

EMERGENCY CONTRACEPTION: PRACTICE OF SERVICE PROVIDERS IN ADDIS ABABA, ETHIOPIA

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ABSTRACT

A quantitative, descriptive, explorative, contextual study was conducted to determine pharmacists' and drug vendors' levels of knowledge, and attitudes towards and practices of emergency contraceptives (ECs) services in Addis Ababa, Ethiopia. From all licensed pharmacies and drug shops in Addis Ababa, 40 service providers were randomly selected, during 2008, and interviewed using structured interview schedules. The findings revealed that although these service providers were knowledgeable about the purpose and dosing schedules of EC, they lacked knowledge about side-effects, contra-indications, and types of ECs. Most respondents portrayed subjective attitudes towards easy EC access, especially for adolescent girls, since they believed that it would encourage promiscuity and unprotected sexual intercourse. The knowledge, practices and attitudes of these pharmacists and drug vendors should be improved, as it has a direct effect on potential EC users for preventing unwanted pregnancies among young women, especially adolescent girls.

KEYWORDS: Addis Ababa, attitudes and practices of service providers, drug vendors, emergency contraceptive (EC) service, Ethiopia, knowledge, pharmacists, unwanted pregnancies.

INTRODUCTION AND BACKGROUND INFORMATION

Unwanted and unplanned pregnancies remain one of the major reproductive health problems of women in Ethiopia. Unsafe abortions are estimated to account for about 32% of all maternal deaths in the country. In 2001, the Federal Ministry of Health (FMOH) of Ethiopia in collaboration with local and international organisations, launched a pilot project to introduce emergency contraceptive (EC) services in selected youth centre clinics in the country. This pilot project demonstrated that EC was popular

among young women and that there was a need to expand these services. Research has been done on young adults' and women's knowledge and attitudes towards EC use. However no information on service providers' knowledge, attitudes and practices of EC in Ethiopia could be traced.

DEFINITIONS OF KEY CONCEPTS

- ▶ Emergency contraception refers to an effective method of birth control that prevents pregnancy after unprotected sex. It also refers to the progestin only as well as combined regular birth control pills given in specified doses by pharmacists and drug vendors (Castle & Coeytaux 2000:6).
- ▶ **Practice of service providers** is also based on scientific knowledge, the necessary skills and attitudes to provide effective EC services. Practices of EC service provision include, filling prescription and/or giving advice on EC to clients by pharmacists and drug vendors.
- ▶ **Service providers** refer to health professionals who have attained a bachelor of pharmacy degree (pharmacists) and a diploma in pharmacy (drug vendors). They need to have graduated from a recognised institution and be registered with the Ministry of Health to work as pharmacist or drug vendor in the country ([Online]. <http://encyclopedia.thefreedictionary.com/pharmacist>).
- ▶ **Attitudes** refer to the respondents' opinions, outlooks and intentions towards providing EC services. Respondents' willingness to use, consider EC as useful or recommend EC, are categorised as respondents with positive attitudes. Respondents who had concerns and did not recommend the use of EC were considered as respondents with negative attitudes.
- ▶ **Knowledge of service providers** refers to the information, understanding and skills possessed by pharmacists and drug vendors on EC ([Online]. <http://en.wikipedia.org/wiki/knowledge>). Knowledge about EC includes the types of EC, modes of action, how and when to use EC and its effectiveness, side-effects and contra-indications (Oxford |English Dictionary, 2009).

PROBLEM STATEMENT

In Ethiopia unwanted pregnancies' consequences on the physical and psychosocial wellbeing of adolescent girls and young adult women remain problematic. Unwanted pregnancies remain an important factors contributing to unsafe abortions. Unsafe abortions in Ethiopia account for nearly 60.0% of all gynaecological admissions, and almost 30.0% of all obstetric and gynaecologic admissions. However, these figures represent only the tip of the iceberg due to the clandestine operation of unsafe abortion services (Federal Ministry of Health 2006:1). Improving access of EC service is

essential for reducing unplanned pregnancies. Practices of service providers, which are mainly based on their knowledge and attitudes, are determining factors for accessing EC services. While many make use of the services of pharmacists and drug vendors, because contraceptives are dispensed without prescription; information on the knowledge, attitudes and practices of pharmacists and drug vendors on EC in Addis Ababa is necessary. Without this information it is difficult to design EC interventions which could improve EC access, and prevent unnecessary deaths, and suffering attributable to unwanted pregnancies.

PURPOSE AND OBJECTIVES OF THE STUDY

The aim of this research was to determine the level of knowledge of EC service providers, their attitudes towards ECs and their practices. The objectives of the research were to:

- determine whether pharmacists and drug vendors in Addis Ababa, Ethiopia, had adequate knowledge about the types and mode of action of EC; when and how it should be prescribed; the side-effects and contra-indications and provide EC clients with the correct advice.
- determine the attitudes of pharmacists and drug vendors towards providing EC services to women, especially to adolescent girls.

ETHICAL CONSIDERATIONS

Permission to collect data was obtained from the Ethics Committee of the Department of Health Studies, University of South Africa. Verbal permission was also obtained from the pharmacy and drug shop owners. Respondents were informed about the objectives of the research, and that they could withdraw from the study at any time of the process. Their participation was voluntary, confidential and they would not be harmed by taking part in the research or by deciding not to take part. They then signed an informed consent form. Data were collected in a private interview room, each respondent was assigned a specific number and no identifying information was recorded.

RESEARCH DESIGN AND METHODS

A quantitative, explorative, descriptive design, where the appropriateness of the design was assessed in terms of whether it addressed the research questions and objectives and would produce interpretable and meaningful results, was applied (Polit & Beck, 2008:66). The design was explorative as no research data could be found of a similar study in Addis Ababa. A descriptive design allowed the respondents to describe their opinions and attitudes.

Population and sampling

The research population comprised service providers working in 104 pharmacies and 126 drug shops in Addis Ababa. A list of 230 facilities in Addis Ababa was obtained from the Drug Administration and Control Authority of Ethiopia (DACA). Systematic sampling was used and every 5th facility was selected from the list, at facilities with more than one service provider, all were interviewed until the required sample size had been reached (Polit & Beck, 2008:337). The sample size of this study was 40, which was approximately 41.6% of the total research population (Polit & Beck, 2008:340).

INSTRUMENT, DATA COLLECTION AND ANALYSIS

Data collection was done by interviewing respondents using a structured interview schedule consisting mostly of closed and some open-ended questions (Polit & Beck, 2008:369). The interview schedule was adapted from pre-existing instruments and it was designed to obtain the following information:

- Biographical information and training history of respondents
- Knowledge of EC service providers
- Attitudes of respondents towards EC service provision
- Practices of EC service providers

Five service providers who were not part of the main study were interviewed in order to pre-test the research instrument to

- determine how much time it takes to administer the entire instrument (whether participants found it burdensome).
- identify any part of the instrument that might have been difficult to understand or misinterpreted.
- determine whether the sequencing of questions was sensible.
- enhance validity and reliability of the instrument.

Adjustments were made to the interview schedule prior to conducting the interviews.

The interview was chosen as the data collection approach because the researcher believed that the data collection process would be much quicker than sending questionnaires per post to respondents and it would have a better response rate (Wood & Haber 2002:303; Burns & Grove, 2001:421-422). To overcome possible bias during the interviews, the researcher concentrated only on the questions in the interview schedule. The researcher conducted the interviews and took special care not to influence the respondents to choose a certain response (Kothari, 2004:99; Burns & Grove, 2001:422).

The closed questions were coded and analysed by computer using Microsoft Excel and Epi 6.04 Dos version 2001 soft ware, and the open-ended questions were grouped and analysed quantitatively.

RELIABILITY AND VALIDITY

The structured interview schedule was compiled and adapted by the researcher after the literature was reviewed and after consultation with experts in the field. The instrument was then pre-tested at pharmacies by interviewing service providers who did not participate in the actual study (De Vos et al, 2002: 168).

The research instrument was properly calibrated by defining each concept and assessing for content validity by experts in the field, the supervisors at the University of South Africa (Unisa) and during the pre-testing of the instrument (Wood & Haber 2002:314).

RESEARCH RESULTS AND DISCUSSIONS (N=40)

Biographical data

The majority of respondents were male (72.5%; n=29), younger than 30 years of age (55%; n=22), and Christian (85%; n=34). Only 31.8% (n=7) of the 22 respondents (pharmacists and drug vendors) who received training in the past two years were trained in EC and only 4.5% (n=1) were trained in reproductive health (RH) and family planning (FP). Most of the service providers had 3 - 5 years of service and 25% (n=10) of respondents had more than 9 years of service. Service providers' ages, gender, religious backgrounds, years of service, and qualifications showed no significant relationships with their attitudes towards and knowledge about EC.

Knowledge of service providers on EC

Most (90%; n=36) of the respondents knew the purpose of EC and its approval by the Ministry of Health. One dedicated product, the progesterone-only EC pill known as 'postpill' was available in most (70%; n=28) of the pharmacies and drug shops during the study period of this research. Most service providers (70%; n=28) knew about this progesterone-only pill and very few (15%; n=6) knew about both the progesterone-only and the combined oral contraceptives that could be used as EC. Although the commonly used oral contraceptive pills in higher doses could normally be used for EC, dispensing these pills was uncommon and the knowledge of the respondents on dose calculation was poor.

Many (87.5%; n=35) of the service providers indicated that they knew EC was effective for preventing pregnancies but could not translate the effectiveness of EC into percentages. More than half of the respondents (62.5%; n=25) said that they did not believe that EC was as effective as regular oral contraceptive methods. Almost all

of the respondents said that EC should be administered within the first 72 hours after unprotected sexual intercourse and that 12 hours should be the interval time between the successive doses of EC ingestion. The majority of the service providers (92.5%; n=37) indicated that sexual assault, contraception failure, and non-use of contraception were indications for EC. They also indicated that the use of EC was mainly used by clients after sexual assaults.

The respondents lacked knowledge about the side-effects and contra-indications of EC. They incorrectly indicated that EC could cause uterine and breast cancer, skin pigmentation, abdominal pain, and high blood pressure. Only 5% (n=2) of the service providers mentioned that nausea, vomiting and irregular vaginal bleeding could be side-effects of EC and 30% (n=12) said that pregnancy and late timing in seeking EC were contra-indications for EC. Most women who need EC can usually use it safely. More than half of the service providers (52.5%; n=21) disagreed with the statement 'EC can cause abortions', but 20% (n=8) believed that EC was an abortifacient.

Service providers' attitude towards EC use

The majority (87.5%; n=35) of the respondents believed that EC service provision for women, including adolescents would encourage promiscuity and decrease compliance with the use of regular contraceptive methods. The respondents seemed to have unwarranted concerns about the repeated use of ECs as they believed it would pose health risks for these women.

Should a pregnancy continue despite the use of EC, half of the respondents would advise the client to continue with her pregnancy, even if she had used ECs. From those who said that they would advise a woman to continue with her pregnancy; the majority explained that EC posed no problem either to the foetus or the mother, and only a few of the respondents admitted that they would do so because there was no other choice. The respondents who indicated that they would not advise a woman to continue with her pregnancy, explained that EC had side-effects for the foetus (such as causing malformations), and that they would also prefer to send the client to a medical doctor for consultation, since they had limited knowledge about the subject.

More than half of respondents (57.5%; n=23) were not in favour of advanced provision of EC to a client mainly because: "prior provision encourages negligence, increase risk taking behaviour, and misuse of method". Whereas fewer than half of the respondents were in favour of advanced provision by explaining that: "prior provision increase access for immediate use and the earlier EC is used the better the outcome".

More than two thirds of respondents (67.5%; n=27) have supported over-the-counter availability of EC, while one third did not. Dispensing EC to any client who asks for it including young adolescent girls, was not supported by half of the respondents since they believed that EC "would encourage unsafe sex; promote earlier sexual debut; increase misuse of method; and had side-effects". And they said that "there had to be

‘precautions’ [restricted access] in providing EC services especially to adolescent girls, so that misuse of the method would be avoided”.

Service providers practice on EC

Of service providers interviewed, 90% (n=36) provided EC to their clients, and they accurately explained how they would advise their clients on the dosing schedule for the progesterone-only pill. Though the regular combined oral contraceptives were available without prescription in pharmacies and drug shops of Addis Ababa, the majority of respondents have never dispensed these pills as EC. The progesterone-only type pill was widely used in pharmacies and drug shops of Addis Ababa as EC.

Of the respondents who practised EC, more than half tended to limit repeated EC use for the unfounded concerns that EC has side-effects when used repeatedly; encouraged unsafe sex and some believed that in order to enforce the use of regular contraceptive pills, repeated use of ECs should be discouraged. In this study the majority of respondents revealed that it was not necessary to obtain a prescription or laboratory test in order to provide EC for their clients.

Pharmacists and drug vendors in Addis Ababa provided progesterone-only type EC pills to their clients, and they were knowledgeable about the purpose and indications of EC and dosing schedule of this EC pill. Providers rarely considered the combined oral contraceptives to be used for EC and their knowledge on the dosing schedule for this type of pill was poor.

Pharmacists and drug vendors in Addis Ababa had inadequate knowledge about the side-effects, contra-indications, and actions of EC. The respondents in Addis Ababa were unsure and were not knowledgeable about the safety and effectiveness of EC. They incorrectly believed that the repeated use of EC would pose health risks. Pharmacists and drug vendors in Addis Ababa had unwarranted concerns that EC service would encourage women to have unsafe sex and increased promiscuity. They also believed that EC could compromise compliance to regular contraceptives methods among women. Provision of EC to women whose pregnancies were advanced reportedly was associated with risk taking behaviour of women by pharmacists and drug vendors in Addis Ababa.

LIMITATIONS

Though a census of all pharmacists and drug vendors in Addis Ababa was conducted, the results could not be applied to the rest of Ethiopia. However, there is no reason to believe that the findings could not be generalised to other pharmacists and drug vendors in similar areas.

Information gathered, relied on service providers’ self-reports and this might have affected the information obtained through over-reporting. Another research strategy,

such as observations of the actual EC practices of service providers, could have provided different findings. Women who requested ECs were not interviewed, and their experiences were thus not recorded.

RECOMMENDATIONS

In order to improve the quality of EC service in Addis Ababa, there is a need to up-date, train and re-train all service providers working in pharmacies and drug shops about types of ECs, actions, safety, effectiveness, side-effects and contra-indications. Service providers need to be informed that the repeated use of EC has no associated serious health risks. Most current available data on research findings of other countries on the impact of availing EC services to adult women and young adolescents need to be made accessible to foster changes in attitudes among service providers to favour EC service provision.

Service providers need to be up-dated on current information and vigorous attempts should be made in educating providers on dosage and the use of the commonly dispensed oral contraceptives as alternative methods of EC in addition to the progesterone-only pill.

Vigorous attempts need to be exerted in order to ensure improved EC access coupled with its safe use, especially among adolescent girls and young adult women. More research is recommended to improve access and quality of EC services in Addis Ababa. Future research should address service providers' assumptions that ECs will increase promiscuity and compromise the use of regular contraceptives.

The demand for, accessibility of and use of ECs among women in Addis Ababa should be studied further by collecting data from these women themselves.

REFERENCES

- Burns, N, & Grove, S.K. 2001. *The practice of nursing research: conduct, critique and utilization*. 4th Edition. Philadelphia: W.B. Saunders.
- Castle, M.A., & Coeytaux, F. 2000. *A clinician's guide to providing emergency contraceptive Pills*. Los Angeles: Pacific Institute for Women's Health.
- De Vos, A.S., Strydom, H, Fouché, C.B. & Delport, C.S.L. 2005. *Research at grass roots for the social sciences and human service profession*. Pretoria: Van Schaik.
- Federal Ministry of Health - FMOH. 2006. *Technical and procedural guidelines for safe abortion services in Ethiopia*: Addis Ababa.
- Kothari, C.R. 2004. *Research methodology methods & technique*. 2nd Edition. India: New Age International Press.
- Oxford English Dictionary. 2009. *Knowledge*. (Online). <http://www.wikipedia.org/wiki/knowledge>. (Accessed 12 March 2009).

Polit, D.F. & Beck, C.T, 2008. *Nursing research: Generating and assessing evidence for nursing practice*. 8th Edition. Philadelphia: J.B. Lippincott.

The Free Dictionary. 2009. *Practice of pharmacist*. (Online). <http://encyclopedia.thefreedictionary.com/pharmacy>. (Accessed 12 March 2009).

Wood, L. & Haber, J. 2002. *Nursing research methods critical appraisal and utilization*. 5th Edition. St. Louis: C. V. Mosby.