

KNOWLEDGE AND ATTITUDE REGARDING PCPNDT ACT AMONG MEDICAL UNDERGRADUATES: A STUDY CONDUCTED IN TEACHING INSTITUTE MUMBAI

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ARTICLE INFO

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Key words: PCPNDT Act, Medical
students, Knowledge, Attitude.

ABSTRACT

Background: Pre conception and Pre natal Diagnostic Technique Act was amended in year 2003 which provides for the prohibition of sex selection before & after conception & for regulation of prenatal diagnostic techniques appropriately as mentioned above & for prevention of their misuse. As per global trends, the normal child sex ratio (CSR) should be above 950, still there is a gap of 67 points in CSR for Maharashtra as compared to the global trends. With advancement of technology doctors are probably misusing their power. Medical students are future doctors in whom knowledge has to be imparted right from the UG level since the impact is life-long. Hence this study was conducted keeping in mind the aim & objective to study the Knowledge and Attitude regarding PCPNDT Act in Medical Undergraduates. **Materials & methods:** This cross sectional study was carried out at Medical college of Mumbai. All posted hundred (III MBBS Part I) students during December 2013 were included. Pre designed pretested questionnaire was administered. Analysis was done with the help of MS Excel & SPSS version 15. **Results:** Out of 98% who knew about sex determination, 67% were aware that Ultra sonography is used for sex determination. Maximum number of students 40% had knowledge that it is carried out in USG Clinic, & is a crime & has legal punishment, mandatory registration of USG machine only 61% could write the full form of the Act. 56% came to know about the Act from mass media. More than half (59%) answered that doctor, pregnant lady & relatives should be held responsible. 95% students opined that sex determination should be punishable. Maximum opined reason for female foeticide was son preference & female foeticide deteriorates female health. None of them preferred to have both daughters. **Conclusion:** Despite of population explosion in India majority of the students believed that family size should be completed by having two children; one of each sex. There is a need to create awareness among medical fraternity & the general population by health education.

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INTRODUCTION

The Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 was enacted by the Indian Parliament to provide for the regulation of the use of pre-natal diagnostic techniques for the purpose of detecting generic or metabolic disorders or chromosomal abnormalities or certain congenital malformations or sex linked disorders and for the prevention of the misuse of such techniques for the purpose of pre-natal sex determination leading to female foeticide and for matters connected therewith or incidental thereto.¹

Maharashtra was first State to enact Maharashtra regulation of use of PNDT Act in 1987. The Act was passed in 1994 & amended in April 2003 to Pre conception and Pre natal Diagnostic Technique(Prohibition of sex selection) Act (PC-PNDT) which is applicable to all Govt/NGO/Private/corporate establishments. The Act

provides for the prohibition of sex selection before & after conception & for regulation of prenatal diagnostic techniques appropriately as mentioned above & for prevention of their misuse.²

Though, sex ratio at birth is a better indicator of pre-natal sex selection, the child sex ratio is still most widely quoted because of its easy availability at the district level and throughout the country. The child sex ratio reflects the imbalance between the number of girls and boys, indicating that the practice of sex selection. Child Sex Ratio (CSR) is calculated as the number of girls per 1000 boys in the 0-6 years age group. As per global trends, the normal child sex ratio should be above 950.¹

Maharashtra recorded decline of 30 points in CSR between 2001 and 2011. According to 2011 Census CSR for rural Maharashtra is 880 as compared to 888 for urban

Maharashtra.¹ Still there is a gap of 67 points in CSR as compared to the global trends. Several activities have been undertaken by Maharashtra for effective implementation of the PCPNDT Act to reverse skewed sex ratios in Maharashtra.

Maharashtra was the first State to issue guidelines and provide funds to NGOs for conducting sting operations on erring doctors & initiated website & helpline for reporting about erring doctors. Also, released booklet titled **Chakulya muklelya** and organises the training of Appropriate Authorities under the Act as a continuous activity.¹

The medical and nursing community are the first contact point for any couple intending to go in for sex selection. Sex selection is not only about technology & easy access to ultrasound technology for sex determination followed by elimination of the female but low status of women in society and the deep-rooted prejudices females face through their life.¹

Though the act was implemented as a solution for the falling sex ratio, we were not able to improve it & this figure at India level is lowest since independence³. On the other hand with advancement of technology there has been a misuse of ultrasound machines for prenatal sex determination by doctors⁴. This social evil can't be tackled alone by law making and implementing agencies without the active involvement of the medical fraternity.

Misuse of advanced technology continues to be a problem. Doctors might still be misusing their power & be involved in female foeticide. It is a topic of concern to everyone in the medical field. Active involvement of the medical fraternity is necessary. Medical students are future doctors in whom knowledge has to be imparted right from the UG level since the impact is life-long. Hence this study was conducted keeping in mind the aim & objective to study the Knowledge and Attitude regarding PCPNDT Act in Medical Undergraduates.

MATERIALS & METHODS

This cross sectional study was carried out at Department of Community Medicine in Medical college of Mumbai during December 2013. Required permission was obtained. All hundred (III MBBS Part I) students who were posted at the department were informed about the study. Their valid informed consent was obtained. All of them were ready to participate in the study and no one remained absent on the day when the questionnaire was administered. Pre designed pretested questionnaire was administered to them. Students knowledge about the Act, techniques used for detection, source of information, punishment, notice to be displayed, declaration by the pregnant lady was asked .Their opinion regarding punishment, possible reasons of female foeticide, impact of female foeticide and ideal number of children a couple should have was asked. Frequency tables were prepared & percentage was calculated. Analysis was done with the help of MS Excel & SPSS version 15.

RESULTS

There were 59% girls & 41% boys. Only 98% knew about sex determination and female foeticide. Out of 98% who knew about sex determination, 66(i. e. 67%) were aware that Ultra sonography is used for sex determination, followed by 26% told amniocentesis while 7% were not aware about technique for sex determination.

Maximum number of students (42) had knowledge that sex determination is carried out in USG Clinic, followed by Private Hospital (23).Though, belonging from Municipal Medical college ,15 students answered that sex determination can take place in Government Hospitals also. Most of the students knew that sex determination is a crime. Though, more than 3/4th of students knew about the Act, only 61% could write the full form of the Act. 56% came to know about the Act from mass media, 31% from health staff & 13% from friends & relatives.

Maximum students knew that there is legal punishment for sex determination however 86% were aware that the punishment includes fine & imprisonment both. More than half (59%) answered that doctor, pregnant lady & relatives should be held responsible for sex determination While 26% told that doctor, husband & relatives should be held responsible. 86% knew that registration of USG machine is mandatory & 14 % were not aware. 92% had knowledge about notice to be displayed outside the clinic but out of that only 26% could correctly explain the matter to be written in the notice. 61% were not had Knowledge regarding declaration while undergoing USG by the pregnant lady. While 28 who had knowledge regarding declaration only 46% could answer it correctly.

Figure1: Source of information of the Act

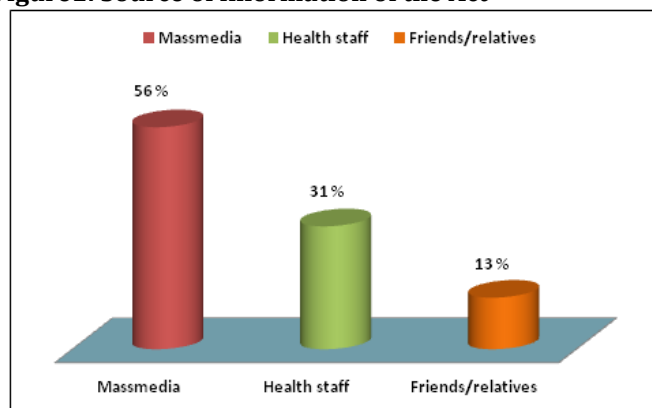


Table 1: Knowledge of medical graduates

Knowledge of medical graduates	Knowledge	Frequency N=100
About person to hold responsible for sex determination	Doctor, Pregnant lady, relatives involved	59
	Doctor, Husband & Relatives	26
	Only Doctor	7
	Don't know	5
	Doctor & Pregnant lady	2
	Doctor & Husband	1
	Only pregnant lady	0
About USG machine registration	Yes	86
	No	0
	Don't know	14
About notice to be displayed outside the clinic	Yes	92
	No	2
	Don't know	6

About matter on the Notice board to be displayed	Correct	24
	Wrong	66
	Don't know	10
Regarding declaration while undergoing USG by the pregnant lady	Yes	28
	No	11
	Don't know	61

Table 2: Attitude regarding sex determination

Attitude of medical graduates	Attitude	Frequency N=100
Should sex determination be punished?	Yes	95
	No	5
Attitude regarding person to be hold responsible	Doctor, Pregnant lady & Family member involved	82
	Only family member involved	11
	no one	5
	Both doctor & pregnant woman	2
	Only pregnant woman	0

According to 95% of students sex determination should be punishable, though 98% said that it is a crime, showing a gap of 3% in knowledge & attitude. 88% opined that most possible reason for female foeticide were son preference followed by dowry, gender inequality, problems related to marriage of females, fear of exploitation of females in the society.

Most of the students agreed that female foeticide deteriorates female health & increases exploitation of females. Only 7% opined to have one daughter as ideal number of children & none of them preferred to have both daughters. 79 % believed that there should be two children (one of each sex) as ideal number of children a couple should have.

Figure2: Possible reasons of female foeticide

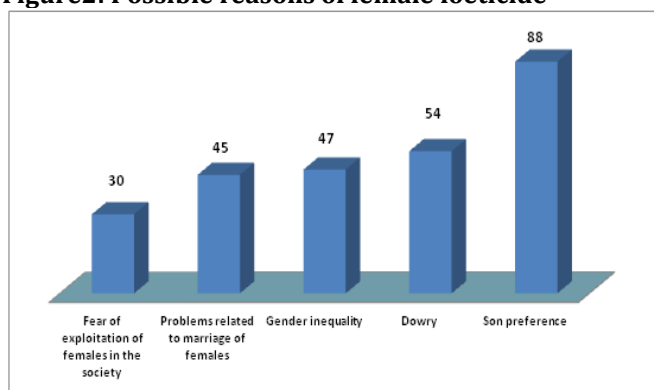


Table3: Impact of female foeticide on Society

Impact of female foeticide on Society	Frequency N=100
Adverse effects on female health (physical & mental) because of repeated pregnancies & forced abortions	73
Increasing sexual and social crime against women	43
Increase in prostitution, sexual exploitation & cases of STDs & HIV/AIDS	31
Any other	5
Don't know	2

DISCUSSION

In the present study medical graduates were in agreement regarding knowledge of female foeticide (98%) the same findings were quoted by Siddhu TK et al ³, however the current study showed 20–30% higher knowledge regarding the act, punishment (both fine & imprisonment) and USG registration as compared to Siddhu TK et al study conducted at Bathinda. This shows that students from the current study had more knowledge due to exposure to mass media but their knowledge regarding punishment of people involved in sex

determination was less by 10% as compared to Siddhu TK et al. This might be result of medical students hailing from various places from Maharashtra including rural also.

Students attitude regarding person to be punished (doctor, pregnant lady & family member) was 10% more in the present study as compared to study conducted in Gujarat by KM Dhaduk, ⁴

In none of the studies participants opined to have two daughters as ideal number of children. This shows strong desire & preference for male child is deep rooted. In one other study conducted by S Puri⁵ shows 58% respondents prefer male as first child. however around 3/4th respondents supported view of one male and one female child as ideal number of children in both Siddhu TK et al study & this study.

The possible reasons for female foeticide and impact of female foeticide on society were consistent with Siddhu TK et al & Nath et al study .^{3,6}

CONCLUSION

This study shows that almost all medical graduates were aware of sex determination & female foeticide. Majority were aware that USG is the most popular technique. 95% were of the opinion that sex determination should be punished however still there are students who don't agree that a doctor should be punished for violation of the act.

Despite of population explosion in India majority of the students believed that family size should be completed by having two children; one of each sex. Very few preferred to have girl child as a single child. There is a need to create awareness among medical fraternity & the general population by health education.

RECOMMENDATIONS

There is a need for strict law enforcement for violation of the Act & create awareness in the general population by health education. Also, improve the literacy of a girl child & status of women in the society. There is imperative need to adopt one child norm irrespective of sex of the child for population stabilisation in India. Ethical approach by the doctors should be followed and expected.

REFERENCES

1. Annual report on implementation of the Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act ,2005,PNDT Division Ministry of Health and Family Welfare Government of India ,New Delhi.
2. Sunderlal, Textbook of Community Medicine,CBS Publisher, Third edition, pg 373
3. Sidhu TK Kumar S Paramjit E Kaur S, A study of knowledge and attitude of medical undergraduate students regarding prenatal sex determination and female foeticide ,Indian journal of Maternal and child health, Volume 13 (3), 2011
4. KM Dhaduk et al , A study on doctor's perspective on PNDT Act, Indian Journal of Community Medicine, vol 34, issue 2, April 2009, 160-1
5. S Puri, Gender preference and awareness regarding sex determination among married women in slums of Chandigarh, Indian Journal of Community Medicine, 2007, vol 1, no 1, 60 - 63
6. Nath A, Sharma N, Knowledge and attitudes of medical students and interns with regard to female foeticide, Indian Journal of Community Medicine, 2009, vol 34, 164.

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