International Journal of Scientific Reports
Magar AA et al. Int J Sci Rep. 2020 Aug;6(8):316-321
http://www.sci-rep.com
pISSN 2454-2156 | eISSN 2454-2164
DOI: http://dx.doi.org/10.18203/issn.2454-2156.IntJSciRep20203115

Original Research Article

Gender preference among pregnant women in Nepal

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Received: 29 March 2020
Accepted: 27 April 2020

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ABSTRACT

Background: Nepalese society is traditionally patriarchal and son-preferred with increasing numbers of sex-selective abortions. In this context, this study aims to assess the gender preference and associated factors among pregnant women visiting the antenatal care ward of a large public maternity hospital in Kathmandu, Nepal.
Methods: A hospital-based cross-sectional study was carried out among 821 antenatal women. Data was collected via face to face interview with structured questionnaire, and gender preference was assessed using Coombs' scale.
Results: At the first instance, more than half 56.2% respondents wished to have two sons and one daughter if they were to have only three children. On asking further questions as per the Coombs' scale, about 40% of the respondents had son preference falling in IS scale 7-5, 33% had balanced IS-4, and 27% had daughter preference (IS 3-1). The respondent characteristics significantly associated with gender preference were ecological region (p=0.007), education (p=0.009), marital duration (p=0.044) and parity 0.32.
Conclusions: The wish to have son is prevalent among the respondents followed by a mixed gender of children. Educational status, ecological region, and parity explain this differential wish. Women's education and autonomy are the areas to tackle with sex bias of offspring.

Keywords: Gender, Preference, Coombs' scale, Nepal

INTRODUCTION

There has been decline in fertility and explicit preference for smaller families in most parts of East and South Asia.[1] Aborting a fetus of the undesired sex or halting childbearing only after achieving the desired sex composition of children is common practice in this region.[2] The sex selective abortion inflates the sex ratio at birth and lowers fertility.[3] Sex ratio is a significant social indicator measuring status and equity between male and female in the society indicating gender preference. Nepalese society is patriarchal and son-preferred. Sex-selective abortion is rising and is one of the major causes of imbalances in the sex ratio in Nepal.[4,5] Legalization of abortion in 2002 in Nepal has further led to the sex selective abortion and activists estimate that around 50,000 unborn babies are aborted in Nepal every year after parents find out through ultrasound scans that they are girls.[6]

Gender preference affects contraceptive use, pregnancy rates, average number of siblings, sex distribution of children, birth intervals, and duration of postpartum abstinence.[7-10] Further, the risk of postnatal depression in the mothers having baby girls is higher because such mothers often experience domestic violence.[11] There is limited research about women's preferences for sex of the child across castes, ethnicities, and ecological areas of Nepal, even though this is an important issue in addressing the unbalanced sex ratio and managing the overall demographic transition in the country.[12] Hence, the study was carried out to estimate the gender preference and identify associated factors among the pregnant women in Kathmandu, Nepal.

METHODS

Study area and setting

The research was conducted in Ante-Natal care out-patient department (ANC-OPD) of Paropakar Maternity and Women's Hospital in Kathmandu for the duration of 6 months (September 2018 to February 2019). This is a tertiary public maternity hospital with high flow of the pregnant women coming for the ANC and delivery care. The hospital receives more than 5000 ANC visits monthly, and the hospital record showed that there was a total of 68111 ANC visits in the year 2018.

Study design and sampling

This is a hospital based cross-sectional study. A sample of 821 pregnant women were included in study. Pregnant women of any gestation week who came for the antenatal visit in ANC OPD of the Paropakar Maternity and Women's Hospital were randomly selected. About 17 samples were recruited each day over the two months duration.

Data collection procedure

Pretested semi structured questionnaire was used as the research tool and data was collected via face to face interview method. The questionnaire included three sections consisting of socio-demographic information, obstetric characteristics and gender preference related information. the questionnaire was first prepared in English. We adopted the Coombs' scale questions to seek gender preference. The questions were translated into Nepali, pre-tested and used.

Study variables and data analysis

Dependent variable is gender preference and was assessed using the Coombs scale where women were asked questions regarding their sex preferences for children, each question offering different scenarios. Respondents were given to choose their ideal scenario if they had an opportunity to bear only three children throughout their lifetime. A minimum odd number was used to maximize the biases of respondents' gender preferences. Using these questions, each respondent's IS position was estimated.

First, respondent was asked, "if you were to have only three children, would you most like to have three girls, one boy and two girls, two boys and one girl, or three boys." If the respondent answered three boys, she was in the IS 7 position (extreme boy preference), and if she answered three girls, she was in the IS 1 position (extreme girl preference).

If she answers either one boy and two girls or two boys and one girl, she was further asked what her next preference would be excluding the combination she chose (second scenario). If she answered two boys and one girl in her first question, she was further asked what her alternate preference would be if she could not have that proportion. If her second choice was three boys, she was IS 6 (relatively strong boy preference).

If instead she answered two girls and a boy, she was again questioned as to what she would want if she could not have that proportion (third scenario). If she answered three boys, she was IS 5 (weak boy preference), and if she answered three girls, she was IS 4, indicating a preference for balance. The same procedure was followed if the respondent answered two girls and a boy to the initial question to identify her as IS 2 to IS 4.[13,14]

In this way, we categorize the gender preference in three categories: son preference (IS 7 to 5), balanced (IS 4) and daughter preference (3 to 1). Independent variable included were age, ethnicity, religion, working status, marital duration, type of family, type of marriage, marital duration, parity, age at first pregnancy, previous child history, and history of abortion/miscarriage of the respondent. The data was analysed using descriptive statistics and bivariate analysis (Chi-square test) in SPSS version 21.

Ethical considerations

Written informed consent was taken from all respondents for the interview and the purpose of the study and procedures were clearly explained to them. Ethical approval was taken from the Institutional Review Committee (IRC Ref. No. 187/075/076-IRC) of B. P. Koirala Institute of Health Sciences, Dharan.

RESULTS

Sample characteristics

The demographic and obstetric characteristics of the respondents were shown in (Table 1). The mean age of respondent was 24.84±4.48 years. Majority were from hilly region 75.4%, were Hindu 79.5, were literate 92.7% and lived in joint family 66.5%. More than one-third of the respondents belonged to disadvantaged Janajatis 38.48% and were upper caste 35.07%. The mean age of marriage of the respondent was 20.40 (SD=3.67) years.

More than half 55.81% of the respondents chose their partners themselves (love marriage) and had marital duration of less than five years 62% at the time of interview. Majority of the respondents were in their third trimester 61.88% and were primiparous 60.3%.

Among multiparous women, majority 80.4% had babies within 2 years of marriage and more than half 58.9% had at least one son. About 15% of the respondents had history of abortion. Among those who had history of abortion, 26% had induced abortion.

Table 1: Respondent demographic and obstetric characteristics (n=821), Kathmandu, Nepal 2019.

Characteristics	Category	Frequency N (%)
Ecological region	Mountain	102 (12.4)
	Hilly	619 (75.4)
	Terai	100 (12.2)
Religion	Hindu	653 (79.5)
	Buddhist	133 (16.2)
	Christian	20 (2.4)
	Muslims	15 (1.8)
Ethnicity	Upper caste	288 (35.0)
	Relatively advantaged	134 (16.3)
	Janajatis disadvantage Janajati	316 (38.48)
	Muslims	15 (1.82)
	Dalit	68 (8.31)
Education	Illiterate	60 (7.3)
	Literate	761 (92.7))
Occupation	Employed	221(26.9)
	Unemployed	600 (72.1)
Marital duration (in years)	<5	509 (62.0)
	5-10	224 (27.3)
	>10	88 (10.7)
Family type	Nuclear	275 (33.5)
	Joint	546 (66.5)
Pregnancy	First trimester	15 (1.8)
	Second trimester	298 (36.3)
	Third trimester	508 (61.9)
Parity	0	495 (60.3)
	1	274 (33.3)
	2	48 (5.9)
	>2	4 (0.5)
History of abortion	Yes	123 (15.0)
	No	698 (85.0)

Gender preference and associated factors

In the first scenario when the respondents were asked to choose one gender combination if they were to have only three children, more than half 56.2% replied two sons and one daughter. Table 2 shows the choices of gender combinations in subsequent scenario.

The distribution of respondents according to IS scale was shown in (Figure 1) and about 40% of the respondents had son preference (IS 7-5), 33% had balanced (IS 4) and 27% had daughter preference (IS 3-1).

In bivariate analysis (Table 3), the respondent characteristics significantly associated with gender preference were ecological region (p=0.007), education (p=0.009), marital duration (p=0.044), and parity (0.032). Among the son preference, higher percentage is in hills (69.5%) followed by Terai (15.4%).

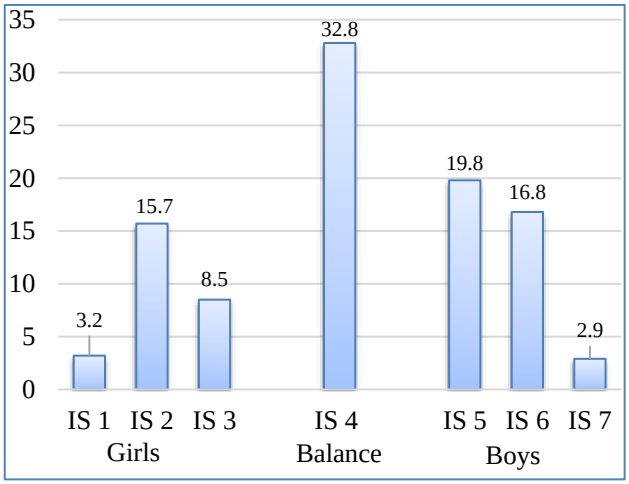

Figure 1: Percentage distribution of gender preferences (IS scale) among pregnant women, Kathmandu, Nepal 2019.

Table 2: Gender preference of respondents in Coombs' scale, Kathmandu, Nepal 2019 (n=821).

Coombs scale question	Options	N (%)
First scenario		
If you were to have only three children, which combination would you choose? (n=821)	Three sons	24 (2.9)
	Three daughters	27 (3.3)
	Two sons and one daughter	461 (56.2)
	Two daughters and one son	309 (37.6)
Second scenario		
The other choices excluding the one chosen in the first scenario	Those who choose two sons and one daughter (n=461)	
	Three sons	130 (15.8)
	Three daughters	34 (4.2)
	Two daughters and one son	297 (36.2)
	Those who chose two daughters and one son (n=309)	
	Three sons	8 (0.9)
	Three daughters	95 (11.6)
	Two sons and one daughter	206 (25.0)

Continued.

Coombs scale question	Options	N (%)
Third scenario		
Choices between three sons or three daughters	Those who chose two daughter and one son or two sons and one daughter in the second scenario (n=503)	
	Three sons	307 (37.4)
	Three daughters	196 (23.8)
Gender preference (n= 821)	Son (IS 7-5)	325 (39.6)
	Balanced (IS 4)	226 (27.5)
	Daughter (IS 1-3)	270 (32.9)

Table 3: Distribution of gender preference by respondent characteristics, Kathmandu, Nepal (n=821).

Characteristics	Gender preference			P value*
	Boys N (%)	Balanced N (%)	Girls N (%)	
Age (in years)				
<20	37 (40.65)	26 (28.57)	28 (30.76)	0.607
≥20	288 (39.45)	244 (33.42)	198 (27.12)	
Ecological region				
Mountain	49 (48.00)	33 (32.40)	20 (19.60)	0.007
Hilly	226 (36.51)	205 (33.11)	188 (30.38)	
Terai	50 (50)	32 (32)	18 (18)	
Ethnicity of respondents				
Upper caste	108 (37.50)	88 (30.55)	92 (31.95)	0.113
Others	217 (40.72)	182 (34.14)	134 (25.14)	
Religion of respondent				
Hindu	261 (39.96)	204 (31.24)	188 (28.79)	0.100
Others	64 (38.09)	66 (39.28)	38 (22.61)	
Occupation				
Employed	83 (37.55)	65 (29.41)	73 (33.04)	0.093
Unemployed	242 (40.33)	205 (34.17)	153 (25.50)	
Education				
Literate	290 (38.10)	256 (33.63)	215 (28.25)	0.009
Illiterate	35 (58.33)	14 (23.33)	11 (18.33)	
Marital duration (in years)				
<5	194 (38.11)	166 (32.61)	149 (29.28)	0.044
5-10	84 (37.50)	83 (37.05)	57 (25.45)	
>10	47 (53.41)	21 (23.86)	20 (22.73)	
Family type				
Nuclear	106 (38.5)	95 (34.50)	74 (26.90)	0.772
Joint	219 (40.10)	175 (32.05)	152 (27.83)	
Parity				
0	179 (36.16)	166 (33.53)	150 (30.30)	0.032
1	117 (42.85)	92 (33.69)	64 (23.44)	
>1	29 (54.72)	12 (22.64)	12 (22.64)	

*Chi-square test of association.

There was high son preference in the Terai region (50% vs 18%) compared to Hill region (36.5% VS 30.9%). Similarly, more illiterate respondent has high son preference (58.3% vs 18.3%) as compared to literate respondents (38.1% vs 28.2%). Women having more than one parity preferred son (54.7 % vs 22.6%) compared to primiparous women (36.1% vs 30.3%).

DISCUSSION

Based on Coombs' scale and methods, this study found that there was slightly son bias as 40% of the respondents fall into IS 7-5 position. Further, ecological region, education status, marital duration, and parity were found to be significantly associated with the gender preference.

Girl's preference in this study 27% is slightly higher than the study undertaken in Indian city of Lucknow 22%, whereas balanced gender preference 33% was higher in this study compared to Lucknow study.[15] Another study in Nepal carried out among the primiparous women found that majority has not any gender preferences while only 13% wanted son, which is lower than this study.[16] This might be due the primiparous status of respondents who may not care about the sex of the first child.

The commonest reasons for son or daughter preference were psychological (mainly all siblings are of the other sex) and social (help in household tasks, lower risk of divorce and old age care/support). The economic causes were limited to son preference (help in or inherit family business/land and contribution to family income). The commonest reasons for son or daughter preference were psychological (mainly all siblings are of the other sex) and social (help in household tasks, lower risk of divorce and old age care/support).

Daughters were more preferred in hilly region while son were preferred more in terai region. This might indicate cultural and social circumstances of sons and daughters in hills and terai as well as the women status. In terai area of Nepal, there is still more persistent poverty, gender bias and dowry system.[5] These findings were consistent with the analysis of data from national level demographic and health survey of 2016 which concluded that sons were more preferred in terai region as compared to hilly regions.[12] Another study found that Muslims have more son preference as compared to Hindu but this was not the case in this study.[17]

In this study, illiterate respondent had high son preference compared to literate respondents. Previous studies reported similar association.[5,18] Education empowers the women on gender disparity and educated women are more likely to have neutral preferences. Respondents with marital duration of more than 10 years preferred more sons. Higher son preference with increase in marital duration is apparently associated with parity. Son preference has increased with parity in this study and this might be related to have desire of more sons or at least one son with no previous history of son. Such parity effect has been documented, with prominent son preference for the 3rd or 4th child.[19]

This study was carried out among special population, the pregnant women coming to ANC visit in a tertiary public hospital. Though, a variety of pregnant women of ethnicity, occupation and literacy visits this popular maternity hospital, it still may not represent whole section of community and not generalizable. There may be some chances of conscious falsification of information by the respondents or social biasness. So, true magnitude of gender preference is hard to determine, however, this study assessed women's wish to have sons and girl's combination reflecting their gender preferences.

CONCLUSION

The wish to have son is prevalent among the respondents followed by a mixed gender of children. Educational status, ecological region, and parity explain this differential wish. Women's education and autonomy is probably the significant factor to tackle with gender bias.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the institutional ethics committee

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Cite this article as: Magar AA, Karkee R, Upreti S, Subedi L, Ghimire A. Gender preference among pregnant women in Nepal. Int J Sci Rep 2020;6(8):316-21.