

Effect of Religion and Education on Fertility in the EAG States of India: Evidence from NFHS-4

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ABSTRACT

The study seeks to explore the relationship between the level of education of women and its influence on the fertility in Empowered Action Group (EAG) states of India. In addition, the interplay of education and fertility is further affected by religion, which acts as the determinants of fertility. The birth intervals, age at first birth, desire for another child are major determinants of fertility which are taken into consideration for the study. It is pertinent to understand how the level of education and religion of an individual affects the fertility and to what extent. The broader objective of the study is to determine the association between education, religion, and fertility and to further examine the proximate factors that influence the fertility of a woman. The study utilizes the Demographic and Health Surveys, that includes basic information about the household and women in the childbearing ages. This study focuses on the survey of women in reproductive age which would provide active information about fertility. The population defined in the study are the north Indian states that are categorized as EAG (Empowered Action Group) states. Multivariate regression analysis was used to examine the variation in the relationship between fertility and individual and state-level characteristics.

Keywords: Action groups, Contraception, Education, Empowered, Fertility, Religion

INTRODUCTION

Educational attainment always had a dominant effect on women's fertility. The adolescent women population in India is highly susceptible to Sexually Transmitted Diseases (STD), and even Human Immunodeficiency Virus (HIV) infections (Rebecca and Bunnell, 1999). Lack of awareness and education on reproductive health is likely to increase the risk of reproductive health issues (R Nithya, 2017). The need for introducing sexual and reproductive health education would enhance the quality and wellbeing of the significantly vulnerable female population. However, sexual and

reproductive health education is overlooked in India, and provisionally banned in six states in India (Shajahan Ismail, 2015), as it is believed to corrupt and offend “Indian Value System”. However, the National Survey of Family Growth (NSFG) stated no significant relationship between exposure to sex education to children and the risk of premarital pregnancy among sexually active adolescents. Family Planning Association of India (FPA), 2019 reported that 14% of unplanned pregnancies in India are below 20 years old (Apte, 2019). The report further propounds that more than 34 per cent of adolescent women are admitted to being physically, emotionally, or sexually harassed. National Family Health Survey (NFHS) 3rd and 4th, reported a positive relationship between the increase in school education and decrease in the Total Fertility Rate (TFR) with 2.7 in 2005-6 to 2.2 in 2015-16, where the schooling of women went up from 22.3% to 35.7% (IIPS, 2017). Total Fertility Rate (TFR) measures the average number of births a group of women would have by the time they reach age 50 if they were to give birth at the current age-specific fertility rates (2.1 is the Replacement Fertility Rate, above which population increases while decrease when TFR is below it). This marks the importance of education as it reduces the fertility rate by increasing the age at first marriage, the knowledge and usage of contraception and unmet needs for family planning.

Apart from education, other socio-demographic determinants such as religion are believed to have a significant impact on the fertility rate and the growing population in India. The prohibition of usage of contraception and abortion among various religious groups are instrumental in the problems associated with female fertility. The social taboos associated with infertility caused several menacing effects on women’s reproductive health. Societal and psychological pressure to conceive child, fear of remarriage of husband, family reputation in the community etc. collectively lead to an increase in maternal deaths.

This study highlights the effect of education and religion on female fertility in the Indian states, particularly in the Empowered Action Groups (EAG) states. Nine socio-economically backward states known as EAG: Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttarakhand, Uttar Pradesh and Assam are targeted in the study. These states lag behind the demographic transition, poor performance in all the health indicators and have the highest mortality rates in the country. Moreover, the average of India’s TFR is largely affected by the majority of the EAG states. The paper majorly focuses on the effect of education on female fertility and how religiosity affects women’s reproductive health.

METHOD

The secondary data is extracted from DHS (Demographic and Health Survey), a repository of India’s National Family and Health Survey (NFHS-04) to conduct the study on the effect of

education and religion on the fertility of women in EAG+1 states. For this study, two variable indicators that defined fertility are taken into consideration: knowledge of contraception and marriage to the first birth interval. The dataset was further narrowed down to EAG states, and both descriptive and inferential statistics were employed to analyze the association with religion and education. In this study, knowledge and usage of contraception is defined as women who use or know about any modern method of contraception. Women with unmet needs are those who are sexually active but not using any method of contraception. It is a gap between women’s reproductive intentions and their contraceptive behaviour.

RESULTS

The Table 1 below represents the EAG state-wise distribution of religion and level of education.

Table 1:

State	Hindu		Muslim		Christian		Others	
	Not Educated	Educated	Not Educated	Educated	Not Educated	Educated	Not Educated	Educated
Assam	3,738	15,114	2470	5,833	331	867	12	82
Bihar	17,800	21,089	3634	3,232	3	14	12	28
Chhattisgarh	7,145	16,782	96	568	92	352	6	131
Jharkhand	7,681	13,230	1500	2,580	369	908	1,373	1,405
Madhya Pradesh	20,740	36,757	1329	3,311	17	77	45	527
Odisha	8,871	22,671	130	433	690	875	23	28
Rajasthan	15,075	22,369	1706	1,965	0	18	177	655
Uttar Pradesh	25,494	52,021	8917	10,846	11	55	46	271
Uttarakhand	2,662	12,233	813	1,328	2	33	23	206

Studies on fertility argue close association of education and religion on the knowledge of contraception. However, regressing the dependent variable (Y) i.e. knowledge of contraception with the two independent variables (X_1 and X_2), education as X_1 and religion as X_2 , revealed no significant relationship with R^2 value of 0.0009. The education and religion together have 0.09 per cent variation on the knowledge of contraception (Table 2). The causal relation revealed that one unit change in education leads to 0.001 increase in knowledge of contraception.

Table 2:

Variable	Coefficient	Level of significance $p > t $
Education	0.0019	0
Religion	-0.0076	0

Marriage to first birth interval is another important determinant of female fertility. Marriage varies by education, religion and other socio-economic determinants. In this study, education is considered to be an important determinant for marriage at the first interval. The dependent variable (Y) i.e. marriage at the first birth interval in months have a significant relation with respect to the level of education (X_1) at 0.06 level of significance. The results can be inferred as with every unit increase in the level of education, there is 20.98-unit decrease in birth interval. The R^2 value at 0.46 per cent revealed that education alone does not cause much variation on the birth interval of the female after marriage (Table 3). The religion, on the other hand, has no significant relationship with birth interval.

Table 3:

Variable	Coefficient	Level of significance $p > t $
Education	-20.98	0.06

DISCUSSION AND CONCLUSION

There is relative higher fertility rate in Bihar, Uttar Pradesh, Madhya Pradesh, and Rajasthan as compared to the other targeted states. This can somehow be explained by Table 1, which shows that these four states are at the top of the “not educated” level, which means most of the uneducated population reside in these four states. The crisis in education is especially apparent in these four states- with 445.1 million of India’s around 1.2 billion Indians and some of the lowest literacy rates in the country (Census of India, 2011). Today more than 30% of the budget goes to education in Kerala, which is one of the most educated states in the country. Bihar has the most illiterate people- by proportion- than any other state. Government data show the crisis in Bihar’s primary educated system. Bihar’s literacy rate of 61.8%, Madhya Pradesh with 70.6%, Rajasthan with 67.1% and Uttar Pradesh with 67.7% stands even lower than the all India average of 74% (Census of India, 2011).

Table 2 shows a straight positive relationship between education and the knowledge of contraception. However, the rise is not that significant. Studies highlighted that majority of people knew, though not ultimately when it comes to the utilization of various contraceptive methods, it was sub-optimal (Nayak, 2017). The paper claimed media popularizing condoms had been the reason for the rise in the knowledge about family planning methods. The knowledge about their reproductive health is less in these states; hence, it should be taught in primary education. The various reasons for not using contraception were a lack of complete knowledge of multiple methods, social taboos, and opposition from society. Sex education has been highly discouraged

in the community, which is previously discussed. Table 2 shows the relationship between religion and knowledge of contraception. The table shows a neutral relationship between the two variables. Muslims are mostly blamed by Indian society to increase the population, Muslims and Hindus have almost the same percentage of the number of children under 5, according to DHS data 2015-16 (India DHS, 2017). However, Muslims remain the fastest growing religion in India. It is misbelieved that Islam prohibits the usage of contraception. Various political demonstrations are held where they claim that very soon Muslims will overtake the Hindu population in India. However, the highest exponential growth rates for population do not generally exceed 2%, and communities experience a reduction in population growth as the level of education and development increases (Mampatta, 2018). Table 3 shows that the marriage to birth interval decreases with the increase in education of women. It can be explained by the fact that education increases the age of marriage of women. So “educated” women try to conceive as early as possible soon after marriage which can explain the above result.

Whenever we talk of fertility in India, religion always attracts attention. The higher fecundity of Muslims in India has led to various researches on the quantitative relation between religion and pregnancy. NFHS data showed that Muslims have a higher fertility rate than Hindus. It is argued that the prohibition of contraception and abortion is the sole reason. According to NFHS-4 2015-16, Muslims have the highest fertility rate (2.61) in India, followed by Hindus (2.13) (IIPS, 2017). Many of the times, Indian Muslims are blamed on obeying tenants of the Holy book ‘Quran.’ and take over the Hindu population. This research paper discusses whether the Quran states on the family control methods explicitly or implicitly. Religious Scholars have a dominant effect on the lives of people, so the researchers aim at the validity of scholars’ statement and the holy book statements. *BBC stated, “Islamic medicine has known about birth control for centuries - for example, the Muslim writers Avicenna (980-1037) and Al-Razi (d 923 or 924) refer to different methods of contraception.” Islam is an active pro-family and considers a child a gift of God (which every religion does). Quran never explicitly stated the use of family method planning a sin, but many religious scholars openly critic the use of condoms.*

Male infertility puts questions on the virility of men and their muscularity, and many women have to take the blame on themselves to keep that undercover. These social norms give an infertile woman a lesser status in society. There are various myths of girls being unclean during the menstruation cycle and not being allowed to enter the temples, eat alone, and others. Sexual Intercourse is strictly prohibited by religion and culture, but science proved it a very effective natural contraception.

In the present scenario, the fertility rate and illiteracy are towards a decline, as people are giving preferences to their family, their needs rather than religion. The researchers believe that the

highest level of education is still needed to be improved. Also, adolescent girls and should be taught about their body changes, like menstruation cycles, etc. The knowledge about the use of contraception should be highly encouraged, and it must reach the people through mass media, and other methods. Reproductive health programs must emphasize improving access to quality reproductive health services by gender-sensitive providers. There has been the paucity of scientific studies on the effect and changing nature of women's education on fertility

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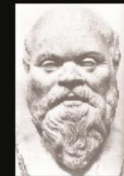
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