

Contents lists available at ScienceDirect

Asian Pacific Journal of Tropical Disease

journal homepage:www.elsevier.com/locate/apjtd



Document heading

doi:10.1016/S2222-1808(11)60018-2

Awareness and use of contraception by women seeking termination of pregnancy in south eastern Nigeria

Echendu Dolly Adinma^{1*}, Joseph Ifeanyi Brian–D Adinma², Nkemakolam Obinna Eke², Chima Iwuoha³, Akinsewa Akiode⁴, Ejike Oji⁵

ARTICLE INFO

Article history: Received 12 January 2011 Received in revised form 2 February 2011 Accepted 15 February 2011 Available online 28 March 2011

Keywords:
Awareness
Use of contraception
Termination of pregnancy seekers
South Eastern Nigeria
Maternal mortality
Induced abortion
Unintended pregnancy

ABSTRACT

Objective: To determine the awareness and use of contraception by women seeking for termination of pregnancy in south eastern Nigeria. Methods: A descriptive cross—sectional questionnaire based on the study of one hundred consecutive abortion seekers attending a clinic in southeastern Nigeria was utilized. Results: Mean age of the respondents was (23.5±4.4) years. The majority were students (55.0%) with 64.0% having secondary education and 33.0% possesing tertiary educational qualifications. Seventy five percent were nulliparous while 49% had one or more previous pregnancy termination. The majority of the respondents (73%) were aware of contraceptive methods but only 10% had ever used including 6% using male condom. Only 38% of the respondents desired to use contraceptives after the termination of index pregnancy. Conclusions: It is concluded that the majority have the high level of contraceptive awareness but contraceptive usage is shockingly low. Therefore, there is a strong need to conduct further and wide spread research not only into the various factors that influence access to contraception but also factors that promote induced abortion and overall unsafe abortion morbidity and mortality as a basis towards the enrichment of discussion related to family planning and contraception, the magnitude of abortion problems, and abortion laws in Nigeria.

1. Introduction

Maternal mortality is an indicator to the quality of maternal health care in every society. Whereas the rate of maternal deaths is drastically reduced in the developed world but that of developing countries is still very high[1]. In Nigeria as well as other countries of the developing world, unwanted pregnancy, unsafe induced abortion and high maternal mortality rates, are all very serious reproductive health problems that require urgent attention[1–7]. Nigeria, in particular, has one of the highest maternal mortality rates in the world and a significant proportion of these maternal

Tel: +234 8033407384

E-mail: drechenduadinma@yahoo.com

deaths is due to complications of unsafe abortions[1-5].

Induced abortion remains a major contributor to maternal morbidity and mortality in Nigeria, and indeed the developing world, which altogether contributes about 95% of unsafe abortions globally. It is estimated that more than 4 million abortions occur annually in Africa. In Nigeria, 760 000 abortions are performed annually which translates to approximately 25 abortions per 1 000 women aged 15-44 years[8-11]. Complications arising from abortions, whether spontaneous or induced, account for a large proportion of maternal deaths in Nigeria[7]. In fact as high as 36 000 maternal deaths have been reported to occur annually from unsafe abortions, representing nearly 60% of Nigeria's overall maternal deaths[7].

Research has consistently shown that high rates of abortion reflect high levels of unintended pregnancy^[12]. In Nigeria, as in other parts of the world, women experience

¹Department of Community Medicine, Nnamdi Azikiwe University, Nnewi, Nigeria

²Department of Obstetrics and Gynaecology, Nnamdi Azikiwe University, Nnewi, Nigeria

³Beniz Hospital, Nnewi, Anambra State, Nigeria

⁴Research and Evaluation Unit, Ipas, Nigeria

⁵Ipas, Nigeria

^{*}Corresponding author: Dr Echendu Dolly Adinma, Department of Community Medicine, Faculty of Medicine, College of Health Sciences, Nnamdi Azikiwe University, P.M.B. 5025, Nnewi, Nigeria.

pregnancies that are unplanned. In Australia, just over half of all women of reproductive age have experienced an unplanned pregnancy^[13]. Some of these women seek to terminate their pregnancies, either through safe or unsafe methods. In Ile Ife, Nigeria, complications from such induced abortions account for 12% of all gynecological admissions^[14]. These abortions are usually responses to unwanted pregnancies that would have been effectively prevented by good contraceptive programming.

Contraception has been acknowledged to be an effective means of combating the problem of unwanted pregnancy and unsafe abortion^[14]. Its effectiveness as a means of family planning and fertility control emphasizes its significance in the promotion of maternal and child health. The barrier methods of contraception have also been found useful in the prevention and control of sexually transmitted infections (STIs) including HIV/AIDS.

The contraceptive prevalence rate in most developing countries remains very low[1]. Worldwide contraceptive prevalence rate was estimated at 55% in 2002 and ranges between 5%-15% in Nigeria[1]. Currently, contraception has not been well consolidated in Nigeria, with evidence from the recent Nigerian National Demographic and Health Survey (NDHS) data indicating that only about 15 percent of sexually active Nigerian women currently practice effective contraception^[2,15]. Some of the reasons for the poor use of contraception in Nigeria include the persisting high premium placed on child bearing, religious teachings which discourage the use of contraception, poor availability and distribution of contraceptives, and women's fear of the side effects of contraceptive[2]. Another reason adduced by Nigerian women for not accepting modern contraception is the belief that it could lead to infertility in the future[2].

Data on the awareness and usage of contraception by women who have had termination of pregnancy are scanty in Nigeria. This study examines the awareness and practice of contraception by women seeking for termination of their index pregnancy. The study is important considering the disparity between contraceptive prevalence rate and abortion rates in Nigeria. The findings would be useful in the development of reproductive health programmes that would increase acceptance and utilization of effective contraception while reducing abortion and its related morbidity and mortality.

2. Materials and methods

Nigeria with a population of 140 million is the most populous country in Africa. The country constitutes of 36 states within six geo-political zones, and a Federal Capital Territory. The study area, Anambra State, is one of the five States of the southeast geopolitical zone, a homogenous Igbo speaking ethnic group in Nigeria. The Igbos represents one of the 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 strong cultural, religious and moral identity that considerably influence their health seeking and health practicing behavior especially as concerns socially sensitive and stigmatized issues such as contraception and abortion.

The study is a descriptive, cross-sectional, questionnaire-based survey conducted amongst 100 consecutive termination-of-pregnancy seekers attending B.H, a private medical centre in Nnewi urban town of Anambra State, southeastern Nigeria.

The interview for this study was conducted by a trained medical practitioner and involved a face—to—face interview using pre—tested, structured questionnaire. The participants to the study were duly counseled and gave their informed consent prior to the interview. In addition, ethical clearance was obtained from the Ethical Committee of the Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria. None of the clients opted out of the interview.

The questionnaire schedule elicited information on the bio-social characteristics of the respondents-age, occupation, educational status, and gestational age at presentation; number of previous pregnancies, and deliveries; number of previous miscarriages and induced abortions; and awareness of contraceptives, usage of contraception, type of contraception ever used, and desire to use contraception. The obtained data were entered into the computer and analyzed using SPSS 13.0 for windows software. Information obtained following analysis were presented as comparative percentages and displayed in tables.

3. Results

A total of one hundred respondents were included in the study. Their ages ranged from 15 to 44 years with a mean age of (23.5±4.4) years. The predominant age group was 20–24 years (62, 62.0%) while the least was 40–44 years (1, 1.0%). All the respondents were Christians. The majority of the respondents were students (55, 55.0%). The gestational age of presentation for termination of pregnancy ranged from 4 to 18 weeks. The socio-demographic characteristics were shown in Table 1.

Of the respondents, 41 (41.0%) had not been pregnant in the past while 45 (45.0%) had achieved one or two previous pregnancies. Most, 75 (75.0%) of the respondents were nulliparous while 7 (7.0%) were grandmultiparous. The distribution of the respondents by number of previous pregnancies and deliveries was shown in Table 2. Only 2 (2.0%) of the respondents had spontaneous miscarriage in the past while 49 (49.0%) had previous induced abortions (Table 3).

Majority of the respondents, 73 (73.0%), were aware of contraceptives while only 10 (10.0%) had ever used any method. The commonest contraceptive method used was male condom, 6 (6.0%). Only 38 (38.0%) of the respondents expressed desire to use contraceptives after termination of the pregnancy.

 Table 1

 Socio-demographic characteristics of the respondents (n=100).

Characteristic	n (%)
Age [Years]	
15-19	10 (10.0)
20-24	62 (62.0)
25-29	18 (18.0)
30-34	7 (7.0)
35-39	2 (2.0)
40-44	1 (1.0)
Occupation	
Professionals	2 (2.0)
Employed under small scale business	27 (27.0)
Civil servants	1 (1.0)
Housewives	2 (2.0)
Artisans	1 (1.0)
Students	55 (55.0)
Traders	7 (7.0)
Unemployed	5 (5.0)
Educational level	
Primary	3 (3.0)
Secondary	64 (64.0)
Tertiary	33 (33.0)

 Table 2

 Distribution by number of previous pregnancies and deliveries (n=100).

Characteristic	n (%)
Number of previous pregnancies	
0	41 (41.0)
1-2	45 (45.0)
3–4	6 (6.0)
5-6	4 (4.0)
7-8	4 (4.0)
Number of previous deliveries	
0	75 (75.0)
1-2	16 (16.0)
3–4	2 (2.0)
5-6	6 (6.0)
7–8	1 (1.0)

Table 3Distribution by number of previous miscarriages and induced bortions (*n*=100).

Characteristic	n (%)
Number of previous miscarriages	
0	98 (98.0)
1	1 (1.0)
3	1 (1.0)
Number of previous induced abortion	ons
0	51 (51.0)
1	29 (29.0)
2	17 (17.0)
3	2 (2.0)
4	1 (1.0)

Table 4Distribution by awareness, usage, type of contraceptive methods ever used and desire to use contraception after termination of pregnancy (n=100)

Characteristic	n (%)
Awareness of contraceptives	
Yes	73 (73.00
No	27 (27.0)
Usage of contraception	
Yes	10 (10.0)
No	90 (90.0)
Type of contraception ever used	
Billing's method	1 (1.0)
Male condom	6 (6.0)
Injectables	1 (1.0)
Pills	1 (1.0)
Withdrawal	1 (1.0)
None	90 (90.0)
Desire to use contraception	
Yes	38 (38.0)
No	50 (50.0)
Do not know	12 (12.0)

4. Discussion

Contraception is an important aspect of reproductive health and plays a major role in the prevention of unwanted pregnancy. It is therefore a significant factor in reduction of induced abortion rates and improvement in maternal health care. Majority of the abortion seekers, 72.0%, in this study are young persons aged below 24 years with most of them being either students or employed under small scale business (82.0%). This represents a highly sexually vulnerable segment of the society. As high as 97.0% of the respondents have attained either secondary or tertiary educational qualifications and are therefore expected to have a reasonably high knowledge of contraception. This is evident in this study from the high level of awareness, 73.0%, of contraceptives elicited from the respondents. Contraceptive usage however was shockingly as low as 10.0%, a possible signal to the observed high number (49.0%) of the respondents who had previous pregnancy termination, some for as many as four times. The high contraceptive awareness and low usage observed in this study is dishearteningly similar to that reported by Adinma et al. fifteen years ago where contraceptive awareness and mean usage amongst women attending antenatal clinic in same study area were found to be 76.0% and 9.1%, respectively[17]. Several other Nigerian studies have also made similar observation[1,10,16,18]. It is not clear as to the reason for the wide disparity between contraceptive awareness and usage which seems to cut across age, parity, and social class in this and other reports in Nigeria[17]. As high as 25.0% of the respondents in this study have had a previous child birth and are probably married. Observations from the study conducted among pregnant antenatal clinic attendees drawn from predominantly middle and low social class population in southeast Nigeria showed that as high as 56.4% and 65.4% of the women, respectively either had no knowledge or did not respond to the question on knowledge of the beneficial and the adverse effect of their desired contraceptive method[17]. Contraceptive ignorance may engender negative perceptions to contraception and constitutes a factor to the disparity between awareness and usage. In Nigeria, family life education in secondary school curriculum rarely emphasize sexuality and contraception, which have been culturally regarded as subjects exclusive for adults. Informations for young people on sexuality and contraception are therefore mostly from peer groups which are often distorted or out rightly wrong^[19–21]. Furthermore, youth reproductive health centers are very few in Nigeria thereby exposing these young people to the ravaging effects of unsafe sexuality. Other factors requiring investigation may include the role of religion, culture, and accessibility of contraceptives. In Nigeria, majority of the people are poor and lack of access to quality health care. Furthermore, family planning and contraception have been poorly developed, being in the main donor driven with untoward repercussion of poor contraceptive commodity security and sustainability. There are varieties of reasons while women will seek for termination of pregnancy. Reports from the Philippines and Pakistan have implicated poverty, while other reports have identified the need to limit family size, contraceptive failure, rape and lack of access to contraception[22-25]. Women who have had an induced abortion have been observed to be at special risk of repeat induced abortion^[26]. Induced abortion of whatever form, legal or illegal, is generally believed to be a consequence of an unmet need for contraception^[27]. Nigeria has a contraceptive prevalence rate of only 15% together with a reported unmet need for contraception of as high as 18%[15]. The likelihood of unwanted pregnancy and induced abortion is therefore high in Nigeria. Post abortion contraception and family planning has been identified as a major tool towards the reduction of abortion related maternal morbidity and mortality for its cost effectiveness in preventing repeat unwanted pregnancy and induced unsafe abortion[28-29]. Westoff has further reported that total abortion rates dropped dramatically as use of effective contraceptives increased in 12 countries of Central Asia and Eastern Europe[30]. There is an overall need for an overhaul of family planning system in Nigeria.

In this study, the commonest method of contraception used by the respondents was male condom, unlike findings in a study conducted in southern Nigeria[2] and another on abortion seekers in south western Nigeria[10] where the predominantly used contraceptive was the oral contraceptive pills. This may be due to the fact that majority of them are students and would not want to be observed by their peers to be taking contraceptive pills. About 38.0% of the respondents

expressed desire to use contraceptives after termination of the index pregnancy. This is similar to findings from another study conducted in India where almost half of the respondents who had induced abortions accepted a family planning method concurrently^[11]. The low level of 'desire to use' contraceptive may not be unrelated to negative perceptions on contraception, earlier discussed, borne out of contraceptive ignorance. Counseling on contraception will undoubtedly dispel ignorance and improve contraceptive acceptability^[31].

In Nigeria, the law on abortion is restrictive, abortion being permitted only to save the life of the mother. The implication of this is that abortion services for unwanted pregnancy are driven underground being performed mainly by quacks with resultant high morbidity and mortality. Suggestions on the revision of Nigerian Abortion Law to make it more liberal have met stiff opposition and evoked explosive discussions and an eventual stalemate. The needless incapacitation of women and wastage of women's lives from unsafe abortion has rendered the need for the development of a universal and unimpeded access to quality family planning and contraception urgent and inevitable in Nigeria.

This study has been undertaken among one hundred consecutive abortion seekers. This number may seem small, but on face-value is considered revealing for an area with legal constraint to induced pregnancy termination. The information obtained-high contraceptive awareness and very low usage from the reasonably literate subject (97.0% with secondary and tertiary educational qualification levels), when interpreted within the context of the larger Nigeria society who are mainly illiterates and ignorant of reproductive health and who therefore often times seek abortion services from quacks, may indicate worse contraceptive and therefore abortion morbidity statistics in Nigeria. Repositioning family planning and contraception in Nigeria requires the collective commitment of both government and non-governmental organizations alike with respect to advocacy, establishment of youth reproductive health centres, and development of sustainable secure contraceptive commodity logistics. Training of reproductive health workers on counseling and provision of family planning services within and outside post abortion care settings should be a norm and should be adequately entrenched into the curriculum of medical and midwifery education. Family life education curriculum especially at secondary school level should adequately address the issue of contraception, sexuality, and indeed reproductive health as a whole and furthermore build the capacity of the relevant teachers to impart this information to the students at that formative adolescent age. Family planning development should also take cognizance of religious and cultural imperatives, which are strong influences in the Nigerian society. Every religion in Nigeria supports family planning albeit in one form or the other. The Catholic Church for instance in spite of its strong opposition to a liberal abortion law accepts natural family planning and should therefore be helped to build the capacity of its adherents towards the proper usage of this contraceptive method. In general it is necessary to conduct further, and wide spread research not only into the various factors that influence access to contraception but also factors that promote induced abortion and overall unsafe abortion morbidity and mortality as a basis towards the enrichment of discussions related to family planning and contraception, the magnitude of abortion problems, and abortion laws in Nigeria.

Conflict of interest statement

We declare that we have no conflict of interest.

References

- [1] Bobzom DN, Mai AM, Chama CM, Muna DM. Maternal mortality in Maiduguri, Nigeria. *J Obstet Gynecol* 1998; **18**(2): 139–140.
- [2] Omo-aghoja LO, Omo-aghoja VW, Aghoja CO, Okonofua FE, Aghedo O, Umueri C, et al. Factors associated with the knowledge, practice and perceptions of contraception in rural southern Nigeria. Ghana Med J 2009; 43(3): 115-121.
- [3] UNICEF. Report highlights risk of maternal mortality in developing world.[Online] Available from: http://www.unicef.org/media/media_45684.html [Accessed on 1 Nov, 2010].
- [4] World Health Organization. Maternal mortality in 2005: estimates developed by WHO, UNICEF, UNFPA, and the World Bank. Geneva: WHO; 2007.
- [5] Okusanya BO, Okogbo FO, Momoh MM, Okogbenin SA, Abebe JO. Maternal mortality and delay: socio-demographic characteristics of maternal deaths with delay in Irrua, Nigeria. *Niger J Med* 2007; 16(1): 38–41.
- [6] Oye-Adeniran BA, Adewole IF, Umoh AV, Oladokun A, Gbadegesin A, Ekanem EE, et al. Community-based study of contraceptive behaviour in Nigeria. Afr J Reprod Health 2006; 10(2): 90-104.
- [7] Oye-Adeniran BA, Umoh AV, Nnatu SN. Complications of unsafe abortion: a case study and the need for abortion law reform in Nigeria. Reprod Health Matters 2002; 10(19): 18-21.
- [8] World Health Organization. Unsafe abortion: global and regional estimates of incidence and mortality due to unsafe abortion with a listing of available country data. Geneva: WHO; 1998.
- [9] Bankole A, Oye-Adeniran BA, Singh S, Adewole IF, Wulf D, Sedgh G. Unwanted pregnancy and induced abortion in Nigeria: causes and consequences. New York: Guttmacher Institute; 2006.
- [10] Oye-Adeniran BA, Adewole IF, Umoh AV, Fapohunda OR, Iwere N. Characteristics of abortion care seekers in South-Western Nigeria. Afr J Reprod Health 2004; 8(3): 81–91.
- [11] Centre for Reproductive Rights. The world's abortion Laws 2005.
 [Online] Available from: http//bookstore: reproductive rights. Org/worablaw20.html. [Accessed on July, 2005].
- [12] Sudhinaraset M. Reducing unsafe abortion in Nigeria. Issues Brief (Alan Guttmacher Inst) 2008; 3: 1–3.
- [13] Nivokova N, Weisberg E, Fraser IS. Does readily available emergency contraception increase women's awareness and use?

- Eur J Contracept Reprod Health Care 2009; 14(1): 39-45.
- [14] Okonofua FE, Onwudiegwu U, Odunsi OA. Illegal induced abortion: a study of 74 cases in Ile–Ife, Nigeria. *Trop Doct* 1992; **22**(2): 75–78.
- [15] National Population Commission (NPC). Nigeria demographic and health survey 2009. Calverton: National Population Commission and ICF Macro; 2008.
- [16] Abiodun OMA, Balogun ORA. Sexual activity and contraceptive use among young female students of tertiary educational institutions in Ilorin, Nigeria. J Contracept 2008; 79(2): 146–149.
- [17] Adinma JIB, Nwosu BO. Family planning knowledge and practice among Nigerian women attending an antenatal clinic. Adv Contracept 1995; 11: 335–344.
- [18] Oye-Adeniran BA, Adewole IF, Umoh AV, Ekanem EE, Gbadegesin A, Iwere N. Community-based survey of unwanted pregnancy in Southwestern Nigeria. *Afr J Reprod Health* 2004; **8**(3): 103-115.
- [19] Adinma JIB, Okeke AO. The pill: perceptions and usage among Nigerian students. *Adv Contracept* 1993; **9**: 341–349.
- [20] Adinma JIB, Okeke AO. Contraception awareness and practice among Nigeria tertiary school girls. West Afr J Med 1995; 14(1): 34–37.
- [21] Adinma JIB, Okeke AO, Agbai AO, Okaro JM. Contraception in teenage Nigerian school girls. Adv Contracept 1999; 15: 293–301.
- [22] Singh S, Juarez F, Cabigon J, Ball H, Hussain R, Nadeau J. Unintended pregnancy and induced abortion in the Phippipines: causes and consequences. New York: Guttmacher Institute; 2006.
- [23] Casterline JB, Arif MS. Dealing with unwanted pregnancies: insights from interviews with women, research report. Islamabad: Population Council; 2003, p. 19.
- [24] Singh S, Wulf D, Hussain R, Bankole A, Sedgh G. Abortion worldwide: a decade of uneven progress. New York: Guttmacher Institute: 2009.
- [25] Alan Guttmacher Institute. Facts about the unmet need for contraception in developing countries. Washington: Alan Guttmacher Institute; 2007.
- [26] Jones RK, Singh S, Finer LB, Frohwirth LF. Repeat abortion in United States: occasional report 29. New York: Guttmacher Institute; 2006.
- [27] Smith R, Ashford L, Gribble J, Clifton D. Family planning saving lives. 4th ed. Washington: Population Reference Bureau; 2009.
- [28] Vlassoff M, Shearer J, Walker D, Lucas H. IDS research rept 59: economic impact of unsafe abortion-related morbidity and mortality: evidence and estimation challenges. Brighton: Institute of Development Studies at the University of Sussex; BNI 9RE.
- [29] Lule E, Singh S, Chowdhury SA. Fertility regulation behaviours and their cost: contraception and unintended pregnancies in Africa, Eastern Europe, and Central Asia. Washington: The International Bank for Reconstruction and Development/The World Bank; 2007.
- [30] Westoff CF. Recent trends in abortion and contraception in 12 countries: DHS analytical studies. Princeton: Office of Population Research, Princeton University and Calverton: ORC MACRO; 2005.
- [31] Adinma JIB, Ikeako L, Adinma ED, Ezeama C, Eke NO. Post abortion care counseling practiced by health professionals in southeastern Nigeria. *Int J Gynecol Obstet* 2010; **111**: 53–56.