

The unmet need for contraception among Nigerian women in the first year post-partum

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ABSTRACT **Objective** To determine the level of Unmet need for Contraception among women in the first year post-delivery in Ile-Ife, Nigeria.

Methods A prospective study of 256 women attending antenatal clinic of the OAUTHC, Ile-Ife, Nigeria was carried out 9–10 months post-delivery. Using a semi-structured questionnaire, the respondents were interviewed for socio-demographic characteristics; obstetric, sexual, and contraception history were also taken. The data were analyzed using descriptive and inferential statistical methods.

Results There was a high level of unmet need (59.4%) in the sample of Nigerian women despite a high level of awareness of common methods of contraception. Education and parity had no significant effect on usage of contraception ($p > 0.05$). No reason was given for non-usage in the largest proportion (30.3%) of the non-users. Only one-third of the respondents could correctly report the 'at-risk' period for getting pregnant in the post-partum period.

Conclusion There is a need to study in more detail the social and cultural factors that determine contraceptive utilization before success can be achieved in closing the gap of unmet need, as it has become evident that increasing the awareness and knowledge of contraception is not enough to achieve the objectives of family-planning programs.

KEY WORDS Unmet need, Contraception, Post-partum women, Nigeria

INTRODUCTION

Population explosions and high rates of unwanted pregnancy had been a major issue in reproductive health in the world, especially in the last 40 years of the 20th century, and these still remain a major challenge. These concerns were the impetus for the

introduction of various family planning (FP) programs in many parts of the world with major objectives of reducing maternal mortality and morbidity, and improving the reproductive well-being of the populace. As programs were implemented, the advantages

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of effective contraception over the risks of morbidity and mortality associated with pregnancy became obvious¹.

Family planning had been found to be able to prevent at least 25% of maternal deaths, but despite this great advantage, many programs that have been implemented in sub-Saharan Africa in the last 50 years could not empower more than one out of every 10 married couples to use modern contraception². There are over 100 million women in the developing world with unmet need for contraception, that is, women who want to postpone or avoid childbearing, but neither them nor their partners are using contraception, and this figure includes 3.4 million Nigeria women^{3,4}. The recent Demographic and Health Survey in Nigeria showed an average knowledge rate of 76.2% and an unmet need for contraception of 16.9% among married women⁵. The importance of closing this high level of unmet need in the developing countries cannot be overemphasized because it is the way of reducing the fertility in these regions by an average of 18%, and also brings most countries in sub-Saharan Africa 20–30% closer to the replacement level fertility⁶.

In-depth interview and survey findings have advanced many reasons for unmet need for contraception; difficulty with access to good-quality family-planning services, health concerns about side effects, lack of information, opposition from husband, and few perceived risks of pregnancy^{7–9} were the major reasons given. In other words, the level of unmet need in a society is determined by a complex interaction of social and cultural factors leading to a wide gap between knowledge and utilization of modern contraception.

In this prospective study, a number of women who had been exposed to a well-structured family planning program during pregnancy were followed up for a period of 9–11 months post-delivery to determine their contraceptive practices. The study assumed that all the women had the need for contraception for at least the first year post-partum either for spacing or for limiting family size.

The objectives of the study were to determine the prevalence of unmet need for contraception and the correlates of contraceptive practices of the respondents such that appropriate intervention can be built into the future designs of the present family-planning program.

METHODS

This study was carried out at the Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC), Ile-Ife, Nigeria over a period of 21 months between January 2003 and October 2004. The Teaching Hospitals Complex comprises two large state hospitals and two comprehensive health centers, and serves as the referral center for all the states and communities within a radius of 80 km from Ile-Ife. Data were collected at the infant-welfare clinic of one of the comprehensive health centers, with the clinic serving the teaching hospital, privately owned and other public health facilities within the community.

The inclusion criteria for this study were: mothers who met our booking criteria and received antenatal care in the Teaching Hospital during the antecedent pregnancy and whose infants were 8–10 months old; and previous exposure to a structured family-planning education program during pregnancy. Suitable respondents were enlisted as they registered at the infant welfare clinic with cards issued from the post-natal ward of the OAUTHC, and when in doubt, the catalogue was used to cross-check the client's records.

The study instrument was a semi-structured questionnaire approved by the research and ethical committee of the hospital. Informed consent was obtained before the self-administered questionnaire was applied to the respondents, and a group of trained interviewers assisted those who could not read or write. The Yoruba (the local dialect) version of the questionnaire was also made available for those who preferred the option. Both versions were pre-tested in a secondary health facility within the community.

The research instrument had three sections: the first section elicited information about the socio-demographic characteristics of the respondents; the second section inquired about the menstrual history, past deliveries, recent antenatal history, history of the last delivery, up-to-date breastfeeding practices and the immunization schedule that the infant had completed; the third section delved into the history of contraception and the sexual history since the last delivery. Information was also obtained about the menstrual history since last delivery, knowledge and use of various types of contraception, and clients' perceived risk of getting pregnant. The study was terminated when the first 256 consecutive respondents had been

recruited, representing about 10% of the annual delivery rate of OAUTHC in recent years.

The data collected were entered and analyzed with the use of the Statistical Package for Social Sciences (SPSS) software, version 11. The results were summarized using relevant descriptive statistics (such as means) and presented using frequency tables and percentages. The association between discrete variables was tested using the chi-square test. Statistical significance was accepted at $p < 0.05$.

RESULTS

Two hundred fifty-six women participated in the study. The age ranged from 17 to 40 years with a mean of 28.51 ± 5.15 years. All were Nigerians, predominantly (92.2%) of the Yoruba ethnic group. Seventy-five percent of the respondents were Christians, 21% were Moslems, and 4% were traditional worshipers. A large proportion (76.6%) of the women attained a minimum of secondary-level education.

One hundred and eight (42.2%) respondents were primipara, 132 (51.6%) were multiparous, and 16 (6.2%) were grandmultiparous. Forty-eight (18.8%) were delivered by cesarean section, 193 (75.4%) had spontaneous vaginal delivery, and 15 (5.8%) had twin deliveries. Fifty-one percent of the babies delivered were males, while 49% were females. All the women were still breastfeeding their babies, though to a varying degree, but only 224 (87.5%) practiced exclusive breastfeeding for the first 4 months.

Two hundred (80.5%) women believed that family planning had beneficial effects, 24 (9.4%) reported that it had no benefit, while 26 (10.2%) did not know whether it had a benefit or not. Two hundred and twenty-four (87.5%) respondents still desired further childbearing, while 12.5% did not; 80.1% would wish to postpone the next pregnancy by at least 6 months from the time of the study.

Table 1 compared the level of awareness, knowledge, and usage of contraception among the respondents; 104 (40.6%) used a family planning method during the period under study, while 152 (59.4%) did not. All 152 women who were non-users either wished to postpone their next pregnancy or did not want more children, and thus met the criteria for unmet need for family planning. Level of awareness of family planning methods recorded 100% for the

Lactation Amenorrhoea Method (LAM) and for the condom; these were followed by coitus interruptus (98%), injectables (78.1%), and IUCD (70.3%). Respondents were least aware of methods of surgical contraception, as only 46.9% were aware of tubal ligation, while a much lower proportion (39.1%) were aware of vasectomy. A wide gap exists between awareness/knowledge and of use of the methods, except for LAM, where knowledge and usage were at par (85.9% and 85.2% respectively). About 88% of the women had used the condom at one time before, 50.3% had used coitus interruptus, and the ever usage rate for the other methods ranged between 0% for vasectomy and 16.8% for periodic abstinence. Furthermore, neither educational attainment nor parity significantly influenced the use of contraception among the respondents ($p > 0.05$).

As shown in Table 2, the commonest excuse that was given for non-use of contraception was breastfeeding (20.40%), followed by perceived side effects (8.5%) and delayed resumption of sexual intercourse (8.5%). The largest proportion (30.3%) of the respondents, however, did not give any reason.

Table 3 shows the respondents' perceptions of 'at-risk period' for getting pregnant post-partum; 88 (34.4%) did not know the earliest time a woman can become pregnant after delivery, 86 (33.6%) reported that it was anytime the woman resumes sexual intercourse, while 26 (10.2%) mentioned that it was when menstruation resumes.

As indicated in Table 4, out of 45 women who resumed menses at 6 weeks post-partum, 34 (75.6%) were already sexually active. Out of 120 women who menstruated by 13 weeks, 63 (52.5%) were also sexually active, while by the ninth month, 207 (80.9%) women had resumed menstruation, and of these, 195 (94.2%) had also resumed sexual intercourse.

DISCUSSION

Contraceptive practice among the nursing mothers in this population was lower than expected, despite unequivocal evidence of exposure to family planning education, with 152 (59.4%) of the sample having unmet needs for family planning. The fact that 80.5% of sample perceived contraception as being beneficial made it difficult to ascribe the knowledge-practice gap to a poor understanding of the concept of contraception. Some of the reasons given by respondents for

Table 1 Contraceptive awareness, knowledge and usage among respondents

	Awareness	Knowledge	Ever use	Current use
Method of contraception	n = 256	n = 256	n = 256	n = 256
IUCD n (%)	180 (70.3)	86 (33.6)	37 (14.5)	27 (10.6)
Injectables n (%)	200 (78.1)	90 (35.2)	16 (6.3)	7 (2.7)
Pills n (%)	190 (74.2)	92 (35.9)	30 (11.7)	7 (2.7)
Condoms n (%)	256 (100.0)	59 (23.0)	225 (87.9)	32 (12.5)
Vasectomy n (%)	100 (39.1)	0 (0.0)	0 (0.0)	0 (0.0)
BTL* n (%)	120 (46.9)	9 (3.5)	3 (1.2)	3 (1.2)
Traditional method n (%)	86 (33.6)	0 (0.0)	0 (0)	0 (0.0)
Coitus interruptus n (%)	251 (98.0)	147 (57.4)	129 (50.3)	16 (6.3)
LAM* n (%)	256 (100.0)	220 (85.9)	218 (85.2)	9 (3.5)
Periodic abstinence n (%)	148 (57.8)	56 (21.9)	43 (16.8)	3 (1.2)

*BTL: bilateral tubal ligation.

**LAM: lactational amenorrhoea method.

Table 2 Reported reasons for non-usage of contraception in the first year post-partum (n = 152)

	Reasons for non-usage	Among non-users	Among total sample
		(n = 152)	(n = 256)
		Frequency (%)	Frequency (%)
1	Perceived side effects	13 (8.5)	13 (5.1)
2	Currently breastfeeding	31 (20.4)	31 (12.1)
3	Thinks contraception can make next pregnancy difficult	10 (6.6)	10 (3.9)
4	Yet to resume menstruation	8 (5.3)	8 (3.1)
5	Don't know about contraception	12 (7.9)	12 (4.7)
6	Husband not around	8 (5.3)	8 (3.1)
7	Prefers abstinence	6 (3.9)	6 (2.3)
8	Yet to resume sexual intercourse	13 (8.5)	13 (5.1)
9	Currently pregnancy	5 (3.3)	5 (2.0)
10	No reason given	46 (30.3)	46 (18.0)

non-use of contraception were misconceptions, and these have been widely documented in Nigeria¹⁰⁻¹¹, but the fact that 30% of the non-users gave no specific reasons for their inaction was a matter of concern. However, they might have other unexpressed possibilities such as spousal refusal as factors responsible for their inaction. While about three-quarters of the respondents had resumed sexual intercourse 6 weeks post-partum, and so were already at risk of another pregnancy, only about a third of respondents could correctly report the 'at-risk' period for pregnancy in the post-partum period. One could infer from this that one of the reasons for the poor contraceptive

practice of this sample was poor perceptions of risk of pregnancy.

It was once more evident from our study findings that exposure to family-planning education does not translate into improved level of knowledge and practice of contraception. Similar findings have been reported by previous authors^{11,12}. Our finding that education attainment seemed to have little effect on contraceptive use had also been observed in other sub-Saharan African countries¹³.

The level of unmet need of 59.4% obtained in our study population is three times higher than that obtained from the Demographic and Health Survey

Table 3 Respondents' perceptions of 'at-risk-period' for becoming pregnant post-partum (n = 256)

	<i>Reported 'at-risk-period'</i>	<i>Frequency</i>	<i>Percentage</i>
1	Any time one resumes sexual intercourse after delivery	86	33.6
2	After lochia has stopped	2	0.8
3	Once menstruation starts	26	10.2
4	After stopping breastfeeding	6	2.3
5	After 6 weeks	20	7.8
6	After 3 months	10	3.9
7	After 6 months	10	3.9
8	After 1 year	6	2.3
9	After 1½ year	2	0.8
10	Don't know	88	34.4

Table 4 Distribution of period of commencement of coitus and resumption of menses among the respondents

<i>Time since the last delivery</i>	<i>Events</i>	
	<i>Proportion resuming menstruation (n = 256)</i>	<i>Proportion of menstruating respondents who have resumed coital activity</i>
6 weeks	45 (17.6)*	34 (75.6%)
13 weeks	120 (46.9)	63 (52.5%)
14–26 weeks	184 (71.1)	142 (77.2%)
27–39 weeks	207 (80.7)	195 (94.2%)

*Frequencies and percentages of menstruating respondents are cumulative from 6 weeks onwards.

(DHS) of Nigeria in 2003⁵. A possible explanation for this observation is that DHS surveys define unmet need for women who wish to postpone their next pregnancy for at least 2 years, while the majority of our study participants signified their intentions to postpone childbearing by at least 6 months from the time of the survey. However, it is well documented that unmet need in most regions of the world is greater than 25% for the married couples, especially in sub-Saharan Africa^{4,14}.

The global desire to reduce maternal mortality and morbidity by reducing the rate of unplanned pregnancy cannot be achieved without tackling the problem of unmet need. Therefore, the shift of emphasis from increasing contraceptive prevalence to meeting the unmet need at the 1994 World Conference on Population and Development¹⁵ was a step in the right direction. Innovative strategies have to be developed to address some of the causes

of unmet needs, and this will require more qualitative research into the problem. Areas to be looked into include how to promote the role of husbands in supporting a partner's decision on family-planning uptake, as men have been reported to exert more influence on family decisions to use contraception¹⁶. It has been shown that improvement in the quality of care will consolidate the gains among current users such that dropping out due to side effects could be reduced, and proper use of LAM could be achieved¹⁷. Program planners should devise a method of evaluating the level of understanding of information given to clients on family-planning methods. The use of audio-visual aids, video shows, and sometimes drama should assist to improve on the quality of the message passed across to clients at the point of service delivery.

In conclusion, contraceptive awareness among women in the early post-partum period in Nigeria

was high, while contraceptive use was poor. The level of unmet need was also high. Improving the contraceptive awareness and availability of methods may not be sufficient in reducing the level of unmet need of the population. An in-depth understanding of the

population's perceived risk of pregnancy and social-cultural determinants of contraceptive behavior in the post-partum period that are informed by empirical evidence are crucial to making significant impacts in family-planning programs.

REFERENCES

1. Orji HW. Mortality associated with fertility and fertility control. *Int Fam Plann Perspect* 1983;15:57–63.
2. Roudi F, Ashford L. Demographic trends, In *Men and Family Planning in Africa*. Washington, DC: Population Reference Bureau, 1996:3–4.
3. Robey B, Ross J, Bhushan I. *Meeting Unmet Need: New Strategies. Population Reports*. Baltimore, MD: Johns Hopkins School of Public Health Population Information Programme. 1996, Series J No. 43:2.
4. Ross JA, Winfrey WL. Unmet need for contraception in the developing world and the former Soviet Union. *Int Fam Plann Perspect* 2002;28(3):138–143.
5. National Population Commission (NPC). *Nigeria. Demographic and Health Survey 2003*. Calverton, MD: ORC Macro, 2004:62, 99.
6. Westoff CF, Bankole A. The potential demographic significance of unmet need. *Int Fam Plann Perspect* 1996; 22(1):16–20.
7. Bongaarts J, Bruce J. The causes of unmet need for contraception and the social content of services. *Stud Fam Plann* 1995;26(2):57–75.
8. Casterline JB, Perez AE, Biddlecom AE. *Factors Underlying Unmet Need for Family Planning in the Philippines*. New York: Population Council, 1996 (Working Paper No. 84):46.
9. Schuler SR, Choque ME, Rance S. Misinformation, mistrust and mistreatment: Family planning among Bolivian market women. *Stud Fam Plann* 1994; 25(4):211–221.
10. Sunmola AM, Dipeolu M, Babalola S, et al. Reproductive knowledge, sexual behaviour and contraceptive use among adolescents in Niger State of Nigeria. *Afr J Reprod Health* 2003;7(1):37–48.
11. Orji EO, Onwudiegwu U. Prevalence and determinants of contraceptive practice in a defined Nigerian population. *J Obstet Gynaecol* 2002;22[5]:540–3.
12. Obisesan KA, Adeyemi AA, Fawole AO, et al. Awareness and use of family planning methods among married women in Ibadan, Nigeria. *East Afr Med J* 1998;75:135–8.
13. United Nations (UN). Population and Development Programme of Action adopted at the International Conference on Population and Development, Cairo, 5–13 September 1994. New York: Department for Economic and Social Information and Policy Analysis, UN, 1995.
14. Casterline JB, El-Zanaty F, El-Zein F. Unmet need and unintended fertility: Longitudinal Evidence from Upper Egypt. *Int Fam Plann Perspect* 2003;29(4):158–66.
15. Robey B, Ross J, Bhushan I. *Meeting Unmet Need: New Strategies. Population Reports*. Baltimore, MD: Johns Hopkins School of Public Health Population Information Program. 1996 Series J No. 43:17–8.
16. Romero-Gutierrez G, Garcia-Vazquez MG, Huerta-Vargas, et al. Post-partum contraceptive acceptance in Le An, Mexico: a multivariate analysis. *Eur J Contracept Reprod Health Care* 2003;8(4):210–6.
17. Cebeci SD, Erbaydor T, Kalaca S, et al. Resistance against contraception or medical contraceptive methods?: a qualitative study on women and men in Istanbul. *Eur J Contracept Reprod Health Care* 2004;9(2): 94–101.

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