

# Over the counter sale of drugs for medical abortion- Knowledge, Attitude, and Practices of pharmacists of Delhi, India

Archana Mishra<sup>\*1</sup>, Anita Yadav<sup>2</sup>, Sunita Malik<sup>1</sup>, Roli Purwar<sup>1</sup> and Supriti Kumari<sup>1</sup>

<sup>1</sup>Department of Obstetrics & Gynaecology, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi - 110029, India

<sup>2</sup>Department of Obstetrics & Gynaecology, Andaman & Nicobar Islands Institute of Medical Sciences, Port Blair, Andaman & Nicobar Islands, India

## Corresponding author\*

Dr. Archana Mishra,

Department of Obstetrics & Gynaecology,

Vardhman Mahavir Medical College and Safdarjung Hospital,

New Delhi -110029, India

E-mail: [drarchanamishra@rediffmail.com](mailto:drarchanamishra@rediffmail.com)

## Abstract

**Introduction:** Despite the well defined law and highly liberal policy Government approved medical facilities are not the leading provider of abortion in Indian Scenario. Whether legally or not Pharmacists are already acting as provider of medical abortion for large number of women in India. Dispense of Medical abortion drugs via pharmacist has the advantages of convenience, relative anonymity, hasty transaction, easy accessibility and saving cost.

**Aims and Objectives:** Objective of present study was to assess the over the counter sale of medical abortion in terms of knowledge, attitude and practices of pharmacists of Delhi, India.

**Material and Methods:** It was a cross sectional interview based study conducted in 110 pharmacies of 6 districts of State of Delhi.

**Results:** A total of 75 pharmacists and 35 pharmacy workers were interviewed. Knowledge and practices of all of them was inadequate in some aspects. 68% knew Medical abortion is legal and 57% thought that over the counter sale of drugs of medical abortion is also legal. Only 40.9% knew the correct regimen of mifepristone + misoprostol combination. Most of them is not aware of any serious side effects and failure rate. Their attitude is indifferent towards the clients but positive towards training in updating knowledge if given option.

**Conclusion:** Their knowledge, attitude and practices while dispensing drugs for medical abortion were inappropriate to qualify them as an independent mid level provider in present scenario. Unregulated OTC sale of abortifacients is responsible for high number of self induced abortion related complications.

**Keywords:** Medical abortion, Pharmacist, Over the counter sale, Midlevel provider.

## 1. Introduction

Medical abortion is the commonest form of self induced abortion used by women for years. Despite the well defined law and highly liberal policy Government approved medical facilities are not the leading provider of abortion in Indian Scenario. Till date abortion related services remain predominantly in hands of uncertified private providers. These providers could be traditional birth attendants, nurses, midwives, pharmacists or quacks.

From 2002, medical abortion is being provided from government approved medical facilities free of cost as a part of safe abortion services. Programmatic approach of family welfare was conceived and implemented “to provide safe abortion along with emphasis on acceptance of some sort of contraception”. This approach was supposed to help in population stabilization which is the ultimate goal. Ironically this approach has turned women away from already limited public health facilities for abortion. An unmet demand for safe abortion services and lack of effective regulatory mechanism further facilitated the bloom of all types of unqualified abortion providers.

Abortifacients are group (H) drugs which cannot be sold without prescription but practically all type of abortifacients whether allopathic or ayurvedic are being sold over the counter. Few so called Ayurvedic preparations with dubious components are even being sold by grocers. Result of such unsupervised abortions can be seen in upswing in the abortion rate and in the high number of abortion related complications including death at the tertiary care centers. Approval of medical abortion by non physician midlevel providers including pharmacists had been an issue of debate for a long time. Whether legally or not Pharmacists are already acting as providers of medical abortion for a large number of women in India. People approach them for medical care because of their convenience, relative anonymity, hasty transaction, easy accessibility and saving cost. These advantages are of importance in particularly low resource setting as in India. In spite of these advantages there are important issues regarding competency and practices of pharmacists which need to be

addressed.

Present study was planned because there are very few studies regarding knowledge, attitude and practices of pharmacist as a provider of medical abortion all over the world. In India to best of our knowledge there have been two studies but the information is 8-10 years old [7-9]. Our study is supposed to provide detailed first hand information regarding knowledge, attitude, practice and competency of pharmacist as independent midlevel provider of medical abortion.

### 1.1 Aims and Objectives

Objective of present study was to assess the over the counter sale of medical abortion in terms of knowledge, attitude and practices of pharmacists of Delhi, India. .

## 2. Material and Methods

This was a cross-sectional study conducted in 110 pharmacies situated in urban areas of Delhi. Delhi as a state is divided in 9 districts out of which 6 districts were selected randomly. We selected almost equal number of pharmacies per district in order to ensure a randomized data. Pharmacies were randomly selected and visited according to convenience by 4 doctors who were uniformly trained to interview Pharmacists. A questionnaire was structured including questions pertaining to knowledge, attitude and practice of providing medical abortion to Clients. Ethical clearance was taken from our institution. Questionnaire was initially pretested in 10 pharmacies and important suggestions were included .Pharmacists were ensured of confidentiality and informed consent was taken .It was emphasized that there are no right or wrong answers and they have to tell only what they were practicing. Only those pharmacists/pharmacy workers who were convinced and volunteered to provide information were included in the study. We tried to interview the pharmacist running the pharmacy but in places where no pharmacists were present in the pharmacy we interviewed the most experienced pharmacy worker. Reason was sought for those who refused to participate in the study. Answers were noted down simultaneously. At the end of interview queries of pharmacists were clarified and no incentive was paid for the interview.

## 3. Results

Our observations in the present study were as follows. We visited 125 pharmacies in total to recruit 110 volunteers. 5 pharmacies refused to participate in the study and 10 did not sell abortifacients due to *lack of consumption*. Most common explanation was” *We are not supposed to answer without permission of owner of pharmacy.*” Our response rate was 88 %. Mean age of volunteers was 32.6 years with mean experience of 9 years. We encountered only 2 females and rests were all males. We encountered 68% pharmacists and 32 % pharmacy workers. We interviewed only one person from a pharmacy .Educational status of volunteers is shown in Table 1.

**Table 1: Educational status of Volunteers**

S. N.	Educational Status	Number	Percentage
1	Tenth	4	3.6
2	Intermediate	7	6.3
3	Graduate	24	21.8
4	B. Pharma	75	68

Only 21.8% of volunteers accepted selling over the counter drugs. It was an expected response. But when we asked indirectly “do you think OTC Sale of drugs for medical abortion is legal and is being conducted in different pharmacies of Delhi”; then 61.8% of volunteers answered yes. 92% Pharmacist or pharmacy workers provided drugs without confirming name of patient, diagnosis or name and qualification of prescribing Doctor. “Name of drug written on a piece of paper, old saved prescriptions, prescription of some other patient” all are acceptable as prescriptions. 2 pharmacies claimed to sell 90-120 packs/month, 4 pharmacies more than 20-30 packs/months, rest pharmacies sell only 2- 8 packs /month. This major variation in sale was because of location of these 6 pharmacies near 4 big hospitals of Delhi. 94% volunteers avoided the question of their personal preference of a particular brand. None of the pharmacies were dispensing any Ayurvedic preparation for medical abortion.

Information about the clients was that “almost 20 % of the clients do not come with prescription” and leave it to pharmacists “to give what you think is best “. To our surprise 95-98 % of these clients are male. 17.27% of participants accepted that even teens are coming for medical abortion.

Knowledge of pharmacists about drugs for medical abortion is described in Table 2.

**Table 2: Knowledge of pharmacists about drugs for medical abortion**

	Questions	Number	Percentage
1	think, medical abortion is legal in India	68	61.81
2	think over the counter sale of medical abortion pills is legal	57	51.8
3	Think mifepristone + misoprostol combination is more effective than misoprostol alone	40	36.36
4	Knew correct doses of mifepristone and misoprostol	40	36.36
5	Knew misoprostol can be given both oral and per vaginum	57	51.8
6	Knew the correct Regimen	45	40.9
7	Think Mifepristone +Misoprostol combination is 100% effective	100	91
9	Knew about congenital malformation in case of continuation of pregnancy	9	8.1

While asking about the gestational age to which medical abortion can be given legally 53.63% pharmacists answered up to 2 months, 42.72% answered 3 months 1.8% answered 4 months and 1.8% answered 5 months. Many incorrect regimens of Mifepristone + Misoprostol combinations are popular in pharmacists. Most common one which was told by 30 % pharmacist was to take mifepristone 200 mg stat followed by 1 tablet of 200 microgram misoprostol 6 hourly. Few advised to take 1 tablet of mifepristone followed 2 tablet of 200 microgram misoprostol after 12 hours. Pharmacists almost never advised per vaginum administration of misoprostol. When asked about side effects of these drugs 15% answered no side effects, 79 % of pharmacists and workers said “regimen has few minor side effects”. None of the pharmacists were aware of ruptured ectopic, rupture uterus, sepsis and shock leading to hospital admission. Side Effects Known to Pharmacists and pharmacy workers are described in Table 3.

**Table 3: Side Effects of Medical abortion known to Pharmacists and pharmacy workers**

SN	Side effects	Number	Percent
1	Pain in lower abdomen	46	41.81
2	Weakness	20	18.18
3	Giddiness	10	9
4	Nausea and Vomiting	40	36.36
5	Minor bleeding	55	50
6	Mild grade fever	10	9
7	Excessive Bleeding and anaemia	15	13.63
8	Incomplete abortion	2	1.8

Attitude of most of the volunteers was indifferent towards the clients. 22 volunteers felt that abortion itself is an immoral thing and should not be liberalized. 58.72% volunteers felt OTC of drugs of medical abortion is morally correct as it is convenient for the clients. Most of the pharmacists do not differentiate between clients. 6% of pharmacists had reservations to provide abortifacients to teens but rest said they will provide with prescription. 95.4% of pharmacists and pharmacy workers expressed keen interest in receiving information and training to provide medical abortion services. 4 pharmacists refused this option due to their old age although their attitude was positive as they said “they will ensure that some younger person from their pharmacy attends and teaches others”. Most of the pharmacist tried to clarify their queries at the end of interview which showed their interest in learning new facts.

Practices of pharmacists are described in detail in Table 4. 92.7% pharmacists think medical abortion is 100 % effective. Almost 7.27% accepted that almost 2% of customers return with failure or complication. 5.45% [n=6] repeated the course of drugs in case client came back to them with “no bleeding after first course”. 3.6% [n=4] asked them to wait for some time. 3.6% [n=4] pharmacists accepted that they had given treatment [Tranexemic acid + mefenemic acid] in case client complaints of excessive bleeding per vaginum. Most of the pharmacist agreed on suggesting the client to seek consultation of a doctor in case of any complication.

**Table 4: Practices of pharmacists while dispensing drugs for medical abortion**

S. No.	Practice	Number	Percentage
1.	Ask gestational age	23	20.9
2.	Ask for confirmation of pregnancy by UPT/ Ultrasound	26	23.63
3.	Ask any obstetric or medical history	0	0
4.	Tell drug doses or schedule to the clients	48	43.63
5.	Explain any expected side effects and their treatment	25	22.72
6.	Explain failure of medical abortion	10	9.09
7.	Contraceptive Advice given	0	0

#### 4. Discussion

Information achieved from present study becomes more important in present scenario when there is a countrywide debate over expanding authorization and training for mid-level providers to offer first trimester medical abortion. In fact many investigators from developing countries believe that Mid-level providers should be authorized for providing first trimester medical abortion. Their competency in providing abortion services and post abortion care can be improved with short training courses [2]. Many countries have permitted midlevel providers for medical abortion either independently or in supervision of physician. Tunisia and South Africa have adapted abortion policy to permit trained midlevel providers independently while Viet Nam permitted it under supervision of a doctor [3-5]. Even in India few researchers reported interest of midlevel providers and reasonable support from physicians from public sector in training of midlevel providers of medical abortion. They recommended authorization of such providers to fulfill unmet demand of doctors and safe abortion services especially in rural areas [8].

Another study performed on chemists of Bihar and Jharkhand 10 years back also suggested that knowledge and practices of pharmacists selling over the counter abortifacients were inadequate and inappropriate but they certainly had interest in learning about the drugs and medico legal issues pertaining to medical abortion. Similar facts were observed in our study .Knowledge about mifepristone and misoprostol has certainly increased in all these years as is its availability but attitude of pharmacists towards providing abortion care to clients has not changed much. Even today seeking abortion is a matter of embarrassment and both client and pharmacists are interested in a hasty transaction without much communication.

We accept that it's a interview based study so assessment of knowledge and attitude was appropriate but assessment of practices could be done only partially as we have to rely on answers provided by pharmacists and pharmacy workers .There have been few more studies from other parts of world reflecting the competency of pharmacists as a providers of medical abortion .Studies conducted in rural area of Mexico had concluded that pharmacy workers were not trained in reproductive health care and impart inaccurate information to clients[6]. In India there were studies from states of Bihar and Jharkhand which have targeted non physician midlevel providers of medical abortion including pharmacists also share the similar view [7-9].

In the present study we agree that there was difference in knowledge of pharmacists and pharmacy workers. We advertently did not differentiate between pharmacists and pharmacy workers because purpose of our study was to present comprehensive data of dispensing the drugs for medical abortion from pharmacies whether by pharmacists or pharmacy workers.

In present study there are some practical issues which weakens the claim of eligibility of pharmacist as midlevel provider of medical abortion in our country even if they are well informed. Our vital observation was that women who need medical abortion are almost never coming in contact with pharmacist so it is impossible to acquire correct information about last menstrual period and other important things to decide eligibility of the client for medical abortion. Even if pharmacists are willing to counsel main client is not available to receive information about side effects, complications and contraceptive advice. Other important issue is of privacy and time devoted to counseling. Pharmacies are shops meant for profit and post abortion advice and care may not be an area of interest for them.

We observed that most of the pharmacists were confused about new regimen of Mifepristone + Misoprostol and older regimen of misoprostol only which they were using previously. Incorrect drug schedule and intake at higher gestational age may be responsible for higher failures and complications observed in self induced abortions witnessed by most tertiary care centers. In an open ended question we asked them "why do you explain drug schedule to most of the client while not explaining side effects, failure rate etc". Almost all pharmacists answered "it's a general tendency of clients to confirm drug regimen from the chemist". When asked about difficulties faced by pharmacists in counseling the clients many of them said "We don't want to embarrass the client by asking uncomfortable questions or they will choose some other pharmacy next time."

There is a need to assess competency and knowledge update of the Pharmacist and pharmacy workers at regular intervals by the regulating authorities'. We suggest some mystery shopper studies including greater number of pharmacies to assess the exact practices. We also suggest that all the outlets dispensing such medications must be registered. Sale of drugs used for medical abortion should be strictly regulated. Pharmacists should be trained in short courses of reproductive health care before considering them for authorized midlevel providers of Medical abortion. Last but not the least is the need of easy accessibility of safe abortion services to all women and emphasis on contraceptive use. Mass media could be of great help in increasing awareness regarding home based supervised medical abortions provided by Government approved medical facilities.

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