interventions. Given the

complicated and often opposing forces affecting global abortion provision, what are the appropriate and sufficient means to stem the pandemic? What are the consequences of failing to do so? This chapter proposes some answers to these perplexing questions.

The problem of unsafe abortion

Prevalence and distribution

The World Health Organization (WHO)[4] defines unsafe abortion as a procedure for terminating a pregnancy either by people that lack the necessary skills or in an environment that lacks the minimal medical standards, or both. Data for 2003[5] show that each year approximately 210 million women become pregnant and of these pregnancies an estimated 80 million are unplanned. About 42 million of these unplanned pregnancies are terminated intentionally, at a rate of 29 abortions per 1000 women of reproductive age. In low-resource countries, only one in three abortions is legal, and 98% of all unsafe abortions occur in these low-resource countries.[5] Nearly half of all abortions, or approximately 19–20 million per year, are estimated to be unsafe.[3] This means that in low-resource countries a woman can expect to experience one unsafe abortion in her lifetime.[6] In contrast, it is rare that a woman in a developed country will undergo an unsafe abortion.

The majority of unsafe procedures are performed where abortion is legally restricted. However, the rate of unsafe abortion in some countries where abortion has been liberalised for decades is still quite high, for example in India, Armenia and Zambia.[5] Therefore, legality is not the only significant contributor to unsafe abortion. Other primary (individual-level) and secondary (systemic) determinants include where a woman lives (urban versus rural), a woman's financial resources, and the availability and quality of abortion and post-abortion services.

Mortality and morbidity

Approximately 70 000 women die each year as a result of unsafe abortion, the overwhelming majority of them in low-resource countries.[5] Deaths from unsafe abortion account for approximately 13% of maternal mortality worldwide but this varies by country from negligible to over 30%.[7] The mortality rate for an abortion done safely is less than 1 per 100 000 procedures for all abortions and may be as low as 1 per 1 000 000 procedures for early first-trimester procedures.[8] However, the mortality rate in regions where unsafe abortion is commonplace is very much higher: 350 deaths per 100 000 procedures in low-resource countries overall and, specifically in Africa, 680 per 100 000 procedures.[3]

Global estimates of the disability burden of unsafe abortion show a loss of approximately 5 million years of productive life each year, representing an estimated 14% of all annual disability from pregnancy-related conditions.[9] However, researchers believe the impact of abortion to be underestimated because of the clandestine nature of some procedures and limitations of measuring abortion disability.[10] Abortion complications are the cause of major morbidities such as pelvic inflammatory disease and other infections of the reproductive tract, secondary infertility, ectopic pregnancy, mid-trimester miscarriage and preterm labour. For example, it is estimated that 1.7 million women each year suffer secondary infertility as a consequence of unsafe abortion. Furthermore, unsafe abortion contributes to the development of chronic reproductive tract infections in an estimated 3 million women per year.[5] The rate and severity of complications are related to the quality of health care for abortion and

management of complications, including the skill of providers, the method of abortion used, and the availability and use of antibiotics. Individual-level factors include the health of the woman, genital tract anomalies, reproductive health infections, female circumcision and gestational age at the time of the procedure.

Economic and social costs

The combined regional annual cost of unsafe abortion in Latin America and Africa was estimated in 2009 to be between US$159 million and US$333 million.[11] In comparison with the cost of providing legal, safe abortion, this economic burden is inordinately high. Data from Uganda,[12] Nigeria,[13] Brazil[14] and Mexico[15] show that the cost of post-abortion care is several times that of providing safe abortion with manual vacuum aspiration. A theoretical costing study estimated that the cost of post-abortion care in tertiary facilities is ten times more than elective abortion by mid-level providers in primary centres; this finding is similar to the results of country-level studies.[12] In Tanzania,[16] it is estimated that the cost of treating a complicated abortion is seven times the annual per person expenditure for health care. Data from Mexico City published in 2009[17] showed that management of severe sepsis costs almost ten times more than manual vacuum aspiration. Together, these data support not only improved services for managing complications but also legalisation of abortion, because of the tremendous cost savings.

The cost of unsafe abortion is also high because its occurrence and complications are so common. Estimates in 2006[9] from 13 low-resource countries indicated that between three and 15 per 1000 women of reproductive age are hospitalised each year for post-abortion care. In some countries, the burden of these hospitalisations accounts for almost 50% of hospital budgets for obstetrics and gynaecology.[18]

The high level of morbidity and mortality associated with unsafe abortion also translates to indirect economic and social costs that are difficult to quantify. 'Indirect' economic costs are related to loss of productivity and increased health problems for those women who survive. The non-economic costs are related to the impact on the children and the extended family of a woman. An estimated quarter to half a million children lose their mothers each year as a result of unsafe abortion;[19] those children are more likely than children with two parents to receive inadequate health care and social services such as education and are more likely to die at an early age.[20]

Pathways to unsafe abortion

Unwanted pregnancy, the necessary (but insufficient) step

Unwanted pregnancy is an extremely common phenomenon, affecting approximately 80 million women each year.[5] Women may know that they do not want a new pregnancy but be unable to exercise choice over conception because of insufficient access to or information about contraception, incorrect and inconsistent contraceptive use, or an inability to exercise autonomy over their own bodies, including being subject to rape. For other women, a pregnancy that was not necessarily unwanted may become unwanted because of changes in life circumstances, including:

- abandonment by spouse
- risk to her life or health
- fetal malformation
- inability to care for an additional child.

Contraceptive use is clearly a critical determinant of abortion. In fact, abortion is lowest where contraceptive use is high, despite the fact that abortion services also may be legal and widely available. For example, the abortion rate is low at 10 per 1000 women of reproductive age in Belgium, Germany and the Netherlands, where access to safe abortion is widespread and modern contraceptive use is high.[3] In contrast, in Africa, rates of modern contraceptive use are low, at approximately 30%, and abortion rates are high, at 30 per 1000 women of reproductive age, despite the legal restrictions on abortion.[3,21] What is more, the cost of providing effective family planning is significantly lower than providing either abortion or post-abortion care services. For example, a study in Nigeria published in 2007[22] estimated that the cost of contraceptive services that would have enabled women to avoid the unintended pregnancies that ended in unsafe abortions would have been one-quarter that of the post-abortion care provided by health facilities. Yet, since 1995, funding for family planning programmes has been drastically reduced.[23]

Desired fertility also plays a critical role in the link between contraception and abortion.[24] Low desired fertility increases the likelihood that any given pregnancy will be unwanted, a phenomenon that occurs more frequently in the absence of universal access to safe and effective methods of contraception.[25] The attitudes and education of providers and women affect whether women adopt modern methods, even where access is universal or near universal.

Legal environment

Approximately 60% of women in the world live in countries where abortion is legal for at least one reason.[26] Most countries allow abortion to save a woman's life. More than half permit it to preserve physical and mental health, and roughly half specify rape or incest as accepted grounds. A minority of countries allow abortion for fetal impairment and for economic or social reasons. Far fewer women in low-resource countries than in developed countries live where abortion in the first trimester is available, regardless of reason. In countries that restrict the legality of abortion, unsafe abortions are far more common than in countries where abortion is more freely available. Moreover, where women may need abortion the most – as a result of poverty and lack of access to contraception – they typically face the most restrictions. In some places, providers may be willing to provide abortions regardless of the law, yet such clandestine services are often of questionable quality, frequently resulting in tragically poor outcomes.

Liberalisation of abortion laws can have a dramatic impact on reducing mortality and morbidity related to unsafe abortion. Documented examples in South Africa and in Romania demonstrate this impact. In Romania, maternal mortality increased dramatically between 1960 and 1990, peaking in 1989 at an estimated 170 deaths per 100000 live births, reflecting the restrictive abortion and contraception laws implemented by Ceauşescu.[6] This rate declined rapidly to 40 per 100000 births in 1999 following his ejection from office and the restoration of access to abortion and contraception. South Africa liberalised its abortion laws in 1996 and subsequently the incidence of infection resulting from abortion declined by 52% and the maternal mortality rate declined by 92%.[27,28]

Although some have argued that legal liberalisation increases recourse to abortion, evidence for such a trend is weak at best. Certainly, the advent of legal and available services may increase the count of procedures as, previously, clandestine acts were always under-reported. In addition, the extent of unsatisfied demand may become

clearer immediately after legalisation. Yet, when contraceptive use increases and fertility levels stabilise, abortion rates tend to decrease where abortion services are legal and available. Global abortion statistics demonstrate that, in developed countries, the rate of abortion decreased from 39 to 26 per 1000 women of reproductive age between 1995 and 2003 – a decline that was even more marked in the countries of the former Soviet Union, where the rate has declined nearly 50% to 44 per 1000 women of reproductive age.[9]

Liberalisation of abortion, however, is not completely predictive of access to abortion, especially in low-resource countries. The translation of law to policy is a necessary step that can have a critical impact on the level of unsafe abortion in a country or municipality. The law on the books is not always the law in practice, often because political will and commitment to ensuring the availability of services is lacking. Indeed, the willingness and ability of health systems to make available services for legal indications affects availability and consequently recourse to unsafe abortion. For example, in India,[29] despite liberalisation of abortion in 1971, the law restricts who can provide abortion, how abortion can be provided and where abortion can be provided – all of which have been translated to policies that restrict access. Also, although abortion is widely available in the private sector, those services are primarily located in urban centres and are expensive, especially in comparison with the free services offered at public clinics. As a result, approximately 40% of the 6.7 million abortions that occur each year in India are unsafe.[30]

Both provider and public awareness of the law, imperative to achieving access to safe services, can be driven by national and local policies. Provider knowledge of the law and willingness to provide abortion for legal indications also directly influences the availability of safe services. At the same time, women's knowledge affects their decisions to seek safe versus unsafe procedures.

Health system constraints

The burden of unsafe abortion on health systems is great, given both the scale of the problem and the high cost of treating complications. An estimated 5 million women are hospitalised each year for treatment of abortion-related complications, such as haemorrhage or sepsis.[31] In many low-resource countries, incomplete abortion is both one of the leading obstetric emergencies and the most common cause of hospital admission.

The rate of hospitalisation for abortion complications often reflects the relative safety of abortion in a particular locality. For example, in Bangladesh, where the rate of abortion remains relatively high, the rate of hospitalisations is fairly low, probably attributable to a widespread, well-developed system of menstrual regulation services.[9] In contrast, in countries where abortion is highly restricted and few services are available, such as the Dominican Republic, Chile, Peru or Egypt, women are forced to resort to unsafe abortion and the proportion hospitalised may be greater than in Bangladesh.

In many countries, in addition to limited health infrastructure, there is a shortage of well-trained healthcare providers. The lack of appropriately trained providers adds yet another barrier to accessing safe procedures. Even where abortion services are available, providers often use outmoded, risky and expensive techniques, both for induction and for treatment of complications. For example, in South Africa, a study in 2000[32] on the management of incomplete abortion in public hospitals showed

that the majority of evacuation procedures were done with sharp curettage as well as general anaesthesia or sedation.

Finally, when women have serious complications from unsafe abortion they may also have trouble accessing appropriate and timely treatment.[33] In most low-resource countries, only tertiary-level facilities have the resources and skilled providers necessary to manage complications such as sepsis and uterine perforation. Therefore, the majority of women at risk of such complications are miles from treatment. Even when women with serious complications reach a tertiary facility, there is no guarantee that the providers will have the necessary training and resources to manage the complication.

Economic and geographic barriers

Poverty is associated with women's inability to access safe abortion services. Two studies, one in Nigeria[34] and one in Tanzania,[35] found that poor women were more than twice as likely to seek abortion services from non-professional providers. Poor women seek recourse to unsafe abortion because they are less likely to be educated, to know their rights under the law and to have the resources to pay for safe services. Additionally, women who are poor have difficulty paying for the travel that is usually required to access services, even unsafe services. Where women work or are primary caregivers, inability to afford the time to seek services is an additional barrier. Moreover, the time it might take a poor women to raise the funds for an abortion further delays the procedure, which becomes riskier with advancing gestational age. Poor women are also more likely to live in countries where abortion is restricted and, thus, where safe services are hard to find.

Ironically, poor women are willing and do pay significant sums of money for services, regardless of safety. A study in one of the poorest districts in Thailand[36] showed that women paid one to two months' salary for an unsafe abortion. In contrast, safe procedures such as manual vacuum aspiration or medical abortion could be provided for far lower cost, if providers were trained, if services were accessible, and if women were knowledgeable about the safety and accessibility of those procedures. Again, this reality highlights the benefit of introducing these simple technologies at all levels of the healthcare system. The cost is far less than developing higher order surgical services or services for managing obstetric trauma and, therefore, the benefit can be more widely shared.

Whether a woman lives in an urban or rural setting is also predictive of access to safe abortion. For example, a study in India[37] demonstrated that women in the rural areas of Uttar Pradesh rarely seek services for abortion complications in secondary or tertiary facilities; rather, they typically obtain care at the village level, where there are no doctors and few skilled healthcare providers. Several factors were found to contribute to this pattern of healthcare-seeking:

- women believed the local providers to be skilled
- few women were willing to expose themselves to the perceived risk of seeking care at referral facilities
- women were unlikely to have resources to seek higher level care.

An additional contributing factor was that rural providers did not necessarily refer women to higher level care when indicated. This research demonstrates that the situation of rural women, the majority of them poor, can prolong resolution of complications, worsen the outcome and increase the cost to women. The study highlights the need

to develop linkages between village-level (primary) care facilities and higher level facilities. It also suggests that providers who are less skilled should receive training and women should be educated on how to manage abortion and its complications.

Cultural constraints

Provider

Physicians play a critical role in expanding the accessibility and availability of safe abortion, both where legal and where restricted. Opinions, knowledge and training affect providers' willingness to provide abortion services and their ability to perform high-quality procedures. A 2001–02 survey of Brazilian obstetricians and gynaecologists[38] demonstrated that confusion and misperception were widespread about the legal indications for abortion. Surveys of providers in countries with similar restrictions, such as Nigeria,[39] show comparable results. Moreover, where knowledge is low and the legal environment highly restrictive, providers are more likely to use substandard methods and thus to cause more serious complications.[13,35]

Even in countries where abortion is legally permitted, physicians act as gatekeepers for abortion provision. Since the rise of medicine as a profession, healthcare services by non-physicians, including abortion practice, have been constrained globally. Owing largely to economic and health worker constraints, many countries and localities have had to rethink such laws and policies restricting practice by non-physician health providers. Yet despite the expanding role of mid-level providers and community health workers in the delivery of health services generally, in many, if not most, countries, physicians remain the only providers allowed to perform abortions.

Women's status in society

Unsafe abortion is perpetuated principally by ideologies and power dynamics that undermine women's right to life and health. These ideologies and dynamics shape policies concerning contraceptives, abortion, sexuality education and, most importantly, women's ability to make independent choices. In patriarchal structures, which are predominant in the low-resource countries of Africa, Latin American and Asia, the male norm drives policies and the distribution of resources. Thus, the female perspective is absent and needs rooted in the women's experiences are not priority areas for law and policy. In this manner, women become second-class citizens – either by law or in reality – and, practically speaking, their diminished status contributes directly to low levels of contraceptive use and high levels of unwanted pregnancy and unsafe abortion. While liberalisation of abortion laws and scaling up contraceptive access is an important step to reversing the impact of unsafe abortion, it cannot be reduced sustainably without the inclusion of women's voices in public decision making.

Stigma

In most places, especially where unsafe abortion is most common, abortion is highly stigmatised. As a result, women do not talk about their experiences: they seek services without good advice, and, when they experience complications, they may delay seeking treatment. Providers also face stigma and either do not share their experiences in providing abortion or shy away from providing it altogether. In addition, because people do not talk openly about abortion, misinformation is rampant. For example, women who self-induce abortion often use ineffective methods, such as herbal

remedies, because they are misinformed about the best way to induce an abortion. Added to the desperation felt by women with unwanted pregnancies, misinformation can cause women to expose themselves to unnecessary risk as a result of unsafe abortion. These contributing factors affect poor and uneducated women disproportionately.

Strategy priorities to reduce the impact of unsafe abortion

Liberalise laws and policies currently restricting abortion provision

Restrictive abortion laws contribute directly to the pandemic of unsafe abortion and thus liberalisation is imperative to improving this situation. While it is possible to mitigate the impact of unsafe abortion in legally restricted environments by improving post-abortion care, such efforts are unduly burdened, costly and inefficient compared with the high impact of making services legal first and then accessible. Indeed, efforts to 'mop up' the effects of unsafe abortion – by expanding post-abortion care programmes – fail to address the most severe and costly complications, as women suffering those consequences rarely reach services. Even when such women manage to reach services, they usually require interventions that are far beyond the scope of basic post-abortion care services. Additionally, expanding post-abortion care will do nothing to address the irreducible need for safe services. Safety valves sometimes exist in places where abortion is legally restricted, allowing some women access to safe but illegal procedures or high-quality post-abortion care. These safety valves are not sufficient. More importantly, as a matter of public policy, reliance on informal mechanisms to mitigate unsafe abortion ensures that inequalities become further entrenched, as these services tend to be available disproportionately to the wealthy and well-educated.

Public health and human rights arguments for liberalisation or decriminalisation of abortion can help to marshal the necessary political will for change. Although not ideal, liberalisation in steps may be the best and most feasible approach in some environments. Even where consensus for abortion on request is lacking and would be difficult to achieve immediately, consensus on abortion for specific indications could result in more liberal laws more swiftly and, in turn, more quickly improve access to safe services.

Scale up the availability of safe and appropriate services

Scaling up health services, including through decentralisation of systems from tertiary to primary levels, has been a critical element of the MDG initiative. Nevertheless, abortion services in many settings fall far behind the norms, policies and guidelines established by international treaties, national laws, professional associations and, in some cases, even ministries of health. Both abortion and post-abortion services have been inadequately integrated into comprehensive efforts to improve maternal health care. To this end, reducing the impact of unsafe abortion will require a significant investment of resources. Important questions remain as to how to achieve better services and to improve resource allocation, including how to ensure that providers are trained, that women are knowledgeable and that the safe, appropriate services can be accessed, even where legally restricted. Generally speaking, there is a need for more trained providers, more points-of-service and more cost-effective means of delivering those services. To achieve these goals will require training and educating providers on modern abortion practice and its complications. Ensuring the use of

appropriate technologies can improve services, expand access and save money. The following are priorities for scaling up the delivery of safe services:

1. replace first-trimester dilatation and curettage with manual or electric vacuum aspiration or mifepristone–misoprostol medical abortion, as appropriate
2. replace outmoded second-trimester procedures with dilatation and evacuation or mifepristone–misoprostol medical abortion, as appropriate
3. implement medical abortion services more widely, including replacing a large percentage of early surgical abortions with medical abortions, especially where physicians and surgical services are lacking
4. simplify surgical services, by reducing or eliminating the use of general anaesthesia
5. decentralise services to outpatient and primary care settings
6. train providers at all levels, most importantly, mid-level providers
7. improve post-abortion care by upgrading clinical care (including misoprostol) and expanding access (including by decentralisation and use of mid-level providers or community health workers)
8. provide integrated comprehensive contraceptive and family planning services.

Medical abortion service alternatives

Expanding the implementation of medical alternatives to surgery must be a critical aspect of future interventions aimed at reducing the impact of unsafe abortion. These methods are highly safe and effective means of delivering both abortion and post-abortion care services. Additionally, they are cost-effective, in large part because services can be provided by a range of less-skilled health professionals and because they require less infrastructure to deliver.

Misoprostol – a synthetic analogue of the E_1 class of prostaglandins, a group of chemicals occurring naturally in the human body – has been invaluable in the development of such non-surgical alternatives. The stability of misoprostol at room temperature and its low cost make it an ideal treatment in low-resource settings. It is not surprising, therefore, that misoprostol is an essential component of all commonly used medical abortion regimens and has been recommended for abortion induction both as a standalone method and in combination with other medications, such as mifepristone or methotrexate.

The combined use of mifepristone and misoprostol has become the 'gold standard' for abortion induction up to 9 weeks' amenorrhoea and has been approved in over 40 countries.[40] Regimens of mifepristone (200 mg) followed by oral, buccal, sublingual or vaginal misoprostol (400–800 μg) are 92–99% effective.[41] Mifepristone in combination with misoprostol has also been recommended by the Royal College of Obstetricians and Gynaecologists for late first-trimester abortion.[42] In the second trimester, mifepristone in combination with misoprostol has been shown to be highly effective at inducing abortion and is the standard of care in many jurisdictions. However, while combined mifepristone–misoprostol regimens should be considered as first-line treatments, methotrexate–misoprostol or misoprostol-alone regimens may be preferable in some delivery settings and to some women because they may be easier to use and/or less costly. Furthermore, in many jurisdictions, mifepristone is not available. In the first trimester, the use of misoprostol-alone for pregnancy termination is 80–90% effective among women up to 8 weeks' amenorrhoea. Methotrexate can

be used in combination with misoprostol up to 8 weeks' amenorrhoea, with reported success rates of 85–95%. The reported success of second-trimester abortion with misoprostol-alone varies widely by regimen and has been reported to be as high as 95% and as low as 40%.[41]

Additionally, misoprostol treatment for incomplete abortion could revolutionise post-abortion care. Until recently, the only available treatment for incomplete abortion was dilatation and curettage, which was then replaced by the equally effective but cheaper and safer manual vacuum aspiration. Unfortunately, manual vacuum aspiration is not always available in low-resource settings, because it requires special equipment and training for use. Furthermore, surgical methods generally have increased risks associated with instrumentation of the uterus: infection, cervical tears, uterine perforation, bleeding and reactions to anaesthesia, among others. In low-resource settings, the highest risk of infection with miscarriage occurs as a result of uterine instrumentation rather than the failure to evacuate the products of conception promptly.

More than a dozen randomised or comparative trials showed that misoprostol has a success rate of 71–100% for treatment of incomplete abortion and miscarriage.[41] Infrequent complications reported in over 20 publications documenting use over 2000 women show it is also highly safe. Moreover, in 2009, WHO added misoprostol for treatment of incomplete abortion to its Essential Medicines List, recommending a single-dose regimen of either 400 μg sublingual or 600 μg oral misoprostol.[43]

Designing effective service-based interventions where abortion is legally restricted

Legal restrictions to abortion complicate the issue of whether and how to train providers and educate women, as in some places such activities may put educators and advocates in legal peril. However, successful programmes have been developed to increase the safety of abortion provided in illegal settings. In such settings, interventions to update medical education about unsafe abortion, new technologies, family planning and reduction of the stigma of abortion may be the most effective means of addressing the problem of access to safe services.

Two novel programmes have been developed recently, one involving telemedicine and the other a harm-reduction approach. Both show promise in more effectively getting at the heart of the problem of unsafe abortion in legally restricted environments. 'Women on Web' provides medical abortion information via the internet (www.womenonweb.org) and services for women up to 9 weeks pregnant via telemedicine. This novel method of delivering accurate information and good services provides a safety net for women who would otherwise resort to riskier procedures. Women are educated on eligibility criteria and contraindications to the procedure, asked to seek a medical evaluation from a doctor to confirm they are eligible, and, if eligible, are sent the required medication. They are asked to follow up via the internet and educated on when to seek care for possible complications. The outcomes of this service after a year are comparable to other services – more than three-quarters sought follow-up care and 6.8% of those reported needing an aspiration procedure.[44]

In Uruguay, Iniciativas Sanitarias has taken a unique approach to reducing the harm caused by unsafe abortion in a legally restrictive environment.[45] With the understanding that, in the absence of legal and policy change, women will continue to expose themselves to risk by seeking unsafe abortions, this initiative strives to provide women who are determined to abort with ready access to reliable information and compassionate counselling before and after their attempts to seek an illegal abortion. The programme emphasises the use of scientific information and preabortion

counselling to mitigate the risks of unsafe abortion. In the year after the programme was implemented in one hospital, there were no maternal deaths reported, compared with four over the 3 years preceding this programme; the number of women with post-abortion sepsis also decreased.[46] This initiative, which began in one hospital, is now being expanded throughout Uruguay.

Close the information gap

Abortion provider shortages are acute; geographically and socially marginalised women continue to seek recourse to unsafe abortion services; services remain under-resourced; and legal and policy reform have failed to make inroads. Information is an essential element to reversing all of these trends, yet it remains inadequate or inadequately used. Several factors contribute to the information gap, and programmatic and policy development will have limited success if they fail to address this issue.

To close the existing gap in information, we must facilitate open scientific exchange, stimulate public discourse and education, and improve provider training and patient education. Information must be accurate and widely available. Appropriate and up-to-date information is critical to improving the quality of abortion services. Leaders in the field can facilitate a culture of open scientific interchange, which is largely prohibited where abortion is legally restricted or highly stigmatised and where, as a result, misinformation tends to be pervasive. Additionally, attention must be paid to getting new technologies and other innovations out to where they are most critically needed. Where open interchange is lacking, innovations may not be adequately disseminated.

Conclusion

MDG 5 is a call to improve the health of women, primarily by reducing maternal mortality and ensuring universal access to contraception. Before that, the International Conference on Population and Development in Cairo in 1994 and the Fourth World Conference on Women in Beijing in 1995 recognised the health impact of unsafe abortion and the moral and public health imperative to address it. Nevertheless, more than a decade later, the problem of unsafe abortion persists at levels that are virtually unchanged. This trend highlights the reality that unsafe abortion will continue to be a major public health problem if not addressed with more direct and comprehensive interventions. Thus, we emphasise the responsibility of all health professionals, including public health professionals and researchers, for the provision of safe, high-quality abortion services. Further, we highlight the imperative of education – through the engagement of civil society – to ensure that the general public is aware of abortion services permitted by law and is able to access them. Above all, the value of sustainable access to high-quality services and appropriate technologies cannot be overestimated.

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