

## PRACTICES RELATED TO PRENATAL DIAGNOSTIC TECHNIQUES AMONG ANTENATAL CASES

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### ABSTRACT

**Background:** Gender inequality in India is an acknowledged and well-documented fact, but its causes and its future is still a mystery. Another valuable way of thinking about gender disparity is female empowerment. Moreover, empowerment has the potential to alleviate other aspects of gender inequality, since some women may choose to promote their own or other women's equality as their goal. **Material & Methods:** The present community-based prospective and cross-sectional study was conducted at department of community medicine and Zanana Hospital associated with PBM group of hospitals in Bikaner and attached to S.P. Medical College. Study duration was of one year, from September 2011 to January 2012. **Results:** 12.9 % of study population confessed that they have done MTP during previous pregnancy. Out of 160 women who are willing to do sex determination in future 71.2% (114) women confessed that they will go for MTP after sex determination. In the present study out of 1000 pregnant women we found that 21% of study population has experienced miscarriage in previous pregnancy. Out of them majority (61.43%) have done MTP due to various reasons. Among the total cases who were opted for miscarriage by the means of MTP, 87.1% of study population never done MTP. 11% women have done it once while 1.9% women have done MTP twice during previous pregnancy. **Conclusion:** Socio-demographic factors like age, literacy, socioeconomic status, parity sex of the previous child and pressure by family or husband affect the practices towards the PC & PNDT Act and woman's preference for her next child.

**Key words:** sex determination, PC & PNDT Act, female feticide.

### INTRODUCTION

Gender inequality in India is an acknowledged and well-documented fact, but its causes and its future is still a mystery. Another valuable way of thinking about gender disparity is female empowerment. Moreover, empowerment has the potential to alleviate other aspects of gender inequality, since some women may choose to

promote their own or other women's equality as their goal (1). The social, cultural and religious fibre of India is pre-dominantly patriarchal contributing extensively to the secondary status to women (2). Numerous studies have noted the sex-selective abortions and the ill treatment of girls that have resulted in millions of "missing"

women – women that should exist but do not. Meanwhile, others have focused on documenting inequalities in society for the surviving women who have less access to nutrition, health services, education and employment than men (3). Another important pillar of the patriarchal structure is marriage wherein women are given a subordinate status having no say in the running of their life or any control over their body or bodily integrity. The dowry or groom price is so staggeringly high irrespective of the class structure that generations may have to toil to repay the debts incurred during marriage (4). Some of the other reasons are the belief that it is only the son who can perform the last rites, lineage and inheritance runs through the male line, sons will look after parents in old age, men are the bread winners etc. All of this has contributed to a low social status for women in the society to such an extent that even the birth of a girl child in a family is sought to be avoided (5).

Pertinently, the responsibility for killing the child was fixed on the woman/mother as she was considered responsible for bringing the girl child into existence. An examination of the causes for eliminating the girl child indicates that the reasons are similar and different depending upon the geographical location in which female infanticide is practiced (6). Various methods were found to eliminate the girl child after her birth like starving her, crushing her under the bed or giving her poison etc (7). Female infanticide now in most places has been replaced by female feticide and in fact sadly, female feticide has made inroads into areas where traditionally there were no instances of female infanticide. As a consequence sex determination centers have mushroomed in all parts of the country including small districts and villages. Most of the female feticide cases in India are preventable and the PC & PNDT Act is very helpful for reducing the rate

of Female Feticide (8). Hence the emphasis of my study is to assess the practices related to prenatal sex determination among the pregnant women in Bikaner, so that we can find out the various reasons of very less sex ratio in Bikaner and also to inform and educate them about PC & PNDT.

## **MATERIALS & METHODS**

The present community-based prospective and cross-sectional study was conducted at department of community medicine and Zanana Hospital associated with PBM group of hospitals in Bikaner and attached to S.P. Medical College. Study duration was of one year, from September 2011 to January 2012. Considering the knowledge about PC & PNDT Act among Antenatal women is 40 % and allowable prevalence approximately 40% (taken from previous studies) and we take allowable error margin of 10% at 95% level of significance. We calculate the sample size by using the formula  $(n) = 4PQ/d^2$ , where P= prevalence (40%), Q= (1-P), d= relative allowable error (10%) and n= sample size. Though the sample size was 600 Antenatal females of 18-49 years of age, but keeping in the view rural Rajasthani women, for whom obstetrics enquiry is very sensitive matter, a high dropout rate was expected. With this view in consideration, randomly selecting a few antenatal women from a large population and descending upon them would not provide the true position. So the 1000 eligible antenatal women of 18-49 years attending the Antenatal Clinic were selected. Clearance from Institutional Ethics Committee was taken before start of study and written informed consent for the study purpose was obtained from all the enrolled participants. All the patients were subjected to a pretested proforma and socio-demographic data were recorded along with detailed general physical and clinical

examination. A separate form was framed for assessment of Practices about PC & PNDT Act .In this form the variables included to evaluate practices were miscarriage rate, MTP, sex determination and sex selective abortion etc. Data were entered in the MS office 2010 spread sheet and Epi Info v7. Data analysis was carried out using SPSS v22. Qualitative data was expressed as percentage (%) and Pearson’s chi square test was used to find out statistical differences between the study groups. If the expected cell count was < 5 in more than 20% of the cells then Fisher’s exact test was used. All tests were done at alpha (level significance) of 5%; means a significant association present if p value was less than 0.05.

## RESULTS

In the present study, a total of 1000 mothers were selected after taking consent. The response rate was 100% and there was no drop out in the present study. Among them no Antenatal women visited between age 43 to 49 yrs. for ANC in antenatal clinic during the study period. Maximum number 38.3% of pregnant women are in the age group 23 to 27 years which was followed by 31.2% pregnant women of 28-32 years of age group, while only 3.8% are coming under 38 to 42 years age group. Among the study population 35.9% women are Primipara, 61.1% are Multipara and only 3% were Grand Multipara. (Table 1)

**Table 1: Age and parity wise distribution of antenatal women**

S.No.	AGE GROUP (YRS)	TOTAL	BIRTH ORDER	TOTAL
1.	18-22	170 (17%)	PRIMIPARA	359 (35.9%)
2.	23-27	383(38.3%)	MULTIPARA	611 (61.1%)
3.	28-32	312(31.2%)	GRAND MULTIPARA	30 (3%)
4.	33-37	97(9.7%)	TOTAL	1000(100%)
5.	38-42	38(3.8%)		
6.	TOTAL	1000(100%)		

In the present study we found that total positively given answers for various character are 1392 .This is due to different women have given “Yes” answer multiple times for different characters. 12.9 % of study population confessed that they have done MTP during previous pregnancy. Out of 160 women who are willing to do sex determination in future 71.2% (114) women confessed that they will go for MTP after

sex determination (Table 2). In the present study out of 1000 pregnant women we found that 21% of study population has experienced miscarriage in previous pregnancy. Out of them majority (61.43%) have done MTP due to various reasons. Among the total cases who were opted for miscarriage by the means of MTP, 87.1% of study population never done MTP. 11% women

have done it once while 1.9% women have done MTP twice during previous pregnancy. (Table 3)

**Table 2: Assessment of practices about pc & pndt act among study population**

S.No.	CHARECTERSTIC	YES	NO	Total
1.	Experienced miscarriage during previous pregnancy	211	789	1000
2.	Done MTP in past	129	871	1000
3.	Used Labs / USG center during previous pregnancy	938	62	1000
4.	Will go for Sex Determination before delivery	160	840	1000
5.	Will do MTP after Sex Determination	114	886	1000
6.	Total	1392	2608	

**Table 3: Assessment of reasons for miscarriage by MTP and its frequency**

S.No.	Reasons for miscarriage	No. of cases
	<b>MTP</b>	129 (61.43%)
	<b>Frequency of MTP</b>	
1.	NONE	871
2.	1	110
3.	2	19
4.	TOTAL	1000

## DISCUSSION

In the present study, out of the total pregnant women visited for ANC in Antenatal OPD and out of these 1000 antenatal women were interviewed who were between the age group of 18-49 years and gave the consent for interview. Similar research study planned with a comparable and community based study on awareness and perception on gender

discrimination and sex preference among married women of reproductive age group in Bareilly (U.P.) conducted by Srivastava et al (2001) (9), Status of Sex Determination Test in North Indian Villages conducted by A J Singh et al (2007) (10), Study on Knowledge, Attitude and Practices Regarding Gender Preference and Female Feticide Among Pregnant Women

conducted by BN Vadera (2007) (11), KAP study on antenatal women done by S. Ghose et al (2011) (12), and a study on male child preference in surat city by Thakkar Dhwanee et al (2011) (13).

Age wise distribution showed that majority of pregnant women were between the age group of 23-27 years (38.3%) while only 3.8 % were between age group of 38-42 years. None of the Antenatal women who visited for ANC in antenatal clinic during the study period were in age group of 43 to 49 yrs. 35.9 % of Among the Antenatal women were Primi, 61.1% were Multiparous and only 3 % women were Grand Multiparous. The Present study also revealed that there was increasing trends of knowledge about PC & PNDT Act is seen with higher socioeconomic group. The difference of knowledge about PC & PNDT act with socioeconomic status varies between 36.5% among class V to 66.1% among class I .These observations are statistically highly Significant. Similar results obtained by a study conducted by Thakkar D et al among pregnant women on the male child preference and found statistically significant results (13).

In most parts of the country son is a major obsession. One son is a cause for joy while two are seen as a lifetime for celebration, the traditional thinking being that if one dies, at least the other will live to take care of the parents. In the bargain, pressures on the woman to produce a son are unending. The girl child is seen as an economic drain as her marriage and dowry crushes her family under huge burden of debts. The various reasons for son preference mentioned by the women include that he is the support and provider in old age; brings in dowry instead of draining family resources; keeps the family name alive; performs the last rites; on investing in sons, say on education or business, the wealth remains in the family. The main perceived reason for not wanting daughters was dowry by all the respondents. Similar results obtained by a study conducted by Puri et al among pregnant women on the male child preference and showed that 56% women in the

slums of Chandigarh showed preference to male child while in the present study it is 67.8% of all study population who gave the preference to male child. (14).

Determination Test (SDT) done while in the present study it is found that 93.8% of study population reported that they had some test done during this pregnancy. 65.8% had ultrasound test done for fetal well being advised by the doctor, 13.3% women confessed that they did it for sex- determination. The reason for increasing trend of use of prenatal diagnostic tests these days may be due to increase in awareness since last few years in the general population either due to increase in education or due to mass media like television, newspapers and internet. These days ultrasonography are advised to almost all pregnant women doctors for fetal well being or excluding any pathology. A study conducted by Sneh Lata Tandon et al revealed that most of the women reported that they had gone for female feticide (MTP) under pressure from their husbands. Many a time the husbands would beat up their wives and force them for female feticide because in their view a female is an economic burden. In contrast in the present study the Positive Attitude was seen more amongst the subjects from lower socioeconomic group. Positive Attitude towards PC & PNDT act varied between 51.4% among social class I to 70 % among social class V. This difference in attitude with socioeconomic class was statistically highly significant (15).

## CONCLUSION

We concluded that the present study shows a clear picture of practices towards the PC & PNDT Act. The existence of son preference at an alarmingly high rate in our society is the root cause of imbalanced sex ratio. Socio-demographic factors like age, literacy, socioeconomic status, parity sex of the previous child and pressure by family or husband affect the practices towards the PC & PNDT Act and woman's preference for her next child.

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