Understanding the Socio-Economic Conditions and Contraceptives: Understanding the Variation in Contraceptive Use among Indian Muslim Couples

Md Anisujjaman

Research Scholar, Centre for International politics, Organisation and Disarmament, School of International Studies, Jawaharlal Nehru University, New Delhi

Abstract: The higher population growth of Muslims is a debated issue in India. It is argued that religious norms play an important role in higher birth rate among Muslims and Muslims are not interested in family planning. This study seeks to understand the contraceptive use among Muslims by finding out the influence of various socioeconomic indicators. The present study is based on National Family Health Survey (NFHS-3), 2005-06.In this study for the analysis of the data SPSS software is used. To understand the statistical significance of the various socio-economic and demographic factors affecting the immunization, a binary logistic regression is attempted. The study shows that with the increase of the educational level, wealth index, and numbers of living children the uses of contraception increases. Employed couples who are engaged in some work are more likely using contraception than their counterpart. Economic well being has an impact in the behavior of contraception use among Muslim couple in India. With the increase of wealth the use of contraception is also increased. The Muslim couples in urban areas are more incline to use contraceptive than who belong to rural areas. There is a close relationship between the living children and the use of contraception among the Muslim couples in India. **Keywords:** population growth, contraceptive, religion, socioeconomic indicators, Muslims couple, India.

I. Introduction

Religion plays very important role in shaping the perception of individual. The values and norms are pertinent independent variables in the family planning. The use of contraception, which is one of the determinants of fertility (Bongaarts, 1983), has a great impact of fertility. Mauldin and Ross (1991) argue that Contraceptive Prevalence Rate (CPR) alone can explain 85 to 87 percent of the variance in Total Fertility Rate (TFR). So differential CPR in different communities may result in different level of fertility. The present study seeks to examine the use of contraception among Muslim couples in India. The Muslim constitutes about 13 per cent of the country's population, which makes it largest minority group in India. The growth rate of Muslim population in India during last three decades is somewhat higher than that of non-Muslim population. So, this higher grow rate prompt to study the prevalence of contraception among Muslim. However, all facts show that Muslim community is passing through a fertility transition. There has been a notable decline in fertility among Muslims (Alagarajan, Kulkarani, 2008). The various socio-economic and demographic factors such as level of education, standard of living, working status, number of living sons has a great impact on prevalence of contraception using. So, it is crucial to study these socio-economic conditions of Muslims and how these factors influence contraceptive behaviour of the Muslims. There are variations in using the contraception among Muslims across the country. Socioeconomically developed states like Kerala, Tamil Nadu record higher percentage in using contraception, it records low in the socioeconomically poor states like Uttar Pradesh and Bihar.

II. Literature Review

There are three main hypotheses which explain the nature of religion-fertility relationship (Johnsons, 1993). The particularised theology hypothesis, which seeks to elucidate this relationship through religious differences believe that some religious teachings are more pro-natalist than others. The 'minority population hypothesis' states that a religious minority (or ethno -religious) minority adjusts its fertility to maximize its security of social mobility and lastly the characteristics hypothesis whish seeks to explain this relationship in terms of differences in other socio-economic conditions (McQuillan,2004).

Davis Kingsley and J. Blake (1956) propose the following set of eleven intermediate fertility variables from their analytical study of social structure across the different societies ranging from tribal to industalised. (I) Factors Affecting Exposure to Intercourse (Intercourse Variables). Those governing the formation and dissolution of unions in the reproductive period. 1. Age of entry into sexual unions. 2. Permanent celibacy 3.

Amount of reproductive period spent after or between unions. And, those govern the exposure to intercourse within unions. 4. Voluntary abstinence. 5. Involuntary abstinence 6. Coital frequency (excluding periods of abstinence). (II) Factors Affecting Exposure to Conception ("Conception Variables"). 7. Fecundity or infecundity, as affected by involuntary causes. 8. Use or non-use of contraception. a. by mechanical and chemical means. b. by other means.9. Fecundity or infecundity, as affected by voluntary causes (sterilization, subincision, medical treatment, etc.). III. Factors Affecting Gestation and Successful Parturition ("Gestation Variables"). 10. Foetal mortality from involuntary causes. 11. Foetal mortality from voluntary causes.

John Bongaarts (1978) further rearranges the above mention eleven variables into following seven proximate determinants such as Age at marriage, onset of permanent sterility, post partum infecundability, fecundability, Use and effectiveness of contraception, spontaneous intrauterine morality, and induced abortions. The aggregate fertility model proposed by Bongaarts focuses on the four proximate determinants of fertility; marriage and marital disruption, the use of contraception, postpartum infecundability and induced abortions and others were treated as secondary factors. He argues that contraceptive practice is primarily responsible for the wide range in the levels of fertility within marriage. In the traditional developing countries, the practice of contraceptive is rare or virtually absent and marital fertility is relatively high, while in the economically developed nations, where marital fertility is lowest, well over half the married women in the reproductive years are current users of contraception. Bongaarts model further allows the identification of the paths through which different socio-economic variables affect fertility. Especially when a socio-economic indicator is weekly correlated with fertility, while strong but compensating effects on the intermediate fertility variables are found. For example, the labour force participation rate of women is weakly related to fertility, this may be because such participation has a strong positive impact on contraceptive use combined with a strong negative and compensating effect on lactation. Hassan Y. Aly and Michael P. Shields (1991) analyse son preference and contraception use in Egypt. They argue that firstly, son preference may increase fertility in Egypt. Rural families, having more son preference, have lower contraception rates than urban families. Secondly, women who marry young are less likely than other women to practice contraception later in their lives. Consequently, those marrying early are expected to have more children. Son preference appears to be an important determinant of contraception and, hence, fertility in Egypt. Contraception increases dramatically at each parity as the number of son's increases. Indeed, the number of sons in the family appears to be the most important determinant of parity-specific probabilities of contraception. Similar trend can be expected for India where patriarchal social structure and son preference are prevalent. P. Arokiasamy (2009) argues that increase in contraceptive prevalence rate among uneducated women is larger and faster than educated women. This is guided by quantityquality trade off and maximization of benefits of health and well being for women and children. Overall this has been resulted in low fertility level. Reed and Udry (1973) in their analysis of the relationship between female work participation and reported frequency of contraception reveal little support for the contention that female work related fertility differentials are caused by differential contraceptive use (Weller, 1968). Although, support was obtained for the hypothesis that work participation was related to contraceptive efforts among zero-parity blacks and whites.

Sriya Iyer (2002) studied that whether religion in India influences one proximate determinant of fertility-the decision to use contraception-even after controlling for the impact of other socioeconomic factors that influence contraceptive use. A detailed micro-level study was done in five villages and the town of Ramanagaram in Ramanagaram taluk in the state of Karnataka. This data set consists of detailed demographic information on a sample of rural Hindu and Muslim women in order to understand the relationship between their adherence to religion and the decision to use contraception Taken together, quantitative and qualitative evidence suggested that individual beliefs held by men and women about whether their religion prescribes or proscribes contraceptive use may be fundamental to demographic decisions. The effect of religion may also be exercised through the local religious community, particularly through religious leaders. However, this is expressed in terms of decisions about socioeconomic matters such as whether to continue an education, taken by individual members of different religions. Alagarajan and Kulkarni (2008I) analysis on religious differential in fertility based on three NFHS rounds observes that there has been substantial decline in fertility rate. The use of contraceptive has become more widely prevalent among all religions and gap between them in terms of using contraception is gradually disappearing.

III. Objective

The main objectives of the study are

- To know the percentage as well as the pattern of using contraception among the Muslim couples in India.
- To examine the impact of various socio-economic and demographic factors in the use of contraception among the Muslim couples.

Database And Methodology: The present study based on National Family Health Survey (NFHS-3), 2005-06. In this study for the analysis of the data SPSS software is used. Couple is the unit of analysis, and so the couple file of third round of NFHS is taken.

Dependent Variable: This study uses contraception use as dependent variable, whether the couple is currently using contraception or not.

Independent Variables: The study uses selected socio-economic and demographic variables to understand the impact of these variables on the contraception use. The socioeconomic variables are: educational attainment, place of residence, caste, wealth index. The demographic variable is: number of living children.

Cross tabulation is done between the dependent variable i.e. currently using contraception and the independent variables which are educational attainment, place of residence, caste, wealth index, sex of the child, no of living children to assess the relationship among them. To understand the statistical significance of the various socio-economic and demographic factors affecting the immunization, a binary logistic regression is attempted.

IV. Results and Discussion

In the following paragraph we will discuss the relationship between the use of contraception and the various socio-economic factors such as educational attainment, place of residence, caste, standard of living index, sex of the child, no of living children with the help of the cross-tabulation.

EDUCANAL ATTAINNT			
	CONTRA	CEPTION	
	Not using	Using	Total
NO EDUCATION			2261
	54.7%	45.3%	
MIDDLE	44.1%	55.9%	2213
HIGHER EDUCATION	41.7%	58.3%	168

Table 1:Educational Attainment and Contraception Use

From the results of Table1. suggests that with an increase in education there is also steady increase in the contraceptive use because with the increase in the level of education the knowledge about the contraception use as well as about the family planning increases. Where the percentage of using contraception among higher education group is 58.3% it is only 45.3% among the no education group.

Table2: Wea	th Index	x and Cont	raception Use
-------------	----------	------------	---------------

Wealth	Contraceptive		
	Using	Not Using	
Poor	41%	59.0%	
Middle	47.3%	52.7%	
Rich	58.8%	41.2%	

Wealth index exerts a great impact in the behavior of contraception use among Muslim couple in India. With the increase of wealth the use of contraception is also increased. The percentage of using contraception is as high as 58.8% in the 'rich' group among Muslim couple; it is only 41% among the 'poor' group.

Table3 :P	lace Of Res	idence and	Contraception	Use
-----------	-------------	------------	---------------	-----

PLACE OF RESIDENCE	CONTRA		
	Not using	using	Total
Urban			2866
	43.8%	56.2%	
Rural			1776
	54.0%	46.0%	

The place of residence has a close association with the contraception use. The results of the Table clearly shows that the Muslim couples who are belong to urban areas, the percentage of using contraception is high (56.2%) than tan who belong to rural areas(46%).

	CONTRA		
	Not using	using	Total
NO CHILDREN			317
	90.9%	9.1%	
ONE CHILD			628
	71.0%	29.0%	
2.00 TWO			1031
	39.8%	60.2%	
3.00 THREE			920
	34.1%	65.9%	
4.00 >FOUR			1746
	43.4%	56.6%	

Table 4:Number Of Children and Contraception Use

It has been observed from the Table that there is a close relationship between the living children and the use of contraception among the Muslim couples in India. When they do not have any children, only 9.1% use contraception, when they have one child the uses increases to 29%, it increases further to 60.2% when they have two children. In case of three children it goes even higher percentage (65.9%) but in case of more than four children there is a little decrease.

Table 5:	Caste	and	Contrace	ption	Use
----------	-------	-----	----------	-------	-----

	CONTRACEPTION			
	Not using	Using	Total	
OBC	50.8%	49.2%	1884	
OTHERS	46.4%	53.6%	2260	

When we look across various castes, it is found that highest percentage of couple currently using contraception (53.6%) from others caste which are the general caste than the percentage is low (49.2%) among the OBCs, it is because couple from general caste are better educated and have better living standard.

	0		
WORKING STATUS	CONTRACE		
	Not using	using	Total
not working	51.7%	48.3%	60
working	47.7%	52.3%	4576

Table 6:	Working	Status	and	Use	of (Contraception
I GOIC OF		Durub		000	U	contraception

The working status has a close association with the contraception use among the Muslim couple in India. Those who are engaged in work they, the percentage of use of contraception (52.3%) is higher than their counterpart which is 48.3%.

Sought for family planning	CONTRAC		
	Not using	using	Total
No Family planning			60
	51.7%	48.3%	
Family planning			4576
	47.7%	52.3%	

There is huge difference in contraceptive use between the couple who adopted the family planning compared to their counter part. The percentage of using contraception among the couple who adopted family planning is 92.3% where as it is only 52.6% among the couple who do not adopted the family planning.

Variables	В	Sig.	Exp(B)
Poor®		0.000	
Middle	0.216	0.193	1.241
Rich	0.592	0.000	1.807
No education®		0	
Middle	0.634	0.000	1.885
Higher	0.802	0.002	2.231
No Living [®] Children		0.000	
One Child	1.478	0.000	4.385
Two Children	2.86	0.000	17.454
Three Children	3.361	0.000	28.809
More than four Children	3.155	0.000	23.464
Caste(1)	0.126	0.208	1.134
Place of Residence (1)	0.104	0.401	1.109
Family Planning(1)	2.977	0.004	19.631
Working status(1)	0.19	0.666	1.209
Constant	-3.757	0.000	0.023

 Table 8: Results of Binary Logistic regression

®=Reference category, In case of caste -OBC, In case of place of residence-Urban, In case of family planningnot sought for any services and in case of working status -not working are the reference category.

V. Results of Logistic Regression

From the bi-variate analysis it is not conclusive about what are the determinants of any phenomenon, because it depicts only the one to one relationship between two variables, whereas in reality hosts of factor play their role simultaneously, so logistic regression has been applied here. Results of logistic regression (Table 8) shows that with the increase of the educational level, wealth index, number of living children the uses of contraception increases. In case of couple who are engaged in some work or the couple who sought family planning they are more likely using contraception than their counterpart.

Results of logistic regression (Table 8) show that the wealth index is statistically significant with the use of contraception. The odds ratio (1.807) of using contraception is high among the rich couple than the 'poor' group couple. In terms of contraceptive use, education plays a determining role. The couple who have higher education, the odds of using contraception is two times higher than who have no education, which is the reference group in the logistic regression. On the other hand, controlling all the other variables in the model, the effect of living children is even greater on the contraceptive use. The odds of using contraception among the couple who have two children are seventeen times higher and who have three children it is twenty eight times higher than the couple who have no children. Compared to OBCs, the other caste couple are more likely to use contraceptio13.4% more but and it is not statistically significant. As far as place of residence is concerned, it is not statistically significant with the use of contraception among the Muslim couple. In terms of contraceptive use, sought for family planning also plays a determining role. The couple who have sought family planning service, the odds of the contraception use is nineteen times higher than their counterpart. In case of working status ,which is not statistically not significant with the use of contraception, the odds of using contraception is high among the working group than their counterpart.

Major Fact Findings in this study:

- In India, across the states in which at least more than 5% of its population is Muslim, the percentage of using contraception is high in the states like Kerala (76.7%), Tamil Nadu (70.1%), West Bengal (68.6%) and low in the states of Uttar Pradesh (40.2%), Bihar(27.5%) among the Muslim couple.
- Among the socio-economic and demographic determinate, educational attainment, wealth index and number of living children have shown high statistical significance with the use of contraception. On the other hand, the factors like caste and place of residence, working status have not shown any statistical significance with the use of contraception.
- Among all the determinate variables that affect the using of contraception among Muslim couple in India, the number of living sons has the highest impact on the use of contraception.

VI. Conclusion

In India, there are huge differences exist in the percentage of using contraception among Muslim couple across the states. The differences in the percentage use of contraception at state level relates with the socio-economic condition of that state. This means in the developed state like Kerala, Tamil Nadu, the percentage of using contraception is high and in the less developed states the percentage of using contraception is low. Our logistic regression also shows that the socio-economic and demographic factors like educational attainment, wealth index, and number of living sons are the determinant factors in the use of contraception among the Muslim couples in India.

References

- Alagarajan, Manoj and P M Kulkarni (2008): 'Religious Differentials in Fertility in India: Is There a Convergence?, Economic and Political Weekly, Vol 43 (48), pp 44-53.
- [2]. Aly, H. Y. and Michael P. Shields (1991): 'Son Preference and Contraception in Egypt', Economic Development and Cultural Change, Vol.39 (2) pp. 353-370.
- [3]. Arokiasamy, P. (2009): 'Fertility Decline in India: Contributions by Uneducated Women Using Contraception', Economic and Political Weekly, Vol. XLIV (30) pp.55-64.
- [4]. Bongaarts, J., (1978): 'A framework for analysing the Proximate Determinants of Fertility', Population and Development Review 4(1), 105-132.
- [5]. International Institute for Population Sciences (IIPS) and ORC Macro (2007): National Family Health Survey (NFHS-3), 2005-06: India. Mumbai: IIPS.
- [6]. Iyer, Sriya (2002): 'Religion and the Decision to Use Contraception in India', Journal for the Scientific Study of Religion, Vol.41 (.4) pp. 711-722.
- [7]. Jejeebhoy, S.J. (2007): 'Sexual and Reproductive Health among Youth in Bihar and Jharkhand: An Overview', Economic and Political Weekly, Vol. XLII (48) pp 34-40.
- [8]. MacCorquodale, P. L. (1984): 'Gender Roles and Premarital Contraception', Journal of Marriage and Family, Vol.46 (1) pp. 597-602.
- [9]. Mason, K. O. and Herbert L. Smith (2000): 'Husbands versus Wives Fertility Goals and Use of Contraception: The Influence of Gender Context in Five Asian Countries', Demography, Vol.37 (3), pp. 299-311.
- [10]. Moursund, Anne and Øystein Kravdal, (2003): 'Individual and Community Effects of Women's Education and Autonomy on Contraception Use in India', Population Studies, Vol.57 (3) pp. 285-301.
- [11]. Reed, F. W. and J. Richard Udry (1973): 'Female Work, Fertility, and Contraception Use in a Biracial Sample', Journal of Marriage and Family, Vol.35 (4) pp. 597-602.
- [12]. Santhya, K. G., and S.J. Jejeebhoy (2003): 'Sexual and Reproductive Health Needs of Married Adolescent Girls', Economic and Political Weekly, Vol. XXXVIII (41) pp 4370-77.
- [13]. Srinivasan, K. (1988): 'Modernization, Contraception and Fertility Change in India', International Family Planning Perspectives, Vol.14 (3) pp. 94-102.
- [14]. Stover, John (1998): 'Revising the Proximate Determinants of Fertility Framework: What Have We Learned in the past 20 Years?' .Studies in Family Planning, Vol.29 (3) pp. 255-267.
- [15]. Visaria, Leela (1999): 'Proximate Determinants of Fertility in India: An Exploration of NFHS Data', Economic and Political Weekly, XXXIV (42-43) 1999, pp.3033-3040.