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## SPECIAL ARTICLE

## Confronting the challenge of unsafe second-trimester abortion

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## ABSTRACT

Unsafe abortion accounts for approximately 13% of maternal deaths worldwide—roughly 47 000 deaths per year. Most deaths from unsafe abortion occur in low-resource countries. Second-trimester abortion carries a higher risk of morbidity and mortality compared with first-trimester abortion and, although the former comprises the minority of abortion procedures worldwide, it is responsible for the majority of serious complications and death where unsafe abortion is prevalent. Therefore, improving access to safe second-trimester abortion must be a priority in low-income regions of the world if the majority of deaths from unsafe abortion are to be prevented. In the present paper, we consider a variety of barriers to second-trimester care, including healthcare provider training and abortion stigma, which may lead to neglect of unmet need for second-trimester services.

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Unsafe abortion accounts for approximately 13% of maternal deaths worldwide—roughly 47 000 deaths per year [1,2]. Of the estimated 21.6 million unsafe abortions each year, 98% take place in low-income countries—with the highest rates occurring in the lowest-resource areas, where the case fatality ratio is approximately 218 deaths per 100 000 unsafe abortions [2]. By contrast, there are 0.7 deaths per 100 000 procedures in the USA [3]. Indeed, for many low-income countries, it will be impossible to meet Millennium Development Goal 5 (reducing maternal mortality by 75% by 2015) without addressing preventable maternal deaths from unsafe abortion [4].

Complications associated with abortion (safe or unsafe) vary according to the duration of a woman's pregnancy. Second-trimester abortion carries a higher risk of morbidity and mortality than does first-trimester abortion, even when performed under the best of circumstances. In the USA, for example, abortion is exceedingly safe; however, the relative risk of death from abortion performed at 16–20 weeks of gestation is approximately 30 times that for a procedure performed at 8 weeks or earlier, although it is still less than one-quarter of the risk of death from carrying a pregnancy to term [3,5]. Second-trimester abortion is even riskier when carried out by persons lacking necessary skills or in an environment that does not conform to minimal medical standards.

Worldwide, approximately 10% of abortions take place in the second trimester but this figure may be as high as 25%–30% in

India and South Africa [6–9]. Although second-trimester abortion comprises the minority of abortion procedures, it may be responsible for the majority of serious complications and death, especially in settings in which unsafe abortion is prevalent. A retrospective review of maternal deaths in Benin City, Nigeria, found that 59% of abortion-related deaths occurred among women whose abortion was induced in the second trimester [10]. A study from Russia [11] reported that, although only 6.6% of all abortions took place in the second trimester, 76% of abortion-related deaths were among women who terminated their pregnancies in this period. Another review of death records found that all recent abortion-related deaths from a region in Mexico occurred in the second trimester [12].

With this lens, second-trimester services become a crucial element of abortion care everywhere. Arguably, one strategy to reduce the need for second-trimester abortion would be to increase the availability of first-trimester abortion. However, lack of access to early care is not the only reason why women present in the second trimester; risk factors for second-trimester abortion include late recognition of pregnancy, adolescence, poverty and financial barriers, substance addiction, lack of awareness of abortion laws, and changing health or relationship status [13,14]. In addition, most countries permit abortion when the life or health of the pregnant woman is threatened or for serious fetal malformations—neither of which is frequently encountered until the second trimester [15]. Efforts to improve access to early termination have successfully moved more abortions into the period before 9 weeks of gestation but the incidence of abortions performed after 12 weeks remains unchanged [6,7]. Therefore, it is unlikely that second-trimester abortion will disappear. Indeed, longitudinal data from the USA and the UK show

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that the second-trimester abortion rate is stable over time, at 10% of all terminations [6,7].

Another strategy to reduce second-trimester abortion would be to make it illegal. However, it is already very well known—through natural experiments in Romania and elsewhere—that legal restriction does not reduce abortion or permanently increase the birth rate; it simply makes abortion procedures (at any duration of pregnancy) more unsafe and increases maternal mortality [16,17]. Preliminary evidence indicated that abortion-related complications in Nepal did not immediately decrease after legalization in 2002, partly because of the difficulty in accessing abortion care after 12 weeks of pregnancy [18]. More research is needed documenting the public health impact of restricting abortion access after the first trimester.

Both medical and surgical abortion methods can be used in the second trimester. The combined mifepristone–misoprostol medical regimen is significantly more effective and results in a shorter time to abortion compared with misoprostol alone [19]. Surgical second-trimester abortion is accomplished via dilation and evacuation, whereby the fetus is removed in parts using surgical instruments. Dilation and evacuation is the only second-trimester surgical method recommended by the WHO [20]. Limited randomized controlled trial data and a Cochrane review indicate that it is superior to induction, with fewer adverse effects, faster completion time, less pain, and overall higher patient acceptability [21–23]. Conclusive data are lacking on provider acceptability of dilation and evacuation versus induction termination. Some doctors find dilation and evacuation emotionally difficult; however, induction shifts the emotional burden to the nurses who care for laboring patients [24].

In many countries, neither medical nor surgical second-trimester abortion services are readily available, owing to, for example, real or perceived legal barriers, lack of trained providers, and concentration of the few existing services in urban centers [15]. Even where second-trimester services are available, evidence regarding the safest and most effective abortion procedures has not been widely translated into practice. Extra-amniotic instillation of ethacridine lactate is used in India [25], and hysterotomy is not infrequently performed for later abortion when medical methods fail [26]. Ineffective misoprostol regimens are used, often requiring hospitalization for several days [26]. Mifepristone is rarely used in the second trimester, largely because it is not available in many countries or because it is not registered for such use if it is available. Although dilation and evacuation has been successfully introduced in some areas of Nepal, Vietnam, and South Africa [27,28], it is not widely available.

Why are safe second-trimester services scarce? And why is dilation and evacuation not more widely adopted? One answer is that dilation and evacuation requires a highly trained provider, making its introduction less feasible in many low-resource settings [29]. However, resources and training may be only a part of a more complex picture. The visceral dimensions of second-trimester abortion, and related abortion stigma, likely have important roles as well [30].

Abortion is highly stigmatized around the world because of, for example, belief that abortion is killing, disapproval of behaviors perceived to have led to unintended pregnancy (i.e. sexual activity or “irresponsible” use of contraception), and belief that abortion represents deviation from feminine maternal ideals [31,32]. Because of this stigmatization, most women do not speak freely about their abortions, leading to the misperception that abortion is rare or unusual—a “prevalence paradox,” as described by Kumar et al. [32]. This misperception leads to a vicious cycle of further stigma and ongoing silence. In other words, stigma makes abortion unspeakable.

In the second trimester, the stigma surrounding abortion is magnified. Women may have felt fetal movement or been “showing;” furthermore, the second-trimester aborted fetus resembles a small infant and—unlike in the first trimester—is no longer hidden in a mass of placental and decidual tissue. Medical induction of labor feels and

looks like birth, except that the delivered fetus is dead or shows transient signs of life. With dilation and evacuation, the fetus is removed in parts, and providers must account for all parts before declaring the procedure complete. Thus, one cannot neglect the corporeality of the fetus in the second trimester. Stigma in this trimester is, therefore, writ large: later abortion looks more like killing a born person; women may be derisively asked why they “waited so long;” and women may be perceived as the ultimate anti-maternal figure when they consent to the dismemberment of a recognizable fetus.

We suggest that stigma regarding second-trimester abortion is so intense that it takes the form of blindness toward—even denial of—the need for such services. The very idea of second-trimester abortion is so disturbing that it creates disbelief that any woman would ever request such care or that any respectable doctor would ever perform this particular kind of “dirty work.” Whereas stigma makes abortion unspeakable in general, it makes abortion unthinkable in the second trimester. Is it possible that blindness to unmet need, rooted in stigma, explains, in part, why efforts to reduce maternal mortality from unsafe abortion in many regions of the world have not directly addressed second-trimester abortion?

What can be done? To begin with, abortion care—including second-trimester procedures—must be mainstreamed into pre-service training for physicians and nurses everywhere. Access to safe and acceptable medical induction could be greatly expanded by registering mifepristone for this indication and making the drug widely available. Clinicians can work to reduce delays by streamlining referrals for abortion care. The “demand” aspect of the issue must also be addressed by improving access to comprehensive sexuality education and to the full range of effective contraceptive methods. Community education about early recognition of pregnancy (including access to free or low-cost pregnancy tests) and the importance of obtaining abortion as early as possible when pregnancy is not desired must be provided. And physicians and women’s health advocates must work to reduce abortion stigma because it likely contributes both to women’s use of unsafe clandestine services and to delays in seeking safe abortion care when it is available.

Data on unmet need for later abortion are also required. Women’s outcomes are unknown when they are turned away from care because of the duration of their pregnancy. These women may be at particular risk for unsafe self-induced or clandestine abortion. National vital statistics data may need to be refined to capture the incidence of second-trimester abortion specifically, in addition to distinguishing between morbidity/mortality from unsafe second-trimester abortion and that from unsafe first-trimester abortion.

Every woman who decides to have an abortion should be able to do so as early as possible in her pregnancy, when the procedure is safest and easiest to perform. However, to reduce maternal morbidity and mortality from unsafe abortion, a comprehensive vision of safe services must encompass second-trimester abortion care. Even if, conservatively, only half of abortion-related deaths occur in the second trimester, focusing exclusively on improving first-trimester abortion care would leave 23 500 of 47 000 deaths per year largely untouched. Healthcare providers, women’s health advocates, and health policy makers must stop neglecting that which they find difficult, and provide the care that a small—but significant—number of women need.

### Conflict of interest

The authors have no conflicts of interest.

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