

# A cross-sectional study of gender preference among married urban women of Central India

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## ABSTRACT

**Background:** Despite the existing preconception and prenatal diagnostic technique act, there is a strong preference for males in societies. There is a need to strengthen the law and to address various social reasons for male preference. **Objectives:** The objectives of this study were to know the pattern of gender preference and to study some epidemiological factors related to it among 18–35 years married women residing in an urban area. **Materials and Methods:** A cross-sectional study was conducted in urban field practice area of the Department of Community Medicine, GMC Nagpur. Data were collected by house-to-house visits using systematic random sampling, and subjects were interviewed using structured pretested questionnaire after due consent. Descriptive statistics and Chi-square test were used.  $P < 0.05$  was considered statistically significant. **Results:** Gender preference was significantly associated with age but not with religion, education, occupation, and type of family. The preference for male was statistically significant with age and presence of one or more daughters. The most common perceived reasons for male preference were to carry forward family name and support in old age. The common perceived reasons for female non-preference were daughters who will not stay with parents permanently and dowry problems. The most common perceived reason for female preference and male non-preference was already having a male child. **Conclusion:** Lack of security at old age, only male being considered to continue family line, and dowry issues are still prevalent in the community predisposing for high gender preference, especially for male child.

**KEY WORDS:** Gender Preference; Married Women; Urban; Epidemiological Factors


## INTRODUCTION

The overall sex ratio in India has increased to 940 as per 2011 census against 933 as given by 2001 census. However, the area of grave concern is that the child sex ratio plummeted to 914 from 927 in 2001.<sup>[1]</sup> Maharashtra recorded decline of 30 points in child sex ratio between 2001 and 2011. According to 2011 census, child sex ratio for rural Maharashtra is 880 as compared to 888 for urban Maharashtra.<sup>[2]</sup> Despite the existence of Preconception and Prenatal Diagnostic Technique

Act and Maharashtra being first state to enact Maharashtra regulation of the use of Prenatal Diagnostic Technique Act since 1987, there is a strong preference for sons in many societies. Not only there is a dire need to strengthen the law but also to address the varied social reasons for male child preference. Hence, the present study was conducted with the objective to know the pattern of gender preference and to study some epidemiological factors related to it among 18–35 years married women residing in an urban area.

## MATERIALS AND METHODS

The present cross-sectional study was conducted in urban field practice area of the Department of Community Medicine, Government Medical College, Nagpur. The duration of the study was from December 2015 to December 2016. Sample size was estimated to be 173, considering the prevalence of gender preference 69% (from the previous study by Davara

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*et al.*), allowable errors of 10%, and level of significance of 95%. Approval from the Institutional Ethics Committee was obtained. Data collection was done by house-to-house visit using systematic random sampling. Married women in the age group of 18–35 years residing in study area were interviewed using structured pretested questionnaire after obtaining written informed consent. Widows, separated or divorced, and those women who or their spouse have undergone permanent sterilization were excluded from the study. If there were two married women in the age group of 18–35 years in a house, then both women were selected as study participants. If there was any locked house or the woman who does not fit to eligibility criteria or if there was no woman in the house, then next house was approached and the process was followed till sample of 200 was reached.

### Statistical Analysis

Descriptive statistics were used to summarize baseline characteristics of the study subjects. Association between two categorical variables was analyzed using Chi-square test.  $P < 0.05$  was considered to be statistically significant.

## RESULTS

Mean age of study subjects was  $25.29 \pm$  standard deviation 3.22 years. All 200 (100%) study subjects were literate with most, i.e., 90 (45%) having completed intermediate or post-high school diploma and 61 (30.5%) were graduate or postgraduate. Maximum study subjects 189 (94.50%) were homemaker. Maximum study subjects 102 (51%) belonged to lower middle Class-III, followed by 53 (26.50%) to upper middle Class-II and 37 (18.50%) to upper-lower Class-IV. None of the study subjects belonged to lower Class-V.

Among 200 study subjects, maximum belonged to nuclear family 75 (37.5%), followed by 70 (35%) to joint family and 55 (27.5%) to three-generation family.

Gender preference was found among 123 (61.5%) study subjects while 77 (38.5%) had no preference. In the present study, gender preference was significantly higher in study subjects in 20–25 years of age group of 69 (71.13%). It was found that as age increases gender preference decreases. Gender preference was found to be statistically significant with age. No statistically significant association of religion, education, occupation, and type of family was found with gender preference [Table 1].

Among 123 subjects with gender preference, the preference for male child was seen in 75 (60.98%), while 48 (39.02%) had a preference for female child. A preference for male child was significantly higher in study subjects in 20–25 years age group, and female child preference was higher in the age group of 26–30 years. The preference for male child was found to be statistically significant with age. Furthermore,

preference for male child was significantly higher in study subjects having one and two daughters [Table 2].

In the present study, the most common perceived reasons for male child preference among 75 study subjects were to carry forward family name 29 (38.67%) followed by support in old age 28 (37.33%). Other reasons were as follows: Source of income 13 (17.33%), may take social responsibility 2 (2.67%), to perform last rites 1 (1.33%), pressure from family members 1 (1.33%), and to support females in family 1 (1.33%).

The common perceived reasons for female child non-preference among these 75 study subjects were daughters who are not going to stay with parent permanently 36 (48%) followed by dowry problems 24 (32%). Other reasons were as follows: Girl child needs more careful rearing 11 (14.67%) and females are economical liability 04 (5.33%).

Common perceived reasons for female child preference among 48 study subjects were: Already having a male child 26 (54.17%) followed by takes cares of parents better than males 10 (20.83%). Other reasons were as follows: Supports in old age 6 (12.5%), brings pride and wealth to family [ghar ki laxmi in hindi] 3 (6.25%), no daughter in family 2 (4.17%), and help in household works 1 (2.08%), of 48 study subjects. The perceived reasons for male child non-preference were: Already having a male child who is sufficient for supporting in old age and continuing family name 43 (89.58%) followed by male child may not necessarily support in old age 5 (10.42%).

## DISCUSSION

In the present study, gender preference was significantly associated with age but not with religion, education, occupation, and type of family. The preference for male was statistically significant with age and presence of one or more daughters. The most common perceived reasons for male preference were to carry forward family name and support in old age. The common perceived reasons for female non-preference were daughters who will not stay with parents permanently and dowry problems. The most common perceived reason for female preference and male non-preference was already having a male child.

The present study found statistical significant association between preference for male or female child and age which is similar to the study conducted by Saha *et al.*<sup>[3]</sup> In our study, there was higher preference for male child in the age group of 20–25 years which was 72.46% while the studies conducted by Pavithra *et al.*,<sup>[4]</sup> Saha *et al.*,<sup>[3]</sup> and Nithin *et al.*<sup>[5]</sup> found that preference for male child was higher in age group of 18–20 years. In the present study, preference for female child was higher in age group of 25–30 years which was 55.56% while the studies conducted by Saha *et al.*<sup>[3]</sup> and Nithin *et al.*<sup>[5]</sup> found that the preference for female child was higher in the age group of 25–34 years (33.16%) and in 30 years and above

**Table 1:** Gender preference in study subjects as per age, religion, education, occupation, socioeconomic class, and type of family

Variables	Gender preference		Total n=200	Chi-square, df	P
	Yes n=123	No n=77			
Age group				7.39, 2	0.024
20–25	69	28	97		
26–30	40	36	76		
31–35	14	13	27		
Religion				2.41, 2	0.30
Hindu	107	64	171		
Buddha	10	11	21		
Muslim	6	2	8		
Education				4.28, 3	0.233
Graduate or postgraduate	31	30	61		
Post-high school diploma	59	31	90		
High school	23	11	34		
Middle school and below	10	5	15		
Occupation				0.24, 1	0.626
Homemaker	117	72	189		
Working	6	5	11		
Socioeconomic class				0.89, 3	0.827
I	4	4	8		
II	31	22	53		
III	64	38	102		
IV	24	13	37		
Type of family				1.36, 2	0.508
Nuclear	50	25	75		
Joint	41	29	70		
Three generation	32	23	55		

**Table 2:** Male or female child preference as per age and number of female children of subjects

Variables	Gender preference			Chi-square, df	P
	Male n=75	Female n=48	Total n=123		
Age group				8.83, 2	0.012
20–25	50	19	69		
26–30	18	22	40		
31–35	7	7	14		
Number of female children				111.1, 2	0.000
None	3	48	51		
One	65	0	65		
Two or more	7	0	7		

age group (30.8%), respectively. We found that 123 (61.5%) study subjects had preference for gender, while in the study by Davara K *et al.*,<sup>[6]</sup> gender preference was found in 69% subjects. In the present study, preference for male child was

found to be 60.98%. Similar preference was found in the study conducted by Davara *et al.*<sup>[6]</sup> and Srivastava *et al.*<sup>[7]</sup> While higher male preference of 88% and 81% was seen in studies conducted by Shalini and Kapilasrami<sup>[8]</sup> and Parida *et al.*,<sup>[9]</sup> respectively. In the present study, preference for female child was found to be 39.02%. Nithin *et al.*<sup>[5]</sup> also found similar female child preference in 44.3% of subjects, while lower female preference was seen in studies conducted by Bhattacharjya *et al.*,<sup>[10]</sup> Davara *et al.*,<sup>[6]</sup> and Kansal *et al.*,<sup>[11]</sup> i.e., 29.7%, 4.4%, and 0.9%, respectively. In our study, there was no statistically significant association found between preference for male or female child and religion which was contradictory to studies conducted by Siddiqui and Hellen,<sup>[12]</sup> Davara *et al.*,<sup>[6]</sup> and Saha *et al.*<sup>[3]</sup> In a study conducted by Siddiqui and Hellen,<sup>[12]</sup> preference for male child was higher in Hindu women which was 87.01%, while in a studies conducted by Davara *et al.*<sup>[6]</sup> and Saha *et al.*,<sup>[3]</sup> preference for male child was higher, i.e., 81.54% and 55.22%, respectively, in Muslim women. This difference may be due to predominant Hindu population in our study area, and there were very few representatives from other religions. Studies conducted by Chavada and Bhagyalaxmi,<sup>[13]</sup> Kansal *et al.*,<sup>[11]</sup> and Khatri *et al.*<sup>[14]</sup> found that the preference

for male child was higher in illiterate, i.e., 93.04%, 93.25%, and 81.9%, respectively. They found a statistically significant association between preference for male or female child and education. Our study could not find any such association between education and gender preference. It may be because none of the subjects in our study was illiterate. There was no statistically significant association found between preference for male or female child and occupation which was similar to study conducted by Deshpande *et al.*<sup>[15]</sup> and Chavada and Bhagyalaxmi<sup>[13]</sup> but contradictory to study conducted by Siddiqui and Hellen<sup>[12]</sup> and Davara *et al.*<sup>[6]</sup> There was no statistically significant association found between preference for male or female child and type of family which was similar to studies conducted by Davara *et al.*,<sup>[6]</sup> Bhattacharjya *et al.*,<sup>[10]</sup> Siddiqui and Hellen,<sup>[12]</sup> and Saha *et al.*<sup>[3]</sup> In the present study, the most perceived reason found for male child preference was to carry forward family names 38.67% followed by to support in old age 37.33%. The foremost reason for non-preference of female child was daughters are not going to stay with them permanently 48% followed by dowry problems 32%. These findings were similar to studies conducted by Chavada and Bhagyalaxmi,<sup>[13]</sup> Davara *et al.*,<sup>[6]</sup> and Lokare *et al.*<sup>[16]</sup>

Our study found significant gender preference for male child and also some epidemiological factors associated to it. However, these results need to be interpreted with certain limitations of this study such as: The study area has subjects predominantly belonging to Hindu religion and there were very few representatives from other religions, majority of study subjects in the study were homemakers and study being cross-sectional in nature, and the gender preference estimated in this study is only for the given time period and can be subjected to change in the future.

## CONCLUSION

In spite of awareness programs to decrease the gender discrimination, there is high gender preference, especially for male child in the community. Awareness campaigns should try to deal with the social reasons such as lack of social security at old age, only males being supposed to continue family line or name, and dowry issues which are prevalent in the community and which predispose for gender preference against female child.

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