

SHORT ARTICLE

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A study of Socio-demographic factors and fertility in a village of Western Maharashtra

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ABSTRACT

Background: In India rural population was reported to be 66%.there is gap in fertility of rural and urban population. Worldwide, fertility rates have fallen from an average of about six children per woman in the 1950s to fewer than three today. Total fertility rate (TFR) gives approximate magnitude of the completed family size. **Objectives:** To describe socio-demographic factors and ascertaining relationship of fertility with socio-demographic factors in a rural area of Maharashtra. **Results:** A total 292 families were interviewed from Dahitane village; Majority Head of family were Hindu males (90%). About 93% population resided in their own houses in that 63% houses were semi-pucca. Houses having electricity supply, in house water connection and in-house latrines were 91%, 39% and 61% respectively. Total fertility rate (TFR) was found to be 1.71 and not significantly associated with socioeconomic class and female literacy. **Conclusions:** The present study showed betterment in water supply and sanitation facility in rural dwellings in spite of the predominance of semi-pucca house.

Key Words: rural, fertility, Total fertility rate, socio demography.

INTRODUCTION

Human fertility is one of the most complex. By fertility is meant the actual bearing of children.¹ It is a measure of rate at which population adds to itself by birth and normally assessed by relating number of births to size of some section of population such as number of married couples or number of women of child bearing age. When fertility remains high population tends to grow at a higher rate than before as mortality is controlled. Fertility is directly influenced by a set of social and biological factors. These factors are often called intermediate fertility variables because they are influenced in turn by several socio-economic, cultural and biological variables. Declines in fertility rates typically follow a reduction in desired family size; parents increasingly want to invest more in the health and education of their children, which raises the “costs” of each child. As these costs increase, couples become more interested in regulating their fertility. Worldwide, fertility rates have fallen from an average of about six children per woman in the 1950s to fewer than three today. Total fertility rate (TFR) gives approximate magnitude of the completed family size. This study was carried out in a rural area of Maharashtra with the objective of describing socio-demographic factors and ascertaining relationship of fertility with socio-demographic factors.

MATERIAL AND METHODS

A cross-sectional community based study was conducted in a Dahitane village of Barshi block in western Maharashtra which is rural field practice area of department of community medicine Dr. Vaishampayan

Memorial Government Medical College, Solapur. The “questionnaire survey” by house interview was employed as method of data collection. The entire village community having 300 households with population 1500 but eight houses were repeatedly closed after three visits so they were excluded and remaining 292 households with population 1480 was divided into the zones as per the number of interviewers and then all 292 households were interviewed during the month of July 2017. Institutional Ethical committee approval was obtained prior to study.

After obtaining verbal informed consent, the questionnaire was organized so as to get information on four broad perspectives; socio-economic, infrastructure, environmental health, and fertility. However, this paper will be mainly focused on linking the socioeconomic factors to the fertility. Data was analyzed by using statistical software SPSS 16.0 version. The statistical analysis included mean, standard deviation, percentages and ANOVA test. The results obtained were considered statistically significant whenever $P < 0.05$.

RESULTS

There were 292 families in the study area. Of the 1480 individuals 692 were females. The sex ratio was 878: 1000 (female: male). Among the population, 45% was below 15 years of age and 8.5% over 60 years of age. Ninety percent household heads were males. Hindus comprised 90 % of the population and the remaining includes Muslims (6%) and Buddhist (4%).

About 93% of the population lived in their own houses; 60% of all houses were semi-pucca houses² (Table-1). While 91% of the houses had electricity connection, only 1-in-3 had in-house water connection; and 61% of houses had in-house latrines. In our study Total fertility rate (TFR) was found to be 1.71 and Socioeconomic class of family according to Modified BG Prasad classification³ had insignificantly related to Variation in TFR. Variation in TFR in the families was insignificant due to Education of child bearing woman in that families using ANOVA test of statistical significance (Table-2).

Table1. Percentage of Households in Dahitane village with Specific Facilities Compared with Indian National Rural Average (NFHS-4) Maharashtra.

Sr. no	Characteristics	Dahitane village	Maharashtra rural (NFHS-4)	
1	Household headship	Male	89.7	88.1
		Female	10.3	11.9
2	Household structure	Nuclear	66	51
		Non-nuclear	34	49
3	Religion of household head	Hindu	89.7	85.6
		Muslim	5.9	5.1
		Buddhist	4.4	8.7
		Other	0	0.6
4	Electricity	Yes	91.4	90
		No	8.6	10
		Improved source	97.9	85.5
5	Source of drinking water	Piped water	39.3	43.6
		Tube well	58.6	22.3
		Unimproved source	2.1	14.3
6	Sanitation facility	Improved, private latrine	61.4	44.2
		No facility/open space/field	38.6	46.8
7	Type of house	Pucca	24.8	53.5
		Semi-pucca	60	43.2
		Kachha	15.2	2.6

DISCUSSION

This study was done to ascertain socio-demographic determinants and fertility pattern in rural Maharashtra. In this study nuclear household (66%) was more compared to Maharashtra state average (51%)² and 43% nuclear family in a study conducted at rural area of Dakshina Kannada by Padma Mohanan et al.⁴ Similar finding of demographic characteristic religion Hindu (86%), Muslim (5%) was found in NFHS-4 but according to Ram Chandra Acharya et al⁵ from Western Terai of Nepal Hindu (63%), Muslim (24%) and Buddhist (10%) and according to Padma Mohanan et al⁴ Hindu (50%), Muslim (45%) and Christians (5%) in rural Dakshina Kannada. Out of 292 Households, 267 (91%) Household had electricity supply comparable to Maharashtra rural

electricity supply (90%)² but a study conducted in slums of vellore town, Southern India by P.K. Mony et al⁶ narrated that electricity supply to house was 96.8%.Sanitation coverage of 61% in our study area was more than the national average of 44%², this could be due to providing affordable sanitation technology and awareness or motivation through ‘Swachh Bharat Mission- Gramin’ Of Government of India⁷ but 28% sanitation coverage was found in vellore slums by P.K.Mony et al. Moving towards Sustainable Development Goal 6⁸Improved source of drinking water 97% was found in our study near to target of universal and equitable access to safe drinking water.

Table2. Effect of socioeconomic status and female education on fertility

Sr.	Socioeconomic class	No. of family	TFR	P value#
1	Upper	06 (o2%)	1	
2	Upper middle	18 (06%)	1	
3	Middle	126 (43%)	1.2	0.069
4	Lower middle	108(37%)	2	
5	Lower	34(12%)	0.6	(F ratio 2.19)
	Female Education*	Frequency	TFR	
1	Illiterate	92(31%)	1.2	
2	Primary	88(30%)	1.2	
3	Secondary	58(20%)	2.3	0.702
4	Higher Secondary	42(14%)	2.2	
5	Graduate	12(04%)	1.5	(F ratio 0.54)

*- woman of 15-49 years age, # ANOVA test, In bracket percentages

In present study pucca houses (24.8%) much lower than state rural area average (53.5%) and urban slums of Vellore town (56.9%), Southern India by P.K. Mony et al. In this study TFR (1.71) was less compared to state rural TFR (2.06) and Rural community, U.T, Chandigarh TFR (2.40) was found by Kaushalya et al⁹ whereas Higher TFR (4.71) was mentioned in study conducted in rural area of Dehradun district by Amrita Kansal et al.¹⁰ In our study socioeconomic class of family and female education was insignificantly related to Variation in TFR but Family monthly income and female education was significantly associated with family planning practices in study conducted in rural Dakshina Kannada by Padma Mohanan et al.⁴

Conclusions: There was betterment in water supply and sanitation facility in spite of the predominance of semi-pucca house. The results can’t be generalized.

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REFERENCES

1. K. Park, Park's Textbook of preventive and social medicine, 24th edition. Banarsidas Bhanot publishers, 2017.521,523.
2. National family health survey-4, Maharashtra 2015-16, International institute of population sciences, Mumbai. P34-36.
3. Tulika Singh, Sanju Sharma, Seetharamiah Nagesh.Socio-economic status scales updated for 2017. Int J Res Med Sci.2017; 5(7):3264-67.
4. Padma Mohanan, Asha Kamath, B.S. Sajjan. Fertility pattern and family planning practices in a rural area in Dakshina Kannada. IJCM.2003;28(1):15-18
5. Ram Chandra acharya. The effect of demographic factors on fertility behaviour in Western Terai of Nepal. Economic J Development.2010; 11&12(1-2):99-111.
6. P.K.Mony, L. Verghese, S. Bhattacharji, A. George, P. Thoppuram, M. Mathai. Demography, Environmental status and Maternal Health Care in slums of Vellore town, Southern India. IJCM.2006; 31(4):230-33.
7. Swachh Bharat Mission-Gramin. Available from: www.swachhbharatmission.gov.in . [Last accessed on 2017 September 25].
8. Sustainable Development Goals-India. Available from: www.in.undp.org/sdg-overview/. [Last accessed on 2017 September 26].
9. Kaushalya, Avinash Kaur Rana, Sushma Kumari Saini. A descriptive study on fertility pattern, prevalence of "pregnancy wastage," and their relationship with health of women in a rural community, U.T, Chandigarh. Nursing and Midwifery Research J.2005; 1(3):144-50.
10. Amrita Kansal, R. Chandra, SD. Kandpal, KS Negi.Fertility profile and its correlates in a rural population of Dehradun district. IJCM 2007; 32(2):152-53.

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