

Full Length Research Paper

A study of fertility intentions of women in Uyo, Nigeria

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Fertility desires are known to reflect subsequent fertility behaviour, therefore, understanding these desires therefore could help in planning strategies to modify fertility behaviour. We undertook the study to contribute useful information in planning future family planning strategies in our region. This was a questionnaire-based cross-sectional study among antenatal women in two health facilities in Uyo, Nigeria. Results show that the mean number of children desired was four. Majority of women (73.2%) desired a maximum of four children while 24.1% wanted 5 to 6 children. The number of children desired was significantly related to the patient's education ($P<0.001$) and the husband's education ($P<0.001$) and majority of women (94%) had discussed this with their husbands. The most common reasons given for the number of children desired were the number they can cater for (45.2%), husband's desires (35.8%) and to protect the woman's health (21.5%). Majority of respondents (66.7%) were aware of the previous government policy on the number of children to have and contraception (92.4%), but only 52.6% had ever used any form of contraception. In conclusion, women in Uyo are generally desirous of smaller family sizes. It is important to develop strategies to increase contraceptive uptake if these desires are to be achieved.

Keywords: Fertility, fertility intention, fertility desire, contraception, Nigeria.

INTRODUCTION

Nigeria's population was estimated to be over 158 million in 2010 (PRB, 2010) with a fertility rate of 5.7 (NPC and ICF Macro, 2009), making it the eighth most populous nation in the world. Nigeria's reproductive indices are also very worrisome with a maternal mortality ratio of 545/100,000 live births, infant mortality rate of 75 /1000 live births, under-five mortality rate of 157/1000 live births (NPC and ICF Macro, 2009) and an estimated yearly prevalence of induced abortion of 760,000 (Bankole et al., 2006). The complex relationship between fertility and development is well established and is not lost on the Nigerian authorities who in 1988, concerned about the rate of demographic growth relative to economic growth, established the National Population Commission and also adopted her first population policy with the aim of achieving a total fertility rate of 4 by the year 2000, or what was generally referred to as the four children per

family (woman) policy (NPC, 1988). In February 2005, Nigerian government launched a reviewed population policy tagged the National Policy on Population for Sustainable Development (NPC, 2004a). Among the targets of this new policy were to reduce population growth rate to 2% or lower by 2015 and to reduce the total fertility rate by at least 0.6 children every 5 years by encouraging child spacing through the use of family planning. Indeed, the aim of different Nigerian population policies and programmes has since been to reduce fertility in the country (NPC, 1988; NPC and ICF Macro, 2009; NPC, 2004a). In spite of this, the Nigerian population has continued to grow while her GDP had continued to decline (PRB, 2010). Also in spite of a high awareness of contraception, contraceptive prevalence for modern contraceptives in the country has remained low (NPC and ICF Macro, 2009, Oye-Adeniran et al., 2006; PRB, 2010).

Studies have shown that those who begin child bearing early and those who begin late have increased odds for unmet fertility desires (Bankole and Singh, 1998; Ibisomi et al., 2011). Also, women with low levels of education, from poor households, rural residents as well as those

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who had experienced child death were at a higher risk of unmet fertility desires (Ibisomi et al., 2011). Even infection with some diseases such as HIV does not seem to negatively modify the fertility intentions of some patients. A study among HIV positive patients also showed that majority of them intended to have more than two children (Oladapo et al., 2005; Iliyasu et al., 2009).

Studies have also shown that a woman's fertility intention fairly forecasts subsequent fertility behaviour of such a woman hence intentions must be taken seriously and come in useful in policy formulation and design of strategies for achieving fertility targets (Poo and Nai, 1994; Schoen et al., 1999; Kodzi et al., 2010). Indeed, the National Demographic and Health Survey, (NDHS) regularly includes fertility desires or intentions as part of its evaluations (NPC and ICF Macro, 2009; NPC, 2004b).

This study was therefore undertaken to understand the fertility intentions of women in Uyo, within the Niger Delta region of Nigeria, in order to provide insight into possible future expectations with regards to fertility within the region and useful information that could help in planning future strategies in family planning and other intervention programmes.

MATERIALS AND METHODS

Setting

Uyo is the capital city of Akwa Ibom State in the Niger Delta region in South-south Nigeria. The people are mainly Christians, monogamous and of the Ibibio/Efik speaking stock. The state has a population of about 4 million people (NPC, 2006) and is served by one tertiary health institution, the University of Uyo Teaching Hospital (UUTH). Another health institution, the St. Lukes Hospital, Anua, functions as a secondary health facility and enjoys good patronage by women of the middle and lower socio economic class as the cost of service, especially for maternity services for which it is reputed for, is much cheaper.

Sources of data and analysis

This was a cross-sectional study utilizing semi-structured questionnaire. The questionnaire covered areas of socio-demographic characteristics of respondents, their fertility profiles and intentions and contraceptive awareness and knowledge. The questionnaire included both open-ended and closed-ended questions.

Assuming a maximum variability of 0.5 and a precision of ± 5 at 95% confidence level, a minimum sample size of 400 was obtained from the table provided by Israel (2009) for large populations. To make up for non-response, a sample of 550 consecutive women attending the antenatal care units of both the tertiary and secondary health facilities who consented to participate in the study were requested to complete the questionnaires which had been pre-tested among the antenatal attendees. Nurses were recruited as research assistants and specially trained to provide assistance to those who may require such in completing the questionnaire. The only exclusion criterion was refusal to give consent. The questionnaires were carefully examined for completion, coded and entered into the computer for analysis by the researcher. Data obtained were analysed using the Statistical Package for Social Sciences (SPSS) version 17 for Windows. Level of significance was set at $p < 0.05$.

RESULTS

A total of 550 women participated in the study with 522 (94.9% - 330 from UUTH and 192 from Anua) correctly completing the questionnaire and these were used for the analysis.

Socio-demographic characteristics

Majority of respondents (90.8%) were between the ages of 20 - 34 years with a mean age of 27.75 years. Also, majority of respondents (67.7%) were of the predominant Ibibio tribe, while the Anang and Igbo tribe constituted 11.4 and 10.3% respectively. The married respondents were in the majority (93.7%) while those engaged constituted 3.3%, the single ones were 1.7% and others 1.3%. Out of those married respondents, 96.9% were in their first marriage and 97.5% were in monogamous relationships. However, 25.6% of the women were born into polygamous homes.

The Pentecostal was the most prevalent religious affiliation among respondents (53.3%). Other religious affiliations were Catholic 18.9%, spiritual 10.5%, protestant 8.9% and Islam 1.4%. Students constituted 28.6% of respondents while civil/public servants, sales/trading, professional and fulltime housewives were 24.1, 17, 4.7 and 4.9% respectively. Those unemployed were 11.4%. About 90% of respondents had at least a secondary level education out of while 44.3% had had a university education.

Fertility profile and intentions

63.8% of respondents had experienced previous pregnancies, 45% had previous childbirth while 39.6% had children who were alive at the time of the survey. The highest total number of pregnancies reported by respondents was 15 while the highest total number of childbirth and children alive were 8 and 7 respectively. Of those who had living children 67.5% had at least a male child and 65.1% had at least a female child.

The number of children the women in Uyo desire to have ranged from 2 to 12 with a mean of 4 (Table 1). Majority of respondents (53.3%) would want to have four children in all, 16.8% wanted 3, 3.3% wanted 2, 24.1% wanted 5-6 and only 2.3% wanted 7 or more children. Interestingly, none wanted one child only. The number of children desired was significantly related to the patient's education ($P < 0.001$), the husband's education ($P < 0.001$) and the number of children alive (boy $P < 0.01$, girl $P < 0.05$). However there was no significant relationship between the number of children desired and awareness of contraception ($P > 0.05$) or the number of wives the husband has ($P > 0.05$).

Majority of the women (94%) had discussed with their husbands/partners the number of children they intended

Table 1. Total number of children women in Uyo desire to have.

Number of children desired	Frequency	Percent
2	16	3.3
3	81	16.8
4	257	53.3
5	94	19.5
6	22	4.6
7	6	1.2
8	4	0.8
10	1	0.2
12	1	0.2
Total	482	100

N = 482.

Table 2. Reasons for the number of children desired by women in Uyo, Nigeria.*

Reason	Percent
That is the number I can cater for	45.2
My husband wants me to have that number	35.8
To protect my health	21.5
The number I believe God wants me to have	9.2
To have a (more) female	2.9
My mother had the same number	1.7
It is a tradition in my village	1.5
To have a (more) male child	1.1
I have no reason	3.1

*Multiple responses included.

to have and for 91.9% of those who had discussed, this number was agreeable to both partners.

Reasons for the number of children desired by the women are shown in Table 2. Other reasons (not on the table) included – to have a balance of two boys and two girls - 3 respondents; and the following by given by one respondent each – in case some become wayward (for one person who chose a high number); for better education; I love the number 5 - it stands for 'grace'; I just love children; and it is my discretion.

Majority of respondents (66.7%) said they were aware of government policy on the number of children one should have. Of this number, 79.3% could mention the previous four-child-per-family policy. One mentioned 20 children-per family. The number of children wanted was significantly related to awareness of the number of children stated in the country's old population policy ($P < 0.05$).

Contraception

The women were generally aware of contraception, family planning or ways to delay/avoid pregnancy

(92.4%) and 52.6% had used a form of contraception at some point in the past while 61.9% intend to use a method in the future to plan the number of children they intend to have.

DISCUSSION

The mean number of children desired by women in our study was four. About 73.4% of the women desired to have a maximum of 4 children while 19.5 and 4.6% would prefer 5 and 6 children respectively. The observed findings is similar to that reported in a study in Southwest Nigeria where 60% of women desired 3 to 4 children and that among Nigeria students in a tertiary institution where 50% also desired a maximum of 4 children (Omobude-idiado and Konwea, 2009; Adedini and Liasu, 2009). It is however different from the finding of the NDHS 2008 (NPC and ICF Macro, 2009) where only 25.2% of women nationally, and 32% in the south south geopolitical zone, with four living children desired no more children. Our study shows that despite the generally higher desire for children by women in the national study, the women in Uyo do not desire such high number of children. This supports the findings in the same national report where while the national total fertility rate TFR was found to be 5.7, the TFR for Akwa Ibom state, where Uyo is the capital city, was found to be 4.0 (NPC and ICF Macro, 2009).

Although fertility generally appears to be decreasing as the years progress (NPC and ICF Macro, 2009), and as had been predicted (Caldwell et al., 1992), Uyo is probably just reaping the fruits of the wide enlightenment campaigns and programmes of the safe motherhood era which were widely implemented in the state. Other probable causes of the lower desire maybe due to the high cost of living especially in the urban areas, increasing cost of child care, especially in terms of providing quality education.

Several reasons were given by our respondents for the number of children they desired with majority (45%) giving economic condition viz- the number they can cater for as the main reason while others gave their husbands' desires and the protection of the woman's health as their main reasons. The preference of our study population and attendant reasons may be a product of the generally low economic situation and their level of education which will have raised their awareness to their responsibilities for the care of their offspring beyond mere provision of food and shelter. Indeed education has been known to modify the fertility preferences of women (Oyediran, 2006; NPC and ICF Macro, 2009). In the NDHS 2008 (NPC and ICF Macro, 2009), the more educated women tended to desire fewer children. It is known though that 80% of women in the reproductive age group in the study area (Akwa Ibom state) are literate (NPC and ICF Macro, 2009). In our study, majority of the women were educated despite the inclusion of a secondary health facility to

capture more women of the lower socioeconomic class. A community based study to also involve those in the rural areas is suggested to give a broader view of fertility desires for women in the state. Interestingly, only 1.1% of the women gave desire for a male child as a reason for their fertility intention. This is against the generally held believe that women would go to any length to have a son in order to secure their place in the family as this is a patrilineal society.

It has been found that changes in child-bearing plans may occur in response to partner's wishes, social norms, re-partnering and from knowledge got about implications of parenthood (Bankole and Singh, 1998), thus, as the economic conditions improve from oil derivation dividends and increased minimum wage benefits, changes may be observed in the fertility intentions of women in Uyo in no distant time. Partners' desire as reason for fertility preference is not surprising as this was found in other works (Izugbara and Ezeh, 2010; Ibisomi and Odimegwu, 2011). In this study, it was found that 94% of our women had discussed their fertility desire with their husband/ partner with 92% of whom reaching an agreement. A study using matched wife-husband samples also indicated high levels of concurrence among husbands and wives on fertility intention and where differences existed, husbands were in favour of more children than their wives (Oyediran, 2006). In Northern Nigeria, noted for very high TFR, maternal mortality and low contraceptive prevalence, husbands were considered to be responsible for the high parity as women reported deliberately giving birth to many children in order to inhibit men's tendency to divorce or engage in plural marriage (Izugbara and Ezeh, 2010). It was also found from focus group discussions among major Nigerian ethnic groups that differential fertility intentions between couples are resolved in favour of the man as he's deemed to be 'in-charge' (Ibisomi and Odimegwu, 2011). A retrospective analysis of the demographic and health survey of some developing countries showed a lower spouse fertility intentions agreement of between 27 and 70% (Bankole and Singh, 1998). The higher concordance found in our study may be a product of the high monogamous relationships (97.5%) among respondents compared with a high prevalence of polygamy in that work of Bankole and Singh (1998).

Majority of the women were aware of the previous four-child-per-person policy of government and there was a significant association between this knowledge and those who desired four children only. How this could affect this decision and actual practice may require a more in-depth study.

While there is documented relationship between fertility intentions and actual fertility (Poo and Nai, 1994; Schoen et al., 1999; Kodzi et al., 2010), the chances of achieving these desires may be doubtful if contraceptive prevalence remains at its present low levels. This can be seen in the failure of the reduction in the TFR from 6 to 4 as expressed in the NPC policy of 1988, or a drop of 0.6

from the 2004 level as expressed in the reviewed document of 2004 (NPC, 2004a), as the current TFR by the NDHS 2008 (NPC and ICF Macro, 2009) is still 5.7 for the country. The implication for practice, is that efforts in contraceptive counselling and provision must be increased in order to assist the women achieve their fertility desires otherwise the desired targets of the current population policy may be a mirage at the present levels of contraceptive prevalence.

Conclusion

In conclusion, the fertility preferences of women in Uyo showed that majority desired four children which if practiced would lead to the achievement of the Nigerian National population policy of reducing fertility her rate. The current low contraceptive prevalence in the region does not however give the confidence that this would be easily achieved. It is important therefore to address the unmet need for contraception through increased contraceptive counselling and service provision in order to increase contraceptive uptake. This would also have the added benefit of incorporating, and bringing the immediate and long term economic benefits of small family size to the few, but significant proportion with intention for five or more children.

REFERENCES

- Adedini S, Liasu AS (2009). Factors Sustaining High Fertility Regime in Southwest Nigeria. <http://iussp2009.princeton.edu/download.aspx?submissionId=90161> assessed May 16, 2011.
- Bankole A, Singh S (1998). Couples fertility and contraceptive decision-making in developing countries: hearing the man's voice. *Int. Fam planning Perspectives*; 24(1): 15-24.
- Bankole A, Oye-Adeniran BA, Singh S, Adewole IF, Wulf D, Sedgh G, Hussain R (2006). Unwanted pregnancy and induced abortion in Nigeria: Causes and Consequences. New York. Guttmacher Institute.
- Caldwell JC, Orubuloye IO, Pat C (1992). Fertility decline in Africa: A new type of transition? *Popul. Dev. Rev.*, 18(2): 211-242.
- Federal Republic of Nigeria (1988). National Policy on Population for Development, Unity, Progress and Self-Reliance. Lagos, Nigeria. Federal Republic of Nigeria: Lagos.
- Ibisomi L, Gyimah S, Muindi K, Adjei J (2011). Ideal versus actual: the contradiction in number of children born to Nigerian women. *J. Biosoc. Sci.*, 43(2): 233-45.
- Ibisomi L, Odimegwu C (2011). Understanding resolution of differential fertility preferences among couples in Nigeria www.ijbssnet.com/journals/Vol_2_No_4_March_2011/12.pdf [assessed 5/7/2011]. *Int. J. Bus. Soc. Sc.*, 2(4): 98 – 105.
- Iliyasu Z, Abubakar IS, Kabir M, Babashani M, Shuaib F, Aliyu MH (2009). Correlates of Fertility Intentions Among HIV/AIDS Patients in Northern Nigeria. *Afr. J. Reprod. Health*, 13(3): 71-83.
- Israel GD (2009). Determining sample size. Program Evaluation and Organizational Development, IFAS, University of Florida. PEOD-6. April <http://edis.ifas.ufl.edu/pd006> (assessed 30-6-2010).
- Izugbara CO, Ezeh AC (2010). Women and high fertility in Islamic Northern Nigeria <http://onlinelibrary.wiley.com/doi/10.1111> [assessed 5/7/2011]. *Stud. Fam. Plann.*, 41(3): 193-204.
- Kodzi IA, Johnson DR, Casterline JB (2009). Examining the predictive value of fertility preferences of Ghanaian women. *Demogr. Res.*, 22: 965–984.

- National Population Commission, Nigeria (2004a). National policy on population for sustainable development, Abuja, Nigeria. National Population Commission
http://www.population.gov.ng/images/stories/NATIONAL%20POLICY%20ON%20POPULATION%20FOR%20SUSTAINABLE%20DEVE%5B1%5D_1.pdf Accessed 20-12-2011.
- National Population Commission (2004b). Nigeria Demographic and Health Survey 2003. Calverton, MD: National Population Commission and ORC Marco.
- National Population Commission, Nigeria (2006). Nigerian population census - State population
http://www.population.gov.ng/index.php?option=com_content&view=article&id=89 accessed 06-10-2011.
- National Population Commission NPC Nigeria and ICF Macro (2009). Nigeria Demographic and Health Survey 2008. Abuja, Nigeria: National Population Commission and ICF Macro.
- Oladapo OT, Daniel OJ, Odusoga OL, Ayoola-Sotubo O (2005). Fertility Desires and Intentions of HIV-Positive Patients at a Suburban Specialist Centre. *J. Natil. Med. Assoc.*, 97(12): 1672–1681.
- Omobude-idiado N, Konwea EP (2009). Opinions of Nigerian students in tertiary institutions on family sizes. *Global J. Educ. Res.*, 8(1/2): 39-42.
- Oye-Adeniran BA, Adewole IF, Umoh AV, Oladokun A, Gbadegesin A, Ekanem EE, Yusuf B, Odeyemi KA, Iwere N, Mahmoud P (2006). Community Based Study of Contraceptive Non-Use in Nigeria. *Afr. J. Reprod. Health*, 10(2): 90-104.
- Oyediran KA (2006). Fertility desires of Yoruba couples of South-western Nigeria. www.cpc.unc.edu/measure/publications07-72 [assessed 5/7/2011]. *J. Biosoc. Sci.*, 38(5): 605-624.
- Poo Chang Tan, Nai Peng Tey (1994). Do Fertility Intentions Predict Subsequent Behaviour? Evidence from Peninsular Malaysia. *Stud. Fam. Plann.*, 25(4): 222-231.
- Population Reference Bureau PRB (2011). 2010 World population data sheet. Washington DC: PRB. http://www.prb.org/pdf10/10wpds_eng.pdf.
- Schoen R, Astone NM, Kim YJ, Nathanson CA, Fields JM (1999). Do Fertility Intentions affect fertility behaviour. *J. Marriage Fam.*, 61(3): 790-799.