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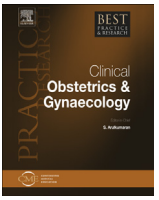

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Termination of pregnancy and unsafe abortion

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Induced abortion is one of the most commonly performed gynaecological procedures in the world. Medical and surgical methods are available for both first- and second-trimester abortions. Generally, for women presenting between 7 and 14 weeks gestation, vacuum aspiration is an appropriate method. Medical method of abortion is otherwise recommended for women who present before or after that time frame. Clinical guidelines should be available in all healthcare sectors providing abortion services to ensure a uniformly high standard of care for all women requesting abortions. Services should ensure that written, objective, evidence-guided information is available for women considering abortion to take away before the procedure, including complications and sequelae of abortion. Nearly one-half of abortions occurring worldwide are considered unsafe abortions, and these can result in maternal morbidity and mortality. Prevention of unsafe abortion is key, and requires a multi-pronged approach, including provision of contraception and expanded access to safe termination of pregnancy.

Q3 Termination of pregnancy and unsafe abortion

Induced abortion is one of the most commonly performed gynaecological procedures in the world. The estimated worldwide rate for abortion in 2008 was 28 per 1000 women aged 15–44 [1]. According to the Centers for Disease Control (CDC), the rate of pregnancy termination in the USA in 2008 was 16

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per 1000 women aged 15–44 years [2]. In Singapore, between 13000 and 15000 induced abortions are carried out each year, which means about one-quarter of all pregnancies are being terminated [3].

In this chapter, we review safe methods of termination of pregnancy in both the first and second trimester, the effect of unsafe abortion, and recommendations for programmes and standards of care in all abortion services. We identify current gaps in knowledge so that they can be addressed as we progress forward in this field.

Safe termination of pregnancy in the first and second trimester

Medical and surgical methods are available for both first- and second-trimester abortions. Over the years, evidence of the efficacy and complications of the various methods available has increased (Table 1).

For women presenting at less than 7 weeks gestation, early surgical abortion is an appropriate method. This allows pre-abortion ultrasound confirmation of a viable intrauterine pregnancy, confirmation of products of conception at aspiration, and ultrasound confirmation of complete evacuation after the procedure. In such instances, products of conception need not necessarily be sent for histological examination [3]. Surgical vacuum aspirations performed at less than 7 weeks gestation, however, are three times more likely to fail to remove the gestation sac than those performed between 7 and 12 weeks [4,5]. Therefore, for women presenting at less than 7 weeks gestation, an alternative recommended technique should ideally be chosen.

Medical abortion may be considered at these earlier stages of pregnancy [6]. Combined mifepristone with prostaglandin regimens are recommended [7]. Mifepristone administered as a single 600 mg oral dose followed 36–48 h by a prostaglandin analogue, such as a gemeprost 1 mg, vaginally is recommended. Evidence from a randomised-controlled trial [8] indicates that a dose of 200 mg mifepristone has similar efficacy compared with 400 mg or 600 mg. The conventional prostaglandin E1 analogue gemeprost is a 1 mg pessary used for mid-trimester abortion, and is effective for early medical abortion and cervical priming. A series of studies have also shown that misoprostol, an alternative E1 analogue, is also effective in all these contexts [9–12], and that misoprostol is also more effective if administered vaginally rather than orally [9]. Side-effects such as vomiting and diarrheoa were reported more frequently by the women who received oral misoprostol than by those who received vaginal misoprostol [9]. Misoprostol is substantially less expensive than gemeprost, making it a more affordable option [10]. In countries in which mifepristone is not available because of stringent government control, a misoprostol-only regimen can be used for first-trimester medical abortion. The regimen includes a loading dose of 800 mcg of misoprostol given vaginally, followed by three further doses of 400 mcg of misoprostol given at 3-hourly hourly intervals. With this dose schedule, medical abortion was achieved in 96% of women, with minimal side-effects, and was also accompanied by a significant drop in the mean and median serum beta human chorionic gonadotropin (hCG) levels 2 weeks after the abortion [13]. Clinical assessment is key in determining the completeness of the medical abortion; beta-hCG and ultrasound can be used as supplements in confirming a successfully medically induced abortion, and both have been shown to be equally effective [14].

Table 1
Overview of methods of termination of pregnancy in first and second trimesters.

Methods of termination of pregnancy		
First trimester		Second trimester
Medical abortion	Combined mifepristone with prostaglandin regimens or prostaglandin-only regimens	Dilatation and evacuation
Surgical abortion	Vacuum aspiration	Administration of systemic abortifacients (e.g. mifepristone and prostaglandins). Intrauterine instillation of abortifacients (e.g. hypertonic saline, prostaglandin F2-alpha).

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