

A Study on Gender Preference and Awareness on Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act Among Antenatal Women in Visakhapatnam City

Dr. B. Sailaja Suresh Kumar¹, PG, Dr. Sunita Sreegiri², Dr. S.Appala Naidu³.

1. Dr B. Sailaja Suresh Kumar , Post Graduate, Dr. Sunita Sreegiri, MD, Associate Professor, 3. Dr S. Appala Naidu, MD, Professor & HOD, Andhra Medical College, Visakhapatnam.

Abstract

Background: Child sex ratio has been declining over a period of time. Preference for a male child by the family leading to sex selective abortion is found to be a major factor which may have adverse impact on the social structure. This study was undertaken to find out the gender preference and awareness on PCPNDT act among antenatal women.

Methodology: A cross-sectional study was conducted among 100 antenatal women attending to Outpatient department of two tertiary care hospitals and willing to participate. Information was obtained using a pre- tested questionnaire on order of pregnancy, gender preference by the mother, by the family, awareness on PCPNDT etc.

Results: Majority of the mothers were in the age group of 21 to 30 years (83%) with mean age 23.03 yrs \pm 3.6. Of them 42% were primigravida and 58% were of 2nd order and above. One third (27%) preferred male child in the present pregnancy. Preference for male child was more among the family members (43%). It was more among those with at least one living girl child. About 58% of the mothers were aware of PCPNDT Act. Of these, 89% were aware that sex selection is punishable. Awareness about PCPNDT was significantly high among literates as compared to illiterates. About 18% of the mothers tried to know the sex of the present fetus by USG.

Conclusion: Having male child is more commonly a family's preference and seen in families with at least one girl child. While following the present trend of small family with couples having two or only one child, a family is considered complete only when couples have both male and female children. This concept is found to be the underlying reason for preference of male child in majority of the cases.

I. Introduction

Sex ratio in India has been declining over a period of timespecially in the past two decades and continues to be adverse towards the women. As per 2011 Census the Child Sex Ratio (CSR) in India is 914 females per 1000 males(1). Preference for a male child by the family leading to sex selective abortion is found to be a major factor which may later have adverse impact on the social structure. Even after implementation of regulations such as PC&PNDT act, such preferences and practices are still prevalent. The state of Andhra Pradesh (AP) although has a better CSR statistic with 943 per 1000 males but is still under the cultural influence. The city of Visakhapatnam, being hub for Health Care services reaching to nearby districts of both AP as well as bordering Orissa, provides technological advantages with many tertiary centers booming up offering maternal care services. This study was undertaken to find out the gender preference and awareness on PCPNDT act among antenatal women attending to tertiary care centres in Visakhapatnam City.

II. Methodology

A cross-sectional study was conducted among 100 antenatal women, consecutively attending to Outpatient department of two tertiary care hospitals and willing to participate. The objectives were 1) To know the sociodemographic profile of antenatal mothers and to find out gender preference if any and 2) to elicit awareness on PCPNDT act among them.

Information was obtained using a pre- tested questionnaire. Permission was obtained from the Superintendents of the two tertiary hospitals as well as institutional ethics committee prior to study. Consent was taken from the participants. The variables were demographic data, order of pregnancy, sex of previous child, gender preference by the mother, by the family, awareness on PCPNDT etc. Data was analyzed using Microsoft Excel and expressed as percentages and proportions.

III. Results

A total of 100 antenatal women were considered for the study. As shown in table no.1 majority of them (83%) were in the age group of 21-30 yrs. Around half (55%) were educated upto high school / intermediate and one third were graduates. Majority (85%) were unemployed / housewives, 6% were into professional work and the remaining (9%) were semiskilled workers. Most of the mothers (90%) belong to Hindu religion and 83% have family income less than Rs 10000/-. Sixty four percent belong to joint / extended family.

Table No. 1 : Demographic details of Study Population

Age in years	Percent
<20	12
21-30	83
31-40	5
Literacy status	
Illiterates	13
Upto high school & intermediate	55
Graduation and above	32
Income	
<5000/-	16%
5000-10000/-	67%
10000-15000/-	1%
15000-20000/-	1%
>20000/-	15%
Type of family	
Nuclear	36%
Joint	32%
Three generation	32%
Religion	
Hindu	90%
Christian	7%
Muslim	3%

Table No 2. Distribution of Study population as per order of pregnancy and number of living children

Order of pregnancy	Percentage
Primi	42
2 nd	48
3 rd	10
No. of living children	
Single child	46
Two children	4
Three children	0
Four children	1

Fertility related history (table no. 2) shows that 42% of the subjects were primigravida, 48% were in 2nd order pregnancy and 10% were in 3rd order pregnancy. Of the total 58 mothers with 2nd and 3rd order pregnancy, forty six mothers had one living child, 4 mothers had two living children and one mother had four living children with total number of living children being 58. Remaining 7 mothers of 2nd and 3rd gravida had h/o of abortion. Of them 5 were MTP, however MTP was done in view of malformed fetus.

Table no 3 :Distribution of study population and their family members according to preference for male child in the present pregnancy.

Preference	By the mother	By the family members
Yes	27	43
No	73	57
Total	100	100

As shown in Table no 3, majority of the mothers (73%) did not have any preference whereas 27 % preferred male child in the present pregnancy. Compared to this, 43 % of the family members of these mothers preferred male child.

Table no 4:Order of Pregnancy vs preference for a male child

Order of pregnancy	Preference for a male child		Total
	Yes (%)	No (%)	
Primi	9 (21.4)	33 (78.6)	42
2 nd order	13(27.1)	35 (72.8)	48
3 rd order	5(50)	5(50)	10

Table no 4 shows Preference for a male child was observed more among mothers of 2nd and 3rd order pregnancy, 27.1% of 2nd order and 50 % of the third order respectively.

Out of the total 58 living children, 26 (44.82%) were males and 32 (55.17%) were females. Among those mothers who had one living girl child, 14 (43.75%) preferred to have male child in the present pregnancy and among mothers with one living male child, 4 (15 %) preferred male child in the present pregnancy.

Table no 5 Distribution of study subjects as per their awareness on PCPNDT Act and legal consequences of sex selection.

Variable	Aware	Unaware
Awareness about PCPNDT Act	56%	44%
Sex selection is Punishable	89%	11%

About half of the mothers (56%)were aware of enactment of PCPNDT Act. Of them 89 % of the mothers said they knew that prenatal sex selection is punishable and were aware of the kind of punishment. Among those who were aware, the source of information was media in 82% and by friends/ relatives in the remaining 18%. Around 18% of the women tried to know the sex of the foetus in the present pregnancy.

Table no 6 :Literacy status of mothers vs preference for a male child and awareness on PCPNDT Act

Literacy status of the mother	Preference for a male child		Awareness on PCPNDT act		Total
	Yes	No	Yes	No	
Illiterates	4 (30.76%)	9 (69.23%)	2 (15.38 %)	11 (84.61 %)	13
Upto high school & intermediate	19(34.54%)	36(65.45%)	36 (65.45%)	19 (34.54 %)	55
Graduation and above	4 (12.5%)	28 (87.5%)	18 (56.25%)	14 (43.75%)	32
Total	27	73	56	44	100

Table no 6 shows that there is no statistically significant difference between literacy of the mother and preference for a male child. ()However as education improves upto graduation or above there is less preference.($p > 0.05$)Awareness about PCPNDT is more among those educated upto high school or intermediate or graduation and above as compared to illiterates. This difference statistically significant.($X^2 :10.3, p < 0.001$).

IV. Discussion

In the present study, it is found that majority of the antenatal women were in the age group of 21-30 yrs but still 12 % were below 20 yrs of age which needs to be focused on. Around half were educated upto high school or intermediate. Majority were unemployed or housewives. A teenage mother not only is reproductively unfit for motherhood but also not mature enough to take decisions for herself and her family. With our existing patriarchal societal structure, an economically dependent housewife with only high school education or even below is not adequately informed and empowered to take decisions. Such women can easily be influenced and overpowered by other family members especially regarding the choice of a male child and undergoing abortions which can be harmful to her health. Obstetric history shows that the study population is a mixed group consisting of primigravida, 2nd & 3rd order pregnancy. Out of the 2nd and 3rd order pregnancies more than half had previously female children.

Regarding preference for a male child in the present pregnancy, majority of the mothers had no preference similarly reported by Kansal R et al (2), Vedpathak V et al (3), Mitra P et al (4). Rather it was observed more among the family members of the mother than herself suggesting that the choice is more a family choice than an individual. Also it suggests that cultural factors and valuing elders' opinion in the family is a priority for the daughter in law. Among the mothers, the preference was observed more in 2nd and 3rd order pregnancies especially those already having a female child because of the opinion that a family is considered complete when both male and female children are present, similarly quoted by Kansal R et al (2). Mothers who were illiterates or having education upto high school, who cannot be assertive, expressed a preference for male child which may be because of family pressure.

Regarding awareness about PCPNDT act, around half (58%) knew about the regulation which is similar study by Mitra P et al (4). In contrast to this Manhas S et al (5) reported a high % of mother being aware about PCPNDT. However majority (89%) of those who were aware about the Act knew about the legal aspects

and the penalties. On further analysis it is observed that awareness was significantly high among those educated upto high school & intermediate and graduates as compared to illiterates similar to study by Khatri M et al (6).

Even though female literacy is considered proxy to the welfare of the family as well development of the community, our school or undergraduate curriculum does not include legal implications or the penalty related to it thus restraining prospective mothers from having knowledge on some important legal issues related to sex selection. This gap needs to be addressed by revamping of the education system so as to educate common people on legal issues.

A convincing fact, reflecting the role of media, is that major source of information is media (82%) thus proving once again the crucial role played by media in propagating information. In this study friends and relatives as source of information were only 18 % which is in contrast to study by Kumar et al (7). Women with at least high school education who have exposure to media are the most benefitted. Therefore authorities should consider media as strength in propagating the message. Regarding preference of male child in this pregnancy it is the family influence which plays a major role.

V. Conclusion

Having male child is more commonly a family's preference and seen in families with at least one girl child. While following the present trend of small family with couples having two or only one child, a family is considered complete only when couples have both male and female children. This concept is found to be the underlying reason for preference of male child in majority of the cases. Awareness about the fact that sex selection is punishable is although satisfactory, facts about regulations such as PCPNDT Act have still not percolated into the community.

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