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Research Article

Attitude and Experiences of Young Women towards Medical Abortion: A Hospital Based Study

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Abstract: As per WHO, medical abortion is safe and effective method for termination of early pregnancy. A combination of mifepristone (200mg orally) followed by misopristol (800µg vaginally or 400 µg orally) 36-48 hrs later administered to induce abortion. Before administration of these drugs, confirmation of pregnancy, gestational age and site of pregnancy is must. These drugs should be administered under medical supervision to avoid complications like undetected extra-uterine pregnancy, incomplete abortion, septicaemia, heavy bleeding and resultant complication. Despite these recommendations, many people consider these drugs as safe and effective in the hands of untrained personals and purchase over the counter directly from the chemists without proper prescription and become victims of unsafe abortion. The present study was conducted to assess the attitude and experiences of young women towards medical abortion, self medication and to generate awareness regarding safe abortion practices. A prospective cross sectional study was carried out on 200 married women in age group between 18-35 years attending Out Patient Unit of Obstetrics & Gynecology at Sri Lakshmi Narayana Institute of Medical Sciences (SLIMS), Bharath University, Pondicherry- 605009, INDIA employing systematic random sampling method. The socio-demographic data, obstetrical history was collected and was correlated with women's knowledge and attitude towards medical abortion. The experiences of the women already undergone medical abortion were also recorded. The average age of women included in the study was 23.4 years ±4.2. The knowledge and usage of medical abortion drugs among the participants was 92.5 % and 17.5% respectively. Age, education, socio-economic status, religion and parity had the significant role in knowledge and attitude towards medical abortion. Most of the participants seek medical abortion to limit family size, birth spacing, unintended pregnancy, failure of contraception and socioeconomic limitations. Television, chemists, friends and relatives were the most important source of information about medical abortion. Knowledge about the brand name, time frame for usage and the side effects of medical abortion were known to 8.1%, 13.5% and 30.2% of the participants, respectively. Most of the participants acknowledged self medication without any medical supervision. Among the 35 participants who had undergone medical abortion, the important reported side effects of medical abortion were nausea , vomiting, moderate to severe abdominal cramps, heavy, prolonged and persistent bleeding. 10 number of participants reported incomplete abortion, out of which 8 had to undergo surgical evacuation and 4 participants reported infection following abortion. The present study recommends that the medical abortion is safe and effective method for termination of early pregnancy. However, these drugs should be administered under medical supervision and patient should be counselled for post abortal contraceptive usage. Government should have vigilance on over the counter sale of these drugs. Health care providers, non-government organisation and government agencies should work in unison to encourage contraceptive usage, safe abortion practices and safe motherhood.
Keywords: Medical abortion, Self medication, Awareness, Practice, Experiences.

INTRODUCTION

Medical termination of pregnancy (MTP) is the most controversial area of family planning, but, it is often the most important method of fertility regulation by the community in the struggle to control family size. Many women consider abortion as an alternative method to contraception [1].

According to the World Health Organization (WHO) approximately 20 million unsafe abortions take place globally every year and around 600,000 women die from complications of unsafe induced abortions. 13 percent of total maternal deaths occur due to unsafe abortions [2]. In India, an estimated 6 million abortions takes place every year, out of which 4 millions are induced [3].

In India, though abortion is legal since the Medical Termination of Pregnancy (MTP) Act came into effect in April 1972, still the abortion accounts for 8-18% of maternal deaths [4, 5].

India is one of the first countries legalising abortion on moderately liberal grounds, yet abortion still remains coloured by social taboos and is often discussed only behind the closed doors [6]. In 2002, the Drug Controller of India approved the use of mifepristone for the purpose of termination of pregnancy up to 49 days of gestation. In 2006, misoprostol was also approved for treating gynaecological conditions, including early abortions [7]. In 2008, the Central drug standard control organisation approved the combipack (1 tablet of mifepristone 200 mg and 4 tablets of misoprostol 200 mcg) for medical abortion up to 63 days of gestation, although the MTP Act still state 49 days as the limit for medical abortion [8].

As per WHO, medical methods of abortion have been proven to be safe and effective when practiced under medical supervision [9]. As per Medical Termination of Pregnancy (MTP) Act of India, this method can only be administered by prescription of Gynaecologists and Registered Medical Practitioners only [10]. The Federation of Obstetrics and Gynaecological Societies of India (FOGSI) recommended close monitoring by government on distribution of these drugs [11].

Despite this, it has been perceived by the people that, medical abortions are extremely safe option even in hands of untrained personnel, leading to its over the counter dispensing, self medication and possibly an increase in unsupervised terminations and sometimes life threatening complications [12].

Thus, the present study was conducted to assess the knowledge, attitude and experiences of young women towards induced abortion, self medication and to generate awareness regarding safe abortion practices and contraceptive usage.

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MATERIALS AND METHODS

A prospective cross sectional study was carried out on 200 married women in age group between 18-35 years attending Out Patient Unit of Department of Obstetrics & Gynaecology at Sri Lakshmi Narayana Institute of Medical Sciences (SLIMS), Bharath University, Pondicherry- 605009, INDIA employing systematic random sampling method.

All the patients willing to participate, falling into selected age group was included in the study. Unmarried women and participants not willing to participate were excluded from the study. Interview of the participants on individual basis was conducted orally on the structured preformed and pretested questionnaire, which was developed to cover the research objectives. Ethical requirements of informed consent and confidentiality were ensured. No incentives of any kind were offered to the participants. Ethical approval was obtained from the Institutional Ethics Committee prior to the start of the study.

The questionnaire included information about age, education, residence, religion, parity, knowledge and usage of medical abortion kit. Women who had knowledge regarding medical abortion kit were further questioned about the source of knowledge, names of various methods, time of use, awareness of side effects, number of times the kits were used, method of procurement and the side effects and complications experienced by the participants who had undergone medical abortions.

The data collected were analysed using SPSS version 20 for frequency, percentage, proportions, chi square test and significance of associations at the level of $p \leq 0.05$ and ≤ 0.01.

RESULTS

In the present study, 200 married women were interviewed through a preformed questionnaire aged between 18-35 years, with an average age of 23.4 ±4.2 years.

Among the participants, 39% studied upto middle school, 55% upto high school, 5% had university degree and 1% was uneducated. 71% respondents were from rural and 29% from urban areas. Most of the participants (73.5%) belong to lower socioeconomic status, 26% from middle and 0.5% from upper class. Most of the participants were Hindu (60%), 27% Christian and 13% were Muslims.

Though the overall awareness about medical abortion was significantly high (92.5%) in the participants, but 17.5% had reported to have ever used these drugs ($p \leq 0.01$). The knowledge about medical abortion was relatively high among younger participants (aged <25 years), better educated group, urban residents, in higher socioeconomic strata, in Hindus compared to Christian and Muslim population (vide Table 1).

The usage of medical abortion drugs was significantly higher among women aged >25 years ($p \leq 0.01$), educated group ($p \leq 0.01$), urban residents ($p \leq 0.01$) and in Hindu's ($p \leq 0.01$) in comparison to Christian and Muslim participants (vide Table 2).

Out of 35 women who had used abortion kits, 15 were primipara, out of which 6 had used kits once, 8 had used twice and 1 had used thrice.

13 participants were para 2, out of which 7 had used kits once, 4 used twice and 2 had used three times. Participants who were para 3 and more, 2 had used once and 5 used kits twice. Significantly higher usage was

observed among participants with lesser parity ($p \leq 0.05$) (vide Table 3).

Various reasons cited by the participants for seeking abortions were to limit family size (28.5%), birth spacing (22.8%), unintended pregnancy (17.1%), failure of contraception (14.2%), socioeconomic limitations (11.4%) and congenital anomalies (5.7%) (vide Fig. 1).

The main source of information regarding the medical abortion was through television (100%), chemists (91.8%), friends and relatives (82.7%), clinicians (77.2%), print media (51.3%), family planning clinics (28.6%), health care providers (27%) and internet (5.45). Most of the participants obtained the information on medical abortion from multiple sources (vide Fig. 2).

Among 92.5% participants having the knowledge of medical abortion kits , only 8.1% were aware of the names, 13.5% were aware of the time frame (upto 63 days of amenorrhea) for the usage and 30.2% were aware of the side effects of kits (vide Table 4).

Among participants who had used abortion kits, 71.4% participants procured the kits either themselves, through husband or relatives from chemists directly without prescription. 28.5% had obtained kits through registered private medical practitioners and none of them obtained from Government hospitals or family planning clinics (vide Table 5).

All the participants experienced nausea, vomiting, moderate to severe abdominal cramps as side effects after undergoing medical abortion. 74.28% reported heavy bleeding, 42.8% reported prolonged and persistent bleeding. 10 number of participants reported incomplete abortion, out of which 8 had to undergo surgical evacuation and 11.4% of the participants reported infection following abortion. Most of the participants experienced multiple side effects (vide Fig. 3).

Table 1: Relationship Between socio-demographic factors and knowledge regarding medical abortions (n=200)

Socio-demographic factors	Number	Percent	Knowledge of medical abortions (n=185)				P value
			Yes		No		
			Number	Percent	Number	Percent	
Age							≤0.01
18-25	132	66	125	94.6	7	5.4	
26-35	68	34	60	88.2	8	11.8	
Education							≤0.01
Illiterate	2	1	0	0	2	100	
Up to Middle school	78	39	65	83.3	13	16.7	
Up to High school	110	55	110	100	0	0	
University Degree	10	5	10	100	0	0	
Residence							
Rural	142	71	130	91.5	8	8.5	≤0.01
Urban	58	29	55	94.8	7	5.2	
Socio-Economic status							
Lower	147	73.5	134	91.1	13	8.9	≤0.01
Middle	52	26	50	96.1	2	3.9	
Upper	1	0.5	1	100	0	0	
Religion							≤0.01
Hindu	120	60	117	97.5	3	2.5	
Muslim	26	13	20	76.9	6	23.1	
Christian	54	27	48	88.8	6	11.2	

Table No 2. Relationship Between socio-demographic factors and practice regarding medical abortions (n=200)

Socio-demographic factors	Number	Percent	Practice of medical abortions (n=35)				p value
			Yes		No		
			Number	Percent	Number	Percent	
Age							≤0.01
18-25	132	66	14	10.6	118	89.4	
26-35	68	34	21	30.8	47	69.2	
Education							≤0.05
Illiterate	2	1	0	0	2	100	
Up to Middle school	78	39	14	17.9	64	82.1	
Up to High school	110	55	19	17.2	91	82.8	
University Degree	10	5	2	20	8	80	
Residence							≤0.01
Rural	142	71	15	10.5	127	89.5	
Urban	58	29	20	34.4	38	65.6	
Socio-Economic status							≤0.01
Lower	147	73.5	14	9.5	133	90.5	
Middle	52	26	20	38.4	32	61.6	
Upper	1	0.5	1	100	0	0	
Religion							≤0.01
Hindu	120	60	26	21.6	94	78.4	
Muslim	26	13	2	7.6	24	92.4	
Christian	54	27	7	12.9	47	87.1	

Table 3: Distribution of abortion according to Parity (n = 35)

Parity	Medical Abortion					
	1 time		2 times		≥3 times	
	No	Percent	No	Percent	No	Percent
≤1	6	17.1	8	22.8	1	2.8
2	7	20	4	11.4	2	5.7
≥3	2	5.7	5	14.2	0	0

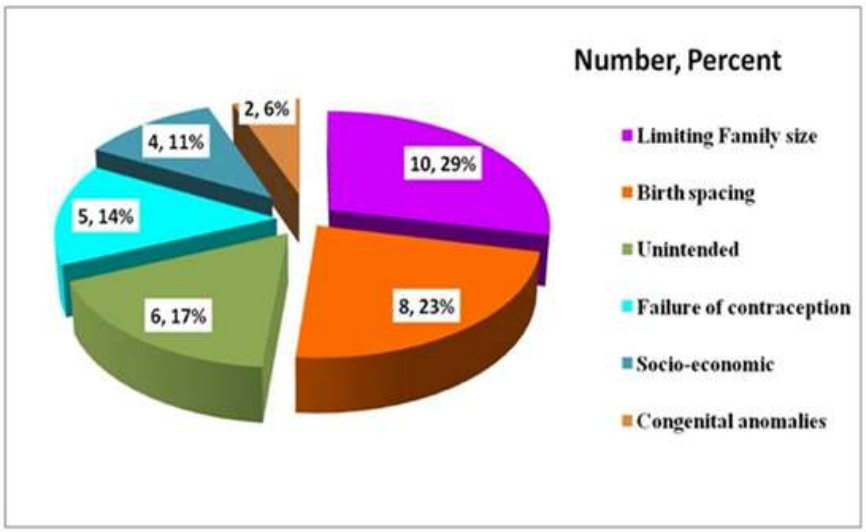

Fig. 1: Reasons for seeking abortion (n=35)

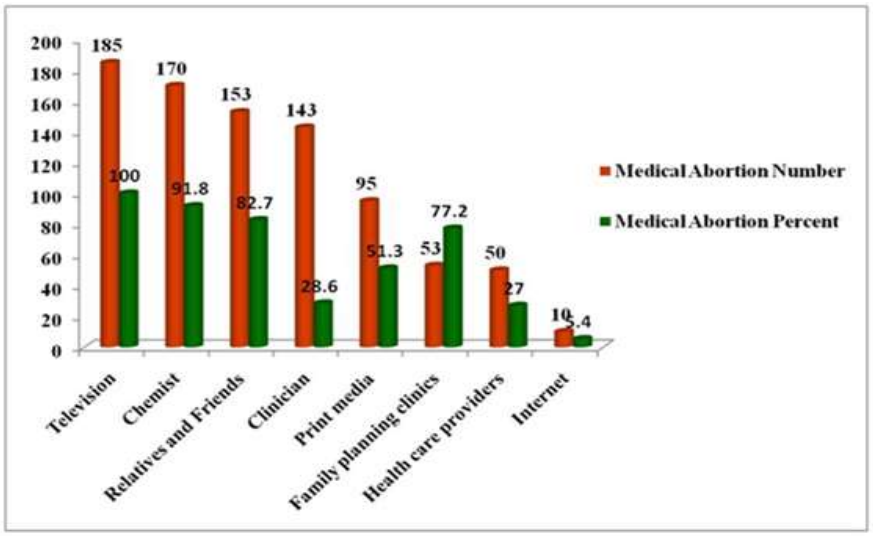

Fig. 2: Sources of information regarding Medical abortion (n=185)

Table no 4: Knowledge of names, timing and side effects of Medical abortion kits (n=185)

Knowledge	Medical abortion kit	
	Number	Percent
Names	15	8.1
Timing	56	30.2
Side effects	25	13.5

Table No 5. Procurement of Medical abortion kits (n=35)

Source	Medical abortion kit	
	Number	Percent
Self/Husband/Relatives	25	71.4
Private Medical Practitioner	10	28.5
Government Hospitals	0	0

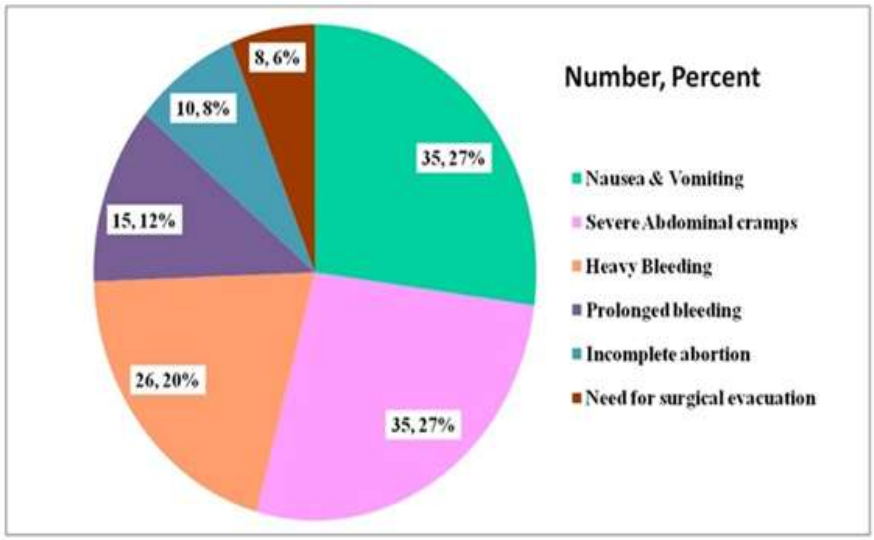

Fig. 3: Side effects of medical abortion experienced by participants

DISCUSSION

Medical termination of pregnancy is women's reproductive right to space pregnancy, to limit the family size and also to use it as emergency measure in case of contraceptive failure. However, it is essential to have safe abortion services to safe guard maternal health.

The MTP Act states safe usage of drugs for early medical abortion. Medical abortion is advised only to

those patients willing to have minimum of three follow-up visits, can understand the instructions clearly, ready for surgical procedure if incomplete abortion occurs and have easy access to referral facility. A thorough history taking, clinical examination, confirmation of pregnancy, gestational age and location by ultrasound examination should be done. The patient should be counselled regarding side effects and necessary proper follow up. In addition, Laboratory tests such as haemoglobin level, blood group and rhesus (Rh) typing should be performed in all the cases [13].

An informed consent must be obtained before the administration of drugs. The recommended regime is 200 mg of Mifepristone orally on first day and followed by 800 microgram of vaginally Misoprostol or 400 µg orally after 36-48 hours. The patient is advised to report immediately if any undue side effects like excessive bleeding, severe pain, fainting or any other problem occur. Patients are advised follow-up on 14^{th} day and clinical history as well as pelvic examination is to be performed to ensure abortion is complete and there are no other complications. Ultrasonography is required only if history and examination suggest incomplete abortion. In case of incomplete abortion, surgical evacuation may be advised [13].

Despite these recommendations that the medical abortion is safe when provided under the supervision of Gynaecologist or registered medical practitioner, it has been perceived by the people that, medical abortions are extremely safe option even in hands of untrained personnel. Many of them even purchase it directly from the chemists without authorised prescription leading to sometimes life threatening complications [14].

In the present study, the knowledge of medical abortion was significantly higher among the participants but very few had used the method. The knowledge and usage was significantly high in younger age group, educated class, women from urban areas, belonged to higher class and in Hindus in comparison to Christian and Muslims.

Various studies conducted earlier also reported the maximum abortion rates among the respondents of 26-30 age group and in Hindu participants [15-18].
A study conducted at Bangalore, India reported that younger women seek medical termination of pregnancy more frequently rather than older women, which may be attributed to lack of motivation, decision making for contraceptives acceptance either to postpone the pregnancy or to limit the family size [1].

A similar study conducted in Nanded, India reported higher number of educated respondents utilised medical abortion services in comparison to non educated women [18]. Contrary to our findings, relatively higher number of abortion in non-educated group of women has also been reported [15, 17].

Higher incidence of abortion in lower socioeconomic status has also been reported in earlier studies [19, 16, 18].

In our study, relatively higher number of medical abortion was observed in low parity women. However, significant association between number of abortions and gravida at which abortion occurred had also been reported earlier [1, 18].

A similar study conducted earlier in 26 districts from 13 states of India revealed that 47.3% women seeking medical termination of pregnancy had parity 3 or more [20].

Study conducted at Jamnagar, India reported 12.5% women with previous history of abortions 1 or more times and many women consider abortion as method of contraception due to lack of proper knowledge and motivation for use of contraception [21].

In the present study, various reasons cited by participants for seeking abortions were limiting family size, birth spacing, unintended pregnancy, failure of contraception, socioeconomic limitations and congenital anomalies.

The most common reason cited in earlier study conducted in 13 states of India for terminating the pregnancy was "did not want any more children" (42%). Other reasons included "child too young" (23.4%), "exposure to X-ray/illness" (13.4%), "pregnancy due to contraceptive failure" (7.8%), and "others" (4.6%). In 12.4 per cent women the reason for abortion was specifically mentioned "do not want any more daughters" [20].

A similar study conducted in Kaniyambadi, a rural developmental block in Vellore district, Tamil Nadu, India reported 77% of the women used abortion as method of spacing and 13% for limiting family size [6]. The most commonly reported factors responsible for seeking abortion are unwanted pregnancy, socioeconomic reasons and failure of contraception [1]. A study conducted at Delhi reported the reasons were unplanned pregnancy, inadequate income and completed family [22]. It is advised that the eligible couple should be educated and motivated to use different methods for contraception to avoid unwanted pregnancy and resulting abortion.

Most of the subjects in the present study reported television, chemists, friends and relatives, clinicians, print media, family planning clinics, health care providers and internet as important source of information on medical abortion. Most of the women procured the medicine for abortion without any prescription through chemists either by self, husband or through relatives. Only one third of them have reported

to obtain the medication through registered medical practitioners. A few of the participants were aware of the names of the abortion kits, the exact time frame under which they have to use the medications, and very limited participants had knowledge of side effects. Similar observation on media, medical personnel and chemists being the important source of information on medical abortion has also been reported earlier [23, 24].

Similar studies conducted earlier reported higher number of participants follows self medication or obtain abortion kits through untrained personals to seek medical abortion [6, 14, 24].

Medical abortion may have been oversold by the media or the personnel with meagre or no experience, but the information on proper usage and side effects is not being delivered, which may lead to higher incidence of complications and less positive attitude towards medical abortion.

In our study, nausea, vomiting, abdominal cramps were the most cited complication of the medical abortion. Out of 35 women, 10 had reported incomplete abortion and 4 had infection subsequent to abortion. Similar study carried out at Jamnagar, India reported excessive per-vaginal bleeding (89.1%), incomplete abortion (70.2%), missed abortion (2.7%), continuation of pregnancy (2.7%), anaemia (56.7%), septicaemia (8.1%) and death in 2.7% of the women following medical abortion [14]. Earlier study also reported excessive bleeding, incomplete abortion, septicaemia as the main complication of induced abortion [6].

This study recommends that medical abortion is an acceptable method of termination of early pregnancy under proper supervision without the complication of anaesthesia, which is needed during surgical evacuation. The eligible couple in reproductive age group should be provided with information on availability, proper protocol and side effects of medical abortions at every opportunity, this information should be dispensed at antenatal, postnatal, family planning and adolescent clinics. So, self medication can be avoided. Post abortal contraceptive usage should be encouraged to avoid repeated abortions. The chemists who provide medical abortion pills should be able to assess the women's suitability and give counselling about abortion, side effects and post abortion care and suggest follow-up and referral. The government should put restrictions over the counter sale of medical abortion drugs.

CONCLUSION

In India, higher rate of maternal morbidity and mortality due to abortion is because of termination of unwanted pregnancies in unhygienic and unsafe conditions. Such unintended pregnancies can be due to lack of knowledge, apprehension, denial and ignorance for the contraceptive usage.

Additional consequences of unsafe abortion include loss of productivity, economic burden on public health systems, stigma and long-term health problems, such as infertility. Every woman must be counselled regarding advantages, drawbacks, risks and limitations of different methods of abortion.

Prevention of unwanted pregnancy is the best way to prevent unsafe abortion. Hence, awareness on contraceptives and emergency contraceptives is must for all. The chemist also needs to be aware about the MTP Act and consequence of medicines that are taken without medical supervision. The Government must put restrictions on the over the counter sale of drugs that are used for medical abortion and provision should be made to make these drugs available only on authorised prescription from qualified personals.

The feasibility of training informal health providers to offer safe abortion services particularly at early gestation stage should be explored at the policy programme and research levels.

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