

Evaluation of Gender Preference Amongst Primigravida - in tertiary Care Urban Hospital

C G Raghavendra Vailaya¹, C R Shubha Vailaya^{2*}

¹Department of Pediatrics, ²Department of Obstetrics and Gynecology, Subbiah Medical College, Purle, Shimoga.

Email: drvailaya1981@gmail.com

Abstract

Background: Preference for a male child which started mainly in the Medieval period which continues to haunt 21st century India. Female to male ration in Karnataka is at 939 per 1000 which has fallen since a decade. Child sex ratio (0-6years) in Karnataka is 948 female for 1000 male which is declining alarmingly though slightly better than the National average. Sex selective feticide, infanticide and health care seeking practices along with flouting of PNDT norms play a major role in this. The objective was to study the trends in sex preference in modern day urban setting. **Methods:** A Cross sectional study was carried out amongst 200 primigravida pregnant women while attending antenatal clinic at Subbiah Medical College, Shivamogga, Karnataka. A predesigned and pretested, standard questionnaire was given to them for the information. Gender preference was re-evaluated soon after delivery. Data was statistically analysed using SPSS 16.0. **Results:** Majority of women were in the age group of 21-25years. Most women (45.5%) had no gender preference. 43.3% women preferred son while 11.5% wanted girl child. Higher education, better SES and more employment had positive influence on their fetal sex preference. Though 72% participants were aware of the issue at hand, 77.5% wanted the fetal sex determination. Most (84%) women were aware of PC-PNDT Act. Only 51.5% women had freedom to decide their fetal outcome. **Conclusion:** There is better awareness about gender neutrality amongst urban class. However the situation is far from ideal. Society needs to change, if India needs to sustain growth, progress and prosperity. Girl child education, health, safety and employment opportunities need to improve. To utilize our demographic dividend optimally we need to improve this skewed sex ratio as a first step.

Keywords: Gender preference, Sex Ratio, PNDT Act, Prenatal Sex Determination, Sex Selective Feticide..

*Address for Correspondence:

Dr.C.R.Shubha Vailaya, Department of Obstetrics and Gynecology, Subbiah Medical College, Purle, Shimoga.

Email: drvailaya1981@gmail.com

Received Date: 12/10/2019 Revised Date: 02/11/2019 Accepted Date: 21/12/2019

DOI: <https://doi.org/10.26611/10141312>

Access this article online

Quick Response Code:



Website:

www.medpulse.in

Accessed Date:
13 January 2020

INTRODUCTION

“Yatra Naryastu Poojyante Ramante Tatra Devatah”- Manusmriti. Gods will descend only where women are respected and worshipped. Such is the Sanatan Indian heritage. Women were highly revered and respected during Vedic Ages, where they were allowed equal opportunities for education, employment, religious rights to worship, marriage, politics and societal leadership. There were

many female goddesses and saints. Lifeline rivers were worshipped as feminine.

Medieval Bharath saw repeated foreign invasions and frequent wars which led to mass scale social plunders by the conquerors who specially targeted the weaker sections of the society including women and child. Girls were subjected to rape, religious conversion, slavery for labour, sex slavery, murder and oppression. All these led to a societal fear of having girl child and she was gradually deemed to be a liability than an asset. With the changing times, many social evils like child marriage, Sati, dowry, restriction to female education and free movement also began. With personal security under threat families wanted male child for earning, family continuation, war and to perform the last rituals of parents. Gradually we were made to believe that this was our tradition from generations. Thus a gender equitable society was now transformed into a male dominant one. Ever since the first recorded caste based census in India in 1872 by Sir John Risley during the colonial era, the sex ratio of female to male was skewed

(870:1000). From then onwards though this has bettered marginally over centuries, yet not improved as expected. As per latest census in 2011 gender ratio was 943 females (929 in urban, 949 in rural) per 1000 males. In absolute terms India has 48.2% female population as compared to 51.8% males. In 1901 India had highest sex ratio of 972. UN estimates this ratio to be 930 females for 1000 males in 2019 for India. Female to male ratio in Karnataka¹ is at 939 per 1000 which has fallen since last decade. Kerala has highest sex ratio of 1084 females per 1000 males, whereas Haryana is the lowest with 879 females per 1000 males. Child sex ratio (0-6years) in Karnataka² is 948 female for 1000 male which is declining alarmingly though slightly better than the National average (919:1000). With altered social ethos, male child preference has led to female feticide being widely prevalent in India from medieval ages mired by repeated foreign invasions, social unrest, wars, religious persecution, mass genocide, female atrocities and human right violations by the invaders. With more widespread availability of advanced ultrasound facilities for pregnancy termination across the nation including remote areas sex selective feticide has added fuel to the fire in post Independence era. This is the main reason for decline in this ratio in the last decade. More than 10 million fetuses have been aborted over the last 2 decades. Altered sex ratio leads to decrease in female education, poor employment opportunities for learned women, early marriage, increased violence against women including sexual abuse and rape, atrocities for women at workplace, lesser social opportunities for free travel and recreation. All these lead to women being duped as social liability rather than being hailed as an asset. This leads to furthering the same vicious cycle of female castigation. This leads to evil practices of single women marrying multiple men like in few places of North India and increase in sexual crimes which defy women empowerment which is supposed to be the barometer of a healthy society. This is surely an impediment in the progress of the Nation and needs immediate redressal. In order to tackle this larger menace Govt of India has passed PNDT Act (Regulation and Prevention of Misuse) in 1994 which was later amended in 2002 and 2003 to include Preconception and Prenatal Diagnostic Techniques (PC and PNDT), severe punishment for sex determination. Though India has many benchmark legislations, our faultlines mostly lie in their proper implementation and poor awareness amongst public and medical fraternity alike. Govt has brought in several amendments, set up nodal authority for monitoring and conducted many nationwide seminars for spreading awareness. We have also tried to look at the knowledge of parents about this act. We have basically done this study to know about gender preference amongst urban parents and

also to note the change in this pattern from prenatal to postnatal period. We also looked at how many of them wanted not to comply with rules even after being told properly about the rules. This study throws light about our societal attitude in post modern era with access to quality education.

METHODS:

A cross sectional study was conducted in antenatal clinic at Subbiah Medical College, Shivamogga, Karnataka. Subjects were randomly chosen (systematic random sampling of every alternate pregnant women) 200 newly registered primigravida pregnant women while attending ANC clinic from July 2018 to Dec 2018. Pregnant women attending ANC clinic were explained about the study and first 200 primigravida were included after they gave consent for participation. A predesigned and pretested, standard Questionnaire was given to them for data collection. Primigravida were selected to avoid bias of the sex of the first child influencing their choice. Data was statistically analysed using SPSS 16.0. Gender preference was re-evaluated soon after delivery to see if there is any change. Variables included in the study were their baby sex preferences, reasons for their preference if any, influence of elders in the family, awareness about sex ratio in India, various methods of antenatal sex determination, different methods of pregnancy termination, knowledge about PC-PNDT Act and consequences of its violation. Soon after delivery before disclosing the gender of the baby they will be again asked about their preference to see if there is any change. We tried to assess the attitude of pregnant women and her husband about eagerness to know the sex of the child antenatally, also about their persistence for sex determination even after initial denial by the doctor and to know what they would do if the sex of the fetus was anti to their preference. We also asked as to who in the family had the authority of any decision making in this regard. We also assessed their views about PNDT Act and legal punishment (inadequate/apt/harsh). Most questions had objective answers to assess their attitudes. Pamphlets regarding the need for better equitable sex ratio and strict implementation of PNDT Act which requested the public to adhere with norms were distributed before discharge from the hospital to spread positive awareness amongst masses.

RESULTS

Of 544 new primigravida women attending ANC, first 200 consenting pregnant women were selected by randomized sampling of every alternate newly registered women were interviewed during a 6 month period at ANC clinic at SMC. They were given questionnaire to elucidate their child sex preference, preference of number of children and

KAP about PNDT Act. Their sex preference was re-evaluated soon after childbirth. Of them 4 (2%) had spontaneous abortions, 1 stillbirth (0.5%) and 12 (6%) cases were lost to follow up subsequently for delivery. Primigravida was chosen to avoid the sex of their previous child influencing their preference. Most pregnant women (42%) were in age group of 26-30 years. 37% fall in the age group of 21-25 years. 8% pregnant ladies were aged under 20 years and 11% belonged to 31-35 years. Only 2% were aged above 36 years. 31% women belonged to low socio economic status, 58% were in middle and 11% were upper socio economic status as per modified Kuppuswamy's classification updated for the year 2018. 76% were housewives, 5% were daily wage labourers/garment workers and 19% were working women. In our study majority (86%) were urban dwellers and 14% were

staying in nearby villages. All women were literates. 18% had completed education upto primary school. 33% were educated till higher secondary school. 20% were educated upto pre university level. Graduates were 17% and 12% had done postgraduation. 11% women were professionals. Thus the study population was largely Urban, fairly educated and had few economically independent women. 58% women were Hindu, while Muslims were 35%, Christians were 9% while 1% belonged to Jain community. Of all women 13% felt one child is sufficient (100% were Hindus). 58% wanted two children (75% Hindus, 14.6% Christians, 7% Muslims and 3.4% Jains). 29% wanted more than 3 children (93.2% Muslims, 5.1% Hindus, 1.7% Christians). Of those who preferred only one child, majority were working women (81%).

Table 1: Composition of the study population and their gender preference data

Variables	Numbers	Preferred Gender		
		None	Male	Female
Age in years				
<20	16	4	11	1
21-25	75	36	29	10
26-30	84	32	42	10
31-35	21	15	4	2
>36	4	4	0	0
Literacy Status				
Illiterat	0	0	0	0
Primary	36	6	27	3
Secondary	66	15	47	4
Pre University	40	13	24	3
Graduation	34	22	7	5
Post Graduation	24	17	3	4
Professionals	24	18	2	4
Socio Economic Status				
Low	62	11	49	2
Middle	115	68	31	16
upper	23	12	6	5
Religion				
Hindu	117	59	42	16
Muslim	69	25	34	4
Christian	18	7	18	3
Jain	2	0	2	0
Occupation				
Homemaker	152	73	65	14
Employed	38	17	12	9
Labourer	10	1	9	0
Dwelling				
Urban	171	85	65	21
Rural	29	6	21	2

Majority (45.5%) of women had no gender preference. 43% preferred son as their first choice, 11.5% preferred girl child. Of those who preferred son, 31% chose male child for family propagation. 18% felt that sons will help them during their old age. 12% wanted sons for prestige. 11% preferred male child for performing their end of life rituals. 12% felt that girl child was a liability economically and socially. 6% wanted dowry from son's marriage. 4% thought sons will inherit their wealth and give them mental safety. 3% cited peer pressure as the cause. 3% had miscellaneous reasons. Of those who preferred male child majority belonged to low and mid socioeconomic status. Majority (89%) of those who preferred a female child were well educated (graduation and beyond) and belonged to mid and higher socioeconomic status (94%).

Table3: KAP about sex determination and PC-PNDT Act

Questions	Responses	
	Yes	No
Are you aware of declining female: male ratio in India?	144	56
Do you know about fetal sex determination?	191	9
Would you want to determine the sex of your unborn child?	155	45
Is there family pressure for sex determination?	126	74
Do you know that fetal sex determination is a crime?	183	17
Do you know about PC-PNDT Act?	168	32
Are you aware of strict legal punishment for violation of PC-PNDT Act?	125	75
Do you still want to determine the gender in violation of the Act?	31	169
Would you prefer termination if the fetus is female?	13	187
Do you want stricter law to prevent sex based feticide?	86	114
Are you free to take your own decision about the fate of the fetus?	103	97
Would you give equal study/ job opportunities for your son and daughter?	150	50
Are you motivated by our study to spread awareness about PC-PNDT Act?	186	14

KAP questions about PC-PNDT Act, sex determination choices and MTP options were basically objective in nature. 72% women were aware of rather declining female to male ratio in India. 77.5% mothers were keen to know the sex of their fetus antenatally. 63% women sited family pressure as a reason for this eagerness. 91.5% women knew that fetal sex determination is a crime. 84% also knew about PC-PNDT Act though not in full detail. Only 62.5% women knew that knowing fetal sex has stringent punishment. In spite of this knowledge 15.5% women somehow wanted desperately to know the fetal sex. 6.5% women wanted to terminate their pregnancy if the fetus were to be female. However 43% women felt that stricter law is needed to safeguard the interest of female fetuses. 51.5% women disclosed that they were free from any family pressure to take independent decision about the fate of their fetus. 75% women agreed to give equal study and job opportunities for their female child if at all. 93% of participants felt motivated by the end of the study to create awareness about the sex ratio, sex determination and PNDT Act amongst their peers, kins and family members. We also observed a change in this preference as pregnancy advances and the newborn is delivered. These women were followed upto delivery. Of them 4 (2%) had spontaneous abortions, 1 stillbirth (0.5%) and 12 (6%) cases were lost to follow up by the time of delivery. Of those who initially had no preference, 4.3% now had a change due to family pressure. Amongst those who initially preferred a male baby, 20.9% now had no preference. Suprisingly for good, none of those who chose female sex initially had a change of heart.

Preferred Gender during Pregnancy	Change in Preference After Delivery	
	Yes	No
None (n=91)	4 (4.3%)	87 (95.7%)
Male Preference (n=86)	18 (20.9%)	68 (79.1%)
Female Preference (n=23)	0	23 (100%)

DISCUSSION

India's skewed sex ratio has not shown any significant change despite various efforts by lawmakers which has huge social and demographic implications. Our study shows the urban mentality in tyre 2 smart city in modern era. Mean age of our subjects was 27.21±3.2 years, whereas it was 25.39±3.6 years in the study by Gitanjali et al³ and 23.98±3.02 years in study by Kansal R et al⁴. This may be because the more educated urban class marry and conceive much later. Most of them 74.5% had nuclear families. Study in Katkuri et al⁵ also had 72% nuclear families. Of all the participants 45.5% were gender neutral in their preference, 43% wanted male child and 23%

wanted female which is very much heartwarming in view of the current crisis. Gitanjali et al³ study had shown that 75.5% had no gender preference, only 13.7% had male preference and 10.7% had female preference which also points to that fact that the scenario is gradually changing. This is the silver lining as also shown in Kansal et al⁴ study where 66% had no preference as such. This is in contrast to the findings of study by Vadera et al⁶ and Puri et al³ who reported male preference in 58.5% and 56% respectively. Our study has only primigravida women, which negates the bias of previous child influencing their baby gender choice unlike other studies. Male child preference was highest amongst <20 years age group (68.7%), followed by

26-30 years group (50%) and 21-25 years (38.6%) since they are in active reproductive age. Less education, lower experience may also be contributing factors. 100% women >36 years and 71.4% women of 31-35 years had no sex preference for their baby. This may be due to the fact that their chances of conceiving may be less and hence any child would be acceptable to them. Small proportion had female preference which was uniformly seen in all age categories from 6.2% (<20 year) to 13.3% (21-25 years). This however didn't follow any pattern. Our study had no illiterate women as subjects. Majority of women in our study were educated upto secondary school (33%) followed by pre university (20%), primary education (18%), graduation (17%) and post graduation (12%). This is similar to the study by Pavitra et al⁷ where 49% were educated upto secondary school. Middle income group as per Kuppaswamy criteria were the predominant group (58%) followed by lower strata (31%). Similar study done in urban health centre Bangalore by Pavitra et al⁷ had 43% middle, 41% low and 16% high income groups which is parallel to our study. Male child preference was seen in lower education groups (75% amongst primary, 71.2% in secondary, 60% in pre university categories). 60.47% graduates and 70% post graduates had no gender preference. Female preference was seen amongst 16.7% of the professionals, 16.6% post graduates and 14.7% amongst graduates, which is higher than all other groups. This clearly states that education determines their choice of gender profoundly. In our study Hindus were the predominant group (58%), followed by Muslims (35%), Christians (9%) and Jains (1%). Most Hindus (50.4%) had no gender preference, while most Muslims (53.9%) had preference for male child. Christians had mixed preferences (44.5% male and 38.9% had no preference). Jains had 100% preferred male child. Highest female preference was seen in Christians (16.6%), followed by Hindus (13.6%) and Muslims (6.4%). Study by Archak et al⁸, 53.6% Hindus had male preference, 35.1% had no preference, while 47.7% Muslims preferred baby boy and 21.1% had no preference. This study was done in rural West Bengal where the preference pattern may be influenced by the need for agricultural labour. Our study population is urban and hence may have varied needs. Majority of our women folk were homemakers (76%) while 19% were formally employed of which majority were professionals (12%) and 5% were unorganized labour class. This brings out the fact that many non professional educated and employable women were not working after marriage due to various reasons. If considered the number of previously working women this proportion increases 35.5%. Majority of both homemakers (48%) and employed women (44.7%) had no sex preference. 42.8% of housewives and 31.6% of employed women wanted male

baby. As a welcome change 23.6% working women preferred female baby while this dropped to 9.2% in housewives. Most of the (90%) labour class women preferred male child while only 10% had no gender choice. This truly unravels the mindset of different classes of the society as we see today. This class system is the metamorphosed version of erstwhile Indian caste system we inherited from the West. This is closely linked to their economic status and aspirations. Participants of our study were mainly urban dweller (85.5%). In our study most rural women (72.4%) preferred male child, while 20.7% had no choice. Most urban women (49.8%) had no preference while 38% of them chose male child. Female preference however was seen in 12.2% of urban and 6.9% of rural women. This correlates with socio economic differences of our urban rural divide in new India. Of those who preferred son, 31% chose male child for family propagation. 18% felt that sons will help them during their old age. 12% wanted sons for prestige. 11% preferred male child for performing their end of life rituals. 12% felt that girl child was a liability economically and socially. 6% wanted dowry from son's marriage. 4% thought sons will inherit their wealth and give them mental safety. 3% sited peer pressure as the cause. 3% had miscellaneous reasons. Of those who preferred male child majority belonged to low and mid socioeconomic status. In the study by Pavitra et al⁷, propagation of family name (32%), old age responsibility (23%), performing cremation ritual (6%), dowry (21%), economic liability of females (9%), family pressure (9%) were the reasons given by the women for male child preference. Sushma et al⁹ shows dowry (77.3%), marriage problems (9.1%), difficulty in rearing girl child (9.1%) and not staying with parents (4.8%) as the reason for not preferring female children. Women in our study being mainly urban class preferred male child mainly due to family pressure which was reflected in their preference. Still a lot needs to be done to change the societal attitude for bringing in gender neutrality. Pressure source for male preference in our study is mother in law (41%), husband (32%), parents (15%) and others (12%). KAP questions about PC-PNDT Act, sex determination choices and MTP options were basically objective in nature. 72% women were aware of rather declining female to male ratio in India. Pavitra et al⁷ study tells that only 37% had awareness, as it was done in urban slum in women of low SES and poor education. Similar findings were seen in study Ghose et al¹⁰. 95.5% mothers aware about sex determination which is corroborated in study by Srivatsa et al¹¹. 77.5% mothers were keen to know the sex of their fetus antenatally. 63% women sited family pressure as a reason for this eagerness. 91.5% women knew that fetal sex determination is a crime. 84% also knew about PC-PNDT Act though not in full detail. Khatri et al¹² study

says that only 52.4% were aware about the act since it was done a decade earlier with lower education, poor media outreach and medical facility. Only 62.5% women knew that knowing fetal sex has stringent punishment. A similar study done in Chandigarh by Puri et al¹³ 65% had knowledge about the same. In spite of this knowledge 15.5% women somehow wanted desperately to know the fetal sex. Studies by Vadera et al⁶ and Khatri et al¹² had similar female foeticide intent amongst 20.5% and 11.4% respectively. The reason is that these studies included multiparous women with previous female children and family pressure. Khansal et al⁴ showed data similar to our study (7.4%). 6.5% women (nearly half of those who persisted for illegal sex determination) wanted to terminate their pregnancy if the fetus were to be female. However 43% women felt that stricter law is needed to safeguard the interest of female fetuses. 51.5% women disclosed that they were free from any family pressure to take independent decision about the fate of their fetus which is very much welcome. 75% women agreed to give equal study and job opportunities for their female child if at all. 93% of participants felt motivated by the end of the study to create awareness about the sex ratio, sex determination and PNDT Act amongst their peers, kins and family members. This shows that educating women about this problem helps significantly in positively changing their attitude. We also observed a change in this preference as pregnancy advances and the newborn is delivered. These women were followed upto delivery. Of them⁴(2%) had spontaneous abortions, 1 stillbirth (0.5%) and¹² (6%) cases were lost to follow up by the time of delivery. Of those who initially had no preference, 4.3% now had a change due to family pressure. Amongst those who initially preferred a male baby, 20.9% now had no preference which is good change in attitude. Having gone through pregnancy and labour process many women mellow and become more neutral in their choice as we see commonly which is validated in this study. Surprisingly for good, none of those who chose female sex initially had a change of heart. This proves that female baby preference has strong motivational factors. We do not have other studies for comparison. This also signals a positive change in attitude brought about by increase female education and employment, improvement in standard of life and more independence for women in 21st century.

CONCLUSION

India with its largely heterogenous population with varied customs and beliefs has a skewed sex ratio which is a hindrance in the progress of the country. If this is not addressed properly and quickly dividends of our young demography will not be fully availed. It is vital to note that sex driven foeticide and infanticide are gross violations of

basic human rights. It is unjust to deny female fetuses their right to live with dignity and equality. We as a society need to develop right attitude towards female children and implement PC-PNDT Act more effectively. Medical professionals, media, community health workers, paramedics, public, social groups and law enforcement agencies need work in tandem with the lawmakers to make an impact in bringing equality in sex ratio. Nowadays daughters are equally shouldering every responsibility similar to sons. Hence present study throws light about recent scenario in an urban smart city highlighting the need for more concerted efforts.

Limitations: This study is largely urban based, mostly conducted amongst educated, middle and upper income groups and lacks generalization. Small sample size is another limitation.

Relevance of the study: The main idea was to see what the urban data says in post modern era in a smart city. Here only first pregnancy is considered since sex of their previous child will not influence their choice. We have also tried to see the preferred number of children amongst different sub groups in 21st century urban city. We also tried to see if these preferences changed by the time of delivery.

REFERENCES

1. Niti Ayog, New Niti New India , available at <http://niti.gov.in/content/sex-ratio-female-1000-males>, accessed on 10 January 2020.
2. Census of India 2011. Child sex ratio available at <http://www.census2011.co.in/sexratio.php>, accessed on 10 January 2020.
3. Gitanjali Kapoor, Dinesh Kumar .Knowledge, attitude and practice of pregnant women on gender preference, prenatal sex determination and female foeticide. International J of Reproduction, Contraception, Obstetrics and Gynecology; 4:1196-99.
4. Kansal R, Khan AM, Bansal R, Parashar P. A hospital based study on knowledge, attitude and practice of pregnant women on gender preference prenatal sex determination and female foeticide. Indian J Public Health.2010;54:209-12.
5. Katkuri S, Kumar KN. Gender preference and awareness regarding sex determination among married women in urban slums. Int J Community Med Public Health 2018; 5:987-90.
6. Vadera BN, Joshi UK, Unandakat SV , Yadav BS , Yadav S . Study on knowledge, attitude and practices regarding gender preference and female foeticide among pregnant women. Indian J Community Med. 2007;32:300-1
7. Pavithra MB, Sudeepa Dhanpal. A study of gender preference, knowledge and attitude regarding prenatal diagnostic techniques among pregnant women in an urban slum of Bengaluru. International J of Community Medicine and Public health. 2015;3:282-87.
8. Archak Roy, Romy Biswas. A study on gender Preference and awareness Regarding Prenatal Sex Determination

- among Antenatal Women in a rural Area of Darjeeling District, West Bengal. *J of Clinical and Diagnostic Research*. 2017;2:L005-008.
9. Sushma K, Nithesh K. Gender preference and awareness regarding sex determination among married women in urban slums. *International J of Community Medicine and Public Health*. 2018;5:987-90.
 10. Ghose S, Sarkar S Knowledge and attitude of Prenatal Diagnostic techniques Act among women- a hospital based study. *J Community Med*. 2009;5:1-6.
 11. Srivastava S, Kariwal P, Kapilarami MC. A Community based study on awareness and perception on gender discrimination and sex preference among married women (in reproductive age group) in a rural population of district Bareilly, Uttar Pradesh. *Nat J Commun Med* 2011;2:273-6.
 12. Khatri M, Acharya R, Sharma G. Knowledge, Attitude and Practices Related to Pre Conception and Pre Natal Diagnostic Techniques Act Among the Antenatal Women in Bikaner. 2011;1:121.
 13. Puri S, Bhatia V, Swami H M. Gender preference and awareness regarding sex determination among married women in slums of Chandigarh. *Indian J Community Med*. 2007; 1:60-2.

Source of Support: None Declared
Conflict of Interest: None Declared

