Original Article

GENDER PREFERENCE, ATTITUDE AND AWARENESS OF YOUNG ELIGIBLE COUPLES TOWARDS PRE NATAL SEX DETERMINATION IN LUCKNOW DISTRICT

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ABSTRACT

Background: Falling sex ratio is a major concern. Gender preference of young couples, their attitude towards pre natal sex determination and awareness regarding related social issues plays an important role in determining their practice and needs to be studied.

Materials and Methods: This was a cross-sectional; community based descriptive study conducted in Lucknow district from August, 2012 to April, 2013. Couples were interviewed using a pre tested, semi structured questionnaire. Gender preference was assessed using the Coombs scale and attitude towards pre natal sex determination was elicited with the help of a case study. Multi stage random sampling technique was adopted to select the couples. A total of 308 couples were interviewed.

Results: Son preference was observed among 64.6% of the couples while 28.1% couples were in favour of pre natal sex determination. Overall 72.1% couples were aware of unfavourable sex ratio in the country and 74.7% were aware of the harmful effects of declining sex ratio on the society. Majority (93.2%) knew that pre natal sex determination is a crime but only 1.6% were aware of the punishment for the offence.

Conclusion: The study clearly shows that son preference and pre natal sex determination still finds favour with a substantial proportion of young couples and emphasises the need for proper counselling and behaviour change communication among them.

Keywords: Gender preference, Attitude towards pre natal sex determination, Coombs scale, Eligible couples

INTRODUCTION

Over the past decade, gender equality has been explicitly recognized as a key not only to the health of nations, but also to their social and economic development.[1] Its importance is further emphasised by the fact that'promotion of gender equality and women's empowerment' finds itself in the list of Millennium Development Goals (MDG).[2]However it still remains a farfetched dream in many societies and cultures across the globe. Norms in such societies and cultures somehow make males more socially and economically valuable than females. This invariably leads to a strong desire among young couples for having sons and not daughters or having more sons than daughters.This 'desire for a son' or 'son preference' has its own manifestations and implications, both for the family and the society.At the macro or the society level, son preference results in highly skewed sex ratios.At the individual and family level, the primary consequence of son preference is in the form of intense pressure placed on women to produce a male child. With an overall decline in fertility, son preference is now jutting up against desires for smaller families.[3] Also with the advent of technologies such as ultrasound imaging to determine foetal sex and the practice of sex-selective abortions, choosing boys without having to resort to infanticide has been facilitated. Hence persistence of son preference with decreasing fertility levels and availability of technologies to determine foetal sex is proving to be a nightmare for demographers and policy makers across the globe.In India, the prenatal diagnostic techniques arrived in1975 for determination of genetic abnormalities.

However these techniques are being widely misused for determining the sex of the foetus and subsequent abortions if the foetus is female.[4]To prevent this practice of sex selective abortions using the prenatal diagnostic techniques, Government of India enacted the PNDT (Regulation and Prevention of Misuse) Act in 1994. Subsequently this Act was amended in 2002 and 2003 to Pre-conception and Pre-natal Diagnostic Techniques (PC & PNDT), Prohibition of Sex Selection Rules. However these legal efforts have not been able to curb the practice.Research on son preference and attitudes towards pre natal sex determination in India has been very sparse and leaves a lot to be desired especially when it concerns the most populous state of India, Uttar Pradesh. Looking at the number of factors it influences and its serious implications, thorough and in depth studies on Gender preference is needed. The present study thus attempts to knowthe gender preference of young eligible couples of Lucknow, to study their attitude towards pre natal sex determination and also to assess their knowledge regarding issues pertaining to sex determination

METHODOLOGY

This was a community based, cross sectional, descriptive study. It was conducted from August, 2012 to August, 2013. Young eligible couples (currently married coupleswith not more than two children with female partner in the reproductive age group that is between 15-45 years) were interviewed using a pre tested, semi structured questionnaire.Sample size was calculated based on the result of a previous study conducted by-Shrivastava S Et Alwho found the prevalence of son preference amongst married women in rural population of Bareilly district to be 84 %.[5] Absolute precision of 5% and design effect of 1.5 were used to calculate the final sample size which came up to be 308. Multi stage random sampling method was used to select the eligible couples. Stratification, simple random sampling and EPI random walk methods were applied at relevant stages of sampling.The questionnaire consisted of four sections - a) Questions to know the biosocial and economic status of the couple, b) Coombs scale for eliciting the Gender preference of the couple,[6]c) A case study to elicit the attitude of young eligible couples towards pre natal sex determination andd) Questions pertaining to awareness of issues related to pre natal sex determination. Coombs scale which was used in section b provides a measure of gender preference or desired familial sex composition (known as the IS scale). It places respondents on a continuum of sex preferences ranging from one (extreme girls' preference) to seven (extreme boys' preference). The complete scale is grouped as follows: girls' preference (IS 1-3), balanced preference (IS 4) and boys' preference (IS 5-7). Data required to locate a respondent on the IS scale is obtained from a series of three questions, each of which asks the respondent to choose one of two combinations of boys and girls that they would like to have if they could begin child bearing over and achieve completed family size of three. The case study which was used in section c was designed for eliciting the attitude of young eligible couples towards pre natal sex determination. The respondent couples were told about a particular case and questions relating to it were asked. Based on their responses the couples were classified as having an attitude which was either 'Not in Favour', 'In Favour' or 'Strongly in Favour' of pre natal sex determination.If there was a difference of opinion between the partners with respect to questions of component b and c, the opinion/answer of the female partner was considered as the final opinion of the couple. For questions of component d, a couple was considered to be aware/knowledgeable of the issue if either or both the partners came up with the right answer.A joint interview was conducted with both the male and female partners together after both of them consented for it. Interviews were scheduled during late afternoons/evenings or on holidays so as to ensure that both partners were present at home In case if either of the partners was not present during the visit, a suitable time was sought when both would be available and the interview was then conducted at that time. Looking at the sensitive nature of the topic of our study, efforts were made to build a quick rapport with the couple before starting the interview. Help of a local health worker (ASHA/ANM/Anganwadi Worker) was sought for the same. Couples were also assured that their responses would be kept confidential.Data entry and analysis were done using the Statistical Package for Social Sciences (SPSS) for Windows software (version 17.0; SPSS Inc, Chicago).

RESULTS

Out of 308 interviewed eligible couples, maximum (87.7%) were Hindus. Among the female partners,more than half (53.9%) belonged to the age group of 15-24 years while very few (5.5%) were equal to or above 35 years. Among male partners, almost two thirds(65.6%) belonged to 25-34 years age group while only 15.3% were equal to or above 35 years.Educational profile of the female and male partners revealed that illiteracy among female partners(16.2%) was more as compared to male partners(10.4%). However those educated till graduate level or above were more among female partners (17.2%) as compared to male partners (16.2%). Most of the couples (64.7%) lived in joint families and nearly half (50.3%) belonged to socio-economic class 4.

In all, maximum couples (64.6%) were found to prefer sons over daughters where as only a small fraction (22.0%) preferred daughters over sons. The remaining (13.4%) were found to have neutral preferences as per the Coombs scale.Extreme son preference (IS score 7) or extreme daughter preference (IS score 1) was seen in very few couples.

Table 1: Distribution of eligible couples with respect to their biosocial profile (n=308)

Characteristic	Number	Percentage
Age of female partner (in completed years)		
15-24	166	53.9
25-34	125	40.6
≥ 35	17	5.5
Religion		
Hindu	270	87.7
Muslim	38	12.3
Caste		
SC&ST	78	25.3
OBC	149	48.3
Others	81	26.4
Place of residence		
Rural	112	36.4
Urban	196	63.6
Education of female partner		
Illiterate	50	16.2
Primary-Middle school	114	37.1
High School-Intermediate	91	29.5
Graduation-Professional	53	17.2
Type of family		
Nuclear	109	35.3
Joint	199	64.7
Socio-economic status*		
Class 1	2	0.6
Class 2	27	8.8
Class 3	96	31.2
Class 4	155	50.3
Class 5	28	9.1

*Modified Prasad's classification

Maximum couples (45.1%) had an IS score of 5 which indicates a slightly more preference for sons than daughters.Among couples residing in rural areas an overwhelming majority (75.8%) had preference for sons while of all the couples residing in urban areas, a substantial proportion (29.6%) preferred daughters.

The overall mean IS score was 4.57. The difference in the mean IS score of couples residing in rural and urban areas was found to be highly significant.

Attitude of couples towards pre natal sex determination was elicited on the basis of their response to a case study presented to them during the interview. Two couples refused to answer our questions pertaining to the case study and hence have not been included. It was observed that out of all the couples, more than a quarter (28.1%) was in favour of pre natal sex determination with 13.4% of the couples strongly favouring it. In rural areas, 41.8% were in favour of pre natal sex determination while in urban areas the figure was relatively less (20.4%).

Couples residing in rural areas were more likely to be in favour of pre natal sex determination than couples residing in urban areas.

Of the total 308 couples, almost all (99.3%) were aware of at least one method of pre natal sex determination with all the couples from urban areas knowing at least one method.Around a quarter (24.3%) was aware of a place where SDT was done.

Table 2: Gender preference of eligible couples in terms of IS score (Coombs scale) (n=308)

Place of residence	Gender preference (Coombs IS score)									Mean ± SD	p value
	Daughter preference				Neutral	Son preference					
	1	2	3	Total	4	5	6	7	Total		
Rural	0(0)	3(2.7)	7(6.3)	10(9.0)	17(15.2)	55(49.1)	25(22.3)	5(4.4)	85(75.8)	4.96 ±1.03	0.00*
Urban	4(2.0)	9(4.6)	45(23)	58(29.6)	24(12.2)	84(42.9)	29(14.8)	1(0.5)	114(58.2)	4.36 ±1.24	
Total	4(1.3)	12(3.9)	52(16.8)	68(22.0)	41(13.4)	139(45.1)	54(17.6)	6(1.9)	199(64.6)	4.57 ±1.20	

Figures in brackets represent row percentages

Table 3: Distribution of eligible couples according to their attitude towards pre natal sex determination

Place of residence (n=306)	Totalnumber of eligible couples	Attitude towards pre natal sex determination			p value
		Strongly in favour (%)	In favour (%)	Not in favour (%)	
Rural	110	27 (24.5)	19 (17.3)	64 (58.2)	0.00*
Urban	196	14 (7.1)	26 (13.3)	156 (79.6)	
Total	306	41 (13.4)	45 (14.7)	220 (71.9)	

Table 4: Distribution of eligible couples with respect to awareness regarding facts and issues related to pre natal sex determination (n=308)

Question(n = 308)	Urban		Rural		Total	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Aware of methods of sex determination.	196 (100)	0	110 (98.2)	2 (1.8)	306 (99.3)	2 (0.7)
Aware of place where SDT is done	40 (20.4)	156 (79.6)	35 (31.2)	77 (68.8)	75 (24.3)	233 (75.7)
Aware of declining sex ratio	142 (72.4)	54 (27.6)	80 (71.4)	32 (28.6)	222 (72.1)	86 (27.9)
Aware of adverse effects of female foeticide on the society	156 (79.6)	40 (20.4)	74 (66.1)	38 (33.9)	230 (74.7)	78 (25.3)
Aware that pre natal sex determination is a crime	184 (93.9)	12 (6.1)	103 (91.9)	9 (8.1)	287 (93.2)	21 (6.8)
Aware of the punishment of offence	4 (2.1)	192 (97.9)	1 (0.8)	111 (99.2)	5 (1.6)	303 (98.4)

Couples belonging to rural areas (31.2%) were more aware of a place for SDT than couples of urban areas (20.4%).Majority(72.1%) were aware of the declining sex ratio. The awareness was similar in both rural (71.4%) and urban areas (72.4%). Also most of the respondents (74.7%) were aware of the harmful effects of female foeticide on the society. The awareness was more in urban areas (79.6%) as compared to rural areas (66.1%). Regarding awareness about pre natal sex determination being a crime, 93.2% said that they were aware of this fact. However very few (1.6%) were aware of the amount of punishment under the PCPNDT act.

DISCUSSION

The present study was undertaken to know the gender preference of eligible couples of Lucknow, to study their attitude towards pre natal sex determination and also to assess their knowledge regarding issues pertaining to sex determination. Out of the 308 couples who were interviewed, 64.6% were found to have son preference. According to NFHS- 3**,** son preference was observed in every fifth couple in India (20%) and preference for daughters was present only in 2-3% of women.[1] This finding is very different from the finding of current study and this may be because NFHS survey estimated gender preference of married women by asking them just a single question about their ideal family size andcomposition. Married females, when asked such questions usually tend to go by their already existing sex compositions and family size there by obscuring their true preferences. A few other studies done in India have also assessed gender preference of respondents based on single valued statements about the number and sex of children wanted**.** The reported gender preference of respondents in these studies varies between 22.2% and 88%.[5,7,8,9,10]Coombs scale, which was used in this study, howeverhas proved to be more effective in predicting gender preferences than single statements.[11]This is perhaps because Coombs scale takes into account first, second, third and fourth choices and is responsive to choices beyond the first stated preference. It measures an underlying preference structure which may differ considerably from the first statement. In a studyon women's family power and gender preference in Minya, Egypt which used the same Coombs scale to elicit gender preference, it was observed thaton an average, married women preferred sons (IS mean score= 5.03), and 67% of them reported at least some son preference.[12]The finding is similar to that of the current study. Another study in Mbeya region of Tanzania found son preference to be present in 88% of the male respondents using the same Coombs scale. Extreme daughter preference was found in very few respondents (1.3%) although extreme son preference was noted among14.2% of them.[11]The current study revealed that28.1% couples favoured pre natal sex determination with 13.4% strongly favouring it.Looking at the sensitive nature of the topic as well as the fact that couples may not spell out their true attitudes on being questioned directly, a case study was used to assess the attitude towards pre natal sex determination. However most of the previous studies reviewed have assessed attitude towards pre natal sex determination by direct questioning. Favourable attitude towards pre natal sex determination varied between 9.5% and 72.3% in these studies.[5,13,14,15]The present study also found that almost all couples (99.3%) were aware of at least one method of pre natal sex determination with all couples from urban areas knowing at least one method. A hospital based studyfound that 95% ante natal womenwere aware of the availability of a method for intrauterine sex determination.[16]Another study on declining sex ratio in selected districts of Punjab and Haryana found that all the respondents were aware of USG as a method of pre natal sex determination.[17] The present studyshowed that 24.3% coupleswere aware of a place where SDT (sex determination test) was done. While 21.4% of couples of urban areas were aware of a place for SDT, 31.2% couples of rural areas were aware of the same.**A** study conducted in slums of Chandigarh found that 11.6% of married women were aware of a place for sex determination.[7] This study revealed that 72.1% of the respondents were aware of the declining sex ratio while 93.2% were aware that pre natal sex determination is a crime,. However very few (1.6%) couples were aware of the amount of punishment under the PNDT act. Also majority (79.6%) were aware of the adverse effects of female foeticide on the society.**A** study conducted in a tertiary teaching hospital of Mumbai found that out of 105 women, 96 (91.4%) were aware that sex determination can be done by USG. 81 (77.1%) women regarded determining sex of the foetus as a crime. Out of 143 women, only 49 (34.3%) women knew about Pre Natal Diagnostic Techniques [PNDT] Act and 80.5% women were unaware of the legal punishment for sex determination.[14]

CONCLUSION

The study clearly shows that despite rapid social and economic progress over last few decades, age old norm of son preference is very much prevalent. This emphasises the need for comprehensive BCC activities among young eligible couples for promoting the virtue of gender equality amongst them. Need for stronger implementation of existing legal measures like PCPNDT Act and also creating awareness about them is felt. There is also a scope of improvement in terms of knowledge about declining sex ratio and adverse effects of female foeticide. IEC pertaining to these issues must be promoted.

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