

Relationship between Religion and Use of Modern Contraceptives among the Atyap in Kaduna State, Nigeria

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Abstract

This study is based on 347 currently married women aged 15-49 years. Data used were obtained in 1995 from randomly selected dwellings. The data show Christian religious institutions, whose primary concern may be with goals other than family size limitation, serve to mediate adoption of modern contraception and Catholic women are less likely to use modern contraception than women in Evangelical Churches of Wining All (ECWA). Similarly, religious participation significantly increases the likelihood of use of modern contraception. The study underscores the need for intrafaith studies to aid the designing of appropriate strategies for increasing contraceptive prevalence rate in Nigeria.

Key words: religion, contraception, Atyap, Zonzon Nigeria

1. Introduction

The assertion that “religion still wields great power in the modern world” (Parrinder 1954:9-10) is surprisingly relevant in studies of low fertility societies (Johnson 1985:30; Brooks & Chandler 1994). Heaton (1986:248) observed, “religion continues to play a role in patterns of childbearing [even] in societies that have achieved replacement level.” While some religious institutions negatively influence acceptance of modern methods of contraception, others positively influence it (see Goldscheider and Mosher 1991; Ntozi & Kabera 1991; Schenker & Rabenou 1993; Verkuyi 1993).

The reported differences in fertility regulation in both developed and developing societies (Goldscheider & Mosher 1991; Ntozi & Kabera 1991; Verkuyi 1993), have been attributed to denominational differences in theological tenets or doctrines. The lesser use of effective methods of contraception among Catholics than Protestants, in low-fertility developed countries, has been attributed to Roman Catholic doctrine, which supports large families, responsible parenthood (adequate birth intervals), and rejects the most effective birth control methods (Blake 1984; Clegg & Cross 1995). In contrast, Protestants, who also consider procreation and responsible parenthood important, are either believed not to have proscription against contraception and abortion (Johnson 1993) or to have abandoned the tenet of faith for secularism (see Clegg & Cross 1995; Kelley et al 1993).

Prior studies in developed and developing nations have found women’s and community’s religiosity negatively influences the use of contraception (see Neuman & Ziderman 1986; Goldscheider & Mosher 1991; Amin et al. 1996). The US study (Goldscheider and Mosher 1991), for instance, showed that those with more intense religiosity (measured by frequency of participation in religious activities) were less likely to use contraception. A similar pattern was observed in a two level analysis of 1989 data for Bangladesh, but the religious practice of Muslims at the individual level was a weaker predictor of the use of modern contraception than religious practice at the community or district level (Amin et al. 1996). These suggest that religiosity at the individual and societal level could inversely influence fertility regulation.

Caldwell & Caldwell (1987) and Caldwell et al (1992) confirmed this in their assertion that the religiosity of Africans conflicts with reproductive regulation within marriage. Yet, studies of the relationships among religious institutions, religiosity, and reproductive behaviour in Nigeria, seem to be lacking. Thus, very little is known about whether the results above hold in the high-fertility Nigerian society, but I find it reasonable to use the results from the low-fertility developed societies as my starting point. This study contributes to filling the gap in our knowledge of the influence of Christian religion institutions on the use of modern contraception in Sub-Saharan Africa

2. Research setting

The Atyap live in Zongon-Kataf Local Government Area (LGA), Kaduna State and like many other communities of Nigeria, they are principally a rural population and agriculturalists. However, the introduction of Western type education by the Missionaries equipped them with skills for other economic activities and a means of occupational and social mobility

The Atyap community is almost entirely Christian and are also intensely religious (Avong 1998). This intense

religiosity of the Atyap means that I can only investigate mainly differences between very religious and extremely religious people rather than the full range from extremely secular to extremely religious, which has been investigated in Western societies.

3. Research questions

1. What is the general attitude of the Atyap towards modern contraception?
2. What role do religious denomination and religiosity play in determining the contraception among the Atyap women?

4. Research hypotheses

1. Catholic women are less likely to regulate birth through artificial modern methods of contraception than Protestant women
2. The more frequent the participation in religious activities, the less likely the use of contraception
3. The greater the intensity of the religious beliefs, the less likely the use of contraception

5. Data and methodology

The target population for the women survey was women aged 15-49 and the data for this study were obtained from 600 hundred women in this age category including the 347 currently married women used for the analysis. The sample was drawn from 278 randomly selected inhabited dwellings in 10 of 15 villages of Zonzon Atyap, one of the seven administrative units in Atyap homeland.

The quantitative data set from the 1995 Zonzon Atyap Women Survey included a wide range of topics but only the information on factors such as age, education and marital status, religious beliefs and practices, and fertility regulation are used in this study. The questionnaire consisted of replicated questions from the Nigerian national surveys (1981/82 NFS and 1990 NDHS), and the International Social Survey Programme, Religion Round 1. The qualitative data set, which helps in the explanation of and giving an insight into the contraceptive behaviour of the Atyap, contains information from in-depth interviews and focus group discussions. It also helps to illuminate logical interpretations, to verify quantitative evidence, and to supply evidence of fertility behaviour not available in the quantitative data used for this study. Eligible participants in the qualitative data collection exercise for this study were grouped into people with specialised information and those who, when taken together, provided information on views and attitudes common to the entire population under study.

Three categories of religious denomination were used in the analyses: Catholic, Other Protestants (Anglican and Baptist) and Evangelical Churches Winning All (ECWA), a Protestant denomination. Religiosity is measured by religious participation, which is an index based on the average of four 100-point scaled items (frequency of prayers, Church service attendance, Bible reading/study, and attendance of other religious activities). All analyses are limited to currently married women, and explanatory factors other than religious denomination and religiosity are used as control variables in the multivariate logistic regression analysis employed in this study. The choice of independent variables for inclusion in the regression models as control factors was based on the theoretical relevance of predictors in African context, and, generally, the usual statistical significance of 5 per cent level. The problem of multicollinearity was taken care of in the multivariate analysis by excluding one of any two variables with a correlation coefficient of, at least, $r=0.8$ (see Gow 1997).

Multivariate analysis, employing logistic regression analysis, is used to explore the effect of religion on the use of contraception. The logistic regression program is used to estimate the regression parameters of the models that test the stated hypotheses of this study. The logistic regression program which uses the maximum-likelihood method and the base category approach was employed. Therefore coefficients are interpreted as the variation in the predicted log odds of the outcome relative to the reference category. The odds ratio, an exponential of the β coefficient in logistic regression, is relative to the reference categories. Odds ratio values less or more than unity indicate lower or higher likelihood of occurrence of the event being examined respectively, while the odds ratio of unity indicate no effect for that category. The model chi-square can be viewed as an indicator of the amount of variation in the dependent variable explained by the model. The logistic model used is:

$$\ln\left(\frac{P}{1-P}\right) = b_0 + b_1X_1 + \dots + b_kX_k + e$$

where P is the probability of the outcome given the array of independent variables, $X_1 \dots X_k$; b_0 is a constant, $b_1 \dots b_k$ represent a series of unknown coefficients to be estimated using the maximum likelihood method, and e is an error or residual term (Hosmer and Lemeshow 1989)

It is more difficult to establish significant relations between variables with small samples than with large ones (Gilbert 1993), thus a variable with an association with the dependent variable at the 10 per cent level was considered to have a significant effect.

6. Findings

6.1 Characteristics of the currently married women

There is similarity in years of schooling among the three religious groups although Catholics have a lower proportion of currently married women with seven or more years of schooling - 46 per cent compared to 53 per cent for Other Protestants and 49 per cent for the ECWA (Table 1). Most of the women (81) had a low material living standard (four or less modern consumer goods or household facilities), but the proportion of ECWA women with high material living standard is about two times that of Catholics and Other Protestants.

6.2 Bivariate and multivariate analysis

About 40 per cent of currently married Atyap women had ever used modern methods of contraception (Table 2). Lower proportions of women in the younger age groups, consisting mostly of unmarried women and those just starting childbearing, have ever used modern contraception. More women with no education, most of who are older than those with some form of education, have ever used modern contraception. Similarly, a smaller proportion of Catholics than the protestant groups have ever used contraception.

Except for the insignificant relationship between husband's occupation and current use of contraception, all other variables have significant associations with use of contraception (Table 2). However, while the associations of the other variables and use of family planning methods remain statistically significant, when the effects of other factors are controlled, that of religious denominations and ever used modern contraception or currently using family planning disappeared (Table 3). The association between years of schooling and current use of family planning methods also lost its significance.

Although the relationship between religious denomination and contraception is statistically insignificant, Catholic and Other Protestant women were still less likely than ECWA women to have ever used modern contraception in 1995. The probability of Catholic women ever having used modern contraception was 27 per cent compared to 33 per cent for Other Protestants and 36 per cent for ECWA women. Catholic women were also less likely to be current users of any family planning method than did those in Protestant denominations.

As the degree of participation in Church activities increases, the likelihood of ever using modern contraception or current use of any method of family planning also increases, and this relationship is statistically significant at the 5 per cent level. This contrasts with the findings, mentioned earlier, that showed that active participants in religious activities inversely relates to use of contraception.

7. Discussion

7.1 General

Modern contraceptives were first introduced into Nigerian society about few decades ago. This may partly account for low proportions of use of contraception among the Atyap and other rural Nigerian communities where the modern methods were introduced more recently (Makinwa-Adebusoye & Feyisetan 1994). My qualitative data suggest an absence of adequate medical facilities, in both the ECWA clinics and Zongon-Kataf Government General Hospital, for taking care of real or purported side effects may be militating against greater use of modern contraceptives among the Atyap.

However, the proportion of currently married Atyap women (40 per cent) which had ever used modern contraception can be considered relatively high for a rural northern community. It is higher than the 28.9 per cent reported for Nigeria in 2008 (NPC and ICF Macro 2009:67). Furthermore, the contraceptive prevalence of 23 per cent among currently married Atyap women in 1995 is much higher than the about three per cent observed in the Muslim dominated Northwest region, and about nine per cent reported for rural Nigeria in 2008 (NPC & ICF Macro 2009:70). Thus, contraception may have greater reducing effect on the fertility of the Atyap than that of their Hausa-Fulani and Muslim neighbours in the Northwest region or other parts of rural Nigeria.

The greater use of modern family planning methods by the Atyap women than their peers in other rural parts of Nigeria and women in the Northwest region may be partially accounted for by differences in their approval of family planning. Of the currently married Atyap women who knew of at least one modern method of contraception, the proportion (90 per cent) that approved of family planning in 1995 was 23 per cent more than that of rural women and 36 per cent more than that of women in the Northwest region in 1990 (FOS & IRD/Macro 1992:55). Both religion and Western education may also be contributory factors.

7.2 Religious denomination and family planning

The lower likelihood of use of family planning methods by the Catholic women than their Protestant peers, especially the ECWA women (Table 2), was expected since the Catholic clergymen among the Atyap, in accordance with the stand of the Roman Catholic Church, campaign against the use of artificial methods. In contrast, the Protestant clergymen in the 1995 Zonzon Atyap Survey, echoing other Protestant leaders in other parts of the world (see Kollehlon 1994:496), preach in favour of use of all modern methods of family planning, except abortion (Avong 2000). In particular, the ECWA denomination does not only encourage acceptance of modern contraception, but also provides family planning services, thereby contributing to the Nigerian

Government's effort to legitimise acceptance and use of modern contraception (see Makinwa-Adebusoye & Feyisetan 1994). This may account for the observed similarity in contraceptive behaviour between the two Protestant categories.

Church doctrines have been used by the Protestant Churches to enhance the use of modern family planning methods. Most Protestant clergymen consider consultation with herbalists or "witch doctors" for traditional family planning methods to be a sin and therefore strongly discourage it. Most Protestant Church members, especially Protestants, also abhor consultation with herbalists for family planning. For example, an ECWA Church elder considered the use of traditional methods by Christians to be spiritually harmful because the manner they are acquired and used contradicts the teachings of the Bible (Avong 1998). Christians in other parts of the State have also expressed a similar view (Kisekka & Okeshola 1997).

Studies in the 1980s have shown that Ilorin married women (Oni and McCarthy 1986) and Ondo Yoruba wives (Caldwell et al. 1992) adopted modern contraception as a substitute for prolonged periods of postpartum sexual abstinence. This behaviour was linked to modernising forces such as Western education and availability of modern contraceptives that put strong pressure on the couples to reduce the duration of postpartum abstinence. However, a similar contraceptive behaviour could also result from change in societal institutions that influence fertility regulation and the people's perception of the methods of family planning rather than just ideational forces. The 1995 Zonzon Atyap qualitative data reveal that the traditional postpartum abstinence duration of, at least, two years is considered to be wrong because it is against the biblical injunction that married partners should gratify each other's sexual desires, and could lead to the sin of extra-marital sex. Thus, to the Atyap, guided by their Christian rather than Traditional religious rules on sexual relations, modern family planning methods seem a welcome innovation that could make achievement of the culturally desirable long birth intervals as well as observation of the biblical injunction to meet each other's sexual needs possible.

The difference in the use of family planning methods between Catholic and the ECWA (Table 3) seems not to reflect the Catholic Church's official stand against modern methods of contraception because the denominational differences are no longer statistically significant when spousal discussion is taken into account. In addition, participation in religious activities, which is expected to make the women more responsive to the distinctive teachings of the faith, was controlled. This suggests that the reason for the significant difference is not so much differences in Church teachings about modern contraception as differences in marital interaction patterns, perhaps reflecting the Catholic Church's greater emphasis on hierarchical authority (Kollehlon 1994:496).

The emphasis on authority by the Catholic Church may militate against openness in family interaction since it gives husbands of Catholic women greater autocratic control of women. Spousal communication, which is significantly associated with use of family planning methods, is considered to be "a good measure of family interaction patterns - "...the extent to which a close conjugal relationship exists and whether women have any input into family decisionmaking" (Kritz & Gurak, 1991:100). The 1995 Zonzon Atyap Survey data show that Catholic women and other Protestants are less likely to discuss family planning with their spouses than ECWA women, after controlling for age, years of schooling, socioeconomic status and religious belief and participation (not shown). Thus, family interaction patterns tend to have significant consequences for contraceptive behaviour of the Atyap wives, thereby requiring greater attention in future studies on use of contraception among the Atyap as well as Christian religious denominations in Sub-Saharan Africa.

7.3 Religiosity and fertility regulation

The result in Table 3 indicates that regardless of religious denomination, more religious women are more likely to regulate their fertility than less religious women thereby contrasting with the hypothesis that high religiosity militates against the use family planning methods. Heaton (1986) argued that participation in religious activities gives the religious group or institution greater power to shape the behaviour of its members through socialisation regarding its social norms or normative expectations. Thus, active participation in Church related activities, besides exposing the women to information about family planning methods, sets the agenda of what gets considered and approved by the women, and either keep them behaving in the way most acceptable by the group or limit the scope of their behaviour.

My qualitative data indicate that both Catholics and Protestant Churches support a consideration of smaller family sizes by couples (after consultation with God). They were therefore both actively involved in campaigning for the use of family planning methods, although the methods approved for use differed, and the Protestant Churches used Christian doctrines on marital relations to support their stance. Thus, the contraceptive behaviour of the religiously more active Protestant women is not unexpected since it can be assumed to have been positively influenced by their religious institutions and leaders.

However, the use of modern contraception by Catholic women who actively participate in religious activities has no straightforward explanation. The 1995 Zonzon Atyap Women Survey data indicate that Catholic women have an ideal duration of postpartum abstinence that is shorter than that of the Protestant women, but their ideal or desired family size does not differ from that of the Protestants (not shown). Thus the

desire to space births in an environment of reduced desired family size and preference for a shorter duration of postpartum abstinence may make the religiously active Catholics defy the official position of the Roman Catholic Church.

8. Conclusion

This study suggests that Christian religious institutions of the rural Atyp ethnic group have enhanced acceptance of modern contraception, making their contraceptive behaviour different from that reported for Muslim dominated Northwest region of Nigeria. This suggests the need for studies among the various Nigerian ethnic and religious groups, if we are to gain greater insight into the factors that influence contraceptive behaviour for policy purposes.

Modern contraception is widely viewed by the Atyp, especially the Protestants, as a legitimate means of child-spacing: a modern means supported by local religious leaders as serving both religious and traditional goals. This suggests that rather than acceptance of modern contraception being a consequence of an "abandonment of a tenet of faith" (Clegg & Cross 1995:80), it could result from observance of a tenet of faith. It also suggests that it is important to examine the effect of religious institutions on fertility behaviour, within the confines of the cultural environment of the population under study.

Although this study cannot be generalised to cover the entire Kaduna State, or Nigeria, it provides insight into the beliefs and attitudes of the Atyp towards fertility regulation and possibly reflects those of the numerous predominantly Christian ethnic groups of the Middle Belt of Nigeria where the Atyp are located. This study generally underscores the importance of institutional approach in exploring fertility determinants in any particular social group, and the need for maximising rather than minimising the religious subdivisions and coding categories in demographic studies in Nigeria.

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Degree	Field	Institution	City/State/Country	Year Obtained
BSc	SOCIOLOGY	Bayero University	Kano, Kano State, Nigeria	1982
MSc	SOCIOLOGY	Bayero University	Kano, Kano State, Nigeria	1989
PhD	Demography	Australian National University	Canberra, Australia	1999

Table 1: Per cent distribution of currently married women aged 15-49 according to selected characteristics, by religious denomination, Zonzon Atyap, 1995

	Catholic	Other Protestants	ECWA	All	n
Age group					
15-24	25.3	22.2	22.3	23.1	80
25-39	30.8	37.5	31.4	32.7	113
40-49	44.0	40.0	46.3	44.2	153
Years of schooling					
None	25.3	26.3	28.0	26.9	93
1-6	28.6	21.3	23.4	24.3	84
7+	46.2	52.5	48.6	48.8	169
Socioeconomic status					
Low	90.1	87.5	77.7	83.2	288
High	9.9	12.5	22.3	16.8	58
Type of marriage					
Monogamous	70.3	73.8	76.6	74.3	257
Polygynous	29.7	26.3	23.4	25.7	89
Marital stability					
Marriage never disrupted	83.5	80.0	90.3	86.1	298
Marriage ever disrupted	16.5	20.0	9.7	13.9	48
All ever married women	26.3	23.1	50.6	100.0	346
Number of cases	91	80	175	346	

Source: Zonzon Atyap Women Survey, 1995 Note: Numbers do not add to total due to missing cases

Table 2: Percentage of currently married women aged 15-49 who ever used modern family planning methods, and those currently using family planning by selected characteristics, Zonzon Atyap, 1995

Characteristics	Ever used modern methods	Current users	n
Age group			
15-24	17.3	3.7	81
25-39	39.8	15.0	113
40-49	52.9	38.6	153
	X ²	p<.000	
Religious denomination			
Catholic	27.5	14.3	91
Other Protestants	40.0	23.8	80
ECWA	47.4	26.9	175
	X ²	p<.007	
Years of schooling			
None	53.8	40.9	93
6	29.8	19.0	84
7+	38.2	14.7	170
	X ²	p<.003	
Ideal family size			
<5	52.0	32.4	102
5+	37.6	20.1	194
	X ²	p<.018	
Discussion of family planning with spouse			
Twice or less	18.1	8.4	155
More often	58.3	34.4	192
	X ²	p<.000	
Occupation of husband			
Non-agriculture	54.0	25.2	139
Agriculture	31.3	21.2	208
	X ²	p<.000	
All	40.3	22.8	347

Source: Zonzon Atyap Women Survey, 1995 Notes: Number may not add to total cases due to missing cases

Table 3: Logistic regression estimates of the likelihood of currently married women, aged 15-49, having ever used modern methods of family planning and current use of family planning, Zonzon Atyp, 1995

	B	S.E	Odds ratio	n
Panel A: Ever used modern methods				
Religious denomination				
Catholic	-0.407	0.337	0.67	91
Other Protestants	-0.120	0.325	0.89	80
ECWA (RC)			1.00	175
Religious participation	0.035*	0.015	1.04	346
Years of schooling	0.079*	0.039	1.08	346
Age	0.105**	0.021	1.11	346
Discussion of family planning with husband				
Twice or less	-1.625*	0.283	0.20	154
More often			1.00	192
Husband's occupation				
Non-agriculture	0.686*	0.290	1.98	139
Agriculture (RC)			1.000	207
Constant	-6.356**	1.293		
Reduction of X ²	116.602**			
d.f.	7			
Panel B: Currently using family planning				
Religious denomination				
Catholic	-0.423	0.396	0.66	91
Other Protestants	0.027	0.361	1.03	80
ECWA (RC)			1.00	175
Religious participation	0.031*	0.018	1.03	346
Years of schooling	0.033	0.037	1.03	346
Age	0.119**	0.025	1.13	346
Discussion of family planning with spouse**				
Twice or less	-1.623*	0.357	0.20	154
More often			1.00	192
Constant	-7.242**	1.556		
Reduction of X ²	85.448**			
d.f.	6			

Source: Zonzon Atyp Women Survey, 1995

Notes: RC= Reference category; * p<.05; ** p<.01 or p<.001

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