WOMEN'S KNOWLEDGE, PERCEPTIONS AND USE OF EMERGENCY CONTRACEPTIVES AT THREE HEALTH CARE CENTRES IN NORTHERN TSHWANE, GAUTENG PROVINCE

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ABSTRACT

Emergency contraception might be misunderstood by women who resort to termination of pregnancies in the event of unwanted pregnancies, rather than to use emergency contraceptives in the event of unprotected sexual intercourse. This article outlines the information, perceptions and use of emergency contraceptives by women in Northern Tshwane, Gauteng Province.

A quantitative, exploratory, descriptive design was used for this study. Structured interviews were conducted with 83 women (60 adults and 23 adolescents) who presented for contraceptives at three participating health care centres in Northern Tshwane. The results indicated that the majority of both adult and adolescent women lacked knowledge about emergency contraceptives. A number of adolescents portrayed negative perceptions towards using emergency contraceptives, fearing future reproductive problems or malformed babies.

KEY WORDS: Emergency contraception, unwanted pregnancies, qualitative research, woman's knowledge.

INTRODUCTION

Hormonal methods of contraception have been known world-wide for more than 30 years. In the Republic of South Africa (RSA), E-gen-C was introduced in 1998 as an emergency contraceptive which prevents pregnancy if taken within 72 hours after unprotected sexual intercourse or after failure of mechanical contraceptive methods, such as a broken condom. It acts as a contraceptive by delaying the release of a fertilised ovum from the ovaries to the endometrium (Reproductive Rights Alliance 1999:11). Other emergency contraceptive pills include:

- Ovral, dosage of two pills as soon as possible (but withing 72 hours) after unprotected sexual intercourse and second dose of two pills12 hours after the first one.
- Nordette, four pills to be taken within 72 hours after unprotected sexual intercourse as first dose and four pills as second dose 12 hours after the first one.
- Microval, 25 pills to be taken within 72 hours after unprotected sexual intercourse (http://www.who.int/infs/en/fact244.html, 24.08.2001).

An alternative form of emergency contraception is the insertion of a copper-containing intra-uterine contraceptive device (IUCD), which can be inserted up to five days after unprotected sex and even later if intercourse took place early in the menstrual cycle. (An IUCD can be inserted - as an emergency contraceptive - up to five days after the calculated date of ovulation day 19 of a 28-day cycle). This is possible because the IUCD prevents implantation. A further advantage of the IUCK is that it can be left in situ to provide long-term contraception (http://www.who.int/infs/en/fact244.html, 24.08.2001).

Emergency contraception is a safe and effective method of preventing accidental pregnancy after unprotected sex or contraceptive accidents (Kubba 1997:104; Quinn 1999:39). The effective use of emergency contraception could reduce the incidence of unplanned pregnancies and the demand for the termination of pregnancy (TOP) services.

Since the Choice on Termination of Pregnancy Act No 92 of 1996, more than 150 000 pregnancies have been terminated in the RSA. The number of backstreet abortions have reportedly exceeded this number, bringing the estimated total number of TOPs performed in the RSA to over 300 000 (Bateman 2000:11). Effective and knowledgeable utilisation of emergency contraceptives could decidedly contribute towards reducing the number of TOPs performed in the RSA.

Crosier (1996:87) indicated that a number of studies concluded that between 30% and 50% of women presenting for TOPs were not using contraception at the time of their conception. Duncan, Harper, Ashwell, Mant, Buchan and Jones (1990:112) reported that in Oxford in the United Kingdom (UK), 70% of women said they would have used emergency contraception if they had known about it. Women need to be informed about different contraceptive methods, including emergency contraceptives, before they can use them effectively.

PROBLEM STATEMENT

Unwanted pregnancies pose major reproductive health challenges to women throughout the world. Despite the availability of modern contraceptives which include emergency contraception, many women fail to use these effectively. Many women with unwanted pregnancies end up at legal or back street TOP services. "It has been calculated that each year the widespread use of emergency contraception in the USA alone could prevent over 1 million abortions and 2 million unintended pregnancies that end in childbirth" (Cheng, Gulmezoglu, Ezcurra & Van Look 2000:2). Globally an estimated 50 million pregnancies are terminated each year (Cheng et al 2000:1). A large number of these 50 million TOPs could be avoided if the women of the world knew about, and could access, emergency contraceptives, preventing unwanted pregnancies from occurring.

Only a limited number of studies concerning emergency contraception in the RSA could be traced during the

literature search as most previous research focussed on contraceptives, disregarding emergency contraception.

OBJECTIVES OF THE STUDY

The study aimed to

- assess women's knowledge about emergency contraceptives
- describe women's perceptions towards emergency contraceptives
- determine the possibility of using emergency contraceptives in the event of unprotected sex

THE RESEARCH DESIGN AND METHOD

A quantitative exploratory and descriptive research design was utilised to describe the women's knowledge, perceptions and use of emergency contraceptives.

POPULATION AND SAMPLE

The target population for the study comprised women who presented at the selected health care centres in Northern Tshwane. These health care centres provide contraceptives to more than 50 clients daily, yielding a total of more than 150 clients daily from the three centres combined.

A convenience sample of women who came for contraceptives at the three health care centres was selected (Polit & Hungler 1999:281) as it was not possible to predetermine who would be coming on which days. A total of 83 women, 60 adults and 23 adolescents comprised the sample.

DEVELOPMENT OF THE RESEARCH INSTRUMENT

The structured interview schedule was developed, based on information obtained during the literature review. Items relevant to the research questions and in line with the objectives of this study were formulated. The instrument consisted of sections that focussed on biographic data, emergency contraception, knowledge, perceptions, use of emergency contraception and reasons for its use or non-use. The instrument was pre-tested by conducting structured interviews with clients who visited these three health care centres on specific days preceding the actual data collection phase. The respondents who participated in pre-testing the structured interview schedule were excluded from participating in the actual research. Most problems identified during the pre-test related to the Tswana words used in the structured interview schedule pertaining to contraception and emergency contraception. Although most persons were Tswana speaking, and all understood Tswana, the contraceptive terminology in Tswana posed problems. The interviewers (field workers) suggested that the English terms should be provided together with the Tswana terms. This was done.

The initial plan was to post questionnaires to contraceptive clients so that their anonymity could be guaranteed but after the pre-test it became apparent that the respondents required some explanations and would not be able to complete the questionnaires on their own. Consequently, structured interviews were conducted. The three field workers (registered nurses) were provided one day's training aimed specifically at explaining any specific question in similar ways.

VALIDITY AND RELIABILITY

To ensure the quality of a data-collection instrument, it is important to establish its validity and reliability. Validity refers to the degree to which a test or instrument measures what it purports to measure (Burns & Grove 2001:343). The content and face validity of the instruments used for this study were accepted by registered nurses working in family planning clinics as being relevant to identifying women's knowledge, perceptions and utilisation of emergency contraceptives. Experts in reproductive health from the Department of Health and from the Medical Research Council were also requested to evaluate the face validity of the structured interview schedule. The instrument was pre-tested to determine whether the respondents understood all the questions As problems were encountered during the pre-test with the understanding of the meaning of specific questions, the field workers and the researcher spent one day clarifying ways in which each question should be explained.

The reliability of the structured interview, pertaining to the consistency with which it tested the women's knowledge, perceptions and utilisation of emergency contraceptives, was addressed by:

- comparing the data obtained from the three different participating clinics
- comparing data collected (structured interview schedules completed) by the researcher and the two field workers.

As no discrepancies were identified between the above categories of data collected, it was accepted that the structured interview schedule could be accepted as being a reliable data gathering tool.

DATA COLLECTION

The researcher, with the help of three research assistants (registered nurses) visited the three participating health care centres in Northern Tshwane, on pre-arranged dates and times for data collection. All women visiting a clinic on the day when the field workers were there were requested to participate in the research project.

ETHICAL CONSIDERATIONS

The rights of respondents were protected. To maintain confidentiality and anonymity, no names were used during data collection. Each woman was asked to participate. Those who refused were not discriminated against in any manner whatsoever. Those who participated were not remunerated in any way. Permission to conduct the study was requested from and granted by authorities of the three health care centres in Northern Tshwane.

DATA ANALYSIS

Data were encoded and computerised using the Statistical Package for Social Sciences (SPSS) with the help of a statistician. Descriptive and inferential analyses were used to summarise and describe the research results. Logistic Regression Analysis (LRA) was used to ascertain relationships among variables.

ANALYSIS AND DISCUSSION OF THE RESEARCH RESULTS

- **Biographic data**

This background information about respondents were requested in order to contextualise the research results

against the information about the respondents as persons.

- **Age and marital status**

One of the criteria for inclusion in the study was the reproductive age ranging from younger than 16 years to more than 40 years of age. For the purpose of this research, adult ages ranged from 21 years to 40 years and above, while adolescent ages ranged from 15 years to 20 years. The aims were to distinguish adults' knowledge, perceptions and use of emergency contraception from those of adolescents.

Out of 83 females, 60 (72,3%) were adults whilst 23 (27,7%) were adolescents. Only 3 (5,1%) adults were married, 55 (93,2%) were single and 1 (1,7%) was widowed. All 23 female adolescents were single.

- **Residential areas and level of education**

Most respondents, 27 (45,0%) adults and 9 (40,9%) adolescents stayed in the townships of Soshanguve, Mabopane and Ga-Rankuwa including their neighbouring informal settlements. The Logistic Regression Analysis of the data found the residential areas had a significant effect ($p < 0,05$) on the contraceptive practices of individuals. This significant relationship suggests that clients from residential areas where contraceptive services are available with nurses who are supportive and non judgmental, are more likely to use contraceptives effectively than clients who come from residential areas that lack these attributes.

Out of the 60 adult women, 31 (51,7%) passed grade 12, while 23 (43,3%) had lower qualifications than grade 12 and only 3 (5,0%) had no schooling. Out of the 26 adolescent women, 14 (60,9%) had passed grade 12 while 9 (39,1%) had qualifications lower than grade 12, implying that all adolescents had some schooling. Level of education provides the extent of information the clients might have which could influence their contraceptive practices. In view of the relatively high levels of education of these women, their apparent problems in understanding the structured interview schedule's questions, necessitating explanations by the field workers, proved to be an unexpected finding.

- **Home language and religion**

Most respondents were Sotho (47,9%) or Tswana (39,0%) speaking, two languages frequently spoken in Northern Tshwane. (The researcher and the field workers could speak both languages). Although the structured interview schedule was translated into Tswana, it proved easier to use the English interview schedule as the participants were more familiar with the English contraceptive terminology used in this schedule. Prior to collecting the data, the field workers and researcher agreed on specific explanations to be provided for anticipated questions - based on the experiences gained while pre-testing the instrument.

Certain religions have specific practices which could impact on their followers' utilisation of contraceptives and emergency contraceptives. Out of the 83 respondents, 15 (18,1%) belonged to the Apostolic Church and 11 (13,3%) to the Zionist Christian Churches (ZCC). Some clients from these religious groups reportedly used water that was prayed over by their priests to drink after having unprotected sexual intercourse which they regarded as practising emergency contraception. These findings could be compared with those reported by Wood and Jewkes (1000:11) who found that teenagers who attended the ZCC were not using contraceptives because their church discouraged the use of biomedical contraceptives. Other emergency contraceptives reportedly recommended by these churches included strong coffee or tea mixed with unspecified "medicines" to drink after sexual intercourse.

- **Employment status and personal income**

Out of 83 females, 35 (42,2%) were employed, whilst 25 (30,1%) were unemployed and 10 (12,0%) were still at school. Having a job means having an income and being able to improve one's socio-economic status. Although contraceptives are freely available, clients need the financial means to reach health care centres for contraceptive consultations and supplies. With little or no income, clients may not afford to buy contraceptives nor to travel to get them resulting in unprotected sex and unplanned pregnancies.

- **Knowledge about emergency contraception**

In response to whether women knew about emergency contraception, 25 (30.1%) women admitted having knowledge about emergency contraception. Of these 25 women, only 7 could mention that they had heard of the "morning after pill" which could be used after unprotected sex, whilst only three women could provide details about additional information they had regarding emergency contraception which included that:

- Emergency contraception could be used within 72 hours after unprotected sex
- It could be obtained from clinics
- It should only be used in "accidents", and not as routine contraception

None of the respondents knew that the copper-containing IUCD could be used as emergency contraception. Only a minority of adolescents had information regarding the dose, when and under what circumstances emergency contraception could be used. Emergency contraception has a significant role to play in the prevention of unplanned and unwanted pregnancies among all age groups, but its use is determined by women's knowledge and awareness of its availability, apparently lacking among the majority of these women.

Ehlers, Maja, Sellers and Gololo (2000:49) reported similar results in a survey conducted amongst adolescent mothers in the Gauteng Province reporting that 67, 6% of these adolescent mothers did not know about the availability of emergency contraceptives and could therefore not access, nor utilise them to prevent unplanned pregnancies.

According to Netshikweta (1999:18), 73,1% of the student nurses in the Limpopo Province of the RSA had no knowledge about emergency contraceptives and none of these respondents managed to access emergency contraceptives in spite of the fact that they were student nurses.

- **Perceptions about the use of emergency contraceptives**

Respondents were asked if they would use emergency contraceptives after unprotected sex to prevent unwanted

contraceptives when in need. More information about emergency contraceptives should allay fears, and address misconceptions about emergency contraceptives. Using emergency contraceptives after unprotected sex could save women from bringing unwanted children into the world as well as from terminating unwanted pregnancies.

- **Reasons for use and non-use of emergency contraceptives**

Those respondents who would use emergency contraceptives when in need, provided the following reasons:

- Emergency contraceptives could prevent unwanted pregnancies (n = 16).
- It is a better option than waiting anxiously for your next period (n = 11).
- It is better than the termination of a pregnancy (n = 9).

Furthermore, 37 (44,6%) women expressed their intention not to use emergency contraceptives for the following reasons:

- Emergency contraception is just like murder, I cannot do it, nor promote it.
- It is morally not proper to use it.
- I am not sure of its action, what if I have serious complications in future?

Knowledge about the availability of emergency contraception could enable all women to have their babies when they want to have them, with minimum disruptions to their lives, work and education. Proposals that emergency contraceptives should be made more readily available, without prescriptions, were based on a report that 98,0% of the women who self-administered emergency contraceptives, used them correctly, suffered no harm and reduced the number of unintended pregnancies (Glasier & Baird 1998:1).

LIMITATIONS OF THE RESEARCH

The generalisations of these research results are limited because the research project was subject to the following limitations:

- only three clinics in Northern Tshwane participated in the research project
- all respondents were Tshwana or Sotho speaking
- only women visiting the family planning clinics participated in this research project
- only structured interviews were used to collect data.

CONCLUSIONS

Lack of knowledge about emergency contraceptives was evident as the majority of both adults and adolescents had no idea of what it entails nor that emergency contraceptives could prevent unwanted pregnancies - even in the event of unprotected sexual intercourse. In addition to lacking knowledge about emergency contraceptives, the majority of the adolescents were reportedly not convinced that emergency contraceptives could indeed prevent unwanted pregnancies. Some adolescents indicated that they would not use emergency contraceptives, fearing future reproductive complications and having malformed babies. These perceptions pose challenges for future health education efforts to address adolescents' lack of knowledge and fears about emergency contraceptives.

Only a minority of respondents indicated that they would use emergency contraceptives in the event of unprotected sex as they believed that it would be better than having to wait anxiously for the next period, or having a termination of an unwanted pregnancy or having an unplanned baby.

RECOMMENDATIONS

- There appeared to be a need to provide accurate information about what emergency contraception is, its effectiveness, how long after unprotected sex it can be used and how and where it can be accessed in the Northern Tshwane region.
- Further research should be conducted to investigate the availability and accessibility of emergency contraceptives in Northern Tshwane, especially whether it is available at night and over weekends.
- The possibility of accessing contraceptives and emergency contraceptives after office hours and on public holidays should be considered particularly for school going and working women who cannot attend family planning clinics during normal clinic hours.
- Education of women about contraceptives, including emergency contraceptives, should be stepped up in the Northern Tswane region, emphasising the fact that it should only be used in emergencies and not as routine contraceptives.
- Future research should investigate the need of working women and students to attend clinics over weekends or at night.
- Future research should address the potential need for adolescent family planning services where adolescents need not fear meeting their mothers, teachers, grand mothers, aunts or Sunday school teachers.
- Investigate whether private pharmacies and medical practitioners do provide emergency contraceptives to women (including adolescents) who request them.
- Future research should identify whether or not nurses encourage the use of emergency contraceptives at the clinics where they are working.
- Future research should identify whether women requesting termination of pregnancies would have used emergency contraceptives if they could have accessed them.

CONCLUSIVE REMARKS

If women fail to use contraceptives effectively, then emergency contraceptives offer a way of preventing unplanned pregnancies. In cases where both contraceptives and emergency contraceptives failed, women might need to resort to the termination of their pregnancies or to bringing unplanned children into the world - imposing potentially lifelong burdens on both mothers and children. While it remains each woman's

choice whether or not to use contraceptives, emergency contraceptives or TOP services, it is the responsibility of health care workers, especially nurses, to provide sufficient information for women to make informed choices. It is also the responsibility of the health care services to ensure that women can access the services of their choice.

Merely changing legislation which made termination of pregnancy services legal in the RSA, did not enable many women to access these services because they are not available at all clinics, and because nurses might not support the use of these services. Merely providing contraceptives at clinics, sometimes only at specific days and times, also does not enable working women nor students to access these services.

Better knowledge about contraceptives, and especially about emergency contraceptives, can assist many women to make informed choices about their reproductive lives and to have children if and when they are ready to do so to the ultimate benefit of these women themselves and their children. "Other aspects of emergency contraception such as raising awareness among the general public and health care delivery systems merit more research too, if the potential of these regimens is to be maximised and unwanted pregnancies prevented" (Ching et al 2000:8).

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