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Original Research Article

A retrospective study on causes of unsafe abortions in referred patients, at a tertiary care centre in western Uttar Pradesh

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ABSTRACT

Background: Unsafe abortions occur when pregnancy is terminated by unqualified person or in an environment that do not conform to minimal medical standards or both. The aim of this study was to analyse the causes in referred patients of unsafe abortions, methods used and complications with which patients were admitted.

Methods: A retrospective observational study conducted in the department of Obstetrics and Gynaecology, SIMS Hapur Uttar Pradesh, India from 1st June 2019 to 29th February 2020. Data was collected from previous hospital records. Total 150 women aged between 18-40 years, admitted with complications of unsafe abortions and who had taken advice for termination outside our institute, were included. The demographic profile, detailed history, first contact person for abortion advice, abortion service provider, method of termination and prior ultrasound were noted. Exclusion criteria was period of gestation more than 20 weeks and spontaneous abortions.

Results: The study showed 92% contacted unqualified person, out of which 22.5% were uncertified doctors, 30.4% ANM's, 16.7% Nurses, 12.3% consulted quacks and 10.9% Chemists. Among the abortion service providers 23.6% were uncertified doctors, 45.7% Chemists, 15% Nurses, 5.7% Quacks, 3.6% ANM's and 6.4% had taken self-medication. Prior ultrasound was done in 28% cases. Method of termination was medical in 78.7% and surgical in 21.3% cases. Period of gestation was <8 weeks in 69.3%, 8-12 weeks in 27.3%, 12-16 weeks in 2%. 37.3% had parity 2 and 55.3% were Hindus.

Conclusions: Despite availability of safe abortion services, unsafe abortion practices are still prevalent. Approved MTP centres, skilled and certified abortion providers must be easily accessible to women even in rural areas to safeguard their health.

Keywords: Unsafe abortion, quacks, Maternal mortality, MTP, Medical abortion

INTRODUCTION

Unsafe abortion was defined by World Health Organization (WHO) as "a procedure for termination of pregnancy done by an individual who does not have the necessary training or in an environment not conforming to minimal medical standards." Although unsafe abortions are preventable, still they continue to pose risk to women's health and may endanger her life.¹ Despite liberalization of

abortion services by MTP Act, and access to safe abortion services, women are still seeking advice for abortion from quacks, midwives, nurses and chemists. The amended MTP Rules since 2002 also recognized medical abortion (with Mifepristone and Misoprostol) which are considered both safe and effective provided they are taken under medical supervision.

Every year around 25 million unsafe abortions are estimated to take place worldwide, mostly in developing

countries.² As per WHO between 4.7%- 13.2% maternal deaths can be attributed to unsafe abortion each year.³ Under reporting is common as women are reluctant to admit an induced abortion, and various social, religious and economic factors also play a role. Almost 56% abortions in India are under the category of unsafe abortion.⁴ Unsafe abortion is the third leading cause of maternal death in India and some of the common causes of unsafe abortions include attempting abortion at home and visiting unqualified service providers such as quacks.^{5,6} Very often, reason is lack of awareness about legality and availability of safe abortion services.

Aims and objectives

To analyse the various causes for unsafe abortions in patients referred to our institute with complications of unsafe abortion. To know the first contact person for abortion advice and to know about abortion service providers other than qualified medical personnel. To find out whether abortion was advised with or without localization of pregnancy by ultrasound. To identify the commonest period of gestation at which unsafe abortions was sought and methods used for abortions whether medical or surgical. To identify the complications with which patients were admitted.

METHODS

This retrospective observational study was conducted in the department of Obstetrics and Gynecology at Saraswathi Institute of medical sciences, Hapur Uttar Pradesh, India for a period of nine months from June 2019 to February 2020. All the data was collected from previous hospital records of patients who were referred to our institute and admitted with the complications of unsafe abortions. Prior to admission all had taken advice for termination of pregnancy at a place, other than our institute. Total 150 women of age between 18-40 years, were included in the study. The demographic profile of the patient, her obstetric history, last menstrual period and period of gestation were recorded. The first contact person for abortion advice, abortion service provider, reason for termination, method of termination used, any history of ultrasound done prior to abortion and the complications with which patients were admitted, were noted. Exclusion criteria was pregnancy of more than 20 weeks gestation and spontaneous abortions.

RESULTS

In our study, out of total 150 patients, maximum number of cases 85 (56.7%) were from 18-25 year age group and 102 (68%) cases from rural origin. Parity 2 was most commonly seen in 56 (37.3%) of cases and maximum no. of cases 83 (55.3%) were of Hindu religion (Table 1). In our study only 2 patients were unmarried (1.3%).

Maximum cases were of period of gestation <8 weeks (69.3%), followed by 8-12 weeks (27.3%) and least common ones were from 12-16 weeks (2%). (Table 2)

Table 1: Socio-demographic profile.

Characteristics	Number of cases	Percentage
Age (in years)		
18-25	85	56.7
26-34	48	32
35-40	17	11.3
Parity		
1	34	22.7
2	56	37.3
3	39	26
≥4	21	14
Religion		
Hindu	83	55.3
Muslim	58	38.7
Others	9	6
Rural	102	68
Urban	48	32
Unmarried	2	1.3

Table 2: Distribution of cases according to period of gestation.

Gestational age	Number of cases	Percentage
<8weeks	104	69.3
8-12 weeks	41	27.3
12-16 weeks	3	2
16-20 weeks	0	0

Table 3: Method of termination for abortion.

Method of termination	Number of cases	Percentage
Medical (Mifepristone + Misoprostol)	118	78.7
Surgical	32	21.3

Method of termination for abortion used, was medical in 118 (78.7%) in majority of cases while surgical method was noted in 32 (21.3%) of cases. (Table 3)

The details of first contact person for seeking abortion advice shows only 12 (8%) women had taken advice from qualified and certified medical doctors while 138 (92%) patients had taken advice from unqualified persons. Among unqualified persons, 31 (22.5%) women contacted uncertified doctors, 42 (30.4%) ANM's, 23 (16.7 %) Nurses, 17 (12.3%) consulted quacks, 15 (10.9%) Chemists and 10 (6.7%) consulted relative or friend (Table 4).

Among abortion service providers, only 10 (6.7%) were qualified and certified doctors for MTP. Among unqualified persons, 33 (23.6%) were uncertified doctors for MTP, 64 (45.7%) were Chemists, 21 (15%) Nurses, 8 (5.7%) were quacks, 5 (3.6%) ANM's and 9 (6.4%) had taken self-medication (Table 5).

Table 4: First contact person for abortion advice.

First contact person	Number of cases	Percentage
Qualified and certified Doctors (as per MTP Act)	12	8
Unqualified persons	138	92
Uncertified Doctors (As per MTP Act)	31	22.5
Quacks	17	12.3
Nurse	23	16.7
ANM	42	30.4
Chemist	15	10.9
Relative or Friend	10	7.2

Table 5: Abortion service providers in cases of unsafe abortions.

Service provider	Number of cases	Percentage
Qualified and certified Doctor (as per MTP Act)	10	6.7
Unqualified persons	140	93.3
Uncertified Doctors (As per MTP Act)	33	23.6
Quacks	8	5.7
Nurse	21	15
ANM	5	3.6
Chemist	64	45.7
Self medication	9	6.4

Table 6: Reasons for undergoing abortion.

Reason for Abortion	Number of cases	Percentage
Contraceptive failure	56	37.3
For spacing	29	19.3
Desired family size achieved	24	16
Financial reason	23	15.3
Particular sex preference	11	7.3
Others	7	4.7

The most common reason for termination of pregnancy was contraception failure in 56 (37.3%) patients. (Table 6)

Table 6: History of localization of pregnancy by Ultrasound prior to abortion.

History of USG prior to abortion	Number of cases	Percentage
Yes	42	28
No	108	72

Table 7: Complications of unsafe abortion.

Complications	Number of cases (N=150)	Percentage
Haemorrhage	88	58.7
Sepsis	35	23.3
Retained products of conception	57	38
Peritonitis	2	1.3
Trauma to the genital tract	0	0

Total 42 (28%) patients had undergone ultrasound examination prior to abortion for localization of pregnancy, while 72% had no ultrasound examination prior to abortion. (Table 7)

The complications of unsafe abortion for which patients were admitted include excessive bleeding as the commonest complication, seen in 88 patients (58.7%) followed by incomplete abortion in 57 cases (38%). 35 patients had evidence of infection (23.3%) and peritonitis was documented in two patients (1.3%). (Table 8)

DISCUSSION

Although abortion services were liberalized in India, more than four decades ago, still a large number of women continue to seek abortion services from unqualified personnel. While women of all age groups seek abortion in India, review suggests that majority of those seeking abortion are 20-29 years of age and 2-30% women seeking abortion are unmarried.⁷ In our study 68% women were from rural area who have limited access to safe abortion services. As per report of Population Council 2010, three fourth of the Indian population live in rural areas and abortion services are rarely available at rural health facilities.⁸ In present study, maximum number of patients (56.7%) were between 18-25 years of age and only 1.3% were unmarried. Among unmarried, adolescents constitute a large proportion of those seeking abortion about half of the unmarried women seeking abortion are adolescent.⁹ In present study majority of cases were of period of gestation <8 weeks (69.3%) and maximum patients (78.7%) received medical abortion with tablet Mifepristone and tablet Misoprostol. The use of medical abortion has been approved by Drug Controller of India in April

2002. Although medical abortion offers great potential for improving access to abortion, but possibility of its misuse is a matter of concern. The abortion tablets should be consumed under medical supervision, these pills are reportedly widely available over the counter and unsupervised consumption is rising.¹⁰

In present study among unqualified persons as first contact person for abortion, majority of women contacted ANM's (30.4%) and Nurses (16.7%) while in a study by Srivastava et al at Bareilly Uttar Pradesh the first contact person was unqualified in 30.66% and 23.33% were quacks.¹¹ This is in contrast to the study conducted by Barua and Apte in Jharkhand where one-third accessed the service of certified private medical practitioners, 36.45% approached ANM's /dais and 20.56% had accessed uncertified private general practitioners for abortion advice.¹² The high incidence of first contact person being unqualified person specially ANMs and nurses is probably because local ANM's, nurses and other health workers are easily accessible and render first hand health care in rural areas (68% were from rural areas) and people may be having more trust in them. Quacks continue to do private practice and legal action against them is ineffective. Most of the registered abortion services are based in urban areas and the facilities in rural areas are insufficient to meet the demands of local population. History of ultrasound for localization of pregnancy prior to abortion, was present in 28% patients which is similar to the study by Srivastava where history of ultrasound prior to abortion was done in 24.67% cases.¹¹ No case of sex selective abortion was noted in our study, as no case of second trimester USG, when gender identification of the fetus may be possible was noted. This may be because of the strict laws and enforcement under PCPNDT Act. Our observation was also supported by research from Akbulut-Yuksel and Rosenblum's which showed that contrary to common belief, the recent rapid spread of ultrasound in India did not cause concomitant rise in sex-selection. In contrast to our findings research has also showed high level of sex selective abortions in India causing missing of half a million population of females per year.^{13,14}

Rehan et al showed higher incidence i.e. nearly two third of abortions induced by inadequately trained persons¹⁵. Bhattacharya et al also noted that 62% (n=83) abortionists were unqualified out of which 26 were nurses 57 were traditional birth attendants and only 28% were doctors.¹⁶ In contrast, in our study the abortion service providers were unqualified in 93.3% cases while only 6.7% had termination done by qualified and certified MTP doctor. Among unqualified persons, most cases (45.7%) received abortion service from chemists in the form of medical abortion tablets, 23.6% from doctors not certified and trained under MTP Act, 15% from nurses and others from quacks (5.7%) and ANM's (3.6%), while self medication was seen in 6.4% cases. As reported by Srivastava et al 1128% were unqualified abortion service providers and 16% were quacks. Susheela et al estimated that 15.6 million abortions occurred in India in 2015 and 12.7 million (81%) abortions were medical abortions and out of which 11.5 million (73%) were done outside of health

facilities, 2.2 million were surgical abortions and 0.8 million (5%) were done by other methods probably unsafe.¹⁷

Reasons for seeking induced abortion are many and include postponement of childbearing, contraceptive failure, socioeconomic factors, lack of support from partners and conception as a result of rape or incest.¹⁸ Several studies indicate that most abortions are sought to limit family size or space next pregnancy.^{7,19} In contrast to this our study showed most abortions were sought for contraceptive failure (37.3%) while reason was spacing in 19.3% and desired family size achieved in 16% patients. Particular sex preference is thought to be an important reason why women seek abortion in India.²⁰ In our study also in 7.3% patients the reason for abortion was particular sex preference. In present study we did not note any incidence of physical domestic violence leading to abortion. A prospective study conducted by Nelson et al in low- income African-American pregnant women did not find any association between intimate partner violence and pregnancy loss supporting our study.²¹

Various studies indicate that the prevalence of post-abortion complication is relatively high among general population in India.^{22,23} WHO's most recent estimates highlight that deaths due to unsafe abortion account for 13% of all maternal deaths worldwide. In India more than 5.5 million abortions that take place annually are conducted by uncertified providers or in unregistered facilities accounting for 8% of all maternal deaths.^{24,25} Maternal morbidity is much more common consequence of unsafe abortion than mortality. Complications include hemorrhage, sepsis, peritonitis and trauma to cervix, vagina, uterus and abdominal organs.²⁶ 20-50% women who have unsafe abortions are hospitalized for complications.²⁷ The present study showed complications of hemorrhage (58.7%), retained products of conception (38%), sepsis (23.3%) and peritonitis (1.3%). There was no case of trauma to genital tract. The data on long term consequences of unsafe abortion is scarce. The WHO estimates that about 20-30% of unsafe abortions result in reproductive tract infections and 20-40% of these result in upper genital tract infections and infertility. An estimated 2% women of reproductive age are infertile as a result of unsafe abortion and 5% have chronic infections.²⁸

CONCLUSION

Certified and approved MTP centers should come up largely in rural areas for rendering abortion related services to the women so as to protect their health rights. Without skilled abortion service providers and easy access to appropriate facilities the aim of safe abortion cannot be achieved.

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REFERENCES

1. World Health Organisation. Unsafe abortion. Global and Regional Estimates of the Incidence of Unsafe abortion and Associated Mortality in 2008.6th ed. Geneva: World Health Organisation. 2011;2.
2. Ganatra B, Gerdtts C, Rossier C, Johnson Jr B R, Tuncalp O, Assifi A et al. Global, Regional and subregional classification of abortions by safety, 2010-14:estimates from a Bayesian hierarchical model. *The Lancet.* 2017.
3. Say L, Chou D, Gemmill A, Tuncalp O, Moller AB, Daniels J et al. Global causes of maternal death: a WHO systematic aanalysis. *Lancet Glob Health.* 2014;2(6):e323-33.
4. https://www.business-standard.com/article/current-affairs/56-abortions-inindiaunsafedespite=beinglegal=kill=10womeneveryday117112200168_1. Accessed on 20th April, 2021.
5. Illegal abortions cause of many maternal deaths- Times of India. *The Times of India.* 2018.
6. Banerjee, Sushanta K, Andersen, Kathryn L, Warvadekar, Janardan (2012). Pathways and consequences of unsafe abortion: A comparison among women with complications after induced and spontaneous abortions in Madhya Pradesh, India. *International journal of Gynecology & Obstetrics.* 2012;118:S113-20.
7. Ganatra BR. Abortion research in India: what we need to know.In: Ramasubban R, Jejeebhoy S, eds. *Women's Reproductive Health in India*, 1st ed. Jaipur, India : Rawat publications. 2000;186-235.
8. Kalyanwala S, Zavier AJF, Jejeebhoy S. Public health facilities and women's access to abortion: a situational analysis in Maharashtra and Rajasthan. In: Kalyanwala S, Zavier AJF, Jejeebhoy S, eds. *Population Council*, New Delhi: Population Council. 2010:2-74.
9. Jejeebhoy S. Maternal mortality and morbidity. *J Family Welfare.* 1996;43(2):31-52.
10. Coyaji K. Abortion in India: How Can Research Help Us Move Forward? Goa. 2002.
11. Srivastava PC, Rai RK, Saxena S, Roy Chaudhary SK, Singh HK. Unsafe Abortion: A Study in a Tertiary Care Hospital. *J Indian Acad Forensic Med.* 2013;35:3.
12. Barua A, Apte H. Quality of abortion care: Perspectives of clients and Providers in Jharkhand, *Economic & Political Weekly.* 2007;42(48):71-80.
13. Arnold, Fred, S Parasuraman, S Kishor, TK Roy. Sex-Selective Abortions in India", *Population and Development Review.* 2002;28(4):759-85.
14. Sonia B, Cochrane T. Where Have All the Young Girls Gone? Identification of Sex Selection in India. *IZA.* 2010;5381.
15. Rehan N, Inayatullah A, Chaudhary I. Characteristics of Pakistani women seeking abortion and a profile of abortion clinics. *J Womens Health Gend Based Med.* 2001;10(8):805-10.
16. Bhattacharya S, Mukherjee G, Mistri P, Pati S. Safe abortion: Still a neglected scenario: A study of septic abortions in a tertiary hospital of Rural India. *Online J Health Allied Scs.* 2010,9(2):7.
17. Susheela S, Chander S. The Incidence of Abortion and Unintended Pregnancy in India, 2015. *The Lancet Global Health.* 2017;6(4).
18. Finer LB, Frohwirth LF, Dauphinee LA, Singh S, Moore AM. Reasons U S women have abortions; quantitative and qualitative perspectives. *Persp Sex Reprod Health.* 2005;37(3);110-8.
19. Malhotra A, Nyblade L, Parasuraman S, MacQuarrie K, Kashyap N. Realizing reproductive choices and rights: abortion and contraception in India. In: Malhotra A, Nyblade L, Parasuraman S, MacQuarrie K, Kashyap N, eds. *ICRW. Washington, DC: International Center for Research on Women (ICRW).* 2003;5-35.
20. Arnold F, Kishor S, Roy TK. Sex-selective abortions in India. *Populat Develop Rev.* 2002;28(4):759-85.
21. Nelson DB, Grisso JA, Joffe MM, Brensinger C, Ness RB, McMahon Ket al, Violence does not influence early pregnancy loss. *Fertil Steril.* 2003;80(5):1205-11.
22. Saha S, Duggal R, Mishra M. Abortion in Maharashtra: incidence, care and cost. In: Saha S, Duggal R, Mishra M., eds. *Mumbai: Centre for Enquiry into Health and Allied Themes (CEHAT).* 2004;1-23.
23. Elul B, Bracken H, Verma S, Ved R, Singhi R, Lockwood K. Unwanted pregnancy and induced abortion in Rajasthan, India: a qualitative exploration. In: Elul B, Bracken H, Verma S, Ved R, Singhi R, Lockwood K, eds. *Population Council. New Delhi. Population Council.* 2004;31-2.
24. Chhabra N, Nuna SC. Abortion in India: an overview. In: Chhabra N, Nuna SC. eds. *Ford Foundation.* 1st ed. New Delhi: Ford Foundation. 1994;117.
25. Office of the Registrar General, India (RGI). Maternal mortality in India: 1997-2003 trends, causes and risk factors. In: RGI, eds. *Sample Registration System, Series I.* New Delhi: Office of the Registrar General, India. 2006;1-29.
26. Grimes D.A, Benson J, Singh S, Romero M, Ganatra B, Okonofua FE et al. Unsafe abortion: the preventable pandemic. *Lancet.* 2006;368(9550):1908-19.
27. Liskin L. Complications of abortion in developing countries. *Popul Rep F.* 1980;F(7):F105-55.
28. World Health Organization. Unsafe abortion: global and regional estimates of the incidence of unsafe abortion and associated mortality in 2000. In: WHO, eds. *WHO Book.* 4th ed. Geneva, Switzerland: World Health Organization. 2004;1-36.

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