

Original Research Article

Family planning practices and prehospital care received by women seeking abortion services in a tertiary care hospital

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ABSTRACT

Background: The study was carried out in the department of Gynaecology and Obstetrics at RG Kar Medical college and Hospital, among 114 attendees seeking induced or spontaneous abortion. The aim of the study was to assess their socio demographic characteristics, elicit their family planning knowledge, practices and prehospital care received by them before coming to this institute.

Methods: An observational descriptive cross-sectional study was carried out using a predesigned, pretested schedule using systemic random sampling technique among women seeking abortion services at a tertiary care centre.

Results: Out of the 114 interviewees, 53 (46.5%) underwent induced abortion and rest had spontaneous abortion. Statistically significant difference was found between the mean age of induced and spontaneous abortion seekers. Majority i.e. 28 (52.8%) of induced abortion seekers first sought help at illegal abortion service providers. Statistically significant difference was found in duration of marriage, gravidity and number of living children between induced and spontaneous abortion candidates. Contraceptive knowledge and practice were found to be higher among induced abortion seekers.

Conclusions: This study clearly shows the need to focus on unmet need for family planning services including safe abortion services at pre-tertiary hospital level. The Government needs to stop advertisement and sale of over the counter abortifacients which is proving to be a menace to women's health.

Keywords: Contraception, Legal abortion services, Medical termination of pregnancy, Over the counter abortifacients, Prehospital care

INTRODUCTION

With a liberal abortion law in India, MTP is often used as a method of contraception which is evident by the fact that in West Bengal, 82% educated urban couples opted for traditional methods of contraception.¹ Globally a similar picture of reluctance is noticed where 29% abortion clients were interested in usage but were unable, while only 21.5% repeat induced abortion seekers used contraception at their first intercourse after the procedure.^{2,3}

India is the first country in the world to have launched a national program for family planning in 1952. According to first phase of National Family Health Survey 5, though contraceptive usage has increased, it is inclined towards terminal methods of contraception like female sterilization and conventional method acceptance is unsatisfactory.

Each year about 22 million unsafe abortions take place, of which 98% occur in developing countries, resulting in approximately 47,000 maternal deaths, making unsafe abortion one of the leading causes of maternal death.⁴

Rampant practice of over the counter abortion pills without any proper guidance has led to grave complications due to undiagnosed ectopic pregnancies.^{5,6} 63% of induced abortion cases resulting in sepsis was done by traditional birth attendants using instrumentation (72%).⁷ Studies show that an alarming number of abortion seekers i.e. 76.5% and 42.85% have used over the counter emergency contraceptives.^{8,9}

Flaws in preabortion counselling and prehospital care of women seeking abortion services is clearly understood by the paucity of studies about the same. High rates of unsafe abortions and consequent complications are clear indicators of failure in acceptance of WHO preabortion care guidelines.^{4,6} Through this study we have tried to pave the way towards understanding of the health care seeking behaviour of women opting for abortion and the various prehospital care available to them.

The aim of this study was to assess the socio demographic characteristics, prehospital care received, family planning knowledge and practices of women seeking abortion services at a tertiary care hospital and find out the proportion of study subjects opting for legalized abortion services.

METHODS

An observational descriptive cross-sectional study was carried out in the Gynaecology and Obstetrics department of R G Kar Medical College and Hospital at Kolkata, West Bengal during a 2-month period from July to August 2019. Women attending a tertiary care hospital seeking abortion services during the data collection period were included in the study. Women who were unable to talk due to any reason were excluded. A pilot study was carried out in the department of Gynaecology and Obstetrics. The proportion of cases undergoing MTP, among all cases seeking abortion services was 40%. Sample size was calculated assuming P=40, L=precision in absolute term, it is taken as 9.

$$N = \frac{(Z_{1-\frac{\alpha}{2}})^2 \times P \times Q}{L^2} = \frac{(1.96)^2 \times 40 \times 60}{9^2} = \frac{9219.80}{81} = 113.825$$

It is rounded off to 114.

As per available departmental registers of last one year, 121 cases sought abortion services from the department of Gynaecology and Obstetrics of this institute per month. Therefore during the data collection phase, 242 cases were likely to turn up for abortion services.

Systematic random sampling technique was adopted to select study subjects, with a sampling interval of 242/114=2.122 and alternate cases were selected as study subjects.

The first case was chosen by simple random sampling technique using random number table.

A preproposal was prepared and submitted to the ICMR under the STS program. After acceptance of the preproposal, ethical clearance was obtained from the institutional ethics committee and the consenting study subjects or their family members were then interviewed using a predesigned, pretested schedule. Collected and compiled data was analyzed using SPSS version 20. To compare averages Mann Whitney U test was used and chi-square test was applied to compare proportions. A p value of <0.05 was considered to be statistically significant.

RESULTS

Out of 114 interviewees, 61 (53.5%) and 53 (46.5%) had spontaneous and induced abortion respectively. Age of the study subjects ranged from 16 to 40 years with an average of 25.31±5.59, 76 (66.71%) of them were from rural areas and 38 (33.3%) were urban residents. Of the attendees, 6 (5.26%) were illiterate and 10 (8.77%) had attended primary school. Remaining 37 (32.46%), 36 (31.58%) studied upto middle and secondary school level respectively. Thirty-five (30.7%) women studied beyond secondary level. Among study subjects, 81 (71.1%) were Hindu and 33 (28.9%) were Muslim. Out of these 114 study participants, 2 (1.75%) unmarried women sought abortion care services. Eighty-two (71.9%) attendees were homemaker, 5 (4.4%) were students and 26 (22.81%) were engaged in different income generating activities. Seventy-two (63.2%) belonged to joint families and 42 (36.8%) were from nuclear families. Number of family members of the study subjects' families ranged from 2 to 15. Average monthly income of their families was 11644.74±7105.32.

Out of 53 attendees who underwent induced abortion, 25 (47.2%) had legalized abortion but 28 (52.8%) did not have legalized abortion. Unplanned abortion services include abortifacient suggested by homeopathic doctor and quacks and over the counter medications. All 61 (53.5%) women who underwent spontaneous abortion attended a registered hospital or doctor for abortion services.

Out of 61 women who underwent spontaneous abortion, 27 (44.3%) first attended this institution to seek abortion care services, remaining 24 (39.3%) and 10 (16.3%) sought care from registered private practitioners and other government facilities respectively. Out of 53 women who underwent induced abortion, 22 (41.5%) first went for self-medication, followed by 16 (30.2%) who first attended registered private practitioners. Eventually all 114 women came to this tertiary care centre for abortion services.

Among the induced abortion seekers, only OCP was used as contraceptive method by 13 (30.95%), followed by use of only condom by 11 (26.19%) and both condom and OCP by 11 (26.19%). Majority i.e. 23 (67.65%) of spontaneous abortion seekers used only condom followed by use of both OCP and condom by 7 (20.59%).

Correct knowledge regarding contraceptives is higher among induced abortion seekers as compared to spontaneous abortion candidates. Correct knowledge

regarding OCP is present in 17 (32.07%) and IUCD is present in 7 (13.21%) of induced abortion seekers.

Table 1: Distribution of women seeking abortion services at a tertiary care hospital, according to their socio-demographic profile (n=114).

Different characteristics	Type of abortion		P value
	Spontaneous (N ₁ =61) N (%)	Induced (N ₂ =53) N (%)	
Age (in years) (Mean±SD)	24.28±5.46	26.49±5.48	0.034*
Place of residence			
Rural(N ₁ =76)	41 (53.9)	35 (46.1)	0.894
Urban(N ₂ =38)	20 (52.6)	18 (47.4)	
Religion			
Hinduism(N ₁ =81)	39 (48.1)	42 (51.9)	0.072
Islam(N ₂ =33)	22 (66.7)	11 (33.3)	
Literacy status			
Upto primary school level(N ₁ =16)	7 (43.8)	9 (56.2)	0.399
Beyond primary level(N ₂ =98)	54 (55.1)	44 (44.9)	
Type of family			
Joint(N ₁ =72)	42 (58.3)	30 (41.7)	0.176
Nuclear(N ₂ =42)	19 (45.2)	23 (54.8)	
Number of family members			
Median (Q, Q3)	3 (4,5)	4 (4,5.5)	0.411
Monthly family income (INR)			
Median (Q, Q3)	10000 (7000,15000)	10000 (7250,13500)	0.799

*Statistically significant at 5 % level by independent-t test.

Table 2: Comparison between underwent abortion type according to the past history of the attendees.

Variables	Median and IQR	Mann Whitney U	P value
Duration of marriage (in months)			
Spontaneous (N ₁ =61)	30 and 98	1008.5	0.001 [#]
Induced (N ₂ =53)	108 and 96		
Gravidity			
Spontaneous (N ₁ =61)	2 and 1.5	891.00	<0.0001 [#]
Induced (N ₂ =53)	3 and 1		
Number of living children			
Spontaneous (N ₁ =61)	0 and 1	837.00	<0.0001 [#]
Induced (N ₂ =53)	1 and 1		
Duration of current pregnancy (in weeks)			
Spontaneous (N ₁ =61)	10 and 4	1075.000	0.003 [#]
Induced (N ₂ =53)	8 and 3		
Past History of abortion			
	No (%)		
Spontaneous (N ₁ =61)	15 (24.5)	-	0.054
Induced (N ₂ =53)	22 (41.5)		

#- Statistically Significant at 5 % level by Mann-Whitney U test.

Table 3: Distribution of women seeking abortion services according to the causes for induced abortion (n₂=53).

Causes for induced abortion	Unrecognised abortion care		Recognised abortion care	
	N	%	N	%
Medical and eugenic cause (N₁=16)	5	31.25	11	68.75
Socio economic causes (N₂=14)	9	64.28	5	35.71
Other nonhumanitarian causes (N₃=23)	14	60.87	9	39.13
Total (N₂=53)	28	52.83	25	47.17

Table 4: Comparison of type of abortion underwent according to their contraceptive practices (n=114).

Contraceptive use	Spontaneous(N ₁ =61) N (%)	Induced(N ₂ =53) N (%)	P value
Ever user			
Yes	33 (54.1)	42 (79.2)	0.005**
No	28 (45.9)	11 (20.8)	
Using just prior to recent conception			
Yes	6 (9.8)	18 (34.0)	0.002**
No	55 (90.2)	35 (66.0)	

** statistically significant at 5 % level by chi-square test.

Table 5: Distribution of women seeking abortion services in a tertiary care hospital according to the type of contraceptives used by them (n=114).

Type of contraceptive used	Induced (N ₂ =53)		Spontaneous(N ₁ =61)	
	N	%	N	%
Only condom	11	26.19	23	67.65
Only oral contraceptive pills (OCP)	13	30.95	1	2.94
Only IUCD	1	2.38	1	2.94
Both condom and OCP	11	26.19	7	20.59
Both OCP and IUCD	3	7.14	0	0
Both condom and IUCD	1	2.38	0	0
All three (condom+OCP+IUCD)	2	4.76	0	0
Others*	0	0	2	5.88

*Others- Emergency pills, homeopathy medications

DISCUSSION

Mean age of women who underwent induced abortion was found to be higher indicating that older women were reluctant towards contraceptive practices and preferred to limit their family size. Similar to the findings of BC Shivakumar et al and Devi et al majority of our study subjects i.e. 76 (66.71%) belonged to rural areas.^{10,11} Majority of the interviewed attendees were Hindus and most of the induced abortions i.e. 42 (51.9%) occurred among them. A similar observation was made by Lakde et al, Bahadur et al, Agarwal and Salhan and Shivakumar et al.^{8,10,12,13} Rest were Muslims. Increased prevalence of abortion in Hindus may be because of their greater population. Moreover, Hindus are more liberal and easily opt for family planning measures including abortion.¹⁰

Among our study subjects, most women are educated above primary level and induced abortions were maximum i.e. 44 (44.9%) among them. Educated women are more likely to adopt contraceptives and take advantage of the MTP facilities.¹⁰ Only 2 of the abortion seekers were unmarried, reflecting the fact that such cases mostly resort to private facilities for maintaining confidentiality.

Of the 53 (46.5%) women who underwent induced abortion 28 (52.8%) did not resort to legalized abortion services. A dangerous tendency of women seeking help from unrecognized abortion services like homeopathic doctor and quacks, over the counter medications was found in this study. Self-medication or over the counter medication was the first option for 22 (41.5%) induced

abortion candidates followed by 16 (30.2%) who went to a registered private facility. Despite of the liberal abortion laws in India, free abortion care facilities in government hospital, increased community education regarding safe abortion by health workers, such data are alarming. Surprisingly, all 61 (53.5%) women who underwent spontaneous abortion attended a registered hospital or doctor for abortion services. This finding can be explained by the absence of social stigma in a case of spontaneous abortion.

Induced abortion seekers were found to have been married for a longer duration, had higher gravidity and greater number of living children as compared to those having spontaneous abortion. This finding is similar to that of Shivakumar et al and Maheswari et al. and clearly reveals the failure on the part of healthcare providers to counsel such women on the need for contraception to avoid unwanted pregnancies.^{10,14}

Majority i.e. 44 (83.02%) of the women who underwent induced abortion presented during the first trimester of pregnancy (5-12 weeks) followed by 9 (16.98%) of them who presented in second trimester (13-20 weeks) suggesting better awareness towards family planning programmes. Roychowdhury et al noted that most of the abortions (53.33%) were done within first 6 weeks while 42.22% were aborted between 7-12 weeks thus supporting our findings.¹⁵ Bhattacharya et al, Agarwal and Salhan and Kalyanwala et al also had similar findings.^{13,16,17}

Of the 23 (43.4%) induced abortion cases which were carried out due to non-humanitarian causes, 14 (60.47%) chose an unrecognized abortion facility which indicates the social stigma associated with induced abortion in India. Out of the 14 women who underwent induced abortion due to socio-economic causes, majority i.e. 9 (64.28%) sought care at an unrecognized abortion facility.

This fact clearly indicates towards the severe reluctance and unawareness of people regarding the free abortion care facilities and benefits at government establishments. The other causes of abortion were medical and eugenic.

Our study showed a statistically significant difference between women who underwent induced and spontaneous abortion with respect to their contraceptive practices. Amongst the 53 women seeking induced abortion, 42 (79.2%) had used any type of approved contraceptive in the past and 18 (34.0%) had used contraception just prior to recent conception. However, contraceptive use was found to be lower among candidates for spontaneous abortion as compared to those of induced abortion. This finding may be explained by contraceptive failure and women using induced abortion as a method of contraception.

Only oral contraceptive pills (OCPs) were used by 13 (30.95%) of the induced abortion seekers followed by either use of only condom or use of both OCP and condom, in same frequency. Among the 114 attendees, 37 (32.5%) had used OCPs either on its own or as a combination with IUCD and/or condom. However, surprisingly only 24 (21.1%) of these women had adequate knowledge of OCPs, regarding number of tablets taken in each cycle, measures to be taken in case of missed pills, common unharmed side effects of OCP such as nausea, vomiting, headache, leg cramps, mastalgia, weight gain, chloasma, acne, menstrual abnormalities etc. This gap between usage and awareness regarding OCPs and high rates of induced abortion among them may be due to the lack of consumer education resulting in high rates of discontinuation.

IUCD was used by 8 (7%) interviewees but adequate knowledge regarding its use, possible symptoms of pain and slight vaginal bleeding, post adoption practice such as periodical checking of thread and follow up was found in 11 (9.6%). Similarly, condom was used by 55 (48.3%) however, adequate knowledge regarding its use was present in 90 (78.9%) women. This can be attributed to the fact that, majority i.e. 98 (85.97%) of the attendees are educated above middle school level and are therefore expected to have adequate knowledge regarding contraceptive practices. In spite of high awareness, use of contraceptives is low. This finding is similar to that of Nataraja et al which showed that high level of awareness i.e. 76.1% was elicited from the respondents however usage of contraceptives was as low as 35.71%.⁹ Similar findings were also reported by Adinma et al and Nigerian studies.¹⁸⁻²²

We found that majority i.e. 104 (91.2%) of the abortion seekers got adequate prehospital abortion care at the facility they first sought care at, before attending this tertiary care hospital. However, the intriguing fact is that 10 (8.8%) of the attendees did not receive the minimum abortion services at the prehospital care level, that is expected of any health facility. Referral without any medication or wrong medications could have proved to be life threatening for these women. This situation is very disturbing, as every year the government spends huge amounts on health care especially maternal health, aiming towards reducing the maternal mortality rates (MMR). Adequate abortion services at pre-tertiary hospital level plays a huge role in reducing maternal morbidity and mortality. In addition to this, all women belonging to the reproductive age group should be adequately counselled by the community health workers and health care providers at every level of health care, regarding the importance of safe abortion care, free of cost facilities available at government hospitals and where to seek help first in case of any obstetrical emergencies.

CONCLUSION

This study shows us the mirror that abortion services are still not adequately available to women from all sectors of society and in spite of the governments' best efforts, contraceptive usage among women in India is still flawed. We can certainly say that much more research is still required on contraceptive knowledge, attitude and practice and on the abortion seeking behaviour of women as well as on the methods to limit the rampant usage of over the counter abortifacients. Finally, we can conclude by, as Hillary Clinton said, "Defending women's health means defending access to abortion- not just in theory, but in reality. We know that restricting access doesn't make women less likely to end a pregnancy. It just makes abortion less safe. And that then threatens women's lives."

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