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Original Article

Use of contraceptives among staff and students of Niger Delta University, Wilberforce Island, Nigeria

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ABSTRACT

The contraceptive prevalence in Nigeria is generally very low in spite of the high rate of sexual activity and widespread awareness of the various contraceptive methods. This study sought to evaluate the Awareness, knowledge, attitude and use of contraceptives and to determine the sources of information on contraception and contraceptives among Niger Delta University staff and students. A 30-item questionnaire was used to assess the objectives of the study. Data were analyzed using the Statistical Package of Social Sciences (SPSS) version-16.0. Respectively, 50.5% and 49.5% of respondents were Students and Staff; 52% were unmarried; 65.5% were females; 46% were aged between 15-25 years; and Christianity was the dominant religion. High proportions of respondents (94.5%) were aware of contraceptives and had good knowledge of contraceptive use but only 59% have used contraceptive at a point in their sexual life. The most common method of contraceptive was condom (31%); major reason for non-use was side-effects. Awareness and knowledge of contraception is high but prevalence of use is low. There is need for educational interventions and enhanced access to family planning in this community.

KEY WORDS: Awareness, Family planning, Information source, knowledge, Prevalence.

INTRODUCTION

The principle of contraception has been recognized for centuries and included douching with wine, ground cabbage, native concoctions, and drinking of herbs in a bid to prevent pregnancy [1]. Contraceptives are usually taken not just in spacing of children, preventing unintended pregnancies, and limiting family size but also in planning when to have and not to have a pregnancy. The contraceptive prevalence in our environment is very low with attendant increase in unwanted pregnancy and unsafe abortion [1]. The contraceptive prevalence among 15-49 years old women in Nigeria was reported at 14.60% in 2008 [2] and 11-13% as at 2010 [3]. This rate is very low in spite of the high rate of sexual activity and widespread awareness of the various contraceptive methods among Nigerian adolescents and youths [3]. As a result, there are many unintended pregnancies which are a significant public health problem with economic, personal and social consequences and also illegal abortions contributing to a high maternal mortality [4]. Studies conducted in Nigeria in 1990 showed that one out of four pregnancies was unplanned and it had been estimated that 12% ended in induced abortion and 9% end in unplanned birth. Further, various methods are procured by women to induce abortion such as inserting sharp objects into uterus and ingesting poisons which, in many cases, lead to death or permanent disability [5]. Previous studies have reported unwanted pregnancy rates ranging from 18.3% to 64.0% [6, 7]. Evidence has shown that irrespective of the level of sexual activity, modern contraceptive is effective in preventing unintended pregnancy [8, 9]. The low prevalence rate indicates a large unmet need for contraceptive use and, indeed, it has been reported that the contraceptive needs of many communities especially in the developing countries and the world over are still unmet [10, 11]. It is on record that about 32% of married women and 54% of unmarried sexually active women in Nigeria have an unmet need for contraception [4, 12]. Even so, only 7% of married women was reported to use modern contraception and 6% relied on traditional or folk method in 2003 [12].

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The use of effective contraceptive methods has been shown to be beneficial in timing one's pregnancy. Available reports show that many Nigerian women do not use any form of contraception for various reasons [4]. With these in mind, the present study was conducted to determine the awareness, knowledge, prevalence and pattern of contraceptive use and to explore the attitudes and perception of contraception among staff and students of Niger Delta University (NDU), Wilberforce Island, Bayelsa State, Nigeria.

METHOD

A cross‑sectional study was carried out among 250 members of the NDU community by a convenient sampling method over a period of 4 months from February 2013 to May 2013. The Niger Delta University campus is located in Amassoma community in Southern Ijaw Local government area of Bayelsa State. The community is surrounded by water (Wilberforce Island) and, being the largest community in the local government area, constitutes a reasonable mixed population.

Data collection: A pre‑designed, pre‑tested, self‑administered questionnaire in English was used to collect data. The demographic details like age, education and marital status of the respondents were also recorded. A 30‑item questionnaire was constructed to assess the objectives of the study, based upon a review of literature and similar studies conducted elsewhere. Both "open" and "closed" questions were used.

Data analysis: Data were entered into Microsoft Excel and analyzed using the Statistical Package of Social Sciences (SPSS) version‑16.0.

RESULTS

Demography: The demographic characteristics of the study population are shown in Table 1. There were 101 (50.5%) students and 99 (49.5%) staff; 52% were unmarried. There were more females (65.5%) than males (34.5%); 46% were aged between 15-25 years , 32% between 26-35 years while 14% were 41 years and above;80% had tertiary education; 56% came from a polygamous family; and Christianity was the dominant religion (96.5%).

Contraceptive awareness and knowledge: A high proportion of respondents (94.5%) were aware of contraceptives; 5% have never heard about contraceptives at all. As high as 79.5% of respondents believed that contraceptives are used to prevent unwanted pregnancy; 15% thought they are used to prevent sexually transmitted diseases; 0.5% said they are used to regulate menstrual cycle and 2.5% said contraceptives are used to prevent unwanted pregnancy and sexually transmitted diseases as well. (See Table 2)

Contraceptive use: Of the 94.5% of respondent that have contraceptive awareness, only 59% have actually used a contraceptive at a point in their sexual life and 39% have never used any form of contraception. The most common method of contraception used was condom (31%);17.5% used Oral Contraceptive Pills, 3% used Hormonal Injections,5.5% used Condom plus Oral Pills plus Coitus Interuptus and 0.5% used natural methods. 22% of respondents started using contraceptives for less than a year at the time of the study, 23% for 1-5 years, 8% for 6-10 years and only 7% have used contraceptives for over 10years. The major sources of contraceptives were Patent Medicine Stores (24%) and community pharmacy (22.5%); only 13% obtained their contraceptives from the health centre. Sources of Information about contraceptives ranged from Hospital (34%), Friends/Neighbours (28%), Patent Medicine Stores (9.5%) and community pharmacy (6%). See Table 3

Contraception attitude and perception: Regarding type (s) of contraceptives used, 42.5% of respondents preferred their choice because of safety, 7% because of efficacy, 9.5% because of ease of use, 5.5% because of accessibility and 4.5% because of safety, efficacy and accessibility. Reasons given by respondents for non-use of contraceptives include: their religion does not allow it (8%); their husbands did not permit them (4%); they do not want to deliberately control the rate at which they bear children (6%). About 12.5% complained of side effects of modern contraceptive methods and 11.5% were not using any form of contraception because they were not married and so are not sexually active. Also 1% do not use contraceptives because they were married and therefore have no need for contraception as the latter is meant for singles who want to prevent pregnancy. Those who opted to use Traditional Methods of contraception did so because of the side effects of modern contraceptive methods (5%), and 5.5% because of cost of the available modern contraceptive methods. On the overall perception of contraception, 5% perceived contraceptive practice as irrelevant; 7% were of the opinion that it promotes promiscuity, 55% saw it as essential for family planning and 17.5% agreed that it allows women to pursue their career. See Table 4

DISCUSSION

Demographics: Majority of the respondents are not married and within the highly reproductive ages when contraceptive strategies are most needed. A large majority have tertiary education and therefore should be enlightened. Most of the married respondents live in a polygamous relationship and are Christians.

Contraceptive Knowledge, Awareness and Use: This study has analyzed several issues about contraceptive practices among members of the Niger Delta University community. First contraceptive awareness is very high (94.5%). Also, this study indicated a very high knowledge level (94.5%) of the core uses of contraceptives to prevent pregnancy and STDs. This tallies with other studies elsewhere [7, 13, 14]. This high level of awareness is however not translated to a high level of use as only 59% of respondents have ever used any contraceptive strategy. Several studies have reported similar disparities between awareness and use. As it were, high knowledge of contraceptives does not always translate to high contraceptive usage [15]. Other studies have recorded even much lower rates than found in this study. For example, a study among in-school adolescents produced knowledge of contraception of 36.9% and 22.1% for male and female students respectively, and prevalence rate of 10.9% for males and 6.0% for females [16]. The contraceptive prevalence rate according to the National Demographic Health Survey of 2008 is about 15% among 15-49 yrs old married women [4] and a recent survey in Kano, Nigeria reported a prevalence rate of 44.6% [17]. What these data emphasize is that, as far as contraceptive use is concerned, awareness and knowledge are not directly proportional to practice; other factors are involved and we need to understand what these factors are in order to fashion out appropriate strategies for intervention. The most frequent users of contraceptive were aged 15-45 years similar to other studies [4, 17]. This age group falls within the active reproductive years that require family planning strategies. This is a window of life when most people, male and female, are sexually responsive and active. About 46% of the population in this study fall within the adolescence age bracket of 15-25 years representing almost half of the sexually active cohort of the population that was studied. And with such a low percentage of current users of contraceptives in this study (and elsewhere), this translates to a high possibility of unwanted pregnancies with attendant problems for the individuals, their families and the society at large. About half of the current users of contraceptives in this population initiated it within the past 5 years while only 7% have used it for 10 years and above. It would appear therefore that there has been an upward trend in the acceptance of contraception within the past 5 years. A more aggressive campaign and intervention that would address the critical gaps identified will further augment this upward trend.

Reasons for Non-use of Contraceptives: Various predictors of inconsistent or non-use of contraceptives, which are posited to be responsible for the low prevalence rates, have been reported in the literature. These include; ambivalence about contraception and pregnancy, method side effects, difficulties using methods, lack of satisfaction with or availability of providers; having less than a college education, being 35-44 years old, having infrequent sexual intercourse, not being in a current relationship, being dissatisfied with one's method, and believing that contraceptive service providers were not available to answer method related questions. Others are a lack of awareness of important contraceptive issues among consumers, as well as a lack of true understanding of contraception, pregnancy, and sexual function; poor contraceptive knowledge and cultural or religious beliefs; non-availability, cost, negative attitude towards contraception due to societal disapproval and lack of knowledge of how to use them [3,16, 18, 19, 20, 21]. In this study, the most common reason why some of the unmarried ladies do not use contraceptives was that they were yet to be sexually active. This was very hard to believe. Some married men gave reason that they were married and that contraception was for unmarried people who want to prevent unwanted pregnancies. This pre-supposes that this group of married men are only sexually active when they want their spouses to be pregnant. This is also hard to believe. Further, the major reason given by most married and single respondents who were not using any modern contraceptive method was fear of side effects which has been the leading reason indicated even in previous studies. It has been reported that women who stop using oral contraceptives due to side effects often either fail to substitute another method, or they adopt a less-reliable method [22]. There is ample research evidence identifying the various factors that contribute to the low prevalence of modern contraceptive use in Nigeria, with the most common factor being the myth about the side effects of modern contraceptives [3]. Appropriate contraceptive counselling when initiating a method is a posited solution which leads to higher rates of contraceptive continuation if side effects are encountered [19]. It has also been demonstrated that women are most successful with a method when they receive their contraceptive of choice [23]. The male factor (husbands objecting), family objections and religion were other factors impacting on the use of contraceptives in this study. Further, in this study, as in others, education, age, when to stop child bearing and the number of surviving children were also found to have significant impact on contraceptive use. With poor education, women are more likely to believe in the erroneous views that contraceptive use is associated with difficulty in achieving conception in future [14, 24, 25]. All of these plus various

factors related to both supply and demand may be contributory to the low level of contraceptive use. Many Nigerians particularly in the rural areas lack access to modern contraceptives and family planning methods. Even in areas where they exist, there is often poor quality of service, inadequate, poor interpersonal skills and insufficient number of trained service providers [18, 19, 20, 21, 26]. In this study, decision about which contraceptive to use was influenced by many factors including side effects profile, cost and ease of use. In addition, a woman's experience and perceptions of contraception were found also to influence contraception decision making.

Choice of Contraceptive Strategy: The predominant choice of contraceptive in this study was condom which tallies with other reports [14, 27]. The reasons given for this choice of contraceptive was safety and side effects of other methods of contraception such as IUCD or hormonal injections which they believe cause severe headache, delay in menstrual flow and cervical cancer. More so, majority of respondents were not familiar with the other methods. Condom being the most common contraceptive choice must be credited to the wide awareness campaigns of its use in protecting against HIV and STDs in the media. Majority of respondents also acclaim the safety, ease of use and accessibility of condom. In a study, it is estimated that 37% of unmarried sexually active women aged 15-24 years in sub-Saharan Africa use contraception but only 8% use a non-barrier method [18]. These findings are, however, at variance with many other literature reports which favour injectables [17, 29 30, 31] or Oral Contraceptive Pills [11]. A study however reported that, although often more accessible and sometimes more attractive than hormonal methods, condom use was limited by association with disease and promiscuity, together with greater male control; as a result young women often relied on traditional methods or abortion [28].. In this study, however, only 0.5% of the population used traditional or natural methods of contraception. It would appear that traditional methods may no longer be in vogue among the educated people who are predominant in this study population. What is of greatest concern coming from this study is the discovery that as high as 37.5% of respondents never use condom. Apart from risk of unwanted pregnancy, they are exposed to various STDs judging by the level of promiscuity in this environment. It is pertinent to investigate the prevalence of multiple sexual partners in the population in order to fully understand and conceptualize the degree of risk of acquiring STDs. Further, about 8% of respondents claimed to use combinations of Condom, oral pills and coitus interruptus. It is also essential to find out if condom use is a regular and constant feature in these combinations so as to fathom out the degree of risk of acquiring STDs due to non-use of condom.

Sources of Contraception Information and Products: The commonest source of contraceptive information in this study population was the Health Centre (34%) followed by friends/neighbours (28%), Patent Medicine Stores (9.5%) and the media (9.0%). Most women got to know about contraceptives in the hospital during their ante-natal and post-natal days. Our findings are corroborated by other studies that have indicated that the predominant source of information on contraceptive methods was through the clinic personnel [17, 32]. It is, however, quite worrisome to have such a high proportion of information coming from friends and neighbours who are likely to be medically unqualified to offer appropriate and adequate information. This is worrisome because more reliable information should emanate from health workers at the family planning clinics. However, these family planning clinics, where they exist, may not be young-women (single or adolescent) friendly for reasons of cultural misperceptions that family planning is for married people. In addition, a discussion on sex and contraception with young persons may still be considered inappropriate even among health workers in Nigeria. Recent observations in some centers and communities especially in southern Nigeria, however, indicate that staff in health centers are becoming important sources of information [17, 32]. Community pharmacists who should be readily accessible to the population are virtually non-existent in this community; patent medicine stores dot the entire landscape and what information can the managers of such stores give to people when they themselves have no adequate medical knowledge, skill or training. This community is only served by a small cottage hospital and the University Clinic which are under-staffed. What is pertinent to note is that understanding the sources of contraceptive supplies and preferences of users will help in strengthening existing networks and planning strategies to address areas of deficiencies in a bid to encourage their use and ensure that commodities are provided where they are most likely to be accepted. It has been noted that because the source of commodities cannot only limit the number of available methods but can as well affect the kind of information clients receive and the methods chosen [17, 19, 21, 23, 28]. In this study, the main sources of supply of contraceptives were Patent Medicines Stores (24%), Community Pharmacies (22.5%) and Health Centres (13%). However, some studies have found that the private sector was the predominant source of contraceptives [27, 29, 33]. The fact that Patent Medicine Stores are highest on the list of sources of

contraceptives in this study arises from the fact that there are no Community pharmacies and only one general hospital and the University Clinic serve the community. This means that there are very few qualified and practicing health professionals in and around the university community. This may be responsible for misinformation and misperception of the use of contraception and the consequent low use rate.

CONCLUSION

Contraceptive awareness and knowledge is high among Niger Delta University staff and students but its use prevalence is low. This highlights the known fact that knowledge and awareness do not always lead to positive attitudes towards the use of contraceptives because of misconceptions about side effects and use, poor and incorrect information from friends, neighbours and patent medicine dealers and lack of access to adequate health facilities and community pharmacists in the community as sources of quality contraceptive products as well as proper counselling on their use for optimal adherence and positive outcomes. There is a need for serious intervention programme that will stimulate the use of contraceptives among women in the study area. Educational interventions should be carried out to address the deficiencies in knowledge, perception and use of contraceptives. Interventions should aim to counter negative perceptions of modern contraceptive methods and the dual role of condoms for contraception and STI prevention should be exploited. Contraceptive methods should be made available to women of all socioeconomic strata at affordable prices. Access to contraception must generally be improved upon and health care providers should be trained on how to offer counselling services to all clients in order to improve their acceptance of contraceptives. Family planning should be inculcated in postnatal clinics, where women would be referred to family planning clinics after the puerperium for advice on child spacing.

TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF THE STUDY POPULATION

Demographic Characteristics		**Frequency n=200**	**% Response**
Status	Student	101	50.5
	Staff	99	49.5
Marital Status	Single	104	52.0
	Married	93	46.5
	Divorced	2	1.0
	No Response	1	0.5
Age Group (years)	15-20	30	15.0
	21-25	62	31.0
	26-30	34	17.0
	31-35	30	15.0
	36-40	16	8.0
	41-45	13	6.5
	46-50	9	4.5
	>50	6	3.0
Educational Qualification	None	1	0.5
	Primary	5	2.5
	Secondary	34	17.0
	Tertiary	160	80.0
Family Type	Polygamy	112	56.0
	Monogamy	88	44.0
Religion	Christianity	193	96.5
	Islam	1	0.5
	Traditional	4	2.0
	Others	2	1.0

TABLE 2: AWARENESS AND KNOWLEDGE ABOUT CONTRACEPTIVES AMONG STUDY POPULATION

Variables		Frequency n=200	Percentage
Awareness	Yes	189	94.5
	No	11	5.5
Knowledge	Prevent Pregnancy	159	79.5
	Prevent STD	30	15.0
	Regulate menstrual cycle	5	2.5
	Enhance sexual relationship	1	0.5
	Prevent Pregnancy & STD	5	2.5

TABLE 3: PREVALENCE AND PATTERNS OF CONTRACEPTION AMONG STUDY POPULATION

Variables		Frequency n=200	Percentage
Do you use any form of contraception?	Yes	118	59
	No	78	39
	Nil	4	2.0
Choice of Contraceptive	Use Condom	62	31
	Never use Condom	75	37.5
	Oral Pills	35	17.5
	IUCD	3	1.5
	Hormonal injections	6	3.0
	Coitus Interuptus	3	1.5
	Traditional/Natural methods	1	0.5
	Condom +Oral Pills+ Coitus Interuptus	11	5.5
	Condom + Oral Pills	4	2.0
Period of Use (years)	< 1	45	22
	1-5	46	23
	6-10	16	8
	>10	14	7
	Nil	78	40
Source of Contraceptive	Health Centre	26	13
	Community Pharmacy	45	22.5
	Patent Medicine Stores	48	24
	Herbal Centres	2	1
	Parents/Friends	2	1
	Nil	77	38.5
Source of Information on contraception	Hospital	68	34
	Community Pharmacy	12	6
	Patent Medicine Stores	19	9.5
	Friends/Neighbours	56	28
	Media	18	9
	School/Personal Research	15	7.5
	Nil	12	6

TABLE 4: PARTICIPANTS' ATTITUDE AND PERCEPTION ABOUT CONTRACEPTION

Variables		Frequency n=200	Percentage
Reason for Choice of Contraceptive	Safety	85	42.5
	Efficacy	14	7.0
	Accessibility	11	5.5
	Cost	4	2.0
	Ease of use	19	9.5
	Safety + Efficacy + Accessibility	9	4.5
	Nil	58	29.0
Reason for Non-use	Married, unnecessary	1	0.5
	Husband disagrees	8	4.0
	Against Religion	16	8.0
	Don't want to control birth	12	6.0
	Side effects	25	12.5
	Not married/sexually inactive	23	11.5
	Nil	115	57.5
Reason for Choice of Traditional method	Side-effects of modern methods	10	5.0
	Difficulty of handling modern methods	4	2.0
	Cost	11	5.5
	Nil	175	87.5
Overall Perception of Contraceptive use	Irrelevant	10	5.0
	Promotes Promiscuity	14	7.0
	Essential for Family Planning	110	55.0
	Allow women pursue career	35	17.5
	Nil	31	15.5

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