Women's experiences of the final stage of early medical abortion at home: results of a pilot survey

Sharon Cameron, Anna Glasier, Helen Dewart, Anne Johnstone

Abstract

Background and methodology Research has shown that many women choosing an early medical abortion would prefer to be at home rather than in hospital to expel the pregnancy. A service was commenced at a hospital abortion service in Edinburgh, Scotland, UK that allowed women at up to 56 days' gestation to be discharged home soon after misoprostol administration. During a 3-month period, an anonymous questionnaire of women's experiences was conducted 1–2 weeks after the procedure.

Results During the 3 months of the survey a total of 145 women chose to go home to abort. A total of 100 women completed questionnaires out of 145 (69%) distributed. The commonest reasons given for choosing to go home were: to get home sooner (53%) and to be in the privacy of one's

own home (47%). Most (81%) of the women stated that bleeding was either "as expected" (55%) or "not as bad as expected" (26%), and 58% of the women stated that the pain was "as expected" (40%) or "not as bad as expected" (18%). The majority (84%) of the women said that they would recommend this method to a friend.

Discussion and conclusions Discharge home for the final stage of a medical abortion was highly acceptable to women. Since availability is not limited by hospital bed space, more women can be treated by medical methods.

Keywords early medical discharge, home abortion, medical abortion, outpatient medical abortion

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Introduction

National Health Service (NHS) hospitals perform the vast majority of induced abortions in Scotland, usually within obstetric and gynaecology departments. The demand for abortion continues to rise, and in Scotland in 2008 a total of 13 817 women had an induced abortion.¹ Many hospital abortion services struggle to meet the recommended minimum waiting times (i.e. a minimum standard of no more than 3 weeks from initial referral to abortion) and service standards set by the Royal College of Obstetrics and Gynaecology (RCOG).^{2,3} In addition, abortion services in Scotland face the new challenges set by NHS Quality Improvement Scotland that recommend that 70% of all abortions should be performed at under 9 weeks' gestation.⁴

The Royal Infirmary of Edinburgh (RIE) is a university teaching hospital and the major provider of abortion services in Lothian (80%). In 2008, more than 2600 women had a termination of pregnancy in Lothian.¹ The early medical abortion (EMA) service at the RIE is similar to many across the country, whereby women are admitted to a dedicated ward for up to 6 hours after misoprostol administration. Increasing the provision of EMA on such a basis is thus limited by the availability of beds within the ward. A recent survey that the authors conducted of women requesting a termination of pregnancy at RIE indicated that one in four women would opt for home medical abortion if it was available.⁵ Whilst home administration of mifepristone and misoprostol is not considered to be within the confines of the 1967 Abortion Act,⁶ women may be allowed to go home to abort after receiving the medication on licensed premises.⁷ In order to maintain a modern clinical service that is able to meet national standards and provide women with the service that they now seek we

Key message points

- Women value the privacy and control that the opportunity to have the final stage of medical abortion at home offers them.
- Women choosing to abort at home were able to tolerate the pain, bleeding and distress of the procedure.
- The majority of women choosing to abort at home would recommend this method to other women, or would choose it again themselves in the future.

decided to pilot a service that allowed eligible women to go home after administration of misoprostol to complete the final stage of the abortion there, rather than in the hospital. We termed this service 'early medical discharge' (EMD). In order to evaluate women's satisfaction with this new service we conducted an anonymous self-administered questionnaire of women choosing this method of treatment.

Methods

The EMD criteria for treatment were developed by the lead consultant for abortion services within the hospital and were approved by both the clinical management team for reproductive health and the quality improvement team for Gynaecology, NHS Lothian (Box 1).

Box 1: Criteria for suitability for early medical discharge

- Fulfills the requirements of the 1967 Abortion Act
- Chooses to have early medical discharge (EMD)
- ≤8/40 weeks' gestation intrauterine pregnancy confirmed by ultrasound
- ≥16 years of age
- Certain of decision to have abortion
- Resident in Lothian
- Agrees to general practitioner being contacted to determine outcome of pregnancy if patient fails to attend for follow-up
- Adult (≥16 years of age) to accompany patient home after misoprostol administration and be at home with patient
- Resides within estimated 30 minutes travelling from hospital
- Available for follow-up within 2 weeks
- No medical contraindications to medical abortion
- No cause for concern (no child protection issues, domestic violence, abuse, etc.)
- Not requiring interpreting services

NHS Lothian Family Planning/Well Women's Services, Dean Terrace Centre, and Royal Infirmary of Edinburgh; also Department of Reproductive and Developmental Sciences, University of Edinburgh, Edinburgh, UK

Sharon Cameron, MD, MRCOG, *Consultant Gynaecologist*

Anna Glasier, MD, DSc, *Consultant Gynaecologist*

Helen Dewart, RGN, *Clinical Research Nurse*

Anne Johnstone, RGN, BSc, *Clinical Research Nurse*

Correspondence to: Dr Sharon Cameron, Dean Terrace Centre, 18 Dean Terrace, NHS Lothian, Edinburgh EH4 1NL, UK.
E-mail: sharon.cameron@ed.ac.uk

Women who fulfilled the requirements of the 1967 Abortion Act⁶ and who met agreed eligibility criteria (Box 1) were offered treatment with mifepristone (Mifegyne®, Exelgyn Laboratories) (200 mg oral) on the same day as their clinic visit. Women then returned to the clinic 24–48 hours later for the second part of the medical abortion treatment with 800 µg misoprostol (Cytotec®, Pharmacia) administered vaginally. Women had the option to self-administer vaginally themselves if they wished to do so. At this visit they received a single oral dose of paracetamol (1 g) and ibuprofen (400 mg), as is the standard protocol for women undergoing EMA in our hospital. Rhesus-negative women received anti-D at this visit (if required). Azithromycin 1 g was also given if testing for *Chlamydia trachomatis* was positive, or if the result of testing was not yet available. Contraception was also dispensed. Women were given written information on what to expect over the following days and 24-hour emergency contact numbers. They were also given a supply of dihydrocodeine tablets (5 × 30 mg tablets) to take home that they could use for breakthrough pain. A routine follow-up visit that included an ultrasound examination to exclude ongoing pregnancy was arranged for all women at the clinic for 1–2 weeks later.

The EMD service commenced in March 2009. During the 3 months from May to July 2009 an anonymous self-administered structured questionnaire study was conducted of women who chose EMD. This questionnaire was closely based upon the validated questionnaires used by Ingham and Lee in the Department of Health evaluation of EMA pilot sites.⁸ Initially, all women received the questionnaire when they attended for misoprostol, and were asked to complete this at home 1–2 weeks later and either return it to the study team using a freepost envelope, or bring it with them to their follow-up visit to deposit in a collection box. Due to poor return rates in the first month of the pilot, the questionnaire was subsequently given to women when they attended for follow-up. The questionnaire was distributed to women by a research nurse and women were asked to complete it and deposit it in a sealed envelope in a collection box at their follow-up visit. The questionnaire (five pages) consisted of a short introduction followed by questions on demographics including age, previous history of induced abortion and postcode (as a marker of deprivation),⁹ reasons for choosing EMD, physical and psychological experiences at home, any complications, and whether they would choose EMD again. Most questions required tick box answers only.

Ethical approval

The questionnaires used in the study were reviewed by the chair of one of the local research ethics committees who confirmed that ethical committee approval was not required.

Statistical analysis

Questionnaires were coded and data were entered into a database using Microsoft Excel™. Excel was used to perform descriptive statistics.

Results

Socio-demographic and reproductive characteristics

A total of 100 completed questionnaires were received out of 145 distributed (i.e. an overall response rate of 69%; 48% in first month and 88% thereafter). The characteristics of the respondents are shown in Table 1. The reasons (chosen from a predetermined list) as to why women chose EMD are given in Table 2.

Table 1 Characteristics of women ($n = 100$) who completed survey questionnaires

Characteristic	<i>n</i>
Age [(mean (range)) (years)]	24.5 (16–43)
Deprivation category (DEPCAT score) ^a	
Affluent (1–2)	12
Moderately deprived (3–5)	74
Severely deprived (6–7)	14
Ethnicity	
White	92
Asian (Indian/Pakistani/other)	5
Mixed	3
Ever pregnant?	
Yes	52
No	40
Unsure	8
Previous birth	34
Previous miscarriage	15
Previous induced abortion	43
Surgical method only	12
Early medical method (<64 days) only	22
Mid-trimester medical method only	3
Both surgical and early medical methods	6
Gestation at current abortion (days) ^b	
≤42	63
43–49	22
50–56	14

^aThe DEPCAT score is an indicator of social deprivation status, which is based upon postcode sectors within Scotland.⁹

^bOne respondent failed to answer this question.

Table 2 Reasons selected by respondents ($n = 100$) from a predefined list for choosing early medical discharge

Reason for choosing early medical discharge (EMD)	Women stating this as a reason (<i>n</i>) ^a
I could be at home sooner	53
Seemed a more private procedure	47
Involved a shorter hospital stay	39
So I could have someone with me	36
So abortion could be done earlier	27
To feel more in control	26
Recommended by staff	18
I wanted to see aborted pregnancy	8
I was offered no other option	4
Recommended by a friend	3
Other (to be in my own home)	1

^aTotal number exceeds 100 since women could choose more than one reason.

Women's experience at home

Sixty-three out of 100 (63%) women stated that they had inserted misoprostol tablets (vaginally) themselves. The mean time to travel home from the hospital was estimated by women to be 24 (range, 5–75) minutes. The commonest mode of transport home was car ($n = 66$; 66%), followed by taxi ($n = 19$; 19%) and bus ($n = 14$; 14%).

Fifty-two out of 99 (52%) respondents stated that a boyfriend, partner or husband was at home. A relative was at home in 25/99 (25%) cases and a friend in 22 (22%) cases. In 9% ($n = 9$) of these cases more than one adult was at home. However, in 8% ($n = 8$) of cases women reported that no adult was at home.

Of those 89 women who answered the question about how helpful it had been to have an adult at home, 64 (72%) indicated that they found it “very helpful/supportive” to have someone at home. A further 20 (22%) respondents stated that they found it of “some help”. The remaining respondents stated that someone at home made no difference in terms of support ($n = 4$; 4.5%) or made things a “bit worse” ($n = 1$; 1%). Eighty-one out of 99 (81%) women indicated that the bleeding they experienced at home was either “as expected” ($n = 55$; 55%) or “not as bad

as expected" ($n = 26$; 26%). The remaining women ($n = 17$; 17%) stated that bleeding was "worse than expected".

Fifty-eight out of 98 (58%) women stated that pain was "as expected" (40/98; 40%) or "not as bad" as expected (18/98; 18%). The remaining 40 (41%) women felt that the pain was "worse than expected". Although all the women were given a supply of dihydrocodeine for home use, only 27% (27/99) women actually needed to take this preparation. Two-thirds (65/99; 65%) of the women felt that it was obvious to them when the abortion actually occurred and in all 65 cases the women believed this had taken place at home. No one felt that abortion had occurred during the journey home. Seventy-three of the 83 (88%) respondents who answered the question on how upsetting it was when the abortion happened stated they were either "not at all upset" (20/83; 24%) or "a bit upset" (53/83; 64%). Only 12% (10/83) of respondents stated that they were "extremely upset".

EMD experience and women's future recommendations

Eight out of 99 respondents reported one or more problems ($n = 9$) relating to the procedure. These were pain ($n = 6$), prolonged bleeding ($n = 1$), incomplete abortion ($n = 1$) and tiredness ($n = 1$). Eighty-three out of 97 (86%) women stated that they would opt for EMD if they needed an abortion in the future, with 12% ($n = 12$) being "unsure". Only two (2%) women stated that they would not choose this method again. Eighty-four out of 99 (84%) respondents stated that they would recommend EMD to a friend, with 12% ($n = 12$) "unsure". The remaining three (3%) women stated that they would not recommend EMD to a friend. Of those women ($n = 40$) who had rated pain as worse than expected, 33/40 (82%) stated that they would recommend EMD to a friend. Thirty-one out of 39 (79%) women who had never been pregnant before stated that they would recommend EMD to a friend. Seventy-one out of 99 (71%) women rated the EMD service as "excellent" and 24 (24%) women rated it as "good". Three (3%) women rated it as "adequate" and only one woman (who had failed to abort completely) rated it as "very poor".

Discussion

This pilot survey showed that EMD was chosen by women mainly because they wished to be at home sooner and to be in the privacy of their own home with the support of a partner. Women were highly satisfied with this service, which is in keeping with findings of studies from other countries that have shown consistently high levels of acceptability amongst women who choose to be at home for the end stage of their medical abortion.^{10,11} Overall, the majority of women in our pilot survey stated that the pain and bleeding that they experienced were no greater than what they had expected. Whilst this is reassuring that we are counselling our patients appropriately, it is also possible that this reflects the proportion of women in our survey (almost one in three) who had previously experienced a medically induced abortion in the past.

The decision to terminate a pregnancy is not an easy one, and can cause considerable psychological distress for women.¹² Permitting women to be in their own home with a partner, friend or relative present could conceivably offer some women some relief of this distress.

Previous studies have shown that women often choose a medical method of abortion in order to "to be in control".¹³ Most women in this pilot survey opted to take control of placing misoprostol in their vagina themselves rather than having a nurse perform this procedure. Permitting women to pass the final stage of the abortion at

home means that they also take responsibility for managing their own analgesia and the expulsion of products of conception. Researchers in other countries have claimed that this offers a radical change in empowerment for women.¹⁴ Health professionals may worry that women might find it highly distressing to witness the products of conception. It is therefore reassuring that in our study the majority of women who thought that they had seen products of conception were either not upset by this or only a "bit upset".

The introduction of EMD can offer benefits for an abortion service. It can lead to increased numbers of women being able to avail themselves of a medical method, since provision of this method is no longer dependent upon the availability of a bed on a medical abortion ward. Since eligible women can be treated with mifepristone on the same day as their assessment visit, an EMD service should result in shorter waiting times to abortion. Indeed, just over one in four respondents in our study indicated that having the abortion sooner was one of the reasons for choosing EMD. Clearly having an abortion at an earlier gestation confers advantages for women in terms of lower risk of complications, but may also help services meet national recommendations for waiting times and percentages of abortions at early gestations.^{2,4} It seems likely that EMD costs should be less than those of either a day case medical or surgical abortion, due to savings on nursing and theatre staff. A previous pilot study in England estimated the cost of outpatient abortion to be £167 cheaper than standard inpatient medical abortion.¹⁵ Although women were not required to remain on the hospital premises for a set period of time following misoprostol administration, this visit required dispensing of medication (including contraception) and written information and was estimated by nursing staff to take no more than 30 minutes.

EMD cannot and should not totally replace day case medical abortion, since some women may have medical conditions that necessitate hospital care, may not have an appropriate home environment or a supportive adult, or may have communication difficulties that would be problematic if they needed help in the rare event of an emergency such as haemorrhage. Furthermore, there will always be some women who will feel more secure or comfortable undergoing treatment in a hospital setting. Although all the women in our pilot survey were advised to travel home by car or taxi, one in seven admitted to using public transport. Whilst this may simply reflect the unavailability of a car or a taxi service on a given day, it may also reflect a strong desire of some women to avail themselves of this treatment option such that they were prepared to agree to our criteria in order to be at home rather than in hospital to abort. In a small city such as Edinburgh, with good public transport and short journey times, the risk of aborting on a bus may be low. However, for women in larger cities or for those who live in remote and rural areas this may be a real concern and will prevent them from having EMD.

Clearly our study is limited by the fact that it represents the experiences of a selected group of women who fulfilled set criteria and who chose to have the final stage of a medical abortion at home and who attended a follow-up appointment. These women were typically young, Caucasian and from moderately deprived areas, and so these findings may not be generalisable to women of other backgrounds. A recent study of women undergoing medical abortion at BPAS (British Pregnancy Advisory Service) in England reported that Asian women were less likely to find home management acceptable.¹⁶ Furthermore, our agreed criteria for EMD at our service restricted this treatment to

women ≤ 8 weeks' gestation. However, a recent study in Sweden has shown that there is no significant difference in women's acceptability of home abortion or the safety of this approach at < 7 weeks compared to gestations between 7 and 9 weeks.¹⁷ In the light of these findings, and our growing experience of this type of service delivery, we see no reason why EMD should not be offered to women up to 9 weeks' gestation.

Given the findings of our pilot survey, we believe that it will be important in the future to conduct a large trial to compare outcomes between hospital-based treatment with EMD abortion. Outcomes of such a trial would include patient satisfaction, complication rates, readmission rates and an economic analysis. Such a trial should also incorporate qualitative research to further explore and compare women's experiences of EMD and hospital-based medical abortion.

Conclusions

Permitting women to pass the final stage of an EMA at home allows women more control and privacy. It is highly acceptable to women who choose this form of treatment and allows abortion services to offer medical methods to more women, with advantages for women in terms of treatment at an earlier gestation with a lower risk of complications. It is likely that EMD will have cost savings for the abortion service and help services meet national recommendations on waiting times and gestations.

Statements on funding and competing interests

Funding This project was conducted as a part of a series of initiatives to improve the patient journey through abortion services, funded by the Scottish Government.

Competing interests None identified.

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BOOK REVIEWS

The Doctor's Communication Handbook (6th edn). Peter Tate. Oxford, UK: Radcliffe Publishing Ltd, 2009. ISBN-13: 978-1-84619-392-7. Price: £25.99. Pages: 192 (paperback)

This book is excellent. Perused with enjoyment both by me and my experienced GP husband, I found plenty to reflect on within my own day-to-day consultations. The content is suited both to the long-served and the novice. First published in 1994, it was meant as a handbook for the video examination part of the MRCGP. It is now so completely updated that even for those who have come across a previous edition, this sixth one is not to be missed. References are to up-to-date publications, and topics touched upon are relevant to the many varied settings of current UK primary care. The role of the Internet in the way patients consult has been well explored.

The author displays excellent communication skills as a writer! The prose flows beautifully, and is as suited to the beach, train, rain-soaked tent or bath as more formal study. The appendices at the end, as well as offering further reading (useful especially to medical teachers), also offer an insightful account of the author's own major health problems, giving a further stamp of credibility to

an already well-researched and empathic book.

Each chapter in this book has a clear, unambiguous title, with bold bullet points at the beginning, a well laid out text interspersed with pertinent cartoons, and a summary in the final paragraph. This author was one of those behind the widely used mnemonic ICE: 'Ideas, Concerns and Expectations'. He has been the convener of the RCGP examination in the past, and co-wrote the 1984 book, *The Consultation: An Approach to Learning and Teaching* (Oxford University Press). The author's cheerful, upbeat style masks skilfully the serious scholarship that underlies this handbook. Giving an analytical approach to what is the core art of medicine, this book demonstrates this as of equal value to the drier factual areas of knowledge.

Any doctor will find this book of relevance. Undergraduates will cover some of its topics such as breaking bad news, core consultations skills, offering and receiving feedback; and those doctors taking the revamped nMRCGP will find it useful for the Clinical Skills Examination.

I feel confident that every reader of this review will find this book worth acquiring and engaging to read.

Reviewed by **Grace Gibson**, MRCGP, DRCOG
General Practitioner, Kingston-upon-Hull, UK

Me, Myself and I: All About Sex and Puberty. Louise A Spilbury, Mike Gordon. Hauppauge, NY, USA: Barron's Educational Series, 2010. ISBN-13: 978-0-76414-508-7. Price: £6.45. Pages: 64 (paperback)

This book is a great help to anybody who is afraid or unsure about puberty or sex as it is clear, and uses language that is not too hard to understand and if it does have any complicated words they have an easier meaning in brackets next to them, as well as having a glossary and index.

The writer has included a lot of factual and scientific diagrams and good explanations of how your body works and what happens. The book is aimed at anybody from the age of 8 years upwards as it is easy enough for younger audiences to understand.

The book has a connection with the reader as it isn't too factual that it's boring. It has a lot of useful little tips about how things work and answers most of the questions people are normally afraid of asking.

Reviewed by **Hannah Rea**
Teenage reviewer (13 years), Birmingham, UK