

Full Length Research Paper

Prevalence and determinants of unmet need for family planning in Nnewi, south-east Nigeria

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The unmet need for family planning is a very useful tool in measuring and predicting the contraceptive needs of a population. A descriptive cross sectional study of 356 women attending the antenatal clinic of Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria, was carried out to determine the level of unmet need and its determinants. Three hundred and forty (95.5%) of the respondents had knowledge about family planning, while 260 (73.3%) had ever used a modern method. There is a significant lag between the knowledge and use of the common methods of family planning. Ninety eight out of 356 pregnancies (27.5%) were unintended. Seventy six of the unintended pregnancies were due to non use of contraceptives hence an unmet need of 21.4% with 15.2% for spacing and 6.2% for limiting. Husband's disapproval (36.8%), fear of side effects (28.9%) and religious beliefs (14.8%) were the main constraints to the use of contraceptives. There is a significant association between parity and unmet need. Age, level of education, religion and husband's occupation had no significant effects. There is great need to intensify reproductive health education and include men in programs and policies designed to improve family planning practices in Nigeria.

Key words: Family planning, unmet need, antenatal women.

INTRODUCTION

Unmet need for family planning refers to fecund women who either wish to postpone the next birth (spacers) or who wish to stop child bearing (limiters) but are not using a contraceptive method. It is estimated that more than 100 million women globally especially in less developed countries or about 17% of all married women, would prefer to avoid pregnancy but are not using any form of family planning (Ross and Winfrey, 2002). Also, within the less developed regions of the world, about one-fourth of all pregnancies are unintended (Haub and Herstad, 2002), while an estimated 18 million unsafe abortions take place each year (Murray and Lopez, 1998), thereby contributing to the high maternal mortality and injuries.

Family planning is one of the fundamental pillars of safe motherhood and a reproductive right. The practice of family planning is influenced by several socio-demographic factors, hence its variation between regions of the world, countries and within countries. It is pertinent to reposition family planning to accelerate the reduction

of maternal and neonatal mortality in less developed countries.

Nigeria has a low contraceptive prevalence of 8.0% with 17% unmet need for family planning (National Demographic and Health Survey, 2003). These poor reproductive health indices contribute to high rates of unintended pregnancies and about 610,000 induced abortions that occur annually (Henshaw et al., 1998). Reports on unmet need in Nigeria correlate this high level of unmet need for family planning and the attendant high rate of unintended pregnancy. In Ile-Ife, Adeyemi et al. (2005) reported an incidence of 59.4% of unmet need for family planning among women in their first postnatal year, while Etuk and Ekanem (2003) found an incidence of 30% of unintended pregnancies in Calabar. There are several reasons for unintended pregnancies but husband's refusal and fear of the side effects of contraceptives had been consistent (Wolff et al., 2000; Omolase et al., 2008; Mwageni et al., 1998).

The objective of this study was to determine the level of unmet need for family planning among our antenatal women and the underlying factors. The findings shall be useful in designing programs to scale up family planning

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services and uptake in Nigeria.

METHOD

Three hundred and fifty six consecutive pregnant women attending antenatal clinic at the Nnamdi Azikiwe University Teaching Hospital, Nnewi who gave consent to the study were recruited. With the aid of pre-tested, semi structured questionnaires, information on bio-social characteristics as well as sexual and contraceptive practices were obtained from the respondents. Data analysis was done with EPI INFO version 3.3.2 and statistical relations were explored with chi-square table. A p- value of <0.05 at 95% confidence interval was taken as significant.

Aim

To determine the level of unmet need for family planning among antenatal patients in Nnewi, South east, Nigeria, and to evaluate the factors that influence the unmet need and suggest appropriate strategies for its reduction.

Study design/setting

This is a descriptive cross sectional study carried out over five months (October 2008 – February 2009) at the antenatal clinic of Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria.

Sample size

The minimum sample size was determined by using the statistical formula of Fisher for calculating sample size (Hassan, 1991).

$$N = Z^2 pq / d^2$$

Where;

N = Minimum sample size for a statistically significant survey

Z = Normal deviant at the portion of 95% confidence interval = 1.96

P = prevalence value of unintended pregnancy in a health facility = 30.0% (Etuk and Ekanem, 2003)

q = 1- p

d = margin of error acceptable or measure of precision = 0.05

N = 322.69

Minimum sample size = 323. The sample size was adjusted to compensate for non response rate of 10%. Hence, a sample size of 356 was used.

RESULTS

The biosocial characteristics of the respondents are shown in Table 1. Most of the patients (332; 93.6%) were within the age range of 30-34 years; of parity 2-4(154; 43.3%); and had secondary education (218; 61.3%).

Three hundred and forty (95.5%) of the women had knowledge about family planning while 260(73.3%) of them had ever used a modern method. The mean age of coitache was 14.25±2.7 years, and most of the patients had coitus at least twice weekly (282; 79.2%).

Table 2 shows the knowledge and practice of family planning methods by the respondents. The male condom (256; 71.9%) and the Billings method (150; 42.1%) were

Table 1. Biosocial characteristics of the respondents.

| Characteristics | No = 356 | % |
|----------------------------------|----------|------|
| Age | | |
| 15-19 | 2 | 0.6 |
| 20 – 24 | 64 | 18.0 |
| 25-29 | 106 | 29.8 |
| 30-34 | 136 | 38.2 |
| ≥35 | 48 | 13.5 |
| Parity | | |
| 0 | 94 | 26.4 |
| 1 | 70 | 19.7 |
| 2-4 | 154 | 43.3 |
| ≥5 | 38 | 10.7 |
| Marital status | | |
| Married | 332 | 93.6 |
| Single | 12 | 3.4 |
| Separated/divorced | 6 | 1.7 |
| Widowed | 6 | 1.7 |
| Occupation | | |
| Trader | 140 | 39.3 |
| Civil servant | 84 | 23.6 |
| House wife | 66 | 18.5 |
| Student | 42 | 11.8 |
| Artisan | 24 | 6.7 |
| Religion | | |
| Catholic | 182 | 51.1 |
| Pentecostal | 98 | 27.6 |
| Anglican | 76 | 21.3 |
| Husband's occupation | | |
| Unskilled | 152 | 42.7 |
| Midlevel | 142 | 39.9 |
| Professional | 62 | 17.4 |
| Highest educational level | | |
| Tertiary education | 108 | 30.3 |
| Secondary education | 218 | 61.3 |
| Primary education | 30 | 8.4 |

the commonly known and used methods. There was significant lag between the knowledge and use of the common methods of family planning.

Birth spacing (248; 72.9%) and limiting births (138, 40.6%) were identified as the main benefits of family planning while the major sources of information on family planning were health workers (224; 65.9%) and the radio (126; 37.1%) (Table 3).

Ninety eight (27.5%) out of the 356 pregnancies were unintended. Seventy six out of these 98 unintended pregnancies were due to non use of family planning methods giving an unmet need for family planning of 21.4%. Fifty four (15.2%) of the women had unmet need for spacing and 22(6.2%) for limiting birth. Husband's disapproval (36.8%), fear of side effects (28.9%), religious belief

Table 2. Awareness and ever use of family planning methods by the respondents.

| Family planning methods | Awareness (%) | Ever used method (%) | X ² | p-value |
|--------------------------|---------------|----------------------|----------------|---------|
| Male Condom | 256 (71.9) | 144 (56.3) | 15.4 | <0.01 |
| Billings method | 150 (42.1) | 96 (64.0) | 19.33 | <0.01 |
| IUCD | 126 (35.4) | 14 (11.1) | 25.46 | <0.01 |
| Oral contraceptive pills | 110 (30.4) | 8 (7.3) | 23.57 | <0.01 |
| Injectables | 108 (30.3) | 24 (2.2) | 2.30 | >0.05 |
| Withdrawal method | 86 (24.2) | 40 (46.5) | 15.90 | <0.01 |
| Implants | 80 (22.5) | 8 (10.0) | 5.56 | <0.05 |
| Bilateral tubal ligation | 48 (13.5) | - | | |

Table 3. Sources of information on family planning and knowledge about benefits of family planning among respondents.

| Sources of information | No | % |
|------------------------------------|-----|------|
| Health workers | 224 | 65.9 |
| Radio | 126 | 37.1 |
| Peer group | 62 | 18.2 |
| Television | 94 | 27.6 |
| Print media | 28 | 8.2 |
| School | 6 | 1.8 |
| Church | 4 | 1.2 |
| Benefits of family planning | | |
| Birth spacing | 248 | 72.9 |
| Limiting birth | 138 | 40.6 |
| Do not know | 18 | 5.3 |
| Healthy mother/child | 6 | 1.7 |
| Reduces maternal death | 6 | 1.7 |
| Prevents unwanted pregnancies | 2 | 0.6 |

Table 4. Reasons for non use of family planning methods among the respondents.

| Reasons | No | % |
|--------------------------|----|-------|
| Husband's disapproval | 28 | 36.8 |
| Fear of the side effects | 22 | 28.9 |
| Against my religion | 14 | 18.4 |
| Lack of access | 12 | 15.8 |
| Total | 76 | 100.0 |

(18.4%) and lack of access (12; 15.8%) were the main reasons for non-use of family planning methods (Table 4). Parity significantly affected the incidence of unmet need for family planning ($\chi^2=47.33$; $p=0.00$) but age, level of education, religion and the husband's occupation had no significant effects (Table 5).

DISCUSSION

The rate of unintended pregnancies among antenatal

Table 5. Proportion of the respondents with unmet need stratified by biosocial characteristics.

| Characteristics | No (%) | X ² | P value |
|---------------------------|----------|----------------|---------|
| Age | | | |
| 15-19 | - | 4.45 | 0.22 |
| 20 – 24 | 8(12.5) | | |
| 25-29 | 22(20.8) | | |
| 30-34 | 34(25.0) | | |
| ≥35 | 12(25.0) | | |
| Highest educational level | | | |
| Tertiary education | 22(20.4) | 4.73 | 0.09 |
| Secondary education | 52(23.9) | | |
| Primary education | 2(6.7) | | |
| Religion | | | |
| Catholic | 44(24.2) | 1.77 | 0.41 |
| Pentecostal | 18(18.4) | | |
| Anglican | 14(18.4) | | |
| Parity | | | |
| 0 | 4(4.3) | 47.33 | 0.00 |
| 1 | 6(8.6) | | |
| 2-4 | 48(31.2) | | |
| ≥5 | 18(47.4) | | |
| Husband's occupation | | | |
| Unskilled | 36(23.7) | 0.87 | 0.65 |
| Midlevel | 28(19.7) | | |
| Professional | 12(19.4) | | |

mothers recorded in this study was 27.5%. This is high but similar to 30% found in Calabar, South- south Nigeria (Etuk and Ekanem, 2003).

Unintended pregnancies are the fore runners of unsafe abortions. The respondents continued with the pregnancies probably because almost all of them were married and had social and family support. Unintended pregnancies among the adolescents often end in unsafe abortions with the associated morbidities and mortality. The unmet need for family planning from this study is 21.4% which is a little higher than the 17% recorded for

Nigeria (National Demographic and Health Survey, 2003). In Sub-Saharan Africa the level of unmet need among married women ranges from 10% in Chad to 35% in Senegal (Ashford, 2003). The level of unmet need is related to the contraceptive prevalence and fertility rate (Average number of children).

Nigeria has a low contraceptive prevalence of 8.0% and total fertility rate of 5.7% (National Demographic and Health Survey, 2003) hence a high unmet need. This is the pattern in most developing countries. In countries like Brazil and Columbia (Latin America) that have widespread use of contraceptives (>70%) and low fertility rate (two births per woman) have low unmet need of 6 and 7%, respectively (Ashford, 2003). However, in some countries with high fertility, women have low unmet need because their desire for children is high and therefore little gap exists between their child-bearing potentials and contraceptive use. This phenomenon was noted in Chad where women have high fertility rate (6.6%), low contraceptive use (4%) and a low unmet need for family planning (10%) (Ashford, 2003).

This study also showed that 15.2% had unmet need for spacing and 6.2% for limiting childbearing giving a ratio of 2.5 : 1. This ratio is similar to that of the Nigeria National Demographic and Health Survey (2003) of 12.0% for spacing and 5.0% for limiting births. Similar ratios occur in Sub-Saharan Africa and Zambia (Ashford, 2003). The higher need for spacing, shown by this work may be attributable to the younger age group of less than 35 years and low parity, to where 86.5 and 89.3%, respectively of the respondents belong. Though age did not significantly affect unmet need in this study, its correlation with unmet need has been established in Zambia (Ikamari and Lwanga, 2000). After the age of 35 years, most unmet need is for limiting childbearing. However in Nepal (Bhandari et al., 2006) and Kuwait (Shah et al., 2004) a higher unmet need for limiting; 15.5 and 6.1%, respectively and low unmet need for spacing 9.5 and 3.6%, respectively have been reported.

There is a correlation between parity and unmet need in this study. This finding was also noted in Zambia and Kuwait (Ikamari and Lwanga, 2000; Shah et al., 2004). There was no association between religion and unmet need in this study as all the respondents were Christians. Respondents who belong to the Roman Catholic denomination had more unmet need. This could be attributed to the natural method of family planning advocated by the Roman Catholic faith. Also mothers who believe that Islam forbids family planning have high unmet need (Shah et al., 2004). The level of education of the respondents and their husbands' occupation which reflect their socioeconomic status did not influence the unmet need in this study. This study is hospital based and majority of the respondents were of the middle class. Some studies have shown a direct correlation between unmet need and socio-economic status (Shah et al., 2004; Dinç et al., 2007).

Also the place of residence has been shown to affect unmet need. This was demonstrated in Turkey where the unmet need in the rural areas was 17.1 and 8.3% in urban areas (Dinç et al., 2007). The inhabitants of rural areas are usually of low education and socioeconomic status and have limited access to family planning services. It is interesting to note that the husband's disapproval for the use of family planning methods and perceived fear of side effects were the major limitations to the use of family planning methods hence contributing to unplanned pregnancies. These factors had been observed in some studies especially in developing countries (Wolff et al., 2000; Omolase et al., 2008; Mwageni et al., 1998).

In a study in Tanzania, men were found to be suspicious of the modern methods, doubted their safety and feared that women will be unfaithful, if allowed to use contraceptives (Mwageni et al., 1998). Male education and inclusion in family planning programs shall probably correct their negative attitude to family planning.

With respect to utilization of family planning services, this study showed a very poor usage despite a high level of awareness of the common methods of family planning among the respondents. There was significant lag between knowledge and usage of all the common methods of family planning except the injectables. Most of the respondents also had good knowledge about the benefits of family planning. This trend had been previously reported (Etuk and Ekanem, 2003; Mwageni et al., 1998). The implication is that providing information about family planning alone is no longer enough to change the attitude of our women to family planning practices. More efforts should be made in terms of research to find the social, cultural and religious factors that limit the ability of the women to access family planning services.

It is also suggested that scaling up family planning services will increase the contraceptive usage and reduce the unmet need. This includes recognition of missed opportunities, integrating basic reproductive health education in secondary education curriculum, increasing advocacy and access to information, involving men in reproductive health issues as well as improving access to family planning services and commodities.

Conclusion

In spite of a high level of awareness of the common methods of family planning, a high level of unmet need exists among pregnant women in Nnewi, Nigeria. Of all the socio-demographic factors studied, only parity was found, statistically significant. The disapproval of the husband and the fear of the side effects of the family planning methods were the main contributors to the unmet need. There is a great need to intensify reproductive health education and include men in programs designed to improve family planning practices in Nigeria.

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