

## **Abortion among Married Women of Reproductive Age Group: A Community Based Study**

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**ABSTRACT:** Background: Despite a liberal abortion law, every year an estimated 5.7 million abortions are conducted illegally in India. An important reason for women undergoing induced abortion in India is thought to be due to son preference. Objectives: 1) To study the socio-demographic profile of abortion seekers. 2) To study the reasons for procuring abortions by married women of reproductive age group. 3) To study awareness regarding declining sex ratio & attitude towards gender discrimination among married women. Methodology: Using 30 stage cluster sampling technique, a community based cross sectional descriptive study conducted from July 2011 to Nov 2011 at Nanded city in Maharashtra state including 210 abortion seekers married women of reproductive age group. Results: Out of total 313 abortions, majority 186(59.42%) abortions were spontaneous, 234 (74.8%) abortions in gravida 3 & below, 224(71.6%) occurred before 3 months of pregnancy. Most common reason behind induced abortion was heavy bleeding 53(41.7%). Most women perceived non-availability of brides 175(83.3%) as the major repercussion of decreased sex ratio. Main perceived reason for son preference was support at old age 159 (75.7%) while reason for not wanting daughters was dowry 142(67.6%). Conclusions: Abortions were common in first trimester. Spontaneous abortions were more than induced one. Heavy bleeding becomes commonest cause among induced abortions in early gravida while to limit family size was commonest among later ones.

**KEY WORDS:** Abortion, Reproductive age, Sex ratio.

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### **I. INTRODUCTION:**

Abortion is the expulsion of product of conception before 20th week of gestation or if the weight is 500 grams or less. <sup>[1]</sup> Despite a liberal abortion law (Medical Termination of Pregnancy Act, 1972), every year an estimated 5.7 million abortions (ten times the legal ones) are conducted illegally in India. With decreasing age of menarche and early onset of sexual activity; changing values of life, greater permissiveness, sexual inquisitiveness and promiscuity, ineffective use of contraceptives our young people are exposed early to unplanned and unprotected sexual intercourse leading to unwanted pregnancy and subsequently abortions. <sup>[2]</sup> Induced abortions, especially in countries where the practice is restricted by law, continue to be a major reproductive health problem. Some 70 000 women die each year as a result of unsafe abortion. Many more women survive the experience only to suffer throughout the rest of their lives from infertility, chronic morbidity and permanent physical impairment. <sup>[3]</sup> A strong motivation to seek an abortion rests on the widespread desire for smaller families, the need to control the timing of births and the failure or inconsistent use of contraception. Poor access to family planning services shifts from rural to urban settings, poverty and hardship, increase in non-marital sexual activity, adolescent sexuality coupled with unprotected sex, all contribute to the continuing practice of abortion in the developing world. <sup>[3]</sup> It is estimated that most of the estimated 6.7 million abortions that are performed in India each year are illegal. Moreover, abortions performed by uncertified providers are estimated to be two to 10 times higher than those performed legally by physicians, and hold potentially serious adverse consequences for women's health. <sup>[4]</sup>

A steep decline in sex-ratio in recent years has been due to recent technological advancements and easy availability of ultra –sound machines. <sup>[5]</sup> PNDT Act had failed to curb for sex determination and consequent sex selective abortion in the country <sup>[2]</sup> which has prevalence of strong “son” preference. Sex ratio is an important social indicator measuring status of equity between male and female prevailing in society. <sup>[6]</sup> Changes in sex-ratio reflect cultural and socioeconomic pattern of society. Declining sex ratio is an issue of grave concern in India. A preference for boys cuts across caste and class lines and results in discrimination against girls even before they are born. <sup>[5]</sup>

Aim & objectives: 1) To study the socio-demographic profile of abortion seekers. 2) To study the reasons for procuring abortions by married women of reproductive age group. 3) To study awareness regarding declining sex ratio & attitude towards gender discrimination among married women.

## II. MATERIAL AND METHODS:

### 2.1 Study design:

It was community based cross-sectional descriptive study.

### 2.2 Study period:

The study was conducted from July 2011 to Nov 2011.

### 2.3 Study site and population:

A community based survey was conducted in Nanded city in Maharashtra state. The total population of the city was 430733 distributed in 65 Municipal Corporation Wards. All the married women of reproductive age group (15 – 49 yrs) with history of abortion in the past were selected as study population.

### 2.4 Sample size & Sampling technique:

30 stage cluster sampling<sup>[7]</sup> technique was used for the study. Initially 30 clusters were selected from 65 municipal corporation wards. 7 married women with history of abortion in past were interviewed from each cluster. Thus 210 study subjects were studied.

### 2.5 Inclusion criteria:

1) All the married ever gravid women of reproductive age group (15-49) year with history of abortion in past.

### 2.6 Exclusion criteria:

1) Unmarried women 2) Abortion due to rape or infestile 3) Not giving voluntary consent.

### 2.7 Data Collection Process:

The study was approved by Institutional Ethical Committee. Participation in the study was purely on voluntary basis. Before start of the study, they were assured of confidentiality about information obtained from them and a written consent was obtained from them. Rapport building with the community: Before starting the field survey, a good rapport was built with the community by taking help of health care workers (i.e. social worker, anganwadi workers, link workers) who work in close contact with community. The face to face interview was carried out in local language (*Marathi/ Hindi*). Data was collected using pre-designed and pre-tested semi-structured questionnaire.

### 2.8 Study variables:

a) Demographic variables: Age, education, Religion, occupation, marital status, duration of marriage, type of family etc. b) Details about abortion: No. of abortion, type of abortion, place of abortion, reason of abortion, birth order of abortion etc.

### 2.9 Reference Citation:

Reference citation was done by Vancouver referencing style.<sup>[8]</sup>

### 2.10 Statistical Analysis:

Data analysis was carried out with the help of statistical measures, such as percentages, proportion, chi square test and chi square test for trend using software Graph Pad Prism Version 5.01 and Open Epi Version 2.3.

### III. RESULTS:

The mean age of respondent was 33 years. Majority of respondents 72(34.3%) were between age 25-29 years while only 5 respondents between 15 – 19 & 15 respondents between 45 – 49 years. 192 (91.4%) respondents were married, 13 (6.2%) were widow & 5 (2.4%) of respondents were separated from their husbands. Buddha's constituted 87(41.4%) respondents while Hindus constituted 88 (41.9%) & Muslims constituted 35(16.7%) respondents. As per BG Prasad classification, majority of respondents 176 (83.8%) belong to Class V, 30(14.3%) respondents in Class IV. Majority 71 (33.8%) respondents attended secondary school while 31(14.8%) had no formal education. 88(41.9%) respondents were from joint family while 122(58.1%) were from nuclear one. 138(65.7%) respondents had only one abortion followed by respondents with two ,three, four & more than four abortions. (Table 1) Among 313 abortions in 210 respondents, 186(59.42%) were spontaneous & 127(40.58%) were induced. There were 234 (74.8%) abortions in gravida 3 & below out of which 153(65.4%) were spontaneous & 81(34.6%) were induced. There were 79(25.2%) abortions in gravida 4 & above out of which 33 (41.8 %) were spontaneous & 46 (58.2%) were induced. There was statistically significant association between no. of abortions and gravida at which abortion occurred. (Table 2) Majority of abortions 224(71.6%) occurred before 3 months of pregnancy, out of which maximum no. of abortions were in first gravida . 43(13.7%) abortions occurred after 4 months of pregnancy in which, no. of abortions goes on increasing as gravida increases. There was no significant association between gestational age of fetus at the time of abortion and gravida at which abortion occurred. (Table 3)

Most common reason behind induced abortion was heavy bleeding 53(41.7%) followed by wish to limit family size 36 (28.3%) while not wanting female child was cause behind only 3(2.4%) abortions. In first three gravida, heavy bleeding was most common reason leading to induced abortion where as in respondent above third gravida, to limit family size was commonest reason. (Table 4) Most women 175(83.3%) perceived non-availability of brides as the major repercussion of decreased sex ratio followed by polyandry 66(31.4%). (Fig 1) The present study cited that the main perceived reason for son preference was support at old age 159(75.7%) followed by carrying family name by boys 119(56.7%)(Fig 2) and the main perceived reason for not wanting daughters was dowry 142(67.6%) followed by fear of harming 69 (32.8%) & family honour 64 (30.5%). (Fig 3) Majority of respondents received information regarding Sex determination methods from friends & relatives 120(57.1%) followed by media 103(49%) & health worker 27(12.8%) while 42 (20%) respondents had no information regarding sex determination methods. (Fig 4)

### IV. TABLES AND FIGURES:

#### 4. 1Tables:

Table 1: Socio-demographic profile of study Subjects: (n = 210)

Sr.no.	Socio-demographic variable		No. of women (%)
1	Age (yrs)	15 – 19	05(2.4)
		20 – 24	33(15.7)
		25 – 29	72(34.3)
		30 – 34	33(15.7)
		35 – 39	37(17.6)
		40 – 44	15(7.1)
		45 – 49	15(7.1)
2	Marital status	Married	192(91.4)
		Widow	13(6.2)
		Separated	05(2.4)
3	Religion	Hindu	88(41.9)
		Muslim	35(16.7)
		Buddha	87 (41.4)
		Others	00(0.0)
4	Socioeconomic status	I	0(0.0)
		II	1(0.5)
		III	3(1.4)
		IV	30(14.3)
		V	176(83.8)
5	Education	Illiterate	31(14.8)
		Primary	9(4.3)
		Middle	34(16.2)
		Secondary	71(33.8)

		HSC	35(16.7)
		Graduate	22(10.5)
		Post graduate	8(3.8)
6	Type of family	Joint	88(41.9)
		Nuclear	122(58.1)
7	No. of abortions	1	138(65.7)
		2	51(24.3)
		3	15(7.1)
		>4	6(2.9)

Table 2: Distribution of abortions according to gravidity (n = 313)

	Spontaneous abortion	Induced abortion	Total no. of abortions
Gravida 1	67(83.75)	13(16.25)	80(100)
Gravida 2	54(64.29)	30(35.71)	84(100)
Gravida 3	32(45.71)	38(54.29)	70(100)
Gravida 4	16(43.24)	21(56.76)	37(100)
>Gravida 5	17(40.48)	25(59.52)	42(100)
Total	186(59.42)	127(40.58)	313(100)

$(\chi^2 = 36.19, df = 8, p < 0.0001)$

Table 3: Distribution of abortion according to gestational age (n = 313)

Gestational age	G- 1	G-2	G- 3	G- 4	>G- 5	Total
< 2 mon	34(42.5)	31(36.9)	24(34.3)	20(54.1)	20(47.6)	129(41.2)
< 3 mon	28(35)	31(36.9)	21(30)	6(16.2)	9(21.4)	95(30.4)
< 4 mon	10(12.5)	12(14.3)	16(22.9)	6(16.2)	2(4.8)	46(14.7)
>4mon	8(10)	10(11.9)	9(12.8)	5(13.5)	11(26.2)	43(13.7)
Total	80(100)	84(100)	70(100)	37(100)	42(100)	313(100)

( G – Gravida)  $(\chi^2 = 20.55, df = 12, p > 0.05)$

Table 4: Distribution of reasons for induced abortion (n = 127)

Reasons	G- 1	G-2	G- 3	G- 4	G- 5	>G-6	Total
Limit family size	0(0.00)	1(3.33)	10(26.3)	12(57.2)	8(66.7)	5(38.5)	36(28.3)
Not want female child	0(0.00)	0(0.00)	1(2.6)	1(4.8)	1(8.3)	0(0.00)	3(2.4)
Heavy bleeding	8(61.5)	15(50.0)	18(47.4)	4(19)	3(25)	5(38.5)	53(41.7)
Conceived to early	0(0.00)	12(40)	7(18.4)	4(19)	0(0.00)	1(7.6)	24(18.9)
Other	5(38.5)	2(6.7)	2(5.3)	0(0.00)	0(0.00)	2(15.4)	11(18.7)
Total	13(100)	30(100)	38(100)	21(100)	12(100)	13(100)	127(100)

(Other: congenital anomaly, Hyditiform mole, Non growing fetus)

4.2 Figures:

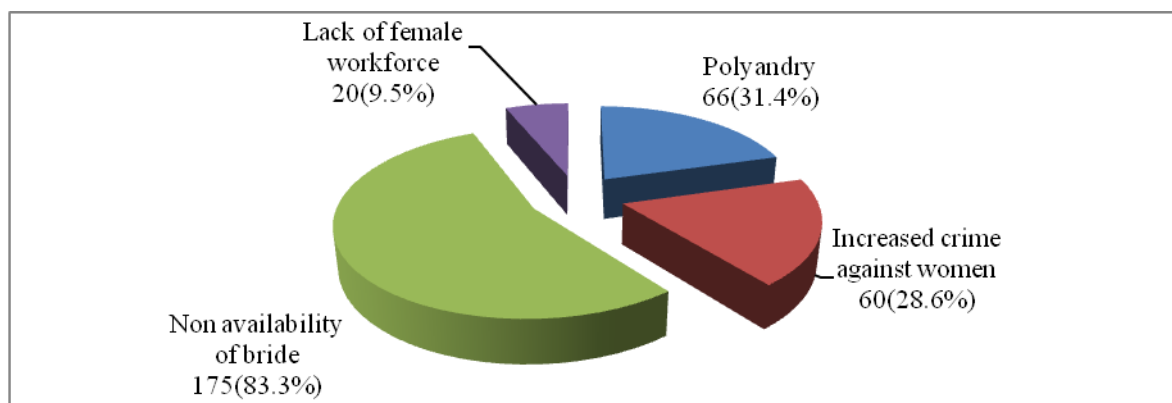


Figure 1: Distribution of effect of decreased sex ratio (n = 210)

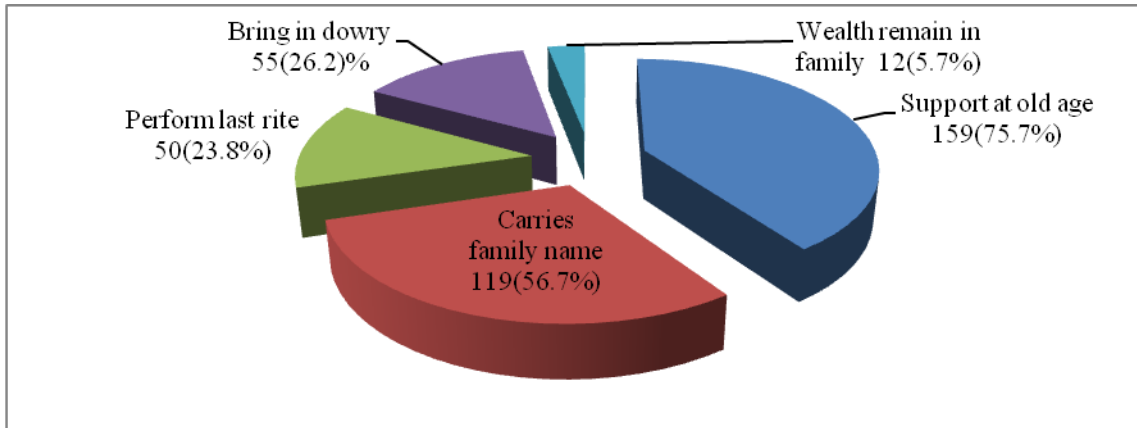


Figure 2: Distribution of reasons of son preference (n = 210)

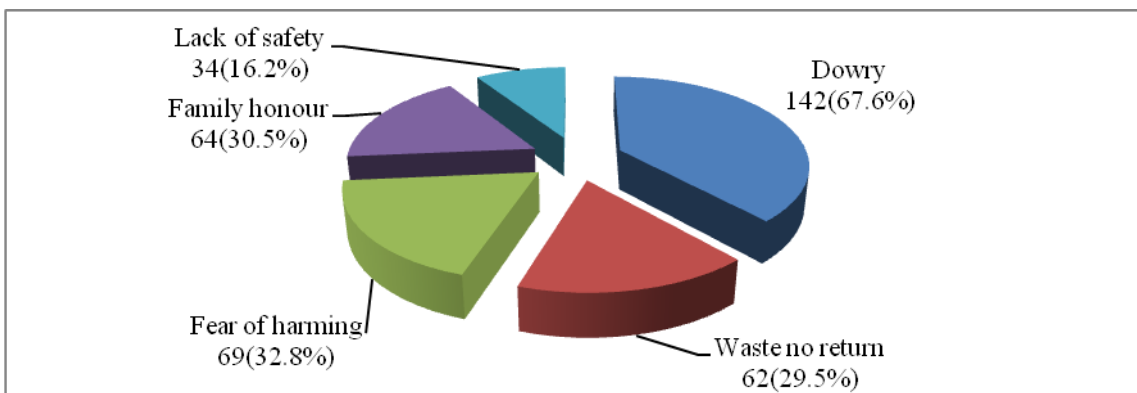


Figure 3: Distribution of perceived reasons of not wanting girl child (n = 210)

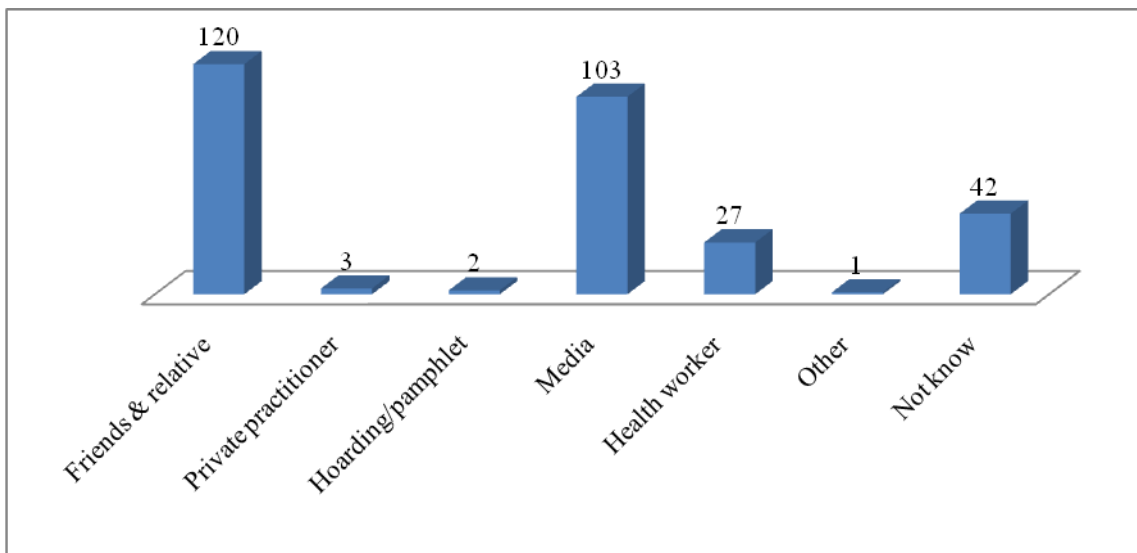


Figure 4: Distribution of respondents according to sources of Information about the Sex Determination Methods (n = 313)

## V. DISCUSSION:

Women of all reproductive age groups seek abortion in India. The gap between estimated abortion and reported MTP cases is enormous, reflecting a fact that less than 10% of the abortions which take place in India, are carried out in government's recognized institutions.

In present study, maximum abortions (34.3%) were noted among respondents of 26 – 30 years age group similar with study conducted by Agarwal & Salhan<sup>[9]</sup>, Shivkumar & Vishvanath<sup>[2]</sup> (38%) & Bahadur et. al.<sup>[10]</sup> (58.5%). Majority of women were Buddha (43.3%) followed by Hindu (36.7%) & Muslim (20%) which was in contrast to Shivkumar & Vishvanath<sup>[2]</sup>, Bahadur et. al.<sup>[10]</sup> & Agrawal & Salhan<sup>[9]</sup> where majority of women were Hindu. Women of lower socioeconomic status constitute maximum (82%), similar observation was noted by Ayesha Humayun et. al.<sup>[11]</sup> (87.6%) and Bahadur et. al.<sup>[10]</sup> (53.4%) of women belonging to lower socioeconomic status. Bahadur et. al.<sup>[10]</sup> noted that (65.2%) women were educated & (34.8%) were uneducated, similar to our study with (79.3%) educated respondent and (20.7%) uneducated. In contrast, Shivkumar & Vishwanath<sup>[2]</sup> noted majority (57.3%) uneducated & (42.7%) educated women. Agarwal & Salhan<sup>[9]</sup> observed that majority of women (70.7%) were illiterate. Ayesha Humayun & Naheed Sheikh<sup>[11]</sup> had finding similar to present study with spontaneous abortions (59.42%) greater than induced abortion (40.58%). In contrast Shivkumar & Vishvanath<sup>[2]</sup> had induced abortions (54.7%) greater than spontaneous abortion (45.3%).

Majority of abortion are performed in first trimester (71.6%), 41.2% in first 2 month (8weeks) & 30.4% in 2-3 month (8 – 12 weeks). Agarwal & Salhan<sup>[9]</sup> also noted majority of abortion cases (89.4%) within 12 weeks of gestation and beyond 12 weeks only (10.6%) cases. Shivkumar & Vishwanath<sup>[2]</sup> had majority of abortions (84.7%) during 5 – 12 weeks of pregnancy followed by 13 – 20 weeks (15.3%). A larger percentage of women presenting during 5-12 weeks suggests a better awareness towards the family planning programme which has now gained popularity even amongst the rural population. Agrawal & Salhan<sup>[9]</sup> noted limiting family size (44%) and spontaneous bleeding (20%) as the major reasons for abortion. Female sex of the fetus was the compelling reasons in 2.67%. In Shivkumar & Shrivastava<sup>[2]</sup> study, commonest reason behind abortion was unplanned pregnancy (30.7%) followed by contraceptive failure (29.3%). Bahadur et. al.<sup>[10]</sup> cited termination of unplanned pregnancy (32.8%) as commonest reason. The reason why women with high gravidity opted for termination of the pregnancy was probably to limit family size or future expenses.

Sheikh Nawal et. al.<sup>[11]</sup> noted increase in marriage problem (28.6%) as most common effect of declining sex ratio similar to present study. Ajindar Walia<sup>[12]</sup> also noted difficulty to find match for boys (92.92%) as most common consequence of declining sex ratio. Ajindar Walia<sup>[12]</sup> & Rainuka Dagar<sup>[13]</sup> noted dowry followed by lack of social security as commonest reasons for not preferring girl child. Anurag et.al<sup>[14]</sup> cited that dowry, economic burden & no parents care taking by girls as reasons behind not preferring girl child. As per study done by NIPCCD<sup>[15]</sup> dowry was perceived as major cause for not preferring girl child by respondent. Anurag et. al.<sup>[14]</sup> noted, carrying name of family (44.7%) as the main reason for son preference. The study conducted by MOHFW<sup>[15]</sup> also observed that carrying family name & inheriting property as the main reason for son preference. Majority of respondent got information about sex determination method from friends & relative (56%) followed by mass media (51.3%). Similar to present study, NIPCCD<sup>[15]</sup> and Anurag et. Al.<sup>[14]</sup> (89.2%) observed majority of respondents got information from mass media.

## VI. CONCLUSIONS:

Majority of women were from the age group 25 – 34 years, married, Buddha by religion had taken secondary education & belong to low socioeconomic status. Spontaneous abortions were greater than induced one but as gravida of abortion increases induced abortions become greater than spontaneous abortions. Abortions were common in first trimester. Heavy bleeding become commonest cause among induced abortions in early gravida while to limit family size was commonest among later ones. Women perceived that non availability of bride will be commonest effect of decreased sex ratio, fear of harming will be commonest reason of not wanting female child, & support at old age was major reason behind son preference. Friends, relatives & media were major source of information regarding Sex Determination Methods to the respondents.

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