

Relation between Economic status and fertility

Dr. Prakash Chand Srivastava

Post Graduate Department of Mathematics, DAVPG College, Azamgarh-276001 (U.P.) India

ABSTRACT

In this paper an attempt has been made to study the relationship between economic status and fertility among women of reproductive age group of sample population.

Statistical Analysis Used-Chi-square test significant at level 0.01 etc.

INTRODUCTION

Several fertility survey in India and world indicate that the average no. of children ever born decreases as per capita expenditure of households increases. For instance it was found in a study in U.S.A. that the average no. of children ever born to those who live in rental accommodation of \$ 500 per month is too in comparison to 4.76 in case of those who can afford an accommodation worth only \$ 50 per month [1]. The economic status of households directly affects the education, like status and the food supply. From new researches it is clear that in the economically strong households the fertility decreases due to their accepted calories whereas the fertility increases in the poor families. It was found in National sample survey in India that among rural couples, in the household where per capita expenditure is up to \$ 10 among the total no. of children ever born per couple is 3.4 and this average is 2.95 when per capita monthly expenditure is between \$ 21-30 and average is 2.7 children in the household of per capita expenditure \$ 30 and above [2]. Thus economic status of households affects fertility.

METHOD

In present study, since income data was difficult to obtain from respondents hence we decided to use expenditure as measure of income. This practice was also followed in National sample survey. In this study we divided all households in three groups according to their monthly expenditure.

- 1. This group consisting those family whose monthly expenditure is less than \gtrless 2000.
- 2. The family whose monthly expenditure is \gtrless 2000-6000.
- 3. The family whose monthly expenditure is above \gtrless 6000.

The no. of married women obtained 71 whose monthly household expenditure was less than \gtrless 2000 in first group, 153 between \gtrless 2000-6000 in second group and 62 in third group whose monthly expenditure was above \gtrless 6000.

Table (1.) shows the average no. of live birth per married women according to economic status. From **Table (1.)** it is clear that the average no. of live birth in first group is 3.84 whereas in second group is 3.21 and third is 2.73.

Expenditures	No. of live births	Women	Average
(₹)			
Less than 2000	273	71	3.84
Between 2000-6000	492	153	3.21
Above 6000	172	63	2.73
Total	937	287	3.26

 Table (1.) verage no. of live birth per married women according to economic status



Thus the average no. of live birth in those women whose household expenditure is low, is higher than others such as first and second group. Thus there is an inverse relationship between household expenditure and fertility.

Table (2.) represents the percent distribution of married women according to their monthly household expenditure and no. of live birth. From **Table (2.)** it is clear that the proportion of respondents who had 5 live births and above was much higher among first group (53.52%) followed by second group (22.2%) whereas in third group it is only (9.52%). From this table it is also clear that among the third and second group the percentage of respondents who had 1-2 live births was 53.96% and 23.52% whereas it is only 12.67% in first group. Thus we conclude that the expenditure is inversely proportional to fertility.

The test of chi-square indicate that the fertility depends upon the economic status. In this analysis chi-square is obtained 55.13 which is very significant at level 0.01.

Expenditure (₹)	No. of live birth			Total
	1-2	3-4	5+	
Less than 2000	09	24	38	71
	(12.67)*	(33.80)	(53.52)	
Between 2000-6000	36	83	34	153
	(23.52)	(54.24)	(22.22)	
Above 6000	34	23	06	63
	(53.96)	(36.50)	(9.52)	
Total	79	130	78	287

Table (2.) Percentage distribution of married women according to Economic status and no. of live births

*Figures in small bracket represent percent $X^2 = 55.13$ df:4 significant at level 0.01.

RESULTS FROM OTHER STUDIES

Study made by **Driver [3]** in central India indicated that inverse relationship existed between fertility and per capita monthly income of the household. But the study made by **Majumdar [4]** in survey of Kanpur and by **Mukherjee and Baljeet Singh [5]** in Lucknow did not support any clear relationship between fertility and income. **Robert Ropett** in his note on "The relationship of the size distribution of income to fertility and the implications for development policy" shows that fertility rate is negatively related to per capita income **[6]**.

The influence of economic factor on fertility was also observed by **Robert Cassen [7].** Most of the studies conducted in India highlighted this inverse relationship between economic status and fertility such as **Sinha – 1957**, **Krishnamurthy – 1974**, **Registrar general of India – 1976,1980**, **Mahadevan – 1986**. [8] [3] [9] [10] [11] [12].

CONCLUSION

In conclusion most of the studies confirm that fertility is inversely related to household expenditure as found in the present study also. The economic status of family directly affects the standard of living and diet. The relation between diet and fertility is observed by many researchers. *Dr. Jose'de Castro* has stressed that if we compare the birth rate with the rate of consumption of animal protein throughout the world we find a frank co-relation between the two factors, the family going down as the consumption of such protein rises.

The experiments on human population have revealed that high protein intake reduces fertility and thus signifying the inverse co-relation between birth rate and protein intake. That is why, high fertility is characteristics of poor people who are undernourished. In economically strong families the rich diet are taken against the poor diet in poor families. And overall improvement of nutritional standard is likely to encourage less prolificness.

REFERENCES

- [1]. Chandra, R.C. (1980) Introduction to population geography, Kalyani publisher New Delhi pp.39
- [2]. Das Gupta Ajit (1955) Couple fertility, ministry of finance pp.42
- [3]. Driver, E.D. (1963) Differential fertility in central India, Princeton uni. Press, New Jersey



- [4]. Majumdar, D.N. (1955) Report on the inquiry into fertility and family planning among married women in Kanpur
- [5]. Malgavakar, P.D. (1982) Population and development, Somaiya publication, Bombay pp.18
- [6]. World Bank staff report (1974) Population policies and economic development
- [7]. Robert Cassen (1978) India's human resources, world bank staff working paper no. 279
- [8]. Sinha, J.N. (1957) Differential fertility and family limitations in U.P.
- [9]. Krishnamurthy, S. (1974) A note on the relation of education, economic status and age at marriage to fertility in a community development block south India bulletin pp.1-14
- [10]. R.G.I. (1976) Fertility differential in India, New Delhi
- [11]. RG.I. (1980) Infant and child mortality survey, New Delhi pp.24
- [12]. Mahadevan, K. (1986) Determinants of religious and caste differential in fertility, New Delhi