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'Daughter Only' Families in India: Levels, Trends and Differentials

Harihar Sahoo¹ and R. Nagarajan²

Background

Government of India has initiated several legal measures, policies and programmes targeted towards the well-being of girls and women, particularly to promote gender equality, reduce the son preference and increase the acceptance of daughters. The results of 2011 Census that show declining trend in Child Sex Ratio (CSR) has started improving in some regions of the country, particularly in all the districts of Punjab and Haryana (the core region of gender biased sex selection) and in some districts of other states, indirectly indicating a reduction in the aversion towards the daughters. The improvement in CSR indirectly indicates the increased acceptance of daughters. Under such circumstances, it is necessary to understand the proportion of couples who stopped childbearing with only daughters and their characteristics. Besides, this will also provide insights into the changing son preference norms. Understanding the characteristics of these couples who stopped childbearing with only daughters will help the policies and programmes to increase the proportion of such couples. Hence, this study attempts to understand the levels, trends and differentials of daughter only couples in India.

Data and Methods

Data for this study were drawn from all the four rounds of National Family Health Survey (NFHS). The NFHS provides information about children ever born by sex for all ever-married women in the sample and thus make it possible to find out the extent of "daughter only" families in selected states. The analysis has been restricted to currently married women so that complications due to marriage dissolution are avoided. Therefore, the study restricts the analysis to currently married women age 15-49 with only daughter/s who are either sterilized or their husbands are sterilized. Further, if the women who are neither sterilized nor their husbands are sterilized but do not want any more children are also considered as "daughter only" families. Women who have experienced any male child loss but currently have only daughter/s are considered as families with both sexes of children. To find out how the "daughter only" families vary across the background characteristics, a set of background characteristics has been considered, such as current age of women, place of residence, educational level, caste, religion, wealth index and region. The bivariate and multivariate (binary logistic regression) analyses have been used to identify the factors responsible for determining the "daughter only" families.

Results

Daughter only families

The results revealed that the daughter only families (i.e., percentage of daughter/s only families among currently married women who have either sterilized or do not want any more children) have increased from 5 percent in 1992-93 to 9 percent in 2015-16 (Figure 1). However, when considering only sterilized couples, it has increased from 3.8 percent in NFHS-1 to 7.2 percent in NFHS-4 (Figure 1).

¹Assistant Professor, Department of Development Studies

²Professor, Department of Development Studies

Daughter only families across the states

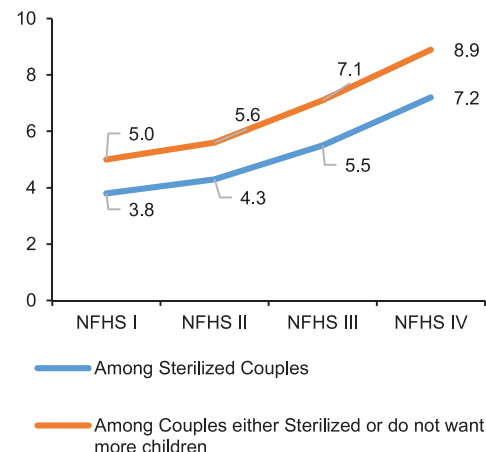
Table 1 presents percentage of daughter/s only families among currently married non-pregnant women who have been either sterilized or do not want any more children by states. As per the NFHS data, the percentages of daughter only families have increased in many states. However, there is a visible regional pattern. In southern states (Kerala, Tamil Nadu, Puducherry, Karnataka, Andhra Pradesh and Telangana), the daughter only families are higher (above 10 per cent in NFHS-3 & 4). On the other hand, in bigger north, central, and western states (Uttar Pradesh, Madhya Pradesh, Rajasthan, Punjab, Haryana, and Bihar), where the patriarchal norms are deep rooted, and the daughter only families are lower to the extent of less than 5 percent in NFHS-4. The results also revealed a huge regional variation in daughter only families in India. Most of the states above the national level are distributed in south, eastern and northeastern regions.

Table 1: Percentage of daughter/s only families among currently married non-pregnant women who have been either sterilized or do not want any more children by states, India.

States	NFHS I	NFHS II	NFHS III	NFHS IV
North				
Chandigarh	NA	NA	NA	9.3
Delhi	5.6	5.5	7.5	6.9
Haryana	1.0	1.5	2.6	2.5
Himachal Pradesh	2.2	3.7	5.4	7.5
Jammu and Kashmir	2.3	2.8	3.9	6.2
Punjab	2.0	2.0	2.9	4.1
Rajasthan	1.2	1.3	2.1	2.8
Uttarakhand	#	#	3.6	4.5
Central				
Chhattisgarh	@	@	4.7	6.1
Madhya Pradesh	3.3	2.0	2.6	4.5
Uttar Pradesh	2.3	1.9	2.4	3.3
East				
Bihar	2.5	2.4	2.0	2.9
Jharkhand	+	+	NA	4.6
Odisha	4.6	4.7	7.2	10.1
West Bengal	7.8	10.0	12.7	16.1
Northeast				
Arunachal Pradesh	4.6	4.6	4.6	6.6
Assam	2.9	5.9	10.0	11.0
Manipur	1.3	1.6	4.9	7.5
Meghalaya	8.2	6.3	8.9	9.5
Mizoram	6.1	5.5	5.0	7.8
Nagaland	8.2	3.2	6.5	8.7
Sikkim	NA	9.9	14.0	16.0
Tripura	6.1	12.6	16.3	20.3
West				
Dadra & N. Haveli	NA	NA	NA	8.8
Daman & Diu	NA	NA	NA	6.2
Goa	8.0	12.3	13.9	17.5
Gujarat	2.8	3.3	3.4	6.5
Maharashtra	4.6	3.9	6.7	8.9
South				
Andaman & Nicobar Isl.	NA	NA	NA	16.8
Andhra Pradesh	8.5	9.0	12.7	15.7
Karnataka	5.7	8.7	11.5	12.9
Kerala	14.0	16.2	21.9	20.1
Lakshadweep	NA	NA	NA	12.9
Puducherry	NA	NA	NA	19.8
Tamil Nadu	10.3	12.1	14.5	17.0
Telangana	\$	\$	\$	13.7
India	5.0	5.6	7.2	8.9

Note: NA: Not-available; @, +, #, \$: clubbed with Madhya Pradesh, Bihar, Uttar Pradesh and Andhra Pradesh respectively

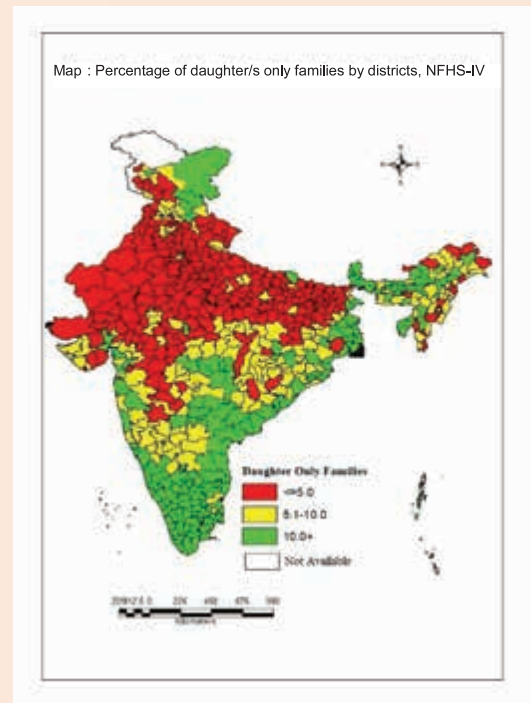
Figure 1: Percentage of daughter/s only families in India



In the southern states, the total fertility rate (TFR) has already reached below replacement level. In normal circumstances, if TFR is 2 and there is no gender bias in sex selection, about 50 percent of the couples are expected to have children of both sexes, about 25 percent are expected to have only male child, and another 25 percent only female child. None of the states with below replacement level fertility has reached the level of 25 percent of female child in NFHS-4 indicating some amount of continuing gender bias even in low fertility states also. However, many of the low fertility states have higher proportion of daughter only families compared with the higher fertility states (above replacement level fertility). The proportion of daughter only families in many of the bigger states (Uttar Pradesh, Madhya Pradesh, Bihar, Rajasthan, Punjab, Haryana, Uttarakhand and Jharkhand) are dismally low, five or less than five percent even in NFHS-4, indicating the continuance of a very strong son preference.

District-wise variations in daughter only families

As the NFHS-4 sample allows district-level estimates, we have calculated the proportion of daughter only families at the district-level for all the 640 districts of India (Census 2011). The state-level estimates confirm the district-level variation in daughter only families. The proportions of daughter-only-families are higher (above 10 per cent) in most of the districts of Southern India. The low prevalence (less than 5 per cent) daughter only families are mostly distributed in central, northern and western parts of the country, confirming the north-south divide in gender norms (Map). Among the top 20 districts (above 20 per cent), 13 are from the two southern most states of Kerala Tamil Nadu and additional 4 are from Puducherry and Karnataka. The top 20 districts are almost close to the biological normal proportion of daughter only families. Whereas, the bottom 20 districts (1.5 per cent or less) are mainly spread in northern and western regions of India, indicating the severe daughter aversion.



Differentials in daughter only families

The bivariate analysis reveals that the proportion of daughter only families is higher among the younger, educated, urban, wealthier and southern families which indicates the changing gender norms and reducing patriarchal values among them. Earlier studies have also indicated that the sex ratio at birth among the educated, urban, wealthier households was much skewed than among their less educated, rural and less wealthier counterparts. The NFHS-3 & 4 results indicate that the acceptance of daughters among the educated, urban, and wealthier households is increasing.

The binary logistic regression results also confirm that, the younger cohorts of women are increasingly accepting daughters compared with their older counterparts. There is a strong effect of education on the daughter only families across the survey periods. With increasing level of education, the odds of having daughter only families increase consistently. Controlling the effect of other variables, the prevalence of daughter only families is found to be 3.5 times (NFHS 2 & 3) and 2.8 times (NFHS-4) higher among women belonging to higher educational level compared with their counterparts in 'no education' category. There is a clear positive and statistically significant effect of educational level on daughter only families. The prevalence of daughter only families is observed to be 1.2 to 1.4 times higher among the upper castes (Others) compared with the Scheduled Castes (SCs). Differentials in daughter only families by religion show that compared with Hindus, Muslims and Sikhs are less likely to have daughter only families.

The acceptance of daughter only families is higher in urban areas than rural areas across the four survey periods and it is statistically significant. As the wealth index increases from the poorest to richest, the likelihood of daughter only families increase significantly. Compared with the northern region, the odds of having daughter only families increase 4 to 5 times in the southern region across the four survey periods. Southern region has the highest proportion of daughter only families in the country. Similarly, the odds for east and northeastern regions increase 2 to 3 times compared with northern region. The odds of daughter only families for western and central regions lies in between southern, eastern, northeastern regions. Clearly, region plays an important role in gender norms of the society even after controlling for background characteristics like age, education, residence, caste and wealth.

Conclusion

Strong preference for sons in India makes couples continue childbearing till they get a son. The secular decline in fertility further intensified the preference for sons and couples have started resorting to gender biased sex selection to produce a son. This has resulted in skewed sex ratios at birth in many regions of the country due to the selective elimination of female fetus. As per the latest round of NFHS-4 (2015-16), the percentage of daughter only families among currently married women who are either sterilized or do not want any more children is about nine percent, an increase from five percent in NFHS-1 (1992-93). The percentage of daughter only families varies greatly across the regions, being higher in southern region compared with the central, northern and western regions. The characteristics of the couples who have stopped childbearing only with daughters provide further insights about the reduction in daughter aversion in the society.

The results of bivariate analysis of data by background characteristics reveal that the proportion of daughter only families is higher among younger women, women having higher education, upper caste households, households residing in urban areas and richer households. The binary logit regression analysis further confirms that younger age of women, higher educational attainment of women, residence in urban areas, higher wealth index of the household and southern, eastern and north-eastern regions have significant positive effects on the acceptance of daughters. The study indicates that the reduction in daughter aversion is initially emerging among younger, educated, urban, and richer couples and this trend is expected to percolate among other social and economic categories of the population in the near future. The gradual increase in acceptance of daughters reveals weakening of rigid patriarchal norms and son preference in the country. The results also reveal that over a period of time there is an increasing trend in the acceptance of daughters in southern states while the increase is slower in northern, central and western states indicating the north-south divide in gender norms.

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