

Study of Total Children Ever Born in Ever Married Women of India: Regression Approach

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ABSTRACT

Background: India is a developing country; facing problems of populations. The reasons for this population blast are poverty, unemployment and also pollution. General need for family planning for females as well as male. We are focusing on controlling birth rate in Ever Married Women (EMW) and factors affecting fertility

Aim: To Fit a regression model on total children ever born and asses the factors affecting for fertility in ever married women's of India.

Objective: To find out the auto correlation between total children ever born and demographic variable

Method: A community based cross sectional retro prospective study was conducted on urban and rural area. Only ever married women were enrolled. **Results:** Out of 89498 women mean of total children's ever born (3.00 ± 2.225). Durbin-Watson d statistics was 1.857. The difference between observed value of TCEB and predicated value TCEB that is $R^2 = 0.532$

Conclusion: We can concluded that, Fitted of regression model on total children ever born having sixty percentage variation from chosen demographic variables. In a real life controlling birth rate we focus on TCEB in EMW. These implementations to be need full for society.

Keywords: - Ever Married Women, Total Children Ever Born

INTRODUCTION

India is a developing country as part of a developing country; India has to facing problems of populations. The recent population of India is about 133.92 crores. India currently faces approximately “33 births per a minute, 2,000 an hour, 48,000 a

day, which calculates to nearly 12 million a year”. Regrettably, the resources do not increase as the population increases. The reasons for increasing population are poverty, traditions, cultural norms, reduces death rate migration and also batter medical facilities respectively. [1]

The high-fertility or larger population countries waiting in many development. Their rate of progress toward development was very low as compare to the other country. [2] Many Tradition in a society developed high fertility. Children's facing in his or her upcoming life bunch of problems. Because of less knowledge of parents about family planning. Marriage is early and common, and it is a viewed as a scandal for a couple, particularly for the wife, not to have children. High fertility is desired because by producing children, preferably sons, a woman raises her status in the family. [3]

There are some variables affecting on TCEB such as urban-rural residence, educational status, economic status, occupational groups, employment of women, religion, respectively. In 1971 at Korea, conducted Fertility-Abortion Survey. The Mass media variables are frequently used in fertility studies. They getting more information from Mass media about the TCEB. However, newspaper readership was the only variable on exposure to mass media included in the 1971 Korea Fertility-Abortion Survey. Government family planning programs in which frequency of home visits received, attendance at group meetings, and visits to health centers. [4]

Common peoples think about to providing good health for his Child .Therefore day by day increases acceptance of birth control methods. Fertility deadening up on Economic development, improvements in literacy and a better employment situation. To improve the quality of life lead to berth rate reduction. [5] Child marriage or aryl age marriage long established tradition in India with poverty and ignorance magnifying the problem. [6]

In Latin America conducted study in which high fertility rates or TCEB seen at early ages of Women, they have been some response. According to Villareal (1998), only Cuba, Uruguay and Argentina, where fertility rates began changing before they 1. Although there is considerable debate in the literature about the meaning and definition of adolescence in contemporary society.

Most of the important factors to reduces birth rate in which to changes in marriage pattern that is intercast marriage pattern are to be improved as camper to the in between cast marriage, we are trying to improving use contraceptives methods. [7,8] The availability of contraceptives and extension of services accessible through family planning programme conducted by state governments as well as central [9-11] Up communing days general need for village adoption for controlling birth rate. In this study we are trying to fitting of regression model based on demographic variables. [12-15]

MATERIALS AND METHODS

A community based cross sectional study was conducted on urban and rural area. We include ever married women. The participants were approached and asked they are willing to enrolling to the study. In this study we analyzed factors affected on total children ever born in ever married women, collected data in the form of the secondary sources. We had taken data from International Institute of Population

Sciences (IIPS) Mumbai. Here we used the data National Family Health Survey (NFHS-1) with taking permission for statistical analysis. We analyze an important component. Under the guidance's of Population research Centers (PRCs) in India.

Statistical Methods:-

Data were tabulated and analysed using statistical package for social sciences (SPSS) version 20.The results were expressed in terms of Descriptive Statistics and fitted regression model expressed in the terms R^2 value. Durbin-Watson d statistics was used to find out the autocorrelation. Significances of differences calculated with students t test. Corresponding p value ie ($p < 0.005$) was considered for statistical significances.

RESULTS

Total 89498 women enrolled in this study in NFHS face One .Total study population was classify according to current age and total children ever born, Number of household members, standard of living index, religions respectively. The TCEB not only affecting a signal variable. There are many reasons such as current age, level of education, cast, place of residency etc.

The total number of children born some factors affecting such as, no of death cases with mean and SD (6.27 ± 4.670), Current age of respondent (30.87 ± 8.8) Number of child deaths (-6.27 ± 4.6), Number of household members (5.81 ± 2.9), Literate, < middle school complete woman (0.20 ± 0.399) respectively. Hear we can say that, we compare no of death case leaser and leaser because of high medical facility and others some rezones. We analyzes that, the different cast, place of residency, level of Education having diffract means and also diffract SD. Please of residency factors was also important.

Table No:-2 Fitting of Regression Model on Demographic Variable

Parameters	Un standardized Coefficients		Standardized Coefficients	t Test	Sig.	Confidence Interval for β	
	β	Std. Error	β_1			Lower Bound	Upper Bound
(Constant)	.584	.025		22.972	.000	.534	.634
Current age of respondent	.123	.001	.492	204.766	0.000	.122	.125
Number of child deaths	.174	.001	.365	147.966	0.000	.172	.176
Number of household members	.003	.002	.003	1.482	.138	-.001	.006
Literate, < middle school complete woman	-.269	.014	-.048	-19.695	.000	-.296	-.242
Middle school complete woman	-.529	.019	-.066	-27.408	.000	-.567	-.491
High school complete and above woman	-1.013	.016	-.159	-64.118	0.000	-1.044	-.982
standard of living index is medium	-.016	.011	-.003	-1.349	.177	-.038	.007
standard of living index is high	-.073	.015	-.012	-4.927	.000	-.102	-.044
woman from Sikh	-.006	.031	.000	-.201	.840	-.066	.054
woman from Buddhist and Jewish	.200	.068	.007	2.940	.003	.067	.333
woman from Christian	-.118	.021	-.013	-5.558	.000	-.160	-.077
woman from Muslim	-.009	.017	-.001	-.529	.597	-.042	.024
woman from other category	-.057	.049	-.003	-1.178	.239	-.153	.038
woman from Rural	.016	.011	.003	1.445	.149	-.006	.038

Fitted Model:

$$\begin{aligned}
 Y: \text{Total Children Ever Born (alive + dead)} &= 0.584 + 0.123 X_1 + 0.003 X_2 - 0.269 D_{d_w_edu_1} - 0.529 D_{d_w_edu_2} \\
 &- 1.013 D_{d_w_edu_3} + 0.16 D_{d_type} - 0.16 D_{d_sli_1} - 0.073 D_{d_sli_2} - 0.006 D_{d_re_1} \\
 &+ 0.2 D_{d_re_2} - 0.118 D_{d_re_3} - 0.009 D_{d_re_4} - 0.057 D_{d_re_5}
 \end{aligned}$$

Table 3: Model Statistics

Model	R	R Square	Adj. R Square	Std. Error of the Estimate	Change Statistics						Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. Change	F	
1	.730	.532	.532	1.522	.532	7186.468	14	88437	0.000	1.857	

Above table in which Predictors: (Constant), woman from Rural, Number of child deaths, standard of living index is medium, woman from Buddhist and Jewish, Number of household members, woman from other category, woman from Sikh, woman from Christian, woman from Muslim, Middle school complete woman, Literate, < middle school complete woman, Current age of respondent, standard of living index is high, High school complete and above woman etc

In the above table value of Durbin-Watson D statistics [7] was 1.857 which was close to 2. That is show that the autocorrelation is not present in the model since the f value was 7186.468 corresponding p value 0.000(<0.005). Hence we can conclude that model was significant. TCEB is taken as a dependent variable. The correlation of all study variables was positive that is 0.73. In fitted model in which we find $R^2 = 0.532$ indicates

that the fitted model explains 60% [8] variation in TCEB.

DISCUSSION

How to control of growth of population has been a reason of lose sleep for the Government of India since a very long time. Hear we can try to find out the relation of total children's ever born and some demographic variable. We use the multinomial logistic regression analysis try to fitting statistical modelling. The correlation between the demographic variable was positive. The TCEB subject to various inhibiting biological and behavioral factors all traditional societies. Birth control some factors affecting modern life styles, use of contraceptive methods Infertility etc. General we can say that, increase in natural fertility associated with early modernization. Current age of respondent, number of child deaths, standard of living

index, place of residency, level of Education factors affecting on the TCEB.

CONCLUSION

Fitted regression model suggest sixty percentage variations from the demographic variable. We can realize that, implementations to be need full about the TCEB to reduce population in EMW.

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