Innovations

Gender Preference and PC-PNDT Awareness: A Rural Outlook

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Abstract

Introduction*According to the economic survey 2017-18, it was estimated that 63 million girls were missing in the Indian population, and 21 million girls were unwanted. To curtail the practice of female foeticide Government of India passed the Prenatal Diagnostic Techniques (Regulation and Prevention of Misuse) Act in 1994.* ***Objectives****1. To assess the awareness among women about PC-PNDT Act.2.To study the perception of rural women about femalefoeticide and gender preference* ***Methodology:*** *A mixed method study conducted in rural Dakshina Kannada with multistage sampling technique. Cross sectional analysis for awareness of PC PNDT Act and gender preference was done. A pre-validated and pretested questionnaire used. Knowledge and attitude were scored and categorized. FGD was done for second objective. Thematic analysis was done for FGD.* ***Results*** *A total of 650 mothers from 13 PHCs were surveyed for the assessment of awareness of PC-PNDT Act and Gender preference.The knowledge regarding PC-PNDT was found to be average in majority i.e., 49.5% and attitude was found to be good in majority i.e., 74.9%Majority of the mothers had no gender preference 57.7%, 20.5% had preference for the female child in the study and 17.2% had preference for the male child. There was significant association of age, occupation, income, type of family and gender preference among women.* ***Conclusion:*** *The awareness regarding the PC-PNDT Act is average among the mothers but majority have good attitude towards the Act. No obvious gender preference observed in the study participants.*

Keywords: *Gender preference, PC-PNDT, Multistage, Rural, FGD*

Introduction

According to the economic survey 2017-18, it was estimated that 63 million girls were missing in the Indian population and 21 million girls were unwanted[1]. That is parents continued to have children till they get a male child, an indicator which is called as Meta preference for a son, the phenomena which resulted in 21 million unwanted girls. Female feticide in India is present from the time of technological advancements in the medical field like prenatal sex determination in the 1970s. According to the 2011 census report, child sex ratio (0-6 years), females per 1000 males is 914. The child sex ratio of 905 and 923 females per 1000 males was found in urban and rural area respectively[2]. According to the 2011 census report, the 0-6 child sex ratio decreased by 5 points registering 947 female children to 1000 male children in Dakshina Kannada district as compared to 2001 census. This ratio increased in rural areas by 4 points and decreased 17 points in urban areas[3].

In 1994, the Government of India passed the Prenatal Diagnostic Techniques (Regulation and Prevention of Misuse) Act with the aim of preventing female foeticide. The implementation of this Act was slower than expected. This very law made it illegal to advertise or perform the tests (with a few exceptions), and prescribed punishments for the doctor, relatives who encourage the test, and the woman herself, with fines from 10 to 50 000 INR (Indian Rupees) and jail terms from 3 to 5 years. It was later amended and replaced in 2002 by the Pre-conception and Pre-natal Diagnostic Techniques (Prohibition of sex selection) Act.The awareness about the PC PNDT Act in the population remains limited until today. Understanding the awareness of PC-PNDT Act will help us determine the level of awareness people have towards the declining trend of sex ratio, and also measures taken by the government to normalise the ratio and discussions about gender preference in the society will help us obtain a further clear picture of reasons for declining sex ratio. The objective of the study was to assess the awareness among women about PC-PNDT Act and to study the perception of rural women about female foeticide and gender preference.

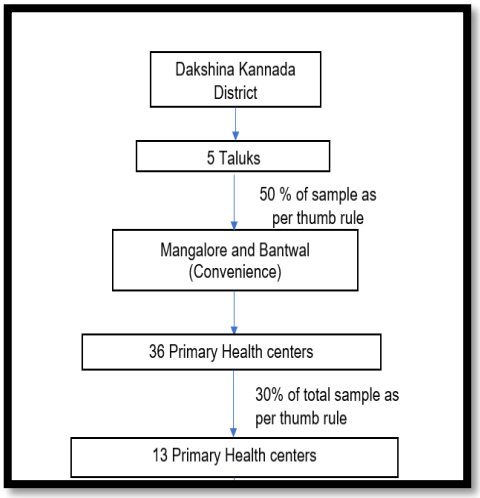
Methodology

A mixed model community-based study was done in Dakshina Kannada District over a period of one-year. Multistage sampling was done to identify the village and women as sample unit. There are 5 Taluks in Dakshina Kannada, 50% of the taluks are considered for the study as per thumb rule [4] (Mangalore and Bantwal is considered for convenience). There are around 36 PHCs in these two taluks. Considering 30% of sample being 13 PHC which were selected randomly using lottery method.Based on the proportion of PHCs, 9 PHCs were selected from Mangalore Taluk and 4 from Bantwal Taluk. The estimation of under 5 and pregnant mothers was taken as 20% at field level studies (under 5 being 12.5%). Considering

a total population of 25,000 in each PHC, we have 5,000 as the population for whom this study is intended. As per thumb rule, 1% of the total population is considered and so, 50 is the sample size in each PHC out of which at least 20 should be pregnant mothers. The final sample is 650. 1-2 FGD will be conducted in each taluk at the field level to study the cause of female foeticide and son preference.

A questionnaire-based interview was conducted among to be mothers and under 5 mothers recording their basic demographic details like literacy, occupation, socio-economic status, religion, marital years, type of family, condition of family and the decision maker in the family and their perception on knowing, acceptance, propagation and contents of PC-PNDT Act. 3 FGDs were conducted in the randomly selected PHC.

Statistical Analysis



Data was entered in the Microsoft Excel sheet and was analyzed using SPSS software (version 16) for analysis. In descriptive statistics, frequencies and percentages were used. Knowledge was graded and scored. The three categories of knowledge are poor (score 0), average (score 1-3) and good (score 4-5). The attitude was also scored and categorized. The three categories of attitude are poor (score 0), average (score 1-3) and good (4-5). The knowledge and attitude were checked for association by using Chi square test. P value <0.05 was considered significant. Odds ratio and multiple logistic regression was applied to detect the individual variable effect. Manual inductive analysis was done for the analysis of the focus group discussion

Results

A total of 650 mothers from 13 PHCs were surveyed for the assessment of awareness of PC-PNDT Act and gender preference. Majority of the women belong to the age group of 26 – 30 years and were Hindu by religion.

Majority of the participants, i.e., 49% of the participants were found to have average knowledge regarding the PC-PNDT Act followed by 40.5% who had good knowledge. There was a significant association of knowledge with several socio demographic factors such as religion, education occupation and income. However, no association of knowledge was found with age and type of family.

The attitude towards PC-PNDT Act was also scored and categorized into poor, average and good. Majority of the participants i.e., 74.9% were found to have good

attitude towards the PC-PNDT Act. Attitude was found to be significantly associated with religion, education, occupation, income and type of family

Table 1 : Showing association of sociodemographic factors with knowledge categories (N=650)

		Knowledge			Total	Chi square value	P value
		Poor	Average	Good			
Age	<20	2(16.6%)	6(50%)	4(33.3%)	12	7.67	0.466
	21- 25	26(15%)	81(46.8%)	66(38.1%)	173		
	26 - 30	25(8.3%)	152(50.9%)	122(40.8%)	299		
	31 - 35	10(8%)	63(50.4%)	52(41.6%)	125		
	>35	5(12.1%)	17(41.4%)	19(46.3%)	41		
Religion	Hindu	42 (10.9%)	191 (49.8%)	150 (39.1%)	383	10.17	0.03*
	Muslim	23 (9.3%)	125(50.6%)	99 (40%)	247		
	Others	3 (15%)	3 (15%)	14 (60%)	20		
Education	<7th std.	17(13.8%)	57(46.3%)	49(39.8%)	123	33.08	<0.01*
	Up to 10th std.	32 (13.8%)	113 (48.9%)	86 (37.2%)	231		
	10 to 12th	10 (5.4%)	103 (55.6%)	72 (38.9%)	185		
	Degree and professional	4 (4.8%)	40 (39%)	54 (56%)	98		
	Not answered	5 (38.4%)	6 (46.1%)	2 (15.3%)	13		
Occupation	Home maker	48 (11.4%)	206 (49.2%)	164 (39.2%)	418	17.36	0.02*
	Skilled	5 (17.2%)	10 (34.4%)	14 (48.2%)	29		
	Unskilled laborers	12 (9.75%)	64 (52.03%)	47 (38.2%)	123		
	Clerical/official/ Professional	1 (2.2%)	28 (63.63%)	15 (27.7%)	44		
	Private/ business/	2 (5%)	11 (30.5%)	23 (63.8%)	36		

	self employed						
Income	<50,000	35 (9.9%)	180 (51.1%)	137 (38.9)	352	23.86	< 0.01 *
	50,000-1,00,000	10 (7.1%)	65 (46.7%)	64 (46%)	139		
	1,00,000-5,00,000	5 (7.5%)	23 (34.8%)	38 (57.5%)	66		
	Not answered	18 (19.3%)	51 (54.8%)	24 (25.8%)	93		
Type of family	Joint	24 (8%)	146 (48.8%)	129 (43.1%)	299	6.35	0.17
	Nuclear	34 (11.3%)	140 (46.8%)	115 (38.4%)	289		
	Not answered	10 (16.1%)	33 (53.2%)	19 (30.6%)	62		

Table 2: Showing association of socio demographic factors with attitude categories (N=650)

		Attitude			Total	Chi square value	p value
		Poor	Average	Good			
Age	<25	24 (12.9%)	23 (12.4%)	138 (74.59%)	185	9.50	1.4
	26 - 30	25 (8.3%)	44(14.7%)	230(76.9%)	299		
	31 - 35	11(8.8%)	23(18.4%)	91(72.8%)	125		
	>35	2 (4.8%)	11 (26.8%)	28 (68.2%)	41		
Religion	Hindu	39(10.1%)	59(15.4%)	285(74.4%)	383	10.17	0.03*
	Muslim	22(8.9%)	34(13.7%)	191(77.3%)	247		
	Others	1(5%)	8(40%)	11(55%)	20		
Education	≤9th std.	20 (16.2%)	10 (8.1%)	93 (75.6%)	123	28.6	<0.001*
	Up to 10th std.	13 (5.6%)	49 (21.2%)	169 (73.1%)	231		
	10 to 12th	21 (11.3%)	25 (13.5%)	139 (75.1%)	185		
	Degree	6 (7.3%)	12 (14.6%)	80 (78%)	98		
	Not answered	2(15.3%)	5(38.4%)	6(46.1%)	13		

Occupation	Home maker	38(9%)	46 (11%)	334(79.9%)	418	53.836	<0.001*
	Skilled	2 (6.8%)	1(3.4%)	26(89.6%)	29		
	Unskilled laborer	14 (11.3%)	28 (22.7%)	81(65.8%)	123		
	Clerical/official/ Professional	8(18.18%)	7 (15.9%)	29(65.9%)	44		
	Private/ business/ self employed	1(2.7)	18(50%)	17(47.2%)	36		
Income	<50,000	31(8.8%)	44(12.5%)	277(78.6%)	352	29.26	<0.001*
	50,000-1,00,000	16(11.5%)	18(12.9%)	105(75.5%)	139		
	1,00,000-5,00,000	3(4.5%)	9(13.6%)	54(81.8%)	66		
	Not answered	12(12.9%)	30(32.2%)	51(54.8%)	93		
Type of family	Joint	21(7%)	35(11.7%)	243(81.2%)	299	33.46	<0.001*
	Nuclear	30(10.3%)	44(15.2%)	215(74.3%)	289		
	Not answered	11(17.7%)	22(35.4%)	29(46.7%)	62		

Majority of the study population i.e., 57.70% of the study participants stated that they do not have preference for the gender of the child. 20.5% of the mothers said they prefer female child.

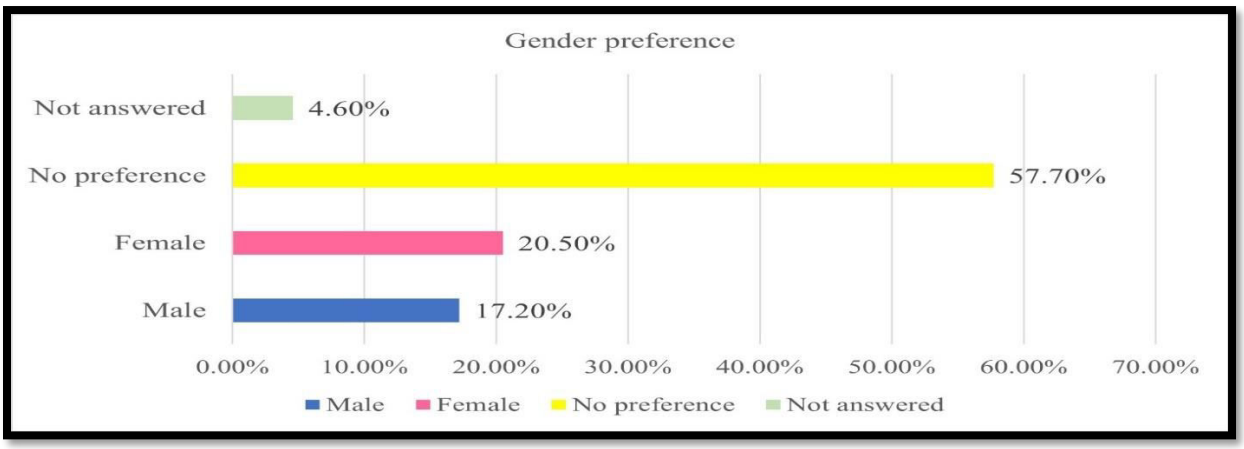


Fig 1 : Showing gender preference among mothers (N=650)

Table 3 showing association of sociodemographic factors with gender preference (N=650)

		Gender preference			Total	Chi square value	p value
		Male	**Female**	**No preference**			
Age	<20	4(33.33%)	2(16.6%)	6(50%)	12	19.7	0.011*
	21- 25	43(24.8%)	38(21.9%)	81(46.8%)	173		
	26 - 30	42(14%)	62(20.7%)	181(60.5%)	299		
	31 - 35	21(16.8%)	21(16.8%)	80(64%)	125		
	>35	2(4.8%)	10(24.3%)	27(65.8%)	41		
Religion	Hindu	54 (14%)	70(18.2%)	241(62.9%)	383	12.01	0.017*
	Muslim	54(21.8%)	58(23.4%)	123(49.7%)	247		
	others	4(20%)	5(25%)	11(55%)	20		
Education	≤9th std.	34(27.6%)	25(20.3%)	56(45.5%)	123	16.75	0.03*
	Up to 10th std.	35(15.1%)	51(22%)	136(58.8%)	231		
	10 to 12th	31(16.7%)	33(17.8%)	112(60.5%)	185		
	Degree/ Professional	10(10.2%)	22(22.4%)	63(64.2%)	98		
	Not answered	2(15.3%)	2(15.3%)	8(61.5%)	12		
Occupation	Home maker	79(18.8%)	94(22.4%)	231(55.2%)	418	25.93	<0.001*
	Skilled	6(20.6%)	3(10.3%)	20(68.9%)	29		
	Unskilled laborer	21 (17.07%)	29(23.5%)	57 (46.3%)	123		
	Clerical/official	4(11.4%)	4(11.4%)	27(77.1%)	35		
	Private/ self-employed/ Professional	2(4.4%)	3(6.6%)	40 (88.8%)	45		
Income	<50,000	58(16.4%)	65(18.4%)	216(61.3%)	352	5.71	0.45
	50,000-	28(20%)	34(24.4%)	72(51.7%)	139		

	1,00,000						
	1,00,000-5,00,000	9(13.6%)	16(24.2%)	41(62.5%)	66		
	Not answered	17(18.2%)	18(19.3%)	46(49.4%)	93		

On assessment of gender preference for second child, conditioned the first child to be male or female it was observed that if the first child is female then the preference for male child is 42.9% and if the first child is male then the preference for the female child is 42.3%. Around 45-50% of the population did not have any preference for the gender of the second child irrespective of the factor whether the first child is male or female.

There was a significant association of gender preference with age, religion, education and occupation.

3 FGDs were conducted in Anganwadi Centers of the District. Registered pregnant mothers and mothers of under 5 children took part in the FGD.

Majority of the women were in the age group of 25-30 years and belonged to Muslim religion. 90% of the participants were housewife.

Sex preference

Majority of the mothers in the discussion said that there are parents who prefer particular gender of the child. Mothers who took part in the FGD said that they did not have any preference for the gender of the child. However, when asked if they could have only one child which gender the child would be 40% of them said no preference, 30% of them they prefer girl child. They also said that the preference for the gender of the child is more common in the older generation among the parents.

Mothers felt that some of them prefer boys while others prefer girl child for variety of reasons. It was coded as follows.

Bread winner

Mothers said that the male child is preferred by parents probably because they see male child as the future bread winner for the family. Parents feel that daughters will get married and go to another house while sons will take care of them.

"It is a belief that sons will take care of the family when they grow up while daughters get married and go off"

Insult

Some mothers felt that when women give birth to girl child there are insulted in the society. They said mothers prefer to have male child as they do not want to get insulted that they gave birth to girl child only.

"Mothers are insulted if they give birth to only girl child. They are scolded and treated badly by the family"

Emotional support

Majority of the women said that they want to have at least one girl child in the family as they are helpful to mothers and support mothers emotionally as well. Daughters take care of the parents as well not just sons.

"A girl child is must in the family. It gives lot of support to the mother in all the way"

Responsibility

Mothers felt that whether the baby is boy or girl, kids require equal amount of care and support. The expenditure on education and others need will be same for boys as well as girls. They mentioned if daughters go for job and support the family unlike earlier times. Even girls are responsible and take care of the family.

Balance of family

Majorly women felt that the preference for the gender of the child is for the balance of the family. That there should be one boy and one girl child. If the gender of the first child is boy then the preference was towards girls and when the gender of the first child was girl the preference was towards boy. Overall parents wanted both boys and girls.

Female child - a curse

Mothers outrightly said that female child is never a curse. They are in fact considered very lucky for the family was opinion of the mothers. Previously they might have been considered that way as getting girls married is difficult in the society with burden of dowry. But they felt that the situation is no longer the same. The burden of dowry has reduced substantially and girls are never a curse.

Abortion

Medical

Majority of the mothers felt that abortion is wrong if it is not done for medical purpose. Mothers felt that abortion is acceptable only if the fetal anomalies are found which cannot be treated.

"If the child has some condition which is found by scan and cannot be treated then it is okay to abort not otherwise"

Sex selective

Mothers said that sex selective abortions are not acceptable. The fetus should not be removed based on the gender. And they believed it's not in practice anymore due to the stringent laws in place.

Discussion

In the current study 54.9% of the participants said that pre-natal sex determination is possible, and all of these participants knew that the ultrasound was technique used for the same. The knowledge regarding the availability of technique for prenatal sex

determination varied from 44.8% - 95%[5,6]. Similar study done by Mehta D in Bikaner, Rajasthan showed that 77.5% of the study participants knew that pre-natal sex determination can be done and 81% of them knew that Ultrasonography is the technique used [7]. A study done in Nagpur by Deshpande et al showed availability of antenatal sex determination technique was known to 80.5% of the participants and 25.5% knew that Ultrasound can be used for antenatal sex determination [8]. A study done in Darjeeling by Roy A showed that 44.82% of the participants were aware that prenatal sex determination is possible [5]. The awareness regarding the possibility of sex determination was found to be 91.7% in the study by Kumar N et al among pregnant women in South India [9].

In this study majority of the participants i.e., 91% of the study participants knew that sex determination is an offence. Similar findings were seen in studies done by Bedre R et al, Gaur NK et al, Kumar B et al where 92.4%, 89.2% and 89% of the participants knew that prenatal sex determination is a crime [10,11,12].

The knowledge was found to be associated with religion, education, occupation and income of the family. Similar findings were found in Deshpande et al where significant association of awareness regarding the PC-PNDT was found with higher education, upper socio-economic class and working status [8].

Most of the participants, i.e., 74.9% were found to have good attitude towards PC-PNDT Act which is like study done by Pavithra et al and Dhananjaya Sharma et al where right attitude was found in 74% and 70% of the participants respectively [13,14]. The attitude towards PC-PNDT Act was found to be significantly associated with the socio demographic factors like religion, education, occupation, income and type of family. The estimated adjusted odds ratio for these factors was close to one.

In our study 11% of the participants said that they would wish to know the sex of the fetus and 9% of them said if given an option they would undergo sex determination. But none of the participants said they would discontinue the pregnancy if the fetus was found to be either boy or girl. Similar studies by Pavithra M B et al, Shalini S et al and Tiwari P showed 23%, 32% and 15% of the participants who wanted to undergo sex determination respectively [13,10,15]. The percentage of women who wanted to undergo sex determination were higher in other studies. Also 18% of the participants in study by Pavithra M B et al, 20% of the participants in the study by Shalini S et al, 7.4% of the participants in study by Maroof K et al said that they will go for foeticide if the child is found to be female[13,10]. However, no such observations were made in this study. There was fear of Act present among the people which prevented them from giving such statements. Twari P et al did any interventional study where they increased the awareness regarding the female foeticide following which it was observed that percentage of the participants who desire to know the sex of the fetus reduced from 15% to 4% [15].

In assessment of gender preference among mothers we found that 57.7% said that they no preference for the sex of the child, 20.5% preferred to female child and 17.2% preferred male child. Similar studies for the assessment of gender preference found that there was high preference for the male child. Study done by Anupama S et al, Roy A and Pavithra MB et al had male child as 59%, 52% and 40% respectively [16,5,13].

The reasons found in the study done by Deshpande et al and Pavithra M B et al for the preference of male child was son carries the name of the family and takes cares of the parents. Similar reasons were perceived by the study participants in the focus group discussion [8,13].

Conclusion

The awareness regarding the PC-PNDT Act is average among the mothers but majority have a good attitude towards the Act. The decrease in knowledge is due to a lack of complete understanding of PC-PNDT Act. No obvious gender preference observed in the study participants. The preference for female child was slightly more probably due to the matriarchal family practice in the district.

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