

Research Article

Teenage Marriages and Induced Abortion among Women of Reproductive Age Group (15-49 Years) Residing in an Urbanized Village of Delhi

Sneha Kumari¹, Jugal Kishore², Vandana Pandit³, Aparnavi P⁴, Mukesh Kumar⁵,
Shalini Smanla⁶

¹Assistant Professor, Department of Community Medicine, North Delhi Municipal Corporation Medical College & Hindu Rao Hospital, Delhi, India.

²Director Professor & Head of Department, ^{3,4,5}Resident, ⁶Assistant Professor, Department of Community Medicine, Vardhman Mahavir Medical College & Safdarjung Hospital, New Delhi, India.

DOI: <https://doi.org/10.24321/2349.2880.201903>

I N F O

Corresponding Author:

Sneha Kumari, Department of Community Medicine, North Delhi Municipal Corporation Medical College & Hindu Rao Hospital, Delhi, India.

E-mail Id:

sneharanjan811@gmail.com

Orcid Id:

<https://orcid.org/0000-0003-2876-8997>

How to cite this article:

Kumari S, Kishore J, Pandit V et al. Teenage Marriages and Induced Abortion among Women of Reproductive Age Group (15-49 Years) Residing in an Urbanized Village of Delhi. *Ind J Youth Adol Health* 2019; 6(1): 15-20.

Date of Submission: 2019-03-18

Date of Acceptance: 2019-04-15

A B S T R A C T

Introduction: Teenage pregnancy is one of the important public health concerns because unsafe induced abortions are also common among them.

Objectives: To find out history of teenage marriages and determinants of induced abortion among women of reproductive age group residing in an urbanized village of Delhi.

Material & Methods: A community-based, cross-sectional descriptive study was carried out involving 320 women of reproductive age group (15-49 yrs.) resident of an urbanized village of Delhi who were selected by simple random sampling after getting their informed consent. Study tool was pre-tested, semi-structured questionnaire containing closed-ended and open-ended questions on socio-demographic profile, age of marriage, obstetrics history, abortion history and complications after induced abortion. The data was collected, compiled and entered in MS-Excel and analyzed with the help of SPSS version 21.0. Association between the groups was accepted statistically significant when $p < 0.05$.

Results: Majority (82.2%) of the women were of age group 25-49 yrs. While 17.8% of the study subjects were of 15-24 yrs. age group. 49.7% of the women accepted that they had solemnized their marriages in teen age. About 40% women were having a history of abortion in their lifetime and one-fourth (25%) women underwent induced abortion. Among induced abortion cases, more than half (54%) of the study subjects underwent unsafe abortions and more common was in adolescent age group.

Conclusion: Teenage pregnancy and unsafe induced abortion are common in an urbanized village. Preventive strategies such as reduction in the unsafe abortion, raising awareness regarding various contraceptive measures, reduction in unmet need of family planning and accessibility of safe abortion services are urgently required.

Keywords: Unsafe Abortion, Teens, Early Marriage, Medical Termination Pills

Introduction

Child marriage is one of the major public health challenge and grave violation of the United Nations Convention on the Rights of the Child.¹ Worldwide, more than 60 million women are estimated to be married before they reach the age of 18 years, and more than one-third of these women live in South Asia.^{2,3} Despite the Prohibition of Child Marriage Act of 2006 that established marriage of females under 18 years and of males under 21 years as a cognizable offence, child marriage remains widespread in India.⁴ The 2011 Indian census estimated that 17 million children in the age group of 10-19 years are married.⁵

As a consequence of these teenage marriages, adolescents are exposed to unsafe abortions and its fatal complications. Unsafe abortions are one of the important causes of maternal mortality and morbidity globally. It remains one of the most neglected sexual and reproductive health problems of current era. WHO defines unsafe abortion as a procedure for terminating an unintended pregnancy either by individuals without the necessary skills or in an environment that does not conform to minimum medical standard's or both.⁶

Globally, an estimated 19-20 million unsafe abortions take place every year, 97% of these are in developing countries. Worldwide, an estimated 68,000 women die as a result of complications from unsafe induced abortions every year-about eight per hour. In India, it is estimated that nearly 7 million induced abortions take place annually. Women tend to seek abortion throughout the reproductive period. But it is alarming that adolescents, both married and unmarried, seek abortion services in a significant number. About 20% of India's population is in the adolescent age group of 10-19 years. It is estimated that there are almost 236 million adolescents in India. Adolescent abortions are estimated to be up to 4.4 million per year.⁷

In comparison with adults, adolescents are more vulnerable to undergo unsafe abortion. Adolescent population is more likely to delay the abortion, resort to unskilled persons to perform it, use dangerous methods and present late when complications arise. Therefore, it is the need of the hour that such type of research studies should be conducted to find out the prevalence of adolescent marriages among women of reproductive years age group(15-45yrs.) and determinants of unsafe abortions among them.

Material & Methods

The present study was a cross-sectional descriptive study conducted during 1st January to 31st March,2018 (3 months). Study area was one of the urbanized villages of South Delhi, which is a field practice area of department of Community Medicine, VMMC & Safdarjung Hospital having a total population of 6448, of which women in the reproductive age group were 1728 (26.8%).⁸

All women of reproductive age group (15-49 yrs.), resident of urbanized village were considered as eligible for inclusion. Severely ill, debilitated and mentally unstable women were excluded from the present study. Sample size for the study was calculated to be 320, assuming the prevalence of induced abortion in an urban resettlement colony of Delhi as 24% with a relative precision of 5% and an alpha error of 0.05 with 10% non-response rate.⁹

In the present study, simple random sampling was used to select study participants. A list of women in the reproductive age group (15-49 yrs.) was prepared and then lottery method was used to draw samples from the list, until the desired sample size was reached. When an individual refused to participate, the next eligible woman on the list was approached and the process repeated thereafter. If a woman's house was found locked, it was visited three more times before the woman was excluded; the next eligible woman on the list was then approached.

Study tool was pre-tested, semi-structured questionnaire. Before conducting the main study, we had done pilot study among reproductive aged women in another urbanized village by taking 10% of sample size i.e.32. After getting their responses, necessary modifications were done in the final questionnaire. The questionnaire was of mixed type containing closed-ended and open-ended questions and the probable responses were noted. The questionnaire was used to collect information regarding socio-economic profile, obstetrics history, abortion history, complications after induced abortion. The data was collected through interviews during house to house visits maintaining confidentiality and privacy.

The data was compiled and entered in MS-Excel and data analysis was done by SPSS version 21.0. Data was presented in the form of frequencies and percentages. Significant association was established by using chi-square tests and Fisher exact tests considering $p < 0.05$ as statistically significant.

The study was approved by Institutional Ethical Committee (IEC). Written consent was obtained from each participant after explaining them the purpose of the study.

Results

A total of 320 women had participated in the present study. Table 1 shows that maximum (68%) women were in the 20-39 yrs. age group. About 22.5% women were illiterate. It was found that 159 (49.7%) of the women married in teenage. Majority (95%) women were Hindus.

Most of the women residing in Delhi are originally belong to some other states. Maximum (79%) women were non-working. Most of the women (85%) had their husbands educated up to middle and above level of schooling. More than half (56%) of study subjects belonged to upper middle socio-economic status.

Table 1. Sociodemographic profile of study population (N=320)

Study Variables	Number (%)
Age (in completed years)	
15-19	35 (10.9)
20-29	120 (37.5)
30-39	96 (30)
40-49	69 (21.6)
Educational status	
Illiterate	72 (22.5)
Just literate	21 (6.6)
Primary	88 (27.5)
Middle school	67 (20.9)
Secondary	38 (11.9)
Senior secondary	19 (5.9)
Graduate and above	15 (4.7)
Age at marriage in years	
<19	159 (49.7)
20 and more	161 (50.3)
Religion	
Hindu	305 (95)
Muslim	13 (4)
Others	2 (1)

*others include Uttarakhand, Rajasthan, Odisha.

**Modified B G Prasad classification (2017)

Table 2. State of origin, Working status, Husband's qualification and economic status

State of origin	
Delhi	59 (18.4)
Bihar	61 (19.1)
Utter Pradesh	100 (31.3)
Madhya Pradesh	17 (5.3)
Others*	83 (25.9)
Working status	
Working	67 (21)
Non-working	253 (79)
Educational status of husband	
Illiterate	15 (4.7)
Just literate	10 (3.1)
Primary	23 (7.2)
Middle school	66 (20.6)
Secondary	85 (26.6)
Senior secondary	76 (23.8)
Graduate and above	45 (14.1)
Socioeconomic status**	
I	56 (17.5)
II	182 (56.9)
III	80 (25)
IV and above	2 (0.6)

Flowchart demonstrates that about 39.4% women were having a history of abortion in their lifetime and among them 25% women underwent induced abortion. Among induced abortion, maximum (87.5%) were having a history

of single induced abortion and other had two or more induced abortions. Out of 80 induced abortions, 38 (48%) women underwent unsafe abortions.

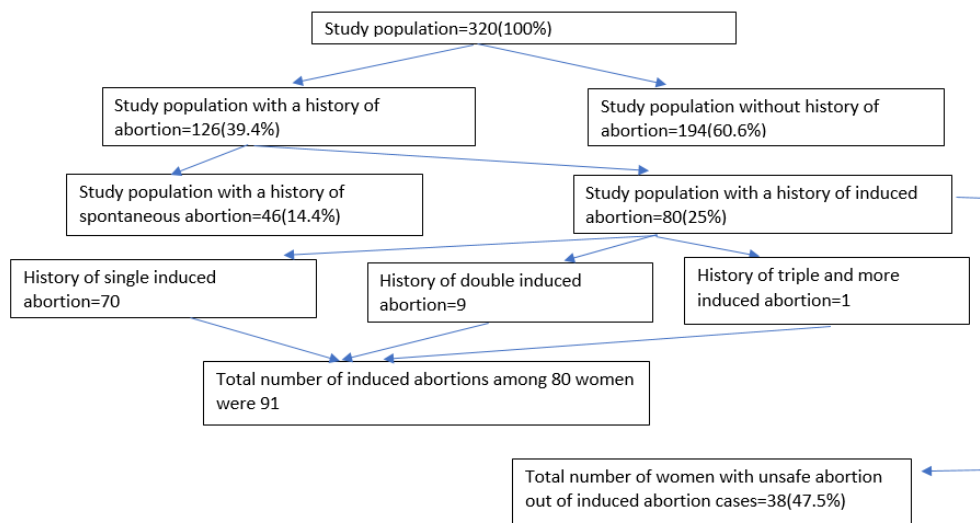
**Flowchart 1. Type and frequency of abortions among study population (N=320)**

Table 3. Factors associated with induced abortion cases (91#)

Study variables	Number (%)
Age at which induced abortion occurred	
15-19 yrs.	16 (17.6)
20-29 yrs.	48 (52.7)
30-39 yrs.	24 (26.4)
40-49 yrs.	3 (3.3)
Type of methods used for induced abortions	
Medical termination pills	40 (43.8)
Surgery	41 (45)
Traditional*	3 (3.75)
Instrumentation**	7 (7.5)
Decision makers for induced abortion	
Self	6 (6.5)
Husband	43 (47.3)
Self & husband	32 (35.2)
In-laws	10 (11)
Type of personnel who induced the abortion	
Self	30 (33)
Untrained	10 (11)
Qualified	51 (56)
Place of induced abortion	
Home	43 (47.2)
Government hospital	42 (46.2)
Private health facilities	6 (6.6)
Reasons for undergoing induced abortion	
Birth spacing	23 (25.3)
Completed family size	31 (34)
Contraceptive failure	16 (17.6)
Medical complications	11 (12)
Others***	10 (11)

#No. of induced abortion by 80 women (include multiple abortions also)

*Includes herbal medicines, some herbs or, goli or, jari-booti.

**Insertion of wooden sticks, hot cloths, towels inside vagina.

***Others included socioeconomic factors, some cultural practices etc.

Above table 3 reflects that 17.6% women underwent induced abortion in their teens (15-19 yrs.). More than half (52.7%) women underwent abortion during 20-29 yrs. of age. Medical termination pills were used in 43.8% cases

and surgery was done in 45% cases. In most (47.3%) of the induced abortion cases, husbands were the main decision makers followed by joint decision of husband and wife (35.2%). Self-induced abortion was done in 33% of cases and 11% cases, it was done by untrained personnel. Most of the induced abortion took place at home (47.3%) followed by government hospitals (46%). Most common reasons for induced abortions were completed family size (34%) followed by birth spacing (25.3%) and then contraceptive failure in 17.6% cases.

Percentage of unsafe abortion was associated with teen age ($p < 0.01$), educational status of the women ($p < 0.001$), lower educational qualification of husband and working women ($p < 0.01$).

Discussion

The present study depicts the status of abortion among women of reproductive age group (15-49 yrs.). It was found that maximum (68%) women were in the 20-39 yrs. age group. It was found that teenage marriages were in about half (49.7%) of the women. Despite having strict laws for legal age of marriage, the capital of our country is having such pathetic scenario. Majority (95%) women were Hindu. About one-fourth (23%) women were illiterate. It could be another reason for their ignorance about health services. Maximum (79%) women were non-working. More than half (57%) of study subjects belonged to upper middle socio-economic status.

In the present study, about 40% women were having a history of abortion and 25% women underwent induced abortion. Among induced abortion, maximum (87.5%) were having a history of single induced abortion. It reflects that one-fourth (25%) of the study subjects were having unintended pregnancies. This figure was similar to another study conducted by Bhilwar et al⁹ in Delhi but higher than other studies.^{10,11} Patnaik et al (2007)¹² in their study observed history of single episode of abortion in 19% of cases and for twice or, more in 4.7% of cases.

Regarding unsafe abortions status, most of the adolescent women (15-19yrs.) underwent unsafe abortion in comparison to the elder women and it was also statistically significant ($p < 0.01$). It is alarming that nearly 18% induced abortion episodes in their teens (15-19 yrs.). In India, adolescent abortions are estimated to be up to 4.4 million per year.¹³⁻¹⁵ It might be due to lesser age, hesitation, social stigma, lack of knowledge regarding safe abortion practices and contraceptive measures. While Khokhar & Gulati¹⁰ in their study at urban slums of Delhi had similar observations where 68.57% of the total women who had undergone one or, more induced abortions were 20-29 yrs. of age. Dhillon et al¹³ in their study in 13 states of India found that three-fifths of the induced abortion seekers were between 25-34 yrs.

Table 4. Association of type of abortion with socio demographic variables (N=80#)

S. No.	Study variables	Types	Unsafe abortion (n=38) Number (%)	Safe abortion (n=42) Number (%)	P-value
1.	Age (in completed years)	15-19 yrs.	12 (31.6)	4(9.5)	0.01*
		More than 19 yrs.	26(68.4)	38(90.5)	
2.	Type of abortion methods	MTPills	21(55.3)	15(35.7)	0.07
		Others	17(44.7)	27(64.3)	
3.	Educational status of women	Illiterate	25(65.8)	10(23.8)	0.0001*
		Literate & above	13(34.2)	32(76.2)	
4.	Educational status of husband	Illiterate	15(39.5)	5(11.9)	0.004*
		Literate & above	23(60.5)	37(88.1)	
5.	Working status	Working	16(42.1)	9(21.4)	0.04*
		Non-working	22(57.9)	33(78.6)	
6.	SES	Lower (I&II)	24(63.2)	22(52.4)	0.33
		Upper	14(36.8)	20(47.6)	

#-Women, who had induced abortion.

*-p value <0.05=statistically significant.

Educational status of women and their husbands had a significant impact ($p < 0.05$) on status of abortion as illiterate couples tend to seek more unsafe practices of abortion. Education makes the couple informative and aware about various health related issues and their corrective measures. It was found that working women tend to undergo unsafe abortion more as compared to non-working mothers. It could be due to dual burden of work pressure (home as well as office), they used to have less time for themselves. Thus they self-medicated for their abortion or, used unsafe practices. While socioeconomic status had no association with the type of abortion. It reflects that it is not only a problem of lower socioeconomic class but a critical issue for all socioeconomic class. About 58% of the women stated that the decision of undergoing abortion was taken by other family members without involving them (47% husbands + 11% in-laws). In 35% of the cases the decision of self was taken along with husband. Factors such as teen age, illiteracy of self and husband and were statistically associated with induced unsafe abortions. This study has some limitations such as possibility of recall bias, lack of generalizability due to sample from a single village which was also field practice area of a medical college.

Conclusion

Teenage pregnancy is one of the important public health problems, which need to be tackled at every level. Increasing awareness about the risk involved and availability of various contraceptive methods may help individual teen to protect from pregnancy. Unsafe abortion is preventable problem. Preventive strategies should aim at reduction in the need

for unsafe abortion by raising awareness regarding various contraceptive measures, to reduce the unmet need of family planning and accessibility of safe abortion services with qualified practitioners especially focusing adolescent age groups.

Acknowledgement

We would like to thank junior residents of Department of Community Medicine, who helped us in data collection.

Conflict of Interest: None

References

1. World Health Organization. The prevention and management of unsafe abortion. Report of a Technical Working Group. Available from: http://whqlibdoc.who.int/hq/1992/WHO_MSM_92.5.pdf.
2. Okonofua FE, Shittu SO, Oronsaye F et al. Attitudes and practices of private medical providers towards family planning and abortion services in Nigeria. *Acta Obstet Gynecol Scand* 2005; 84(3): 270-280.
3. Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2000. 4th edition. Geneva, Switzerland: World Health Organization, 2004.
4. www.censusindia.gov.in/2011...Population/Size_Growth_and_Composition_of_Adol.
5. Population Reference Bureau and Centre for Population Option. Facts at a Glance. New York 1994.
6. Park K. Park' Textbook of Preventive and Social Medicine. 20th edition. Jabalpur: Banarsidas Bhanot publishers 2009. 435.

7. Janshankya Sthirata Kosh (National Population Stabilization Fund). Available at www.jsk.gov.in/maternal_mortality_ratio.asp.
8. Annual survey by department of community medicine, VMMC & Safdarjung Hospital, New Delhi.
9. Bhilwar M., Panna Lal, Nandini Sharma et al. Prevalence of induced abortions and contraceptive use among married women in an urban slum of Delhi, India. *Int J Gynecol Obstet* 2017; 136(1): 29-32.
10. Khokhar A, Gulati N. Profile of induced abortions in women from an urban slum of Delhi. *Indian J Community Med* 2000; 25(4): 177-180.
11. Iyengar K, Iyengar SD. Improving access to safe abortion in a rural primary care setting in India: experience of a service delivery intervention. *Reprod Health* 2016; 13(1): 54.
12. Patnaik A, Ganatyat PK, Patnaik L et al. Socio clinical profile of septic abortion cases - A hospital-based study. *Indian Journal of Community Medicine* 2007; 3: (1): 26-30.
13. Kaur Sukhwinder B, Singh Sukhminder Jit B, Kaur Gangdeep G et al. Medical abortion: is it a blessing or curse for the developing nations? *Sri Lanka J Obstet Gynaecol* 2011; 33: 84-90.
14. Puwar B, Puwar T, Trivedi KN. Study of infertility indicators in slum areas of Ahmadabad city in India. *The internet Journal of Health* 2009; 9(1): 9.
15. Ram R, Ghosh MN, Bhattacharya S et al. Study of unmet need for family planning among married women of reproductive age attending immunization clinic in a medical college of Calcutta. *India Journal of Community Medicine* 2000; Vol. XXV(1): 22-25.
16. Population Reference Bureau and Centre for Population option; facts at glance, New York; 1994.
17. Dhillon BS, Chandhiok N, Kambo I et al. Induced abortion and concurrent adoption of contraception in the rural areas of India (An ICMR task force study). *Indian Journal of Medical Sciences* 2004; 58(11): 478-484.
18. Available at http://rchiips.org/NFHS/factsheet_NFHS-4.shtml.
19. Choudhary S, Aluja NS, Sharma S et al. A study on the extent and reasons of unmet need for family planning among women of reproductive age group in rural area of Haryana. *The internet journal of health* 2009; 12(1): 1-7.