Awareness and perception regarding PCPNDT Act and gender preference among mothers of under-five attending immunization clinic

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Abstract

Background: Falling sex ratio is signaling precipitation of demographic catastrophe in India. Female feticide, male child preference, and gender inequities are to be blamed.

Objective: To study awareness and perception regarding Preconception and Prenatal Diagnostic Techniques (PCPNDT) Act among mothers of under-five attending immunization clinic and gender preference among them.

Materials and Methods: A Cross-sectional study was carried out among 200 mothers of under-five attending immunization clinic at Government Medical College, Nagpur, during April–June 2014. Data were collected by interview using semistructured pro forma after obtaining written consent of mothers. Data were presented in percentage, mean, range with SD, and χ^2 -test as test of significance.

Result: Majority of mothers 150 (75%) were aware about decreasing girls in India. One hundred and sixty-one (80.5%) mothers were aware about prenatal sex determination, and 61 (30.5%) knew that sonography is used for this purpose. Awareness about PCPNDT Act was 65%. Awareness was significantly associated with higher education, upper socioeconomic class, and working status. Although 85 (42.5%) mothers knew that punishment under PCPNDT is in the form of jail or monetary fine, none were aware about the correct penalty. Of 83 mothers desirous of more children, 33 (40%) preferred to have male child; while only 14 (17%) had preference for a female child. Preference for male child was significantly associated with the birth of previous female child.

Conclusion: Awareness regarding PCPNDT Act is high among those with higher education, upper socioeconomic class, and working mothers. Preference for male child is significantly associated with the birth of previous female child.

KEY WORDS: Awareness, PCPNDT, gender preference

Introduction

The child sex ratio in India has fallen to 914 females against 1,000 male subjects, the lowermost since Independence in the

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2011 Census Report,^[1] indicating a continuing preference for boys. Falling sex ratio is signaling precipitation of demographic catastrophe in India. Girls have not vanished overnight. Decades of sex determination tests and female feticide has acquired genocide proportions. Female feticide, male child preference, and gender inequities are to be blamed. Social prejudice against women, already rooted in Indian society, has been impelled on by technological developments. Preconception and Prenatal Diagnostic Techniques (PCPNDT) (Prohibition of sex selection Act) 1994, as amended in 2003 came into effect from February14, 2003.^[2]

The need of the hour is to expand the awareness about female feticide so that people can recognize it as a social issue and can further try to control it.

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1878 International Journal of Medical Science and Public Health | 2016 | Vol 5 | Issue 09

Under this background, this study was carried out to study awareness and perception regarding PCPNDT Act among mothers of under-five children attending immunization clinic and gender preference among them.

Materials and Methods

This cross-sectional study was carried out among 200 mothers of under-five attending immunization clinic at Government Medical College, Nagpur, during April–June 2014.

Sample Size

Assuming the awareness of PCPNDT Act to be 32.49% (Srivastav et al.,^[3]) α = 5%, β = 20%, sample size was calculated to be 200.

Approval from Institutional Ethics Committee was sought. Semistructured pro forma was prepared, and pilot study was conducted among five mothers to assess feasibility and to validate the pro forma. They were excluded from the final sample.

Mothers of the under-five children who attended the Immunization clinic since April–June 2014 were enrolled after taking written informed consent. Every fifth attendee of the clinic was enrolled avoiding those who had been previously included in the study. Data were collected by using interview technique.

Statistical Analysis

Data were entered in Excel sheet and analyzed using statistical software Epi Info 7. Percentage, mean, standard deviation, and range were used to summarize the descriptive characteristics. The χ^2 -test was used as test of significance, with *P* value less than 0.05 considered to be statistically significant.

Result

Mean age of the mothers was 26.35 ± 4.14 (range: 20–44) years. Mean age at marriage was 21.74 ± 2.63 (range: 18–29) years. Mean age at first pregnancy was 23.05 ± 2.58 (range: 19–29) years. Most of them were literate (99%).

Of 200 mothers, 150 (75%) were aware about the decrease in girl children in India [Table 1]. Television and newspaper were the source of information for most of them. More than half of them (129) were aware about the result of decrease in girl children. Most of them (70) replied that boys will not find the bride. Other consequences told by them were atrocities against women will rise (19), generation will not be propagated (11), it will lead to imbalance of nature (6), and progress of nation will be hampered (3) [Figure 1].

This study tried to find out the gender preference among mothers who desired to have more children [Figure 2]. Of 200 mothers, 83 (41.5%) said that they want more children. Among them, 33 (40%) preferred to have son as their next child, 36 (43%) had no preference, while only 14 (17%) said they wanted a daughter. When asked about reasons for son

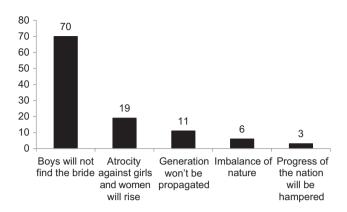


Figure 1: Result of decrease in number of girl children.

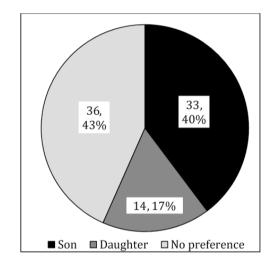


Figure 2: Gender preference among those desirous of more children (n = 83).

preference and nonpreference of daughter, the commonest reasons cited were "son carries name of the family" (*Vanshacha Diwa*) and "takes care of parents in old age." Other reasons told by mothers were girls are burden on parents owing to dowry, male-dominated society; girls are trouble as they need to be protected; and male subjects are head of the family and they manage family affairs.

Availability of antenatal sex determination was known to 161 (80.5%); among them, 51 (25.5%) knew that ultrasound can be used for antenatal sex determination. Awareness about existence of PCPNDT Act was 65%, and 42.5% of them knew that antenatal sex determination is punishable under law. Among them, 29 mothers said that punishment for antenatal sex determination is imprisonment, 23 said it was monetary penalty, while 33 said that punishment is imprisonment and penalty both. But, none of the mothers were aware about the exact punishment under the Act [Table 1].

 $\ensuremath{\text{Table 1:}}$ Awareness about decrease in girl children, sex determination, and PCPNDT Act

Variables		Aware (<i>n</i> = 200)	
	No.	%	
Decrease in girl children in India	150	75.0	
Antenatal sex determination	161	80.5	
Sonography as a means of prenatal sex determination	51	25.5	
PCPNDT Act	130	65.0	
Punishment for prenatal sex determination	85	42.5	

 Table 2: Factors associated with awareness of PCPNDT Act (n = 200)

Factors	Total	Awareness about PCPNDT Act	P *
		Number (%)	
Education			
High school and above	123	95 (77.23)	<0.001
Others	77	35 (45.45)	
Occupation			
Working	24	21 (87.50)	0.013
Housewives	176	109 (61.93)	
Socioeconomic status			
Upper and upper middle	66	56 (84.84)	<0.001
Lower middle and upper lower	134	74 (52.22)	

 $^{*}\chi^{2}$ -test, *df* = 1.

Table 3: Factors associated with son preference (n = 83)

Factors	Total	Son preference	P *
		Number (%)	
Education			
Others	25	10 (40.00)	0.97
High school and above	58	23 (39.65)	
Occupation			
Housewives	74	30 (40.54)	0.67
Working	9	3 (33.33)	
Socioeconomic status			
Lower middle and upper lower	52	24 (46.15)	0.12
Upper and upper middle	31	9 (29.03)	
Previous birth of female child			
Yes	47	28 (59.57)	<0.001
No	36	5 (13.88)	

 $^{*}\chi^{2}$ -test, df = 1.

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9

Perception about PCPNDT Act	Mothers	
	No.	%
It should be strict	33	43.12
It is appropriate	27	35.78
Not properly implemented	14	12.84
Doctors are responsible	9	8.26
Not completely effective	3	2.75

This study tried to find out the gender preference among mothers who desired to have more children [Figure 2]. Of 200 mothers, 83 (41.5%) said that they want more children. Among them, 33 (40%) preferred to have son as their next child, 36 (43%) had no preference, while only 14 (17%) said they wanted a daughter. When asked about reasons for son preference and nonpreference of daughter, the commonest reasons cited were "son carries name of the family" (*Vanshacha Diwa*) and "takes care of parents in old age." Other reasons told by mothers were girls are burden on parents owing to dowry, male-dominated society; girls are trouble as they need to be protected; and male subjects are head of the family and they manage family affairs.

The proportion of those who were aware about PCPNDT Act was significantly higher among those who were educated up to high school or above, those mothers who were working, and those who belonged to upper and upper middle socioeconomic class [Table 2].

There was no statistically significant difference for son preference with respect to education, occupation, and socioeconomic status. But, the preference to have son as their next child was significantly associated with the previous birth of girl child [Table 3].

Questions regarding perception of mothers regarding PCPNDT Act were asked. The most frequent response was that it should be strict 33 (43.12%) so that female feticide can be curbed, while 27 (35.78%) felt it was appropriate. Few 9 (8.26%) mothers said doctors are solely responsible for improper implementation of PCPNDT Act [Table 4].

Discussion

In a recent landmark judgment the Mumbai High Court upheld an amendment to the PCPNDT Act banning sex selection treatment. The Court pronounced that prenatal sex determination would be as good as female feticide. Preconception sex determination violated a woman's right to live and was against the Constitution, it said.^[4,5] Fall in sex ratio is a national shame.

In this study, two-thirds of the mothers were aware about the decreasing number of girl children in India. This is higher than the findings of Mitra et al.^[6] (54.28%). In this study, 64.5% of the mothers knew the consequences of the declining sex ratio. It was higher than the findings of Srivastav et al.^[3] (47%), Vedpathak et al.^[7] (25.83%), and Puri et al.^[8] (11.5%). Common consequences cited for decrease in girl children were that boys will not find the bride and atrocities against women will increase. Similar implications were noted by Srivastav et al.^[3] In this study, most of the mothers (80.5%) were aware about the antenatal sex determination. This is similar to the findings of Dadwani and Thomas^[9] (86%) and Srivastav et al.^[3] (80.13%), Vedpathak et al.^[7] (74%).

Awareness about PCPNDT Act was found to be 65% in this study. Varying proportion of awareness was reported by various studies conducted across India ranging from 32% to

85%.^[3,10-13] This may be owing to the differences in the study setting such as urban–rural difference and hospital and community settings. These studies were conducted among pregnant females and women of reproductive age, whereas this study was conducted among mothers of under-five children.

In this study, proportion of female subjects who were aware about the legal punishment for sex determination was 42.5%. But, none of the mothers was aware about the exact punishment under the act. Puri et al.^[8] found this proportion to be 16.4%, and in the study by Vedpathak et al.,^[7] it was 34.05%.

This study found the fertility preference among the mothers. Of 200 mothers, 83 (41.5%) said that they want more children. Among them, 33 (40%) said they want son as their next child, 36 (43%) had no preference, while 14 (17%) preferred to have daughter. Those who preferred to have daughter had at least one son. Two of the mothers who preferred to have son had already one son. They did not want daughter. This shows the strong son preference among the mothers. This finding is similar to the District Level Household Survey-3 where preference for boy was 33.2%, for girl 11%, 36.3% response was does not matter, and 19.5% said it is up to God.^[14] Preference for male child was higher in the studies conducted in other parts of India as well.^[3,6-8,11,12] While in the study conducted by International Center for Research on Women^[15] found that, in India, son preference is strong but not universal. Many mothers want a balance of sons and daughters, and so, at least some girls are wanted.

The sex preference for the next child becomes more pronounced particularly among women with two or more surviving children. Only 13.6% of those having two living children wanted a girl against 53.3% wanting a boy as an additional child. These gaps become wider over the number of surviving children.^[10] In a study by Frost et al.^[16] in Nepal, they found that the sex ratio of a firstborn does not differ significantly from the expected level of 950–975 females per 1,000 male subjects. However, for secondborn children, especially where the firstborn was female, there has been a sharp (and significant) fall in the number of girls when compared with boys.^[16] In the present study, commonest reasons cited for son preference were "son carries name of the family (*Vanshacha Diwa*)" and "takes care of parents in old age." Similar finding was noted by Ashturkar et al.^[10] and Metri SS et al^[17]

No association was found between literacy status and socioeconomic class of the study subjects and preference to male child in our study as opposed to the study by Srivastav et al.^[3] and Khatri M et al^[18] where unawareness regarding PCPNDT Act and preference for male child was significantly associated with the literacy status of females. In a study done by International Center for Research on Women,^[11] they found that mothers' education is the single most significant factor in reducing son preference. Access to media also significantly reduces son preference. Wealth and economic development do not reduce son preference.

Bringing about changes in the demand for sex determination is a long process and has to be tackled through women's education and empowerment. States in the North East and in Kerala where women have these rights show a comparatively better sex ratio.

In this study, around one-third of mothers had never heard of PCPNDT Act. This is in spite of extensive mass media campaign for raising the awareness. Preference for male child was significantly associated with birth of previous female child. Son preference did not differ significantly with respect to education, occupation, and socioeconomic status of the mothers.

Conclusion

Awareness regarding PCPNDT Act is high among those with higher education, upper socioeconomic class, and working mothers. Preference for male child is significantly associated with the birth of previous female child.

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