

Mid-level health-care providers are a safe alternative to doctors for first-trimester abortions in developing countries

Background

In circumstances where the law permits termination of pregnancy, access to safe induced abortion may still be restricted by limited availability of trained health-care providers. In most countries where abortion is legal, only doctors are authorized to provide first-trimester abortions. To increase access to safe first-trimester abortion and conserve scarce health resources, some countries have trained nurses, midwives and mid-level health-care providers such as doctor assistants. These health-care providers are generally cost-effective and may work in areas where doctors are scarce, providing health services to underserved populations. Before this study, however, no comparative assessment of the safety of first-trimester abortion by type of provider had been conducted in developing countries.

Study design and sample

A study was conducted to compare the safety of first-trimester abortion with manual vacuum aspiration performed by nurses, midwives, mid-level health-care providers and doctors in South Africa and Viet Nam, two countries where mid-level health-care providers are routinely trained to provide first-trimester abortion services. The complication rates among women presenting for induced abortion at up to 12 weeks' gestation were compared by type of provider to a predetermined range of expected complication rates derived from previous experience. Women were randomly assigned to one type of provider and were also asked to report their satisfaction with the procedure. The study was conducted in eight clinics and comprised 25 providers and a total of 2894 women in the two countries. All women presenting for a first-trimester abortion during the study period were informed of the study and invited to participate. Women were eligible to participate if they were at least 18 years old, the gestational age of the pregnancy was less than 12 weeks as estimated by pelvic examination and date of last menstrual period, they resided within a specified geographical area, and they were willing to be randomly assigned to a provider and to be followed-up.

Immediate complications were defined as excessive bleeding (> 500 ml) after the abortion, cervical injury, confirmed or suspected uterine perforation, and adverse drug reaction. Delayed complications were defined as retained products of conception necessitating re-evacuation, haematometra, post-abortion pelvic infection, excessive post-abortion bleeding (> 500 ml), and abortion-related death.

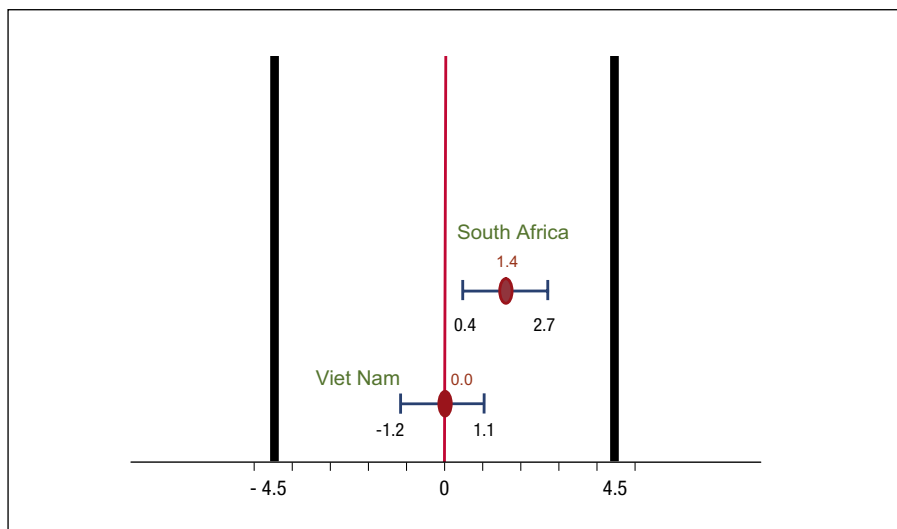


Results

In South Africa, the rate of complications was 1.4 per 100 patients for the mid-level health-care providers and 0 for doctors. In Viet Nam, the rate was 1.2 per 100 patients for nurses, midwives, mid-level health-care providers and doctors. The 95% confidence intervals for both countries fell within the predetermined margin of equivalence (Figure 1). All the complications observed in the study were due to retained products and infection and did not necessitate hospital admission.

Women reported equal satisfaction with the quality of care by type of provider (data not shown).

Figure 1. Percentage difference and 95% confidence intervals in rates of complication of abortion performed by nurses, midwives and mid-level health-care providers as compared with doctors



Source: Warriner IK, Meirik O, Hoffman M, Morroni C, Harries J, My Huong NT, Vy ND, Seuc AH. Rates of complication in first-trimester manual vacuum aspiration abortion done by doctors and mid-level providers in South Africa and Viet Nam: a randomized controlled equivalence trial. *The Lancet* 2006, 368:1965-1972.

Conclusion

First-trimester manual vacuum aspiration abortions performed by government-trained and accredited nurses, midwives and mid-level health-care providers in South Africa and Viet Nam were comparable in terms of safety and acceptability to those performed by doctors. Countries seeking to expand safe abortion services can consider an approach similar to that taken by South Africa and Viet Nam.

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