Emergency contraception: Who are the users?

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(Accepted 24th June 2001)

The Journal of Family Planning and Reproductive Health Care 2001: **27(4)**: 209-212

Abstract

Context. *Data collected from two community family planning services are used to discuss the characteristics of users of emergency contraception (EC).*

Objective. *To investigate the characteristics of women attending for emergency contraception.*

Design. *A descriptive survey design was used to collect data. Questionnaires were completed over a 4-week period. Data were analysed using SPSS.*

Setting. *Community family planning services in South West Surrey and Newham, East London.*

Participants. *Consenting women aged 14 - 44 years attending for emergency contraception (n = 171).*

Main outcome measures. *Description of the users, the current episode and contact with contraceptive services were analysed by age.*

Results. *The age range was 14 - 37 years (mean 20.2 years). A majority were smokers. Of the women, 97.7% attended the clinic within the 72-hour time frame for issuing oral EC, however only 4% came within 12 hours of intercourse; 55% said that they had used contraception. Condom breakage was the commonest reason for failure. Reasons for not using contraception included getting 'carried away' (35%), not having condoms available (22%) and having drunk alcohol (13%). Of the sample 55.6% were previous users of EC.*

Discussion. *The study demonstrates a high incidence of sexual risk taking and need for EC, especially amongst smokers and drinkers. The message that soonest is best still requires promotion. Providers of EC must co-ordinate their services to ensure access within the 12-hour time frame in a local area.*

Conclusion. *Health professionals need to ensure that clients have appropriate information about EC and regular contraceptive methods and that user friendly provision is widely available.*

Key message points

- The message needs promoting that for maximum efficacy, emergency contraception (EC) should be taken as soon as possible within the 72-hour time frame.
- Alcohol is often a contributory factor to unprotected sex and the need for EC. Smoking is also associated with an increased use of EC.
- For those using contraception, condom failure was the major cause of requiring EC. Health professionals should ensure clients are aware of correct condom technique and the damage that many lubricants cause to condoms.
- With the move to general practitioner (GP) provision of contraception and reduction in community clinics, specialist services need to be available if young people are to access EC.

Introduction

Emergency contraception (EC) methods using the Yuzpe technique or insertion of a copper bearing intra-uterine device, have been used by clients attending for contraceptive services in the UK for many years. Clinical practice and efficacy have been described thoroughly.[1] The recent availability of the progesterone-only EC, Levonelle 2, offers wider acceptability through improved efficacy and a reduction in side effects.[2]

The number of women using EC in the UK has been rising steadily during the 1990's. The most popular source of EC is the general practitioner (GP), and GP prescriptions rose from 120 000 in England in 1988 to 590 000 in 1998.[3] Prescriptions from family planning clinics and Brook Advisory Centres rose from about 38 000 in 1989/1990 to 240 000 in 1999/2000; the great majority were for PC4 and only a small percentage for IUDs.[4] The potential of EC to reduce the termination rate has been widely reported.[5-14]

EC has been used disproportionately by younger women. The General Household survey of 1993 found double the percentage of women aged 18-24 (10-11%) had used it in the previous 2 years compared to all women aged 16-49. Higher rates for women aged 15 – 24 than for older women have been persistently reported throughout the 1990s.[3]

Knowledge of, and attitudes towards, EC have been widely studied. Ellertson et al[15] list 70 studies, over half of which have been carried out in the UK. Surveys investigating attitudes and knowledge of teenagers find variable levels of knowledge of the technique and generally poor levels of how to access it.[16-19]

More efficient delivery of contraception, especially to young women, is clearly needed.[20,21] At present this is undertaken by a wide range of agencies: GPs, family planning clinics, pharmacies, and specialist clinics and nurses servicing predominantly young people. Good delivery must rely on knowledge of who the clients are, and this study investigates clients provided with one particular method, EC, in two specialist clinics.

Method

A descriptive survey design was used to collect data from community family planning clinics in South West Surrey and Newham, East London. The work of the South West Surrey clinic has been described elsewhere.[22]

Following ethical approval from relevant committees, questionnaires were completed by doctors and family planning nurses over a 4-week period during 1999/2000. All consenting women aged 14 - 44 attending for EC were offered information about the study and 171 subjects were recruited, 157 from SW Surrey and 14 from Newham, East London. It is believed that these constituted all of the likely sample.

The questionnaire consisted of 21 questions. These included questions normally asked during a consultation for EC, such as demographic characteristics, previous use of EC and future contraceptive intentions. In addition questions concerning alcohol consumption relating to the episode of unprotected sex were included.

Table 1 *Age, previous termination, previous PCC use, and smoking*

Age group	N	% with previous termination of pregnancy	% with previous PCC use	% of smokers
Under 16	14	0	14.3	57.0
16 - 19	74	6.8	50.0	48.6
20 - 24	63	26.9	71.4	58.7
25 +	20	40.0	55.0	30.0
Total	171	17.5	55.5	52.0

Data were analysed using SPSS. Three main themes emerged: description of the users, the current episode and contact with contraceptive services. The age groups under 16 years, 16-19 years, 20 -24 years and over 25 years were analysed in relation to personal characteristics and use of EC.

Results

Description of users

Table 1 shows the age and some key features of the sample. Users were predominantly young. The mean age of subjects was 20.2 years (age range 14 - 37 years); 88.3% were under 25 years. Over half were teenagers and 8.2% were under 16, the age of sexual consent.

Of the sample, 80.7% were of Caucasian origin; other ethnic groups included Afro Caribbean (9.4%), Asian (4.7%) and Chinese (2.3%).

Over two thirds of the sample were in full-time education: 9% attended school and 59% were university or college students. Of those in work, 15 (9%) worked in retailing, 12 (7%) in offices, five (3%) in nursing or child care and 11% had other jobs. None of the sample claimed to be unemployed.

Eighty-eight percent of the sample were nulliparous and 5.3% had children. Seventeen and a half percent had had a pregnancy terminated, including 29% of the 20-24 age group; four of these had had two pregnancies terminated.

Of the 30 who had had a termination, 80% had used EC before as opposed to the 129 who had not had a termination, where 48% had previously used EC (significant to < 0.01).

Smoking (defined as regularly smoking any amount of cigarettes per week) was widespread amongst the sample. Fifty-seven percent of the under 16-year-olds and 54% of all under 25-year-olds smoked. These figures are much higher than national statistics of 15% for under 16s and 41% of 20-25s stated by the Department of Health[23] for young women. Of the smokers 60.9% had previous use of EC compared with 49.4% of non-smokers. This difference was not statistically significant.

The current episode of unprotected sexual intercourse (UPSI)

The great majority of the subjects (97.7%) attended the clinic within the 72-hour time frame for issuing oral EC. Four percent came within 12 hours of intercourse, 37% between 12- 24 hours, 32% between 25-48 hours and 24% between 49- 72 hours. Of those who had previously used EC 43% came within 24 hours compared with 38% of first time users (no significant difference).

Forty-four percent of subjects stated that the unprotected episode had occurred mid-cycle (days 10 - 16 of the menstrual cycle), and altogether 71% between days 10 and 21.

Ninety-four (55%) said that they had used contraception. Reasons for failure included condom breakage (65%), the condom falling off (19.6%) and forgetting to take the contraceptive pill (11%).

The questionnaire asked subjects to comment on the reason for not using contraception. Seventy-seven (45%) had not used it. The most common reasons included getting 'carried away' (35%), not having condoms available (22%) and having drunk alcohol (13%), although altogether 30.4% (n = 52) of the sample stated that they had had alcohol to drink at the time of the episode. Forty-two percent of these had drunk over 5 units and another 23% had no recollection of the amount they had consumed.

Previous and future contact with contraceptive services

Of the study sample, 55.6% had previously used EC on one or more occasion and 31.6% had used it within the last 12 months. Previous use increased with age, apart from in the oldest (25 + years) group.

Community family planning clinics (FPC) had been the main provider of previous EC to the sample (51%). However, 38% had obtained it from their GP and 10% had been to accident and emergency (A&E) or genito-urinary medicine (GUM) services. Two subjects had brought it over the counter whilst abroad.

Table 2 *Previous use of EC and where obtained (some gave more than one answer)*

Age group	GP	FPC	A&E	GUM	Abroad
Under 16	0	2	0	0	0
16 - 19	13	25	3	0	0
20 - 24	22	22	2	3	2
25 +	5	5	0	7	0
Total	40	54	5	10	2

During the consultation future choices of contraception were discussed, and 77% intended to use condoms (48% took these away), 43.9% hoped to be prescribed the combined contraceptive pill, and 8.8% (half of these teenagers) wished to have the contraceptive injection. Small numbers were interested in the intra-uterine device (IUD) and progesterone-only pill.

Information leaflets were given to a majority of the sample (93.6%) and 70% were offered follow up appointments.

Discussion

A majority of data was collected from young peoples' clinics and therefore, as expected, most of the sample were young nulliparous women, and two thirds were in full-time education. However, one in nine were over the age of 25. Notably, 14 (8.2%) were under the age of sexual consent. Age of first intercourse has been declining, and a national study in 1990-1 found 18.7% of women aged 16-19 had experienced their first intercourse before the age of 16.[24] Twenty-two percent of boys and 26% of girls aged 14 in a sample from Lothian, South East Scotland in 1995 had experienced sexual intercourse.[17]

Of the sample 55.6% had had prior use of EC. This is much higher than found in other studies.[25,26] The incidence of prior use increased with age up to 25 years, with 14% of under 16s, 50% of 16-19 year olds, and 71% of 20-24 year olds having used EC before. Women who had had a termination of pregnancy (TOP) were significantly more likely to have used EC previously (80%), compared with 48% of those never having had a TOP.

Young womens' understanding of the timing of EC has been improving, but could become better. In this study 97.7% attended services within the 72-hour time frame for issuing EC, with 24% attending between 49 and 72 hours. However, only 4% attended within 12 hours of intercourse which research has suggested provides maximum efficacy. Reasons for this may include lack of service provision and it is important that providers of EC such as family planning clinics, A&E departments, GUM clinics and walk in centres co-ordinate their services to ensure access within the 12 hour time frame in a local area.

Attitudes and knowledge of EC was not investigated in this study. However, previous users who should have been given information on the efficacy over time effect of EC did not attend any earlier than first time users. Health professionals need to ensure that such information is communicated appropriately and understood by clients attending for EC. Several studies in a variety of settings confirm variable levels of knowledge about using EC and generally poor levels of how to access it. These include teenagers in comprehensive schools,[27] from GP lists,[28] attending clinics,[29] in pregnancy,[10] and requesting terminations.[30] Messages about EC have been mixed in that the term 'morning after pill' failed to convey the message that it could be taken up to 72 hours following intercourse. It may be that the message that soonest is best still requires promotion.

Over half of the sample said that they had used contraception which had failed. The most common reason was condom breakage or splitting. Women may feel more credible stating that they used contraception rather than not, and this may have affected answers given. Of those using contraception, all under 16s stated condom failure as the reason for requiring EC. This could be related to inexperience with using condoms. However, subjects in all age groups attributed failure to condoms which split or came off, including 92% of those over 25 who mentioned contraceptive failure. It was not ascertained whether oils or lubricants had been used which may have caused weakening of the condom, and health professionals need to remind clients about the effects of such items.

Of those who forgot to take the COC, 63% were in the 16-19 age group. This could be due to the erratic nature of their sexual relationships. Twenty percent of the 16-18 year olds in one sample reported that they were not in a steady relationship with their most recent partner.[31]

The figure of 45% of the sample who had not used any form of contraception at the time of unprotected sexual intercourse (UPSI) is worryingly higher than the 17% found in a 1997 study in Southampton.[32] Forty-four percent of subjects had had UPSI midcycle and this is potentially the highest risk time for pregnancy to occur in a 28 day menstrual cycle. 'Getting carried away' was the most common reason (44%), followed by not having condoms available (28%); 29% of those without condoms were under 16. There are many reasons why young people use condoms inconsistently and infrequently, including the embarrassment and expense of purchasing them.[33] Condoms are available free at family planning clinics and young people who are more likely to engage in risk taking behaviour may require specific targeting to encourage use if unintended pregnancy and sexually transmitted infections are to be prevented.

Thirty percent of the sample (35.7% of under 16s) had drunk alcohol at the time of UPSI and 16% attributed this as the reason for requiring EC. Johnson et al[34] identified 'being drunk' as a contributory factor to losing virginity, and note that non-use of contraception is common at first intercourse. The sample contained a high proportion of smokers compared to the general population, and American studies have shown that smoking is associated with higher alcohol consumption and risk taking behaviour.[35] Rowlands et al[26] showed smokers to be more likely to have used EC than non-smokers. Health professionals should take the opportunity to review smoking and alcohol behaviour at consultations for EC and promote the safe sex message.

For future contraception condoms were the most chosen method (77%). However, it is not known whether these were intended solely for contraceptive protection or as prevention from sexually transmitted infections. As expected the combined contraceptive pill was popular with under 25s, and particularly with the under 16s where 71.4% wished oral contraception to be prescribed. The injectable Depo Provera was also a consideration, especially for the 16-19 year olds. This method has seen increasing popularity recently for its long-acting use and independence from intercourse.[36]

The family planning clinic was the most popular source of obtaining EC in the past especially among the under 20 age group. The study did not include questions about service accessibility; however research by the Brook Advisory Centre[37] found that young people often find problems with attending traditional GP services, and user-friendly provision needs to be ensured for under 25s and minority groups.

Conclusion

The study demonstrates a high incidence of sexual risk taking and need for EC following alcohol consumption, along with an association with smoking. Health professionals should therefore take the opportunity to review alcohol and smoking behaviour and promote healthy lifestyles at consultations for EC.

A high level of condom failure is noted, and health professionals may need to ensure that clients are familiar with correct techniques for condom use and that clients are aware that many oils and lubricants can damage condoms.

The message needs promoting that for maximum efficacy, EC should be taken as soon as possible within the 72-hour time frame. Services providing EC need to be regularly available in order for women to obtain EC as soon as possible following UPSI. A high proportion of women in the study had previously used EC and had commonly obtained it at a family planning clinic. The reductions in community clinics mean that it is essential that user friendly provision is available for young people who prefer to attend such specialist services.

Acknowledgements

Dr C Jennings, Ann Robinson and Pippa Moorin Surrey Hampshire Borders NHS Trust, Dr S Abbott and Hilary Reynolds Newham Health Care NHS Trust.

Statements on funding and competing interests

Funding. None.

Competing interests. None.

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