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Original research article

Introducing medication abortion into public sector facilities in KwaZulu-Natal, South Africa: an operations research study☆,☆☆

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Abstract

Objectives: Examine the feasibility of introducing mifepristone–misoprostol medication abortion into existing public sector surgical abortion services in KwaZulu-Natal, South Africa.

Study Design: Cohort study of women offered medication or surgical abortion in a larger medication abortion introduction study. The sample included 1167 women seeking first-trimester abortion at four public sector facilities; 923 women at ≤9 weeks' gestation were eligible for medication abortion. Women who chose medication abortion took 200 mg of mifepristone orally at the facility and 800 mcg of misoprostol buccally (or vaginally if they anticipated or experienced problems with buccal administration) 48 h later at home, based on international research and global safe abortion guidelines. Women who chose surgical abortion received 600 mg of misoprostol sublingually or vaginally on the day of their procedure followed by manual vacuum aspiration 4 h later. Main outcome measures included proportion of eligible women who chose each method, proportion with complete abortion and proportion reporting adverse events.

Results: Ninety-four percent of eligible women chose medication abortion. No adverse events were reported by women who chose surgical abortion; 3% of women in the medication abortion group reported adverse events and 0.4% reported a serious adverse event. Seventy-six percent of women received a family planning method at the facility where their received their abortion, with no difference based on procedure type. Medication abortion patients were significantly more likely to report they would choose this method again (94% vs. 78%, $p<.001$) and recommend the method to a friend (98% vs. 84%, $p<.001$).

Conclusions: Medication abortion was successfully introduced with low and acceptable rates of adverse events; most women at study facilities chose this option.

Implications: Mifepristone–misoprostol medication abortion was successfully integrated into public sector surgical abortion services in South Africa and was chosen by a large majority of women who were eligible and offered choice of early termination method; access to medication abortion should be expanded in South Africa and other similar settings.

Keywords: Medication abortion; South Africa; Acceptability; Public sector

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1. Introduction

Medication abortion has been proven to be safe, effective and acceptable and has been used by millions of women around the world [1–7]. The Republic of South Africa (RSA), whose 1996 Choice on Termination of Pregnancy Act legalized abortion on request through 12 weeks' gestation and for social, economic or psychological reasons from 13 to 20 weeks [8], is one of the only countries in the southern hemisphere where mifepristone has been approved [9]; the South African Medicines Control Council in 2001 approved mifepristone for use with misoprostol through 56 days from the last menstrual period (LMP).

Legal abortion has reduced RSA's abortion-related morbidity and mortality, but barriers to high-quality legal services remain [10–13]. Medication abortion is not widely available in public sector facilities, where 80% of South African women receive their health care [14]. KwaZulu-Natal (KZN), one of the most populous provinces in RSA, has one of the lowest numbers of facilities offering abortion services [15]. Staffing shortages and low levels of health worker and community support have been identified as barriers to service provision [16]. Studies suggest that the availability of medication abortion might increase the number of providers willing to provide abortion and encourage women to seek abortion services sooner [17–19]. Offering additional options early in pregnancy may be particularly important in RSA, where more than 20% of abortions occur in the second trimester [20].

The aim of this study was to examine the feasibility of introducing medication abortion with mifepristone and misoprostol into existing public sector surgical abortion services in KZN. We documented medication abortion uptake, assessed the safety, effectiveness and acceptability of medication and surgical abortion, and compared clients' experiences of the procedures.

2. Materials and methods

Between 2009 and 2011, we conducted an operations research study to evaluate the introduction of medication abortion services in public sector facilities in KZN, which were providing first-trimester, surgical abortion. Eligible facilities had to be registered and approved to provide abortion in KZN, have offered abortion services between August and September 2009 and have one or more providers currently (in the previous month) providing first-trimester abortions. A list of registered abortion facilities was obtained from the KZN Department of Health in August 2009. The average number of first-trimester surgical abortions performed per month at each eligible facility over the previous 6 months was determined through prerandomization assessment visits and sites were stratified into high (74 or more cases per month) and low (less than 47 cases per month) caseload groups based on the natural break in distribution of facilities' caseloads (data not shown).

High and low caseload sites were randomized separately into either the intervention group where sites added medication abortion to their existing surgical services or to the control group where sites continued with surgical services only. Providers and staff at both the intervention and control sites received didactic medication abortion training (including values clarification and training on the study protocol and procedures); at the intervention sites, providers also received clinical training and mifepristone tablets (Fig. 1).

Six sites were randomized to each group; two sites dropped out of the intervention group before data collection began due to loss of their abortion provider, or inability of the provider to attend the medication abortion training. The final sample included 10 public hospitals: 4 intervention and 6 control sites. The data presented in this paper are from the intervention sites.

At the intervention sites, women who were able to communicate in English or Zulu, were willing and able to comprehend and give informed consent, reported a gestational age of 12 weeks or less based on LMP, lived within 1 h from the facility and had access to emergency facilities, and were willing to attend at least one follow-up visit were eligible to participate in the study. In addition, women confirmed by a trained, facility-based nurse to be 9 weeks or less gestation (cutoff selected based on best current clinical evidence and global/national medication abortion guidelines) using standard assessment at the clinic (including reported LMP, physical exam and/or ultrasound evaluation) and who did not have any of the contraindicated conditions included on the mifepristone label in RSA were eligible for medication abortion and were given the option of medication or surgical abortion [21,22]. Women 10–12 weeks' gestation completed a short interview regarding their interest in medication abortion but were not clinically eligible for medication abortion and are excluded from this analysis. All women who were interested in the study and eligible to participate signed an informed consent form.

Women 9 weeks' or less gestation and eligible for medication abortion received detailed information about their abortion procedure options. Surgical abortion information was the same as usually provided in the facility; information on medication abortion included details about the drugs, how they work, dosing schedule and routes of administration, side effects, signs of complications and what to do in case of emergency. These messages were reinforced with a take-home client care sheet that included the provider's phone number and the date and time of her follow-up appointment. Women who selected surgical abortion received an appointment to return for their procedure approximately 1.5 days after their first visit; the specific timing depended on the facility's existing booking system, caseload and provider availability. Medication abortion clients started their procedures by taking the mifepristone on the day they received the counseling and information about the procedure. According to national guidelines, women who chose surgical abortion received 600 mg of misoprostol sublingually or vaginally, followed by manual vacuum aspiration approximately 4 h later. Women who chose medication abortion received 200 mg of mifepristone orally