



Family Size Preference: Socio-cultural and Economic Determinants among the Obstetric Population in Orlu South East Nigeria

N. B. Egenti¹, H. N. Chineke², I. A. Merenu², C. C. Egwuatu³ and P. O. U. Adogu^{4*}

¹Department of Community Medicine, University of Abuja, Nigeria.

²Department of Community Medicine, Imo State University, Owerri, Nigeria.

³Department of Medical Microbiology, Nnamdi Azikiwe University, Awka, Nigeria.

⁴Department of Community Medicine, Nnamdi Azikiwe University, Awka, Nigeria.

Authors' contributions

This work was carried out in collaboration between all authors. Authors HNC and POUA designed the study, wrote the protocol and supervised the work. Authors NBE and POUA performed the statistical analysis. Author IAM managed the analyses of the study. Author HNC wrote the first draft of the manuscript. Author CCE managed the literature searches and edited the manuscript. All authors read and approved the final manuscript.

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ABSTRACT

Background: Human fertility is a function of a variety of factors and a proper understanding of these would be of paramount importance in tackling the problem of population explosion. Determination of the desired number of children is one of the most controversial aspects of fertility analysis. This study was aimed at evaluating the family size preference among the obstetric population in Orlu South East Nigeria, with the objective of establishing the socio-cultural and economic determinants.

Methodology: This was a cross-sectional descriptive study in which systematic sampling technique was used in selecting the respondents. Data was collected using both self and interviewer-administered questionnaires and analyzed using standard statistical method with results presented in tables.

*Corresponding author: E-mail: Prosuperhealth50@gmail.com;

Results: Respondents who married between the ages of 15 to 29 years preferred to have an average of 4-6 children, while those who married after the age of 30 years preferred an average family size of 0-3 children. Not much variation exists in the family size preferences among the major religious faiths of Catholic, Anglican and Pentecostal. However, the study showed that 3 (50%) of adherents of Islamic and Traditional religions said they desired to have 7 children and above. The Roman Catholic respondents showed the least contraceptive usage while those who attained tertiary education desired fewer children than those with primary and secondary educational levels. Unemployed respondents and civil servants preferred to have 0-3 children on the average. Marital status, place of residence and use of contraception were the other factors that had significant influences on family size preference ($p < 0.01$, $p < 0.001$ and $p < 0.000$ respectively).
Conclusion: Socio-cultural and economic factors were important determinants of family size in Orlu, South East Nigeria.

Keywords: Family size; preference; socio-cultural; economic determinants Orlu.

1. INTRODUCTION

Human fertility is a function of a variety of factors. A proper understanding of these factors would be of paramount importance in tackling the problem of uncontrolled fertility which will pave way for the improvement of the prevailing socio-economic and demographic challenges in the country [1]. According to the National Population Commission (NPC), the total fertility rate (TFR) in Nigeria is 5.7% [2]. This means that at the current fertility levels, the average Nigerian woman who is at the beginning of her childbearing years will likely give birth to approximately 6 children by the end of her lifetime [2].

Traditionally, Nigerians believe that marriage is the only approved avenue through which men can express their virility and women their fertility [3]. Thus, in traditional society, couples who have many children are regarded as superior to those with fewer children [3]. It is also believed that many children constitute great economic advantage as they contribute meaningfully to family income generation. Moreover, preference for male children is widespread, and in many families without a male child, the mothers often continue childbearing with the hope of getting the elusive male child, and to prevent the man from marrying another wife [4].

Determination of desired number of children is one of the most controversial aspects of fertility analysis [5]. Some factors such as the place of residence, have been identified as determinants of fertility behavior [6] and contraceptive use which will ultimately affect family size [7].

Significant improvement in the standard of living in Africa will remain a mirage unless population

growth is positively controlled. The first step should be to elucidate fertility desires and possible correlates thereof, among selected women of reproductive age group. Therefore the objective of this study is to evaluate the family size preference among the obstetric population in Orlu, South East Nigeria, with a view to establishing the socio-cultural and economic determinants.

2. METHODOLOGY

2.1 Study Area

The study was conducted in Orlu Local Government area, one of the 27 Local Council Areas and the third largest city in Imo State. It has a population of 220, 000 according to the year 2006 national population census. The inhabitants are predominantly farmers, traders and civil servants. It has several private and public health facilities including the Imo State University Teaching Hospital which is a tertiary health facility.

2.2 Study Population

Respondents were women who came for antenatal clinics in the various communities in the area. To be eligible, the woman would have lived in the area for at least 5 years.

2.3 Study Design

This was a descriptive cross-sectional study to evaluate the socio-cultural and economic determinants of family size preference amongst the Obstetric population in Orlu, South East Nigeria.

2.4 Sampling Method

Systematic sampling technique was used, in which every alternate antenatal attendee within the age group of 15 to 49 years, and who agreed who agreed to take part in the study, was selected.

Sample size determination:

It was calculated using the Leslie's formular [8]

$$N = \frac{Z^2 PQ}{D^2} \quad (\text{for population} > 10,000)$$

Where

N = Minimum sample size when p is > 10,000

Z = Standard normal deviate at 95% (1.96)

P = estimated prevalence at (0.7 for this study).

Q = 1 – P

D = tolerance error using 95% confidence limit (0.05)

$$\text{Therefore: } N = \frac{(1.96)^2 \times 0.7 \times (1-0.7)}{(0.05)^2}$$

$$= \frac{3.8416 \times 0.21}{0.0025} = 322$$

Out of this number, only 312 questionnaires were successfully completed and returned.

2.5 Data Collection

Data was collected from the respondents by the use of structured interviewer- administered questionnaire. The respondents were drawn from selected antenatal clinics in the communities.

2.6 Data Analysis

Collected data was analyzed manually using electronic calculator and results were presented in tables.

2.7 Ethical Consideration

Institutional ethical approval for this study was obtained from Imo State University Teaching Hospital Ethics Committee, Orlu. Verbal consent was obtained from each respondent before collection of data and this was in addition to written consent duly signed by some of them.

2.8 Limitations of Study

Counting the number of children one has delivered is culturally frowned at in Orlu rural communities, and so, many of the respondents felt uncomfortable with this research. However, the researchers employed persuasion and encouragements to circumvent this barrier.

3. RESULTS

Table 1 shows that the majority of respondents 150 (48%) were between 20-24 years of age. Table also shows that while most of the respondents 286 (92%) were currently in marriage, 17 (55%) were single while 7 (2%) were either widowed or separated. Moreover, 47.1% of the respondents attained secondary level of education while 10.9% had tertiary education. Majority of the respondents 147 (47.1%) were Roman Catholics, followed by Pentecostals 84 (26.9%), Anglicans 72 (23%), and Islamic and traditional religion 9 (2.9%). Furthermore a large number of the respondents 218 (70%) resided in the rural areas while only 94 (30%) lived in the urban.

Table 2 shows that the number of living children (family size) exhibited significant relationships with age of respondents ($p < 0.05$), marital status, religion ($p < 0.01$), Educational status ($p < 0.001$) and contraceptive knowledge / use ($p < 0.00$).

In Table 3, 125 (40%) of the subjects knew about contraceptives, but do not use them, whereas 109 (35%) knew and had ever used some of the contraceptives. Majority of Roman Catholics do not use contraceptives unlike the Anglicans and Pentecostals. These findings are statistically significant at $p < 0.01$.

4. DISCUSSION

This study has revealed that respondents who married between the ages of 15 to 29 years tend to have a modal family size of 4 to 6 children, while those who married after the age of 30 years appeared to have a modal family size of 1-3 children. This shows that women who married early tended to desire more children than those who married at older age. Aryee et al. [9], observed that age at marriage is an important indicator of fertility level, and by extension, family size, especially in societies with minimal family planning practice. However, a similar study by Bean et al. [10], showed that in some countries like Togo, Latin America and in some parts of

Nigeria, age at marriage does not determine the level of fertility and family size as child bearing before marriage is somehow tolerated.

Table 1. Socio-demographic variables of respondents

Socio-demographic variables	Frequency	%
Age (years)		
15 – 19 Years	31	10
20 – 24 Years	150	48
25 – 29 Years	109	35
30 – 34 Years	16	5
≥35 Years	6	2
Total	312	100
Marital status		
Never married	17	5.5
Currently married	286	92
Widowed	2	0.5
Divorced/Separated	7	2
Total	312	100
Religion		
Catholic	147	47.1
Anglican	72	23.1
Pentecostal	84	26.9
Islamic and Traditional	9	2.9
Total	312	100
Educational status		
No formal education	45	14.4
Primary	86	27.6
Secondary	147	47.1
Tertiary	34	10.9
Total	312	100
Place of residence		
Rural	218	70
Urban	94	30
Total	312	100
Contraceptive knowledge and use		
No Knowledge	78	25
Knows but does not use.	125	40
Have used before	109	35
Total	312	100

Majority of the respondents who had no knowledge of contraception and who did not use any form of contraception, preferred a larger family size unlike those who possessed both knowledge and history of contraceptive use. Those who made use of contraceptives appeared to have fewer numbers of children than the respondents who did not. This was similar to the findings of Adewale et al. [11], who observed that women that did not use contraceptives had a

twelve-fold increase in fertility level when compared with those that used contraceptives. These findings also confirmed the low rates of contraceptive usage and the subsequent high fertility rates that have been observed in most countries of the sub-Saharan Africa. The trend also agrees with the findings of Ross et al. [12], in Nigeria in which an inverse relationship between fertility preference and use of contraception was observed.

Not much variation was observed in the family size preferences within the 95% confidence limit (0.05) among Christian religious faiths of Roman Catholic, Anglican and Pentecostal. However, adherents of the Islamic and Traditional religions tended to desire more children, as evidenced by the greater than 50% of them who desired to have seven (7) children and above. This was in harmony with the findings of Okafor et al. [13] in their work amongst the Awka people of South Eastern Nigeria, in which they observed that their traditional titled men and adherents of their traditional religion tended to marry wives, who gave birth to many children. Sometimes, these children assisted in farm work thus boosting the family agricultural productivity as also observed by Togunde et al. [14]. The Islamic faith allows a man to marry up to four wives and as such, a larger family size is expected among the adherents when compared with others.

The study also showed that the Roman Catholic respondents had the least prevalence of contraceptive usage while the Pentecostals had the widest acceptance of contraceptives. This finding was similar to that of Chacko et al. [7] who observed that religious affiliation was among the factors that influenced contraceptive usage in some communities.

Respondents with tertiary and secondary education desired fewer children than those with primary or no formal education. This supported the findings of Osili et al. [15] who observed that empowering females educationally had a significant impact on fertility decisions. However, studies done by Akpotu [16], showed that rudimentary education in the least developed societies might initially increase fertility. This means that there is a threshold beyond which education has a negative effect on fertility. According to Ushie et al. [17] the United Nations posits that this threshold is beyond primary education, that is, at the level of some secondary education or basically at least seven years of education.

Table 2. Family size according to socio-demographic variables of respondents

Socio-demographic variables	Number of living children (family size)			Total	X ² p-value
	0-3 Children	4-6 Children	≥7 Children		
Age group at marriage (years)					
15 – 19 Years	9	19	3	31	
20 – 24 Years	52	55	43	150	
25 – 29 Years	41	37	31	109	X ² =15.54, *p<0.05
30 – 34 Years	7	9	0	16	
≥35 Years	6	0	0	6	
Total	115	120	77	312	
Marital status					
Never married	11	3	3	17	
Currently Married	100	114	72	286	
Widowed	1	0	1	2	X ² =19.15, *P<0.01
Divorced/Separated	3	3	1	7	
Total	115	120	77	312	
Religious denomination					
Catholic	46	60	41	147	
Anglican	31	28	13	72	
Pentecostal	37	29	18	84	X ² =6.12, p>0.05
Islamic and Traditional	1	3	5	9	
Total	115	120	77	312	
Educational status					
No formal education	8	17	20	45	
Primary	21	34	31	86	X ² =47.01, *p<0.001
Secondary	59	65	23	147	
Tertiary	27	4	3	34	
Total	115	120	77	312	
Place of residence					
Rural	72	86	55	213	
Urban	43	34	22	99	X ² =2.47, p>0.05
Total	115	120	77	312	
Contraceptive knowledge and use					
No Knowledge	9	31	39	79	X ² =100 *P<0.000
Knows but does not use.	45	59	32	136	
Ever / Currently uses	61	30	6	97	
Total	115	120	77	312	

*Statistically significant

Table 3. Respondents use of contraceptives according to religious affiliations

Religious denominations	Knowledge and use of contraceptives			Total N (%)	%*
	No knowledge frequency (%)**	Knows but never used frequency (%)**	Ever used or currently uses contraceptives frequency (%)**		
Catholic	35(23.8)	74(50.3)	38(25.9)	147(100)	47.1
Anglican	14(19.4)	29(40.3)	29(40.3)	72 (100)	23.1
Pentecostal/others	29(31.2)	22(23.6)	42(45.2)	93 (100)	29.8
Total	78(25)	125(40)	109(35)	312 (100)	100

X²=18.12; p<0.01

**percentage within each denomination

*percentage of total respondents

The study also showed that the unemployed respondents and civil servants preferred fewer children, with 1-3 children on the average. On the other hand, respondents involved in agriculture preferred more children with an average of 7 children and above. As highlighted earlier on, these children helped in farm work and enhanced agricultural output as emphasized by Togunde et al. [14] Furthermore, Ushie [17], in his study showed that working women, experienced lower fertility than those who were not working. "Role conflict" is often advanced as the basis for the differences in the fertility of women who are in the work force and those who are not. Working women, especially those engaged in non-domestic enterprises, have a conflict between work and reproduction. Among these women, caring for their children is often regarded as a difficult task when compared with their non-working counterparts, and thus they have the tendency to beget fewer children [17].

The study also depicted that women in a marriage relationships tended to desire more children than single women. This finding was similar to one of the positions held by Sonfield et al. [18] that most women who are married or in a union are more eager to begin child bearing than their counterparts who are not in any union [18]. This is because a stable marriage relationship comes with a number of financial and social benefits in favor of the woman [18]. Moreover child rearing outside marriage (single motherhood) is in conflict with the culture and tradition of the Igbo people who constitute majority of the respondents in this study [19].

There was a slightly higher family size preference among the rural dwellers when compared with their urban counterparts. This agrees with the findings of Findley et al. [6], who characterized the relationship between fertility behavior and place of residence as having a direct linkage. There is a fairly consistent correlation between urban or rural places of residence and fertility. This ecological characteristic of urban-rural differential is also connected with different monetary costs and efforts necessary for raising and educating children, and these are much higher in the urban than in rural areas [6].

5. CONCLUSION

In conclusion, various socio-cultural and economic factors have indeed been identified as important determinants of family size preference among residents of Orlu, South East Nigeria.

Concerted efforts should be made by the government and other relevant stakeholders to enlighten women both in the urban and rural communities on the availability and use of appropriate family planning services in view of the current uncontrolled population growth trend in Nigeria.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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