

# KNOWLEDGE AND PRACTICES AMONG MEDICAL ABORTION SEEKERS IN SOUTHEASTERN NIGERIA

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**Abstract.** Nigeria has restrictive abortion laws; unsafe abortion and its complications are major public health challenges. Access to reproductive health services in Nigeria, including medical abortion, is poor. We determined the socio-demographic characteristics, patterns of abortion practices, and experiences of medical abortions among abortion seekers in southeastern Nigeria. We carried out a descriptive, cross sectional survey of 100 consecutive medical abortion seekers in southeastern Nigeria. Subjects had a mean age of 23.5+4.4 years. Fifty-five percent of respondents were students. Sixty-four percent had a secondary educational level, 33% had a tertiary education level and 3% had a primary educational level. Fifty-eight percent of subjects were ages 18-20 years at coitarche; 25% had one or more previous deliveries and 49% had a previous termination of pregnancy. Forty-eight percent had used drugs for pregnancy terminations. Drugs used for termination included quinine combined with other drugs in 8%; gynaecoid alone in 6%, gynaecoid combined with other drugs in 6% menstrogen combined with other drugs in 6% and an unclassified drug in 14%. Thirty-three percent of subjects purchased their abortion drugs in a pharmacy. Three percent, 2%, and 0% of subjects had a knowledge of misoprostol, mifepristone and methotrexate, respectively. One percent of respondents had used misoprostol. We detected serious information gaps regarding abortion and poor access to reproductive health services. There is a need for policies and program to bridge this gap, and a need for revision of the present Nigerian abortion law.

**Keywords:** abortion practices, experience on medication abortion, termination of pregnancy seekers, Nigeria

## INTRODUCTION

In Nigeria and many developing countries of the world, abortion and its

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complications present a major public health challenge. It has been estimated that approximately 760,000 abortions are performed annually in Nigeria, as high as 40% of which are performed by non-medical practitioners (Henshaw *et al*, 1998; Bankole *et al*, 2006; Adinma *et al*, 2007). Abortion laws in Nigeria are restrictive; abortion is only allowed for the purpose of saving the life of the mother

(Henshaw *et al*, 1998; Adinma *et al*, 2007). Termination of pregnancy, whether induced or spontaneous, can be associated with complications; studies from Nigeria report these complications include ectopic pregnancy (Olatubosun and Okonofua, 1986; Anorlu, 2005), chronic pelvic inflammatory disease (Lapido, 1989), secondary infertility (Okonofua, 1994; Okonofua and Snow, 1995), secondary amenorrhea (Okonofua, 1993), hemorrhage (WHO, 1997). In Nigeria maternal mortality amounts to 59,000 deaths annually, which represents 10% of the world's maternal deaths. It has also been reported there are 34,000 deaths annually in Nigeria due to complications of abortion (CEDAW, 2006; Centre for Reproductive Rights, 2008).

Current treatment for incomplete or induced abortions is the use of a manual vacuum aspirator (MVA); a relatively safe instrument that can be utilized even in out-patient departments. It requires minimal training, little analgesia, and is associated with fewer complications than the old conventional dilation and curettage (D&C) (Greenslade, 1993; Fraser, 2001; Forna and Gülmezoglu, 2004). Medication abortions using drugs has recently come into focus as a plausible alternative to MVA to induce abortion. The term medical abortion refers to the termination of pregnancy using medications instead of surgical intervention (Creinin, 2000). Medications employed for medical abortion include mifepristone, misoprostol and methotrexate. Mifepristone (RU-486) was developed in France in the 1970s by researchers. The first clinical study of mifepristone as an abortifacient was in Geneva in 1981 and by 1985 its improved efficacy when combined with a prostaglandin analogue was reported. France became the first country outside of China to license the use of mifepris-

tone in combination with a prostaglandin analogue for medical abortion, in 1988 (Blumenthal *et al*, 2004). This combination regimen was recommended following discussions by reproductive health experts on medical abortion, in Bellagio, Italy in 1998 (The Population Council, 1998). Mifepristone in association with the prostaglandin analogue misoprostol is believed to have a high degree of efficacy (92-99% for complete abortion) along with an excellent safety profile (ACOG, 2005). Misoprostol has also been used as a stand-alone medical abortifacient. It is an oral prostaglandin analogue; it is inexpensive, easy to administer and stable at room temperature. It is widely used in obstetrics and gynecology to "ripen" the cervix, induce labor, treat post-partum hemorrhage and treat first and second trimester abortions (El-Rafaey *et al*, 1996; Goldberg *et al*, 2001; ACOG, 2003a,b; Saxena *et al*, 2003). However, its use for gynecologic and obstetrics indications is "off-label" in most countries. Methotrexate is a dihydrofolate reductase inhibitor which has been used as a single dose or short-term administration as an alternative treatment for ectopic pregnancy and for first trimester medical abortion (ACOG, 1998; Adinma, 2007). Recent reports indicate women prefer medical abortions to surgical abortions because it offers greater privacy and autonomy, is less invasive, and seems more natural than surgical terminations (Henshaw *et al*, 1993; Winikoff, 1995).

In Nigeria abortion practices are not well-defined and shrouded in secrecy on account of the restrictive abortion laws along with cultural, religious and moral restrictions. Abortions are often performed illegally by a variety of practitioners, including unskilled health practitioners and street-side quacks, employ-

ing variety of substances ranging from ineffective medications to unusual local concoctions and instrumentations. Morbidity and mortality from these practices is either under reported or not reported in abortion statistics.

In this study we investigated the socio-demographic characteristics of abortions seekers, the types of abortions carried out and their knowledge and experience with abortion medications. We determined to detect abortion practices and information gaps regarding abortion in Nigeria to assist in the development of policies and practices regarding abortion in order to reduce morbidity and mortality caused by abortion complications.

Nigeria has a population of 140 million and is the most populous country in Africa. Nigeria is comprised of 36 states with six geo-political zones and a Federal Capital Territory. The study area, Anambra State, is one of five States in the southeastern geopolitical zone, and has a population comprised of a homogenous Igbo speaking ethnic group. The Igbos are one of three major Nigerian ethnic groups, the others being the Hausas in the North and the Yorubas in the Southwest. The Igbos are predominantly Christians with a few animists and have a strong cultural, religious and moral identity that considerably influences health care behavior, especially with socially sensitive and stigmatized issues, such as abortion.

In Nigeria drug procurement and distribution are haphazard and poorly controlled; dangerous and sensitive drugs can be purchased over the counter; in the market and on public buses, usually peddled by unqualified drug vendors. Medical abortion drugs have not been approved for use for pregnancy terminations in Nigeria. Mifepristone is only

rarely seen and methotrexate has only been licensed to treat cancer. Only recently the National Agency for Food and Drug Administration and Control (NAFDAC) approved misoprostol for the treatment of post-partum hemorrhage.

## MATERIALS AND METHODS

We carried out a descriptive, cross sectional, questionnaire-based survey among 100 consecutive abortion seekers attending a private medical center in Nnewi, an urban town in Anambra State, southeastern Nigeria.

Interviews were conducted by a trained medical practitioner that performs abortions using face-to-face interviews with a pre-tested, structured questionnaire. Participants gave informed consent prior to participation. Ethical clearance was obtained from the Ethics Committee of Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria. None of the respondents declined to be interviewed.

The questionnaire elicited information about the bio-social characteristics of the respondents: age, educational status, occupation, number of previous pregnancies, miscarriages, deliveries, number of pregnancy terminations and mean age at termination of pregnancy, types of drugs used for termination of pregnancy and their sources and knowledge and use of abortifacients, including misoprostol, mifepristone and methotrexate. The data were analyzed using SPSS 13.0 for Windows software (SPSS, Chicago, IL). Information obtained following analysis are presented as comparative percentages.

## RESULTS

Table 1 shows the bio-social characteristics of respondents. The predominant

Table 1  
Distribution by bio-social characteristics  
of respondents.

| Characteristics                  | Number |
|----------------------------------|--------|
| Age (years)                      |        |
| 15-19                            | 10     |
| 20-24                            | 62     |
| 25-29                            | 18     |
| 30-34                            | 7      |
| 35-39                            | 2      |
| 40-44                            | 1      |
| Education                        |        |
| Primary                          | 3      |
| Secondary                        | 64     |
| Tertiary                         | 33     |
| Occupation                       |        |
| Professional                     | 2      |
| Employed in small scale business | 27     |
| Civil servant                    | 1      |
| House wife                       | 2      |
| Artisan                          | 1      |
| Student                          | 55     |
| Trader                           | 7      |
| Unemployed                       | 5      |
| Total                            | 100    |

Table 2  
Distribution of miscarriages, termination  
of pregnancy and age at termination  
among respondents.

| Abortion practices         | Number |
|----------------------------|--------|
| Previous miscarriage       |        |
| 0                          | 98     |
| 1                          | 1      |
| 3                          | 1      |
| Total                      | 100    |
| Previous terminations      |        |
| 0                          | 51     |
| 1                          | 29     |
| 2                          | 17     |
| 3                          | 2      |
| 4                          | 1      |
| Total                      | 100    |
| Age at termination (weeks) |        |
| 4-6                        | 45     |
| 7-9                        | 29     |
| 10-12                      | 12     |
| 13-15                      | 2      |
| 16-18                      | 2      |
| Do not know                | 10     |
| Total                      | 100    |

age of coitarche was 18-20 years (58% of respondents), followed by 15-17 years (25%), with 3% of respondents having coitarche at ages 12-14 years. Seventy-five percent of respondents had no previous delivery; 25% had previously delivered 1-8 times. Table 2 shows the number of miscarriages, number of pregnancy terminations, and mean age of termination of pregnancy among respondents.

The drugs employed for termination of pregnancy among respondents are shown in Table 3, Fig 1 shows the sources of drugs used for termination of pregnancies. Three percent, 2% and 0% had a knowledge of misoprostol, mifepristone and methotrexate, respectively.

One percent had previously used misoprostol, but none had used mifepristone or methotrexate.

## DISCUSSION

Seventy-two percent of respondents were below age 24 years. This is high compared with a previous report of 55% (AGI and CAUP, n.d.), and may connote an increasing demand for pregnancy termination among younger women. It may also reflect a greater knowledge of abortifacients among younger contraceptive methods to prevent unwanted pregnancy.

Sixty-four percent of respondents had a secondary educational qualification;

Table 3  
Drugs used for termination of pregnancy by respondents.

| Drugs   | %  |
|---|----|
| Gynaecosid alone                                | 6  |
| Gynaecosid combined with other drugs            | 6  |
| Hot (alcoholic) drink alone                     | 1  |
| Hot (alcoholic) drink combined with other drugs | 4  |
| Herbal remedy                                   | 1  |
| Menstrogen alone                                | 1  |
| Menstrogen combined with other drugs            | 6  |
| Postinor alone                                  | 3  |
| Postinor combined with other drugs              | 2  |
| Quinine alone                                   | 4  |
| Quinine combined with other drugs               | 8  |
| Other   | 14 |
| None  | 52 |

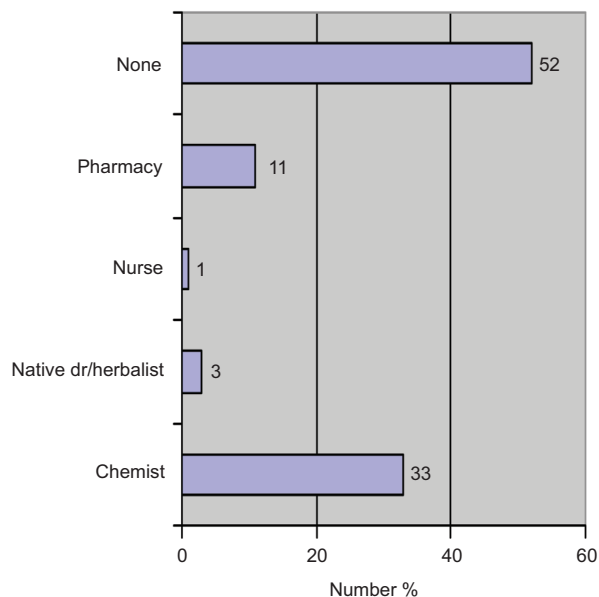


Fig 1—Source of drugs used for termination of pregnancy.

this may have contributed to the high number of abortion seekers below age 24. This indicates a knowledge gap regarding reproductive health. Poor knowledge of reproductive health was also seen among women with a tertiary educational qualification, who constituted 33% of respondents in this study.

Fifty-five percent of respondents were students and 27% were women employed in small scale businesses. These two categories of women are sexually vulnerable groups; economic problems may drive them to promiscuity to make ends meet, with attendant repercussions of unwanted pregnancies.

The unmet needs for reproductive health education are readily evident in the results of this study. Eighty-six percent of respondents in this study had sexual intercourse by age 18 years, 41% had been pregnant once and 49% had a

previous abortion. In a community based study conducted by Alan Guttmacher Institute (AGI) and the Campaign Against Unwanted Pregnancy (CAUP) among Nigerian women who had a previous abortion, 40% had a history of at least two abortions (AGI and CAUP, n.d.). This figure was 49% in our study. Eighty-six percent of abortions occurred during the first trimester. These figures are similar to a study conducted in southwestern Nigeria where 87% of abortions occurred during the first trimester (Oye-Adeniran *et al*, 2004). Ten percent of respondents in this study were not aware of the gestational age at the termination of pregnancy. An inability to recognize the correct dating of a pregnancy may have serious implications for the safety of pregnancy terminations; particularly if the woman seeks help from unqualified practitioners.

Abortion requests were not restricted



to childless women; 25% of the women in this study had one or more children. Married women with children who want to postpone their next birth or who already have as many children as they want or can support constitute an important group likely to resort in abortion to meet their child bearing goals. Among women with a previous experience of an unwanted pregnancy and induced abortion in Nigeria, approximately 67% were married and living with their husband (Okonofua *et al*,1996).

Forty-eight percent of women in this study had used various drugs to induce abortion, including hormones, alcohol and quinine used either alone or in combination with other drugs. Twelve distinct drug regimens were reported by respondents. The use of these unconventional preparations for inducing abortions has also been reported in a previous Nigerian study (AGI and CAUP, n.d.) and is likely the result of restrictive Nigerian abortion laws, which drive women to seek abortion services from unqualified persons, such as patented medicine dealers which comprised 33% of the sources for these drugs. Others included pharmacists, nurses, and native doctors/herbalists.

More interesting was the degree of ignorance among respondents about modern abortifacients. Only 3% and 2% of respondents had a knowledge of misoprostol and mifepristone, respectively. Only 1% had ever used misoprostol and none had ever used mifepristone or methotrexate. It is possible this lack of information about these abortifacients may be related to their non-approval status for this indication by the NAFDAC.

This study was carried out among women considered to have knowledge and financial resources to seek safe abor-

tion services. The fact that 97% of respondents in this study had a secondary educational level attests to their relatively high literacy status which would influence their decision making as to how and where to seek abortion services. The findings of this study cut across all segments of the female population. There are less fortunate women with little or no education in Nigeria who are uninformed and economically handicapped, making it highly unlikely they will seek safe abortion services, but instead will seek assistance from unqualified practitioners adding to the gruesomely high maternal morbidity and mortality in Nigeria.

The findings from this study points out serious gaps in information, and poor access to reproductive health services among women in Nigeria. This calls for action on the part of both government and non-government organizations to develop policies and programs to bridge this gap and avoid the consequences of poor access to reproductive health information and services.

In spite of high literacy among respondents in this study, reproductive health education was lacking. It is necessary to include family and reproductive health education in the current educational curriculum in Nigeria. Policies and programs should also be developed for youth not in school, since this group may be in the majority and would not be reached by programs in schools. Programs directed at women's groups and religious women's organizations should be developed or improved upon to help disseminate reproductive health information to women.

The negative effect of the restrictive abortion laws in Nigeria is evident in this study; this may also exist in similar

countries. Such laws need to be reviewed and revised to reduce maternal morbidity and mortality from abortion.

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