

## Abortion Decision Making in India: Whose Role is Vital?

Barsharani Maharana \*

### Abstract

*Using District Level Household Survey-3 (2007-08), this paper portrays the scenario of induced abortion in India and some selected states which note high rates of abortions. It further explores the decision making process of abortion and key factors associated with it. The role of women is most important in decision making process for abortion in the states where incidence of abortion is high. However, result from Multinomial Logistic Regression analysis indicates that women who reside in rural areas, and are uneducated, with low standard of living, have done ultrasound and have terminated their pregnancy in private clinics are more prone to depend on others' decision for termination of pregnancy. The paper suggests that reproductive health programmes of the government should enhance awareness about complications of abortion and encourage the women to seek consent of medically qualified persons before the termination of pregnancy. For this uneducated and poor women need to be given special attention.*

Key words: Induced abortion, decision making, education, standard of living.

### I. Introduction

Women's access to safe abortion services is essential to safeguard their health and is one of the important components of Reproductive and Child Health Programme of Government of India. Arrangement of safe and legal abortion is important for women's survival and reproductive health, particularly in view of the fact that abortion is one of the leading causes of maternal mortality and morbidity. The magnitude of induced abortion, whether legal or illegal, has become an issue of serious concern in developing countries. In developing countries, the risk of death following complications of unsafe abortion procedures is many times higher than that of an abortion performed professionally under safe conditions (WHO, 1998). Induced abortion is often done using several dangerous procedures under substandard clinical and unsanitary conditions.

Abortion was liberalized in India after Medical Termination of Pregnancy (MTP) Act came into effect, according to which a pregnancy may be terminated within 20 weeks of gestation. Before 1972, abortion was permitted only if it was necessary to save the life of the woman. Now it is also allowed on the grounds of preserving her mental or physical health, as well as in case of pregnancy due to rape, incest or contraceptive failure. However, it is illegal if performed just because a woman or some other person requests it or if it is sought only for social and/or economic reasons (United Nations, 1993). The initiative taken by the Government of India to liberalize abortion was path breaking in that it recognised that an unwanted pregnancy could cause serious mental anguish to a woman and, therefore, she should have the right to abortion. The MTP Act, however, included several restrictions which have proved counterproductive in making abortion services widely and easily accessible to women. Doctors who have received training in MTP can only perform abortion procedures and it cannot be performed in any place other than a clinic or a hospital established or maintained by the government or an institution approved by the government for this purpose. Thus, abortion being a sensitive issue, a large number of women are not aware of its being legal and also do not approve it. In such circumstances, most of the women who go for abortion prefer sources which

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\* Barsharani Maharana, Senior Project Officer (NFHS-4), International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai- 400 088. Email: barsha.iips@gmail.com

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are not public and go to private clinics where privacy and confidentiality are better maintained (CORT, 1995).

The Indian government has repeatedly emphasized that MTP should not be viewed as a method of family planning or of reducing the national birth rate. In India, the incidence of abortion is always under reported, perhaps because of the guilt or moral stigma associated with it. Some studies estimate the extent of under-reporting to be about 50 per cent (Tiwari, 1994). A study conducted by Chhabra and Nuna (1994) reveals that because of illegal abortions, 15000-20000 abortion-related deaths occur in India every year, mainly among married women. In recent years, induced abortion has attained high public concern because of the alarmingly high levels of maternal mortality and morbidity due to unsafe abortion. It is observed that after the introduction of the Medical Termination of Pregnancy, reported MTP cases have been on increase. In India every year approximately 5-6 million abortions are conducted by private practitioners illegally. a majority of these cases are done in rural areas having inadequate facilities and done in an unhygienic and unscientific way. These abortions carried out by untrained village practitioners are a major determinant of continued high levels of maternal mortality and morbidity. According to the Consortium on National Consensus for Medical Abortion in India (2008), every year an average of about 11 million abortions take place annually and around 20,000 women die every year due to abortion related complications.

According to a study conducted by Shah and Ahman (2004) in Asian, African and Latin American regions, two-thirds of unsafe abortions occur among women aged 15-30 years and 14 per cent among women under 20 years. In Asia, thirty per cent of unsafe abortions are among women under 25 years and 60 per cent in women under 30 years. The age pattern of unsafe abortions differs markedly between regions. However, almost 60 per cent of unsafe abortions in Africa are among women under 25 years and almost 80 per cent are among women under 30 years. In Latin America and the Caribbean, women aged 20-29 years account for more than half of unsafe abortions. A study based on National Family Health Survey (1992-93) data reveals that abortion seekers in India had given birth to more number of children compared with those who have not yet sought abortion and women who are working in the family farm are less engaged in induced abortion, while those who were self-employed or employed by someone else reported the highest rates of abortion (Das, Desai & Patel, 2000). Khan et al. (1990) and Chhabra et al. (1988) in their study found that the proportion of illiterate women among abortion seekers is low compared with the literate women. A large proportion of abortions are now cited as falling under a special category that was almost non-existent at the time of the framing of the Act. This category is sex determination followed by abortion of the female foetus. In such cases, it is not the pregnancy but its outcome that is unwanted. The first sex selective abortion was documented in India in the 1970s, with the advent of amniocentesis and it immediately began to be used in genetic clinics for determining the sex of the foetus with the sole purpose of circumventing the birth of girls (Ooman & Ganatra, 2002). A study by Kumari (2006) portrays that the sex of the child is an important factor for induced abortion as the abortion rate is high with two children or having one son and one daughter.

Some studies conclude that son preference is an important factor influencing the practice of abortion (Park & Cho, 1995; Miller, 2001; Van Balen & Inhorn, 2003), and that son preferring women who do not want daughter tend to terminate their pregnancies through induced abortion. In a strong son preferring society, if a woman of reproductive age has a strong son preference, she may seek to become pregnant until she achieves her desired number of sons (Wen, 1992; Haughton, 1996; Arnold, 1997; Clark, 2000). When she has enough sons, she may use induced abortion to stop having more children (Park & Cho, 1995; Miller, 2001; Wong & Ho, 2001; Van Balen & Inhorn, 2003). According to Nagaraj (2002), fertility decline in Tamil Nadu has been achieved by bunching births around shorter birth intervals with a high proportion of pregnancies-at-risk and high level of pregnancy wastage. In some cases, abortion is used either for limiting family size or for spacing children (Ganatra et al., 1999; ICMR 1989; Khan et al., 1990). In a community based study, Malhotra et al. (2003) focused that more than half of the abortions among urban women in Madhya Pradesh took place in a public sector facility and the remaining resorting to folk methods or self-induction. In mid-1990s, over a quarter of a century after abortion became legal, a study by Ganatra et al. (2000)

showed that despite having had an induced abortion in the recent past, one fourth of the women believed abortion was illegal while 12 per cent were unsure of its legal status.

In recent decades, contraception and induced abortion have been widely used as a means by women to achieve their desired number of children and for birth timing (Bankole et al., 1999). In their study, Ganatra et al. (1999) and Gupte et al. (1997) have mentioned that public abortion services are generally not accepted because of their insistence on contraceptive use immediately after abortion. A study conducted by Visaria, Ramachandran, Ganatra and Kalyanwala (2007), reveals that overall, private facilities are considered to be much better than those run by the government, and women cite a wide range of reasons to justify their use of them. This suggests that women and their families do weigh the alternatives before deciding where to go. Johnson, Horga and Fajans (2004), interviewed over 500 people from 145 institutions in 25 cities, towns and villages in Romania, about the range of actions needed to prevent unwanted pregnancies, reduce abortion-related morbidity and mortality and improve the quality accessibility and availability of abortion and contraceptive services. They observed that although much progress has been made in contraceptive services over the past ten years, improvements in abortion care have lagged considerably. Ganatra and Hirve (2002) interviewed 197 adolescent women and found that most of them performed abortion in private sector and spacing was the main reason for them to seek abortion because use of contraception was low among them.

In India the law requires a medical practitioner's authorisation for an abortion. In addition, the public health services sometimes ask women for their husband's signature of consent, even though it is not stipulated in law. In Punjab, the High Court allowed a man to divorce his wife on grounds of cruelty because she has had two abortions against his wishes, which implies acceptance of husband's consent (IIPS, 2003). When women go to a hospital for abortion, they are often asked to get the signature of the husband as an indicator of the latter's consent. This has become a troublesome issue in the context of women's reproductive rights. Most abortion-related maternal deaths are attributable to illegal abortions. Several studies identified the important factors responsible for induced abortion in India. However, one of the key factors of induced abortion in India is decision making process. Since, India is a country where lack of autonomy and awareness of women, male domination and economic constraints are the main restraints that prevent women to take free decision regarding abortion. Hence, there is a need to identify the important factors responsible in decision making process regarding abortion and the major states where incidence of abortion is high. Fewer attempts are made to identification of factors associated with abortion decision making. The present study emphasises identifying the correlates of decision making process regarding abortion. The specific objectives of the study are (a) to assess the current scenario of induced abortion in India and its states, (b) to explore the decision making process of abortion in India and its states which note high rates of abortions, and (c) to determine the key factors associated with decision making process in abortion.

## II. Data and Methods

### *Data*

This study uses unit level data from District Level Household Survey-III (2007-08) to fulfil the objectives. Women are the unit of analysis. According to the data, out of 11,56,932 ever married women aged 15-49 years interviewed in India, 37,192 experienced induced abortions. Simple univariate and bivariate analyses have been used to show the current abortion scenario and the decision making process of abortion in India and its states. Multinomial logistic regression analysis further explores the determinants of decision making process, where the response variable is *decision making process* and is divided in three categories: *decision taken by self*, *decision taken by medical persons* and *decision taken by others*. The analysis has been done for India as a whole and for fourteen Indian States viz. Punjab, Jammu & Kashmir, Maharashtra, Uttar Pradesh, West Bengal, Odisha, Haryana, Kerala, Tripura, Tamil Nadu, Assam, Manipur, Delhi and Goa.

*Multinomial logistic regression:*

$$\ln(P_1/P_3) = \beta_{01} + \beta_{11} * X_1 + \beta_{21} * X_2 + \epsilon_1$$

$$\ln(P_2/P_3) = \beta_{02} + \beta_{12} * X_1 + \beta_{22} * X_2 + \epsilon_2$$

$$P_1 + P_2 + P_3 = 1$$

P<sub>1</sub>: estimated probability of decision making of abortion by the respondent herself

P<sub>2</sub>: estimated probability of decision making of abortion by medical persons

P<sub>3</sub>: estimated probability of decision making of abortion by others (husband, mother-in-law, other family members and friends).

**III. Results**

The findings reveal that the occurrence of induced abortion in India is 3 per cent. In the major states like Punjab, Jammu & Kashmir, Maharashtra, Uttar Pradesh, West Bengal, Odisha, Haryana, Kerala, Tripura, Tamil Nadu, Assam, Manipur, Delhi and Goa, the percentage of abortion ranges from 3 to 8. When we look into the decision making process regarding abortion in India and its states where the rate of abortion is high, it is evident from Table 1 that percentage of women taking decision for abortion on their own is substantially high than decision taken by medical persons and Others. However, in states like Uttar Pradesh, West Bengal, Odisha and Assam, more than 15 per cent of women depend on decision of Others (husband, mother-in-law, mother, other family members and friends) to abort pregnancy. In Kerala, 49 per cent women abort on the advice of medical persons which is significantly high as compared with other states.

Table 1: Scenario of abortion and decision making process among women who have experienced induced abortion in India and states which notes high rates of abortion (2007-08)

States	Induced abortion (%)	Decision to abort taken by		
		Self	Medical persons	Others
Punjab	3.3	49	36	14
Jammu & Kashmir	3.5	66	21	13
Maharashtra	4.4	54	39	8
Uttar Pradesh	4.5	60	20	19
West Bengal	4.7	66	16	18
Odisha	4.8	66	17	18
Haryana	4.9	52	40	9
Kerala	5.5	40	49	12
Tripura	5.8	70	12	18
Tamil Nadu	6.0	68	21	12
Assam	6.4	65	13	22
Manipur	7.4	68	23	9
Delhi	7.6	65	26	9
Goa	7.6	59	26	15
India	3.2	61	24	15

The scenario of decision making process by socio-economic and demographic characteristics of the respondents among the states which note high rates of abortion is shown in Table 2. It proves that decision making process differs by socio-economic and demographic characteristics. For instance, in Punjab two-thirds of the women of age group 18-24 years abort their pregnancy by the decision of Others (husband, mother-in-law, mother, other family members and friends). But in Maharashtra, Haryana and Kerala, medical persons take the decision for more than 50 per cent women of same age group. However, for the same age group percentage of women depending on decision of Others (husband, mother-in-law, mother, other family members and friends) for abortion is still substantial in all the states. Percentage of women aged 25-34 years decide themselves to abort is high in all the states except Kerala and Tamil Nadu where most of the women aged 25-34 years abort by

Table 2: Abortion decision making process among women by socio-economic and demographic characteristics in India and states which note high rates of abortion (2007-08)

Background characteristics	India			Punjab			Jammu & Kashmir			Maharashtra			Uttar Pradesh			West Bengal			Odisha		
	Self	Medical persons	Others	Self	Medical persons	Others	Self	Medical persons	Others	Self	Medical persons	Others	Self	Medical persons	Others	Self	Medical persons	Others	Self	Medical persons	Others
<b>Age (years)</b>																					
18-24	47.9	33.4	18.8	20.0	10.6	69.4	59.0	28.2	12.8	40.4	50.7	8.9	49.2	25.9	24.8	62.5	16.1	21.4	54.1	20.8	25.2
25-34	59.4	25.1	15.5	53.1	36.5	10.4	61.3	23.3	15.4	55.0	38.1	7.0	57.9	21.8	20.3	64.9	17.4	17.7	67.5	15.3	17.2
35 and above	64.6	21.8	13.6	50.3	31.6	18.1	70.1	18.3	11.6	58.0	33.8	8.3	66.0	17.0	17.1	68.7	15.0	16.3	65.9	17.2	16.9
<b>Place of residence</b>																					
Rural	60.5	22.3	17.2	47.0	37.2	15.8	65.7	18.5	15.8	52.5	40.3	7.3	59.5	19.2	21.3	66.5	14.8	18.8	66.9	15.0	18.1
Urban	60.9	26.3	12.8	52.4	34.6	13.0	67.7	27.2	5.1	54.5	37.4	8.1	61.9	21.4	16.7	65.7	18.6	15.7	63.1	20.4	16.5
<b>Caste</b>																					
Scheduled castes	60.7	23.9	15.4	47.6	38.1	14.3	55.6	26.7	17.8	58.0	33.7	8.4	59.7	20.2	20.1	68.7	13.3	18.0	67.9	15.1	17.0
Scheduled tribes	58.6	21.1	20.3	*	*	*	67.4	21.7	10.9	40.1	46.8	13.1	62.8	23.3	14.0	54.8	14.0	31.2	65.7	14.5	19.9
Others	60.9	23.9	15.2	50.3	35.0	14.7	67.7	19.8	12.4	54.4	38.4	7.2	60.7	20.1	19.2	66.0	17.3	16.6	65.6	17.1	17.3
<b>Working status</b>																					
Not working	59.8	24.3	15.9	49.1	35.4	15.4	58.9	22.0	19.1	52.5	40.1	7.4	60.3	20.3	19.4	67.3	16.1	16.6	65.3	16.9	17.8
Working	62.1	22.7	15.1	50.4	37.5	12.1	70.8	19.8	9.4	55.1	36.7	8.3	60.9	19.8	19.3	64.3	16.4	19.3	67.7	15.5	16.8
<b>Educational qualifications</b>																					
Not educated	83.3	6.3	10.4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Educated	60.5	24.7	14.8	49.4	36.6	14.0	63.3	24.7	12.1	53.7	38.5	7.8	60.6	21.5	17.9	66.0	17.0	17.1	65.9	17.9	16.3
<b>Standard of living</b>																					
Poorest	61.3	19.0	19.6	*	*	*	*	*	*	45.3	42.7	12.0	58.7	18.1	23.2	59.9	19.8	20.2	64.7	16.2	19.2
Poor	62.1	20.3	17.6	*	*	*	69.2	15.4	15.4	43.5	50.7	5.8	57.5	22.6	19.9	64.6	15.0	20.4	66.7	15.8	17.5
Middle	61.8	21.0	17.1	71.0	24.2	4.8	62.7	19.6	17.6	48.8	43.9	7.3	60.4	18.7	20.9	68.5	11.3	20.3	68.5	13.6	17.9
Richer	59.5	24.5	16.0	48.6	39.6	11.8	68.5	17.4	14.1	52.4	38.9	8.8	58.0	21.4	20.6	69.1	13.9	17.1	65.1	20.0	14.9
Richest	60.3	26.2	13.4	48.4	35.6	15.9	65.7	25.7	8.6	56.5	36.2	7.4	62.9	19.7	17.4	66.1	21.4	12.5	64.0	17.1	18.8
<b>Ultrasound done</b>																					
No	66.8	17.2	16.0	58.7	27.4	13.9	72.9	15.3	11.8	65.3	26.9	7.8	65.7	15.4	18.9	67.9	13.8	18.3	67.9	14.6	17.6
Yes	41.9	43.5	14.6	33.4	51.1	15.5	49.4	34.4	16.2	37.2	55.0	7.7	40.0	38.9	21.2	42.2	49.1	8.6	57.4	24.7	17.9
<b>Place of abortion</b>																					
Government	59.1	24.8	16.1	40.4	46.9	12.7	60.0	28.9	11.1	49.9	42.7	7.5	60.8	21.1	18.1	59.0	23.9	17.1	65.2	17.2	17.6
Private	61.7	23.0	15.3	52.9	31.9	15.2	71.9	12.9	15.1	54.8	37.4	7.9	60.4	19.7	19.9	68.4	13.7	17.8	66.9	15.6	17.5

\*Percentage not shown, based on fewer than 25 unweighted cases.

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Table 2: Abortion decision making process among women by socio-economic and demographic characteristics in India and states which note high rates of abortion, (2007-08).

Background characteristics	Haryana			Kerala			Tripura			Tamil Nadu			Assam			Manipur			Delhi		
	Self	Medical persons	Others	Self	Medical persons	Others	Self	Medical persons	Others	Self	Medical persons	Others	Self	Medical persons	Others	Self	Medical persons	Others	Self	Medical persons	Others
<b>Age (years)</b>																					
18-24	30.1	56.8	13.2	25.3	67.4	7.4	56.5	17.7	25.8	61.0	23.3	15.7	59.3	12.7	28.0	55.2	32.8	12.1	46.0	36.0	18.0
25-34	46.3	44.3	9.4	37.7	50.6	11.7	76.1	11.3	12.6	67.0	20.6	12.4	64.6	14.3	21.1	70.9	17.4	11.6	60.5	30.2	9.3
35 and above	64.5	29.1	6.4	43.6	44.4	12.0	70.1	10.8	19.1	69.3	20.2	10.6	67.6	11.9	20.4	67.4	25.0	7.6	69.9	22.3	7.9
<b>Place of residence</b>																					
Rural	43.8	46.8	9.4	41.4	47.4	11.2	69.7	12.6	17.7	70.1	18.3	11.6	65.4	13.5	21.0	68.0	19.8	12.2	64.4	27.1	8.5
Urban	59.4	32.6	8.0	38.2	49.7	12.1	72.0	11.0	17.0	66.1	22.3	11.6	64.9	11.7	23.4	67.8	27.1	5.1	64.9	26.1	9.0
<b>Caste</b>																					
Scheduled castes	42.5	45.0	12.4	40.4	47.1	12.5	70.0	8.6	21.4	71.7	18.8	9.5	67.2	15.8	17.0	68.6	25.7	5.7	60.1	30.2	9.7
Scheduled Tribes	*	*	*	*	*	*	70.6	14.7	14.7	51.1	22.2	26.7	67.1	11.3	21.6	54.9	33.7	11.4			
Others	53.3	38.8	7.9	40.1	48.3	11.6	70.4	12.4	17.2	67.2	21.0	11.8	63.8	12.7	23.5	72.0	17.6	10.4	65.7	25.4	8.9
<b>Working status</b>																					
Not working	51.5	40.4	8.2	39.9	49.5	10.5	68.4	14.5	17.0	67.2	21.1	11.6	64.2	13.4	22.4	66.7	23.0	10.3	63.3	27.4	9.3
Working	51.9	38.3	9.9	40.1	44.4	15.5	75.8	5.3	18.9	68.7	19.8	11.6	70.9	11.9	17.2	68.7	22.4	8.9	71.1	21.3	7.6
<b>Educational qualifications</b>																					
Not educated	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Educated	54.9	37.0	8.1	39.6	48.9	11.6	69.6	11.8	18.6	67.2	20.9	11.8	65.3	12.4	22.3	66.8	23.7	9.6	64.7	26.1	9.2
<b>Standard of living</b>																					
Poorest	*	*	*	*	*	*	*	*	*	59.4	26.6	14.1	60.8	16.7	22.5	67.0	26.6	6.4	*	*	*
Poor	45.8	49.2	5.1	*	*	*	74.4	11.6	14.0	74.2	18.5	7.3	62.5	16.3	21.2	68.9	20.7	10.4	*	*	*
Middle	41.4	50.5	8.1	38.2	60.0	1.8	76.9	12.5	10.6	68.1	20.3	11.5	63.1	13.5	23.4	69.4	23.2	7.4	*	*	*
Richer	40.6	50.0	9.4	37.4	49.0	13.6	65.3	15.3	19.3	68.6	17.7	13.7	69.2	10.5	20.3	66.6	19.9	13.5	65.0	25.9	9.1
Richest	57.7	33.7	8.5	41.9	47.2	11.0	70.5	5.1	24.4	66.2	23.2	10.6	67.0	12.2	20.7	68.5	25.2	6.3	64.9	26.2	8.9
<b>Ultrasound done</b>																					
No	60.9	31.5	7.7	52.9	32.9	14.3	72.2	11.4	16.5	73.7	14.8	11.5	66.5	12.6	20.9	68.9	21.2	9.9	70.4	18.8	10.8
Yes	37.4	52.4	10.2	21.0	71.3	7.7	42.3	26.9	30.8	41.3	46.5	12.2	56.5	16.4	27.1	57.1	39.6	3.3	50.6	45.3	4.1
<b>Place of abortion</b>																					
Government	48.8	42.1	9.1	37.1	46.1	16.8	71.4	14.7	13.9	63.3	24.2	12.5	63.4	13.7	22.8	70.5	19.3	10.2	57.8	32.5	9.7
Private	52.5	39.0	8.5	41.8	50.1	8.1	67.5	7.9	24.6	69.8	18.9	11.3	71.2	11.5	17.3	63.6	28.7	7.6	69.0	22.5	8.5

\*Percentage not shown, based on fewer than 25 unweighted cases.

the decision of medical persons. As compared to the urban areas, for the women who reside in rural areas, 'Others' (husband, mother-in-law, mother, other family members and friends) take the abortion decision in states like Punjab, Jammu & Kashmir, Uttar Pradesh, West Bengal and Manipur. In most of the states, percentage of urban women taking decision at their own is more than the rural women. In all the states, percentage of working women taking decision at their own to abort is high than the non-working women. Likewise, educated women prefer the advice of medical persons to terminate the pregnancy than their uneducated counterparts. Percentage of poor women taking advice from medical persons for abortion is less as compared with rich women. In Jammu & Kashmir, Uttar Pradesh, Haryana, Assam and Delhi, percentage of women depending on decision of 'Others' to abort is high among the women who have gone for ultrasound than the women who have not done it.

Table 3: Predictors of abortion decision making process in India, 2007-08

Covariates	Decision taken by medical persons	Decision taken by others
<b>Age (years)</b>		
18-24		
25-34	0.630***	0.688***
35 and above	0.543***	0.600***
<b>Place of residence</b>		
Rural		
Urban	1.130**	0.842***
<b>Caste</b>		
Scheduled castes		
Scheduled tribes	0.981	1.371***
Others	0.981	1.094
<b>Educational qualifications</b>		
Not educated		
Educated	4.867**	2.585*
<b>Working status</b>		
Not working		
Working	1.010	0.880**
<b>Standard of living</b>		
Poorest		
Poor	1.063	0.944
Middle	0.917	0.829
Richer	1.071	0.840
Richest	1.067	0.759*
<b>Ultrasound done</b>		
No		
Yes	4.219***	1.560***
<b>Place of abortion</b>		
Government		
Private	0.794***	0.856***

\*\*\* p<0.01; \*\* p<0.05; \*p<0.10

### Results from Multinomial Logistic Regression Analysis

It is evident from Table 3 that age of the respondent is inversely associated with the odds of abortion decision taken by medical persons. Women aged 25-34 and 35 years and above are respectively 37 and 45 per cent less likely to take advice for abortion from a medical person than the women aged 18-24 years. However, in urban areas women are more likely to take advice from medical persons than in rural areas and the plausible explanation may be that in urban areas women are more aware about the complications of abortion. Among educated women, the likelihood of taking advice from medical persons is high as compared with uneducated women due to exposure about the consequences of abortion. Likewise, working women are more likely to abort with the advice of medical persons than non-working women because they are aware of its outcomes. The likelihood of taking advice from a medical person to abort is more among women who have gone for ultrasound

than others since after ultrasound medical persons are the best to take a decision to abort the pregnancy or not. Women who terminate their pregnancies in private clinics are less likely to take advice from medical persons.

When we look into the decision of abortion taken by 'Others' (husband, mother-in-law, other family members and friends), the likelihood of depending on others' decision to abort is more among the women who reside in rural areas than in urban areas. The probable reason may be that women who reside in rural areas lack independence to take a decision. Women belonging to Scheduled Tribes are 37 per cent more likely to prefer decision making by others in pregnancy termination than their counterparts. However, non-working women are more likely to prefer decision of 'Others' than working women. Women whose standard of living is low follow the decision of 'Others' to terminate their pregnancies compared with their rich counterparts. It is noticeable that those who have done ultrasound are 56 per cent more likely to abort by the decision of 'Others' and it shows a strong sex preference by the family members.

Predictors of abortion decision making in the different states of India which note high rates of abortion is shown in Table 4. It is evident that in all the states women aged 25-34 and 35 years and above are less likely to seek advice from medical persons than women aged 18-24 years. However, in Kerala, women aged 25-34 and 35 years and above are 34 per cent and 36 per cent more likely to take medical persons' advice than women aged 18-24 years. In Jammu & Kashmir, Maharashtra, Uttar Pradesh, West Bengal, Odisha, Tripura, Tamil Nadu, Assam, Manipur and Delhi, urban women are more likely to depend on the decision of medical persons than the rural women. In all the states, among educated women the likelihood of taking advice from medical persons is high as compared with the uneducated women due to awareness about the complications of abortion. It is a matter of concern that in states like Maharashtra, Odisha, Haryana, Kerala, Tripura, Tamil Nadu and Assam working women are less likely to seek advice of medical persons. Except Uttar Pradesh, Kerala, Tripura and Manipur, rich women are less likely to take advice of medical persons than the poor women. It is good to see that in almost all the states women who have done ultrasound are more likely to seek advice from medical persons for abortion as compared with those who have not done it. On the contrary, in all the states for the abortions performed in private facility, the likelihood of taking concern of medical person is less than the abortion performed in government facility.

In all the states, the likelihood of depending on decision of 'Others' to abort is more among the rural women than the urban women as it is already explained that the plausible reason may be that rural women lack independence for taking any kind of decision. The likelihood to prefer decision of 'Others' to abort is more among non-working women than working women may be due to lack of autonomy and economic constraints and the scenario is same in all the states. In most of the states, poor women depend on decision of 'Others' to terminate their pregnancies compared with their rich counterparts. In all the states women who have done ultrasound and terminated the pregnancy are more dependent on 'Others' for taking decision than those who have not done it and aborted.

#### IV. Conclusion

The study shows that in the states like Punjab, Jammu & Kashmir, Maharashtra, Uttar Pradesh, West Bengal, Odisha, Haryana, Tripura, Tamil Nadu, Assam, Manipur, Delhi and Goa where the incidence of abortion is high, majority of women themselves take the abortion decision. But in Kerala around fifty per cent women terminate pregnancy by the decision of medical persons. In Uttar Pradesh and Delhi, women abort by the decision of 'Others' (husband, mother-in-law, mother, other family members and friends) - family members. Age of the respondent, place of residence, educational qualifications, working status, standard of living, ultrasound done and place of abortion are the strong predictors of decision making process regarding abortion.

In Punjab two-thirds of women of age group 18-24 abort their pregnancy by the decision of 'Others' (*husband, mother-in-law, mother, other family members and friends*). In Maharashtra,

Table 4: Predictors of abortion decision making process in the states of India which note high rate of abortion, 2007-08

Covariates	Punjab		Jammu & Kashmir		Maharashtra		Uttar Pradesh		West Bengal		Odisha		Haryana	
	Medical persons	Others	Medical persons	Others	Medical persons	Others	Medical persons	Others	Medical persons	Others	Medical persons	Others	Medical persons	Others
<b>Age of the respondent (years)</b>														
18-24														
25-34	0.122***	0.188**	0.322	0.701	0.636***	0.655	0.633***	0.741	0.863	0.729	0.560*	0.619	0.676	0.564
35 and above	0.103***	0.278*	0.368	0.486	0.563***	0.717	0.487***	0.666**	0.559	0.557*	0.702	0.536**	0.307***	0.359**
<b>Place of residence</b>														
Rural														
Urban	0.961	0.655	1.505	0.794	1.164*	1.394	1.507***	0.881	1.147	1.440	1.672***	0.886	0.631***	0.540*
<b>Caste</b>														
Scheduled castes														
Scheduled tribes	2.20	1.180	0.163**	0.441	1.754	2.332*	1.076	0.460	0.435	3.339***	0.329*	1.113	0.890	0.010
Others	1.005	1.269	0.311***	0.385	1.273	1.006	1.228	0.907	1.254	1.257	1.070	1.113	0.766	0.677
<b>Educational qualifications</b>														
Not educated														
Educated	1.010	1.600	1.100	2.040	0.834	1.002	3.655	3.122	7.200	2.150	2.580	0.853	1.370	9.80
<b>Working status</b>														
Not working														
Working	1.071	1.072	1.142	0.869	0.641	0.199	1.021	0.860	1.592*	1.292	0.928	0.738	0.660**	0.982
<b>Standard of living</b>														
Poorest														
Poor	--	--	0.595***	0.162	--	--	1.707	1.256	0.531	0.986	0.962	0.752	--	--
Middle	0.530***	0.253	0.163***	5.814***	0.564	0.298	1.705	0.866	0.232***	0.574	0.590	0.685	1.272	3.840
Richer	0.137***	0.679	0.183***	4.589***	0.449	0.387	1.413	0.817	0.315***	0.519	0.937	0.731	0.947	2.020**
Richest	0.143***	0.878	0.209***	6.056***	0.374*	0.255**	1.007	0.716	0.621	0.474	0.577	0.924	0.675	2.380**
<b>Ultrasound done</b>														
No														
Yes	3.885***	1.955**	3.586***	1.171	3.452***	1.741***	4.618***	2.197***	7.009***	0.699	2.072***	1.212	2.737***	2.199**
<b>Place of abortion</b>														
Government														
Private	0.478**	0.864	0.262***	0.733	0.726***	0.935	0.857	1.021	0.517***	1.135	0.961	1.074	0.780	0.805

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \*p&lt;0.10

Continued...

Table 4: Predictors of abortion decision making process in the states of India which note high rate of abortion, 2007-08

Covariates	Kerala		Tripura		Tamil Nadu		Assam		Manipur		Delhi	
	Medical persons	Others	Medical persons	Others	Medical persons	Others						
<b>Age of the respondent</b>												
18-24												
25-34	1.340	1.210	0.459	0.231*	0.823	0.692	0.923	0.684*	0.626	1.644	0.586	0.337*
35 and above	1.357	1.068	0.484	0.414	0.930	0.535*	0.969	0.726	0.621	1.134	0.436*	0.257***
<b>Place of residence</b>												
Rural												
Urban	0.792	0.927	1.456	0.409	1.356*	0.943	0.716	1.663***	1.367	0.495	1.342	1.220
<b>Caste</b>												
Scheduled castes												
Scheduled tribes	0.471	0.246	3.278	0.409	1.524	5.522***	0.761	1.843***	1.833	1.104	0.967	0.678
Others	0.674	0.776	2.607	0.698	1.076	1.271	0.880	1.939***	0.415	1.163	0.899	1.093
<b>Educational qualifications</b>												
Not educated												
Educated	1.396	1.755	1.500	9.548	0.969	1.045	6.462	6.170***	1.070	2.890	--	--
<b>Working status</b>												
Not working												
Working	0.232	0.992*	0.276	1.355	0.487	0.802	0.599*	0.487**	1.073	0.775	0.870	0.689
<b>Standard of living</b>												
Poorest												
Poor	--	--	--	--	--	--	0.922	0.904	1.285	0.799	--	--
Middle	1.656	0.173	3.414	0.760	0.422	1.946	0.677	0.789	1.544	0.774	0.172	1.530
Richer	1.939	0.932***	2.767	2.127	0.400	2.319	0.453*	0.634	1.217	1.318	0.268	0.769
Richest	2.309	0.104***	0.845	3.603	0.483	1.719	0.634	0.564	1.299	1.013	0.586	0.897***
<b>Ultrasound done</b>												
No												
Yes	0.176***	0.253***	4.413***	4.357***	5.965***	1.842***	2.125***	1.822***	3.321***	0.601	3.763***	0.432*
<b>Place of abortion</b>												
Government												
Private	1.223	0.588*	0.656	1.604	0.687***	0.801	0.831	0.652***	1.477	0.664	0.485***	0.595

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \*p&lt;0.10

Haryana and Kerala medical persons take the decision for more than 50 per cent women of the same age group. However, for the same age group percentage of women depending on decision of 'Others' (husband, mother-in-law, mother, other family members and friends) for abortion is still significant in all the states. In Punjab, Jammu & Kashmir, Uttar Pradesh, West Bengal and Manipur rural women depend on 'Others' (husband, mother-in-law, mother, other family members and friends) decision to terminate the pregnancy than their other counterparts. Percentage of urban women taking decision at their own is found to be more than rural women. In all the states percentage of educated women who abort by the advice of medical persons is more than the uneducated women. Taking advice from medical persons for abortion is less among poor women as compared with rich women. In Jammu & Kashmir, Uttar Pradesh, Haryana, Assam and Delhi percentage of women depending on decision of 'Others' to abort is high among the women who have gone for ultrasound than the women did not go for it.

In India and its states, for women aged 18-24 years, who reside in urban areas, are working, and are educated, the likelihood of taking advice from medical persons to abort the pregnancy is more than their other counterpart. Nevertheless, women who reside in rural areas, are uneducated, whose standard of living is low, have done ultrasound, and terminated their pregnancy in private clinics are more likely to prefer the decision of 'Others' (husband, mother-in-law, mother, other family members and friends) to terminate the pregnancy.

Making decisions about abortion is both a dynamic and complex process. Therefore, it is important to understand with whom women discuss their pregnancy, whom they consult or whose permission is sought or who compels them to undergo abortion. Choosing to have an abortion is a very personal decision, and only a woman can take decision herself. Seeking advice of a doctor or close friends or family are the options. In fact, consulting medical person before abortion is advantageous for a woman's health, but she should not feel coerced by anybody's decision. Furthermore, socio-economic and demographic characteristics of women have significant influence on abortion decision making as poor and uneducated women are more likely to depend on 'Others' (husband, mother-in-law, mother, other family members and friends) decision to terminate the pregnancy. The findings of the study suggest that Government should implement programmes to enhance awareness about complications of abortion with more focus on women who live in rural areas, uneducated and poor, and encourage them to take advice from medically qualified persons before the termination of pregnancy.

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