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(CASE REPORT)



# Right to abortion & safe abortion will reduce maternal mortality

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#### **Abstract**

Recent report of the United Nations population fund's state of the world population says that around 08 women die every day in India because of unsafe abortion. There are many reasons behind the deaths such as taking abortion pills without consulting doctor, abortion carried out by untrained personals, abortion in hospitals without facilities settings etc. Married women have the right to abortion but what about the unmarried pregnant women; this case is one of the major cause of unsafe abortion especially in our country India. Right to abortion simply means one can go for safe abortion i.e. the abortion will be carried out by a trained doctor in a hospital approved for pregnancy termination having facilities settings. Time to time amendments in Medical termination of Pregnancy act took place but no right provided to unmarried. Supreme Court in its judgment on 29th September 2022 gave right to abortion to unmarried pregnant women too up to 20 weeks from the date of gestation. This judgement came in a case that filed on July 2022 by 25 years old pregnant women. The judgement is a revolution and save many lives of women because it will stop or reduce the number of unsafe abortions. The article discussed about the impact of this decision on women in near future, unsafe abortion, medical abortion using medications, actions and adverse effects of medications used for abortion, medical termination of pregnancy act 1971, amendment in act and effect of Supreme Court's judgement on women's health and mortality.

**Keywords**: Medical termination of pregnancy act 1971; Unsafe abortion; Right to abortion; Safe abortion; Maternal mortality; Misoprostol; Mifepristone

## 1. Introduction

On July 2022, a case was filed in Supreme Court (SC) by a 25 year old unmarried woman seeking an abortion after the Delhi High Court rejected her plea. The woman wished to terminate her pregnancy because her partner had refused to marry her at the last time. The Supreme Court in a noteworthy judgment on 29<sup>th</sup> September 2022 said that it is unconstitutional to discriminate between married and unmarried women for permitting termination of pregnancy on definite uncommon grounds when the foetus is between 20-24 weeks.

Supreme Court of India has now given right to abortion to all women, it means that now unmarried women can also approach for safe abortion. Earlier this right was with married women only. Moreover, After this judgement, if a woman becomes pregnant after marital rape, she can proceed to abortion because it is against her wish.

The above judgement focuses on three significant things

- It is the right of woman to go for safe abortion before 20 weeks.
- A woman can go for abortion if she thinks that pregnancy is against her wish.
- This is applicable both for married and unmarried women as well [1].

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In India, especially in rural areas, many cases we usually hear and read that a woman is expelled out of the home/village because of pregnancy before marriage, this happens because the Indian society does not accept pregnancy before marriage. Usually in India males in the families take all decisions of a girl marriage and abortion as well i.e. when and where she will marry or when and where the abortion will be done without asking what actually the girl want. The deficiencies in Medical termination of Pregnancy act (MTP) are i. unmarried women can go for abortion in some special cases only ii. in marital rape cases, there was no right to women to terminate the pregnancy. Marital rape is defined as the forceful sexual activity without wife's consent.

Conditions stated above gave rise to unsafe abortion. Now Supreme Court decided to include the marital rape in MTP act too. This judgement is like a revolution in field of pregnancy and abortion. Women in India have almost all rights equal to man such as education, voting in elections, working outside home etc. but they didn't have the right on their own body/own wishes on pregnancy.

## **Objectives**

- To find out statistics of deaths due to unsafe abortion in India.
- To find out reasons behind unsafe abortion.
- What Medical termination of pregnancy act 1971 and amendments says?
- Impact of supreme court's judgement on abortion
- Drugs used in medical abortion: actions, side effects and safety of individual as well as combined drugs.

## 2. Reasons behind Abortion and scarcities in MTP act, 1971

- In married cases, practice of illegal sex determination. Abortion is carried out if girl child is there.
- In unmarried cases, illegal abortion because of pregnancy before marriage.
- Lack of awareness.
- Lack of strict laws which can restrict rape like events.
- Social thinking.
- Many terms not clearly defined in the MTP act.

#### 2.1. Requirement for abortion as per MTP act 1971

The MTP (Amendment) Act 2021 reduces restrictions and provides access to safe and legal abortion services e.g. up to 20 weeks of gestation, opinion of one registered medical practitioner is required for termination of pregnancy. The amendment in act has also increased the upper gestation limit from 20 to 24 weeks in case of special categories of women like survivors of rape, victims of electral love and others like challenged women and minors. A pregnancy of more than 24 weeks can also be terminated in case of substantial fetal abnormalities with opinion of the state level medical board. The act also allows termination of pregnancy in cases of failure of contraception for family planning.

**Table 1** Shows the requirement of opinion of number of doctors at different stages of pregnancy as per MTP act 1971

Pregnancy	Advice/opinion for abortion
<20 weeks	01 doctor
20-24 weeks	02 doctors
>24 weeks	Medical board

## 2.2. Major amendments in MTP act, 1971

In 2021, amendments in MTP act took place, major changes/inclusions were

- For married woman, partner's consent was compulsory for abortion.
- For unmarried woman, consent of partner as well as permission of court was compulsory.
- In rape cases, abortion was carried out on courts advice/decision only.
- Some exceptional cases were included.

#### 2.3. MTP act 1971/MTP (Amendment) act 2021 and SC judgement: At a glance

In 1971 act, married women have the right to abortion where the length of the pregnancy does not exceed twenty weeks. Husband, mentally unfit, physically challenged, danger to mother, rape victim were highlighted conditions whereas in case of unmarried women there was no such right to them. After amendment in 2021, married women have the right to abortion where the length of the pregnancy exceeds twenty weeks but does not exceed twenty four weeks and included some more conditions like partner, divorced, widow and minors were included. In Supreme Court's judgement, right to abortion is now extended to unmarried women too where the length of the pregnancy does not exceed twenty weeks. Meaning of partner is clearly defined and marital rape is included in conditions for abortion [2,3].

## 2.4. Unsafe abortion and its health consequences

Two methods are employed for abortion i.e. surgical method and medical method. The health outcome of unsafe abortion depend on the facilities where abortion is carried out, the expertise of the abortion provider, the procedure of abortion used, the health of the woman and the gestational age. Unsafe abortion plan of action may involve introduction of an object or substance (root, twig or catheter or traditional concoction) into the uterus; dilatation and curettage execute incorrectly by an untrained provider, ingestion of detrimental substances and application of outside force. In some settings, traditional practitioners powerfully batter the woman's lower abdomen to disrupt the pregnancy, which can begin the uterus to rupture and by using certain medications such as the prostaglandin analogue Misoprostol, in wrong dosages for inducing abortion takes the life of woman. Complications of unsafe abortion include hemorrhage, sepsis, peritonitis and trauma to the cervix, vagina, uterus and abdominal organs. About 20–30% of unsafe abortions results in reproductive tract infections and 20–40% in upper genital tract infection. One in four women who undergo unsafe abortion is likely to develop temporary or lifelong disability requiring medical care. Evidence shows that women face considerable physiological, financial and emotional costs who go through unsafe abortion. The possibility of death due to unsafe abortion differs from region to region. When abortion is carried out by skilled providers utilizing correct medical techniques, drugs and under hygienic conditions, that is considered to be mentally and physically safe [4].

## 2.5. Unsafe abortion: Third leading cause of maternal mortality

According to the recent report, seven states have very high maternal mortality in India. These seven states are Rajasthan, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Odisha and Assam i.e. 130 or >130 maternal deaths per 100,000 live births. Despite of legislative protection, the third leading cause of maternal mortality is unsafe abortion in India. UNFPA's recent reports says that around eight women die from causes related to unsafe abortion per day which means 240 in a month and 2880 in a year. Complications usually arises during abortion and young women aged between 15 to 19 years were at the highest risk of dying due to these complications [5].

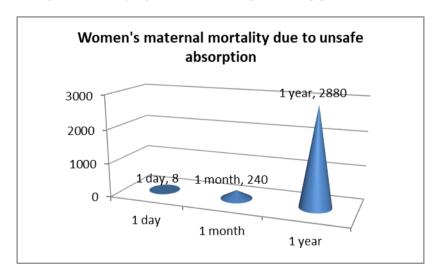


Figure 1 Graph shows deaths in a day which tells further deaths in a month and in a year as per UNFPA 2022 report

## 3. Medical abortion (Drugs used for abortion)

#### 3.1. Misoprostol

It is synthetic prostaglandin E1 analogue which is also known as Alprostadil. It inhibits gastric acid secretion and also shows cytoprotective activity that's why used in treatment of peptic ulcer and Non-steroidal anti-inflammatory drugs (NSAID) induced gastric ulcers. The recommended dosage for peptic ulceration and NSAID induced ulceration is 800 mcg daily in 2-4 divided doses for 4-8 weeks. For prophylaxis of NSAID induced ulcers 200 mcg is administered two times or four times in a day in divided doses.

The side effects are diarrhoea, abdominal cramps, nausea, vomiting, flatulence, headache, backache, loss of appetite and menstrual irregularities (heavy periods, bleeding from the uterus and postmenopausal bleeding). In pregnancy this drug is contraindicated because it may produce abortion [6,7].

## 3.2. Mifepristone

Mifepristone is also known as RU-486 which is a 19-norsteroid compound. It is a potent competitive antagonist at both progesterone and glucocorticoid receptors that's why used as a contraceptive. Mifepristone is an abortifacient used to terminate early pregnancy. As single oral dose of the abortion pill containing Mifepristone 600 mg plus 200 mcg of Misoprostol has been found to terminate pregnancy in 95% of patients during the first 7 weeks after conception. Alternatively, a single oral dose of 600 mg Mifepristone and a vaginal pessary containing 1 mg of Prostaglandin E1 may be used to terminate early pregnancy. A single dose of 600 mg is an effective emergency postcoital contraceptive.

Adverse effects – Nausea, vomiting, vaginal bleeding, diarrhoea, flatulence and headache.

Abortion pill – Recently the antiprogestin, Mifepristone (RU-486) in combination with Prostaglandin E2 (Dinoprostone) has been found to produce effective early abortion [6,7].

#### 3.3. Medical abortion is safe, affordable and effective

WHO recommends medical abortion up to early first trimester (upto 63 days since the first day of last menstrual period). Both Mifepristone and Misoprostol are USFDA approved for medical abortion. Drug controller general of India has approved a combo pack of one 200 mg tablet of Mifepristone and four 200 mcg of Misoprostol for medical method of abortion up to 63 days from the date of gestation. Mifepristone blocks the action of progesterone, a hormone necessary to encourage pregnancy and Misoprostol causes contraction of uterine, which throw out the fetus and other products of conception.

Both surgical and medical methods of inducing abortion have their ownadvantages and disadvantages. The main advantages of medical abortions are:

- Surgical and anaesthetic risks are avoided.
- Less painful procedure than surgical abortion under local anaesthesia.
- The disadvantages of medical abortion are:
- It requires longer period for completion
- Multiple visits to medical centre

Initially when Mifepristone was approved for first trimester abortions, a higher dose of 600mg was recommended but now similar results have been achieved with a much lower dose of 200mg. Now medical abortion can be done safely, effectively and successfully both in urban and rural hospital of India. Proper counselling of patients can avoid all the complications of abortion and medical abortion can be successfully performed. Moreover, the risk of increased blood loss as the gestation age increase and chance of retained products of conception in advance gestation age should be explained to the patient [8].

#### 3.4. Results and side effects of combined use of Mifepristone and Mifepristol for medical abortion

The article says that the  $600 \mu g$  Misoprostol when administered with Mifepristone, give success rate of about 93% for complete abortion up to 49 days of gestation. The researchers concluded that results of vaginal Misoprostol is much better than oral Misoprostol and pregnancy expulsion will be in rapid rate. The simultaneous use of Mifepristone and

Misoprostol is able to shorten the amount of time necessary for a medical abortion and has the potential to reduce patient anxiety.

Common side effects of using the combination drugs are cramping, nausea, fever with chill, dizziness, vomiting, headache, diarrhoea [9].

In 2005, Murthy and associates reported that the combined administration of Mifepristone and Misoprostol to pregnant women less than seven gestation weeks is an efficacious way of achieving medical abortion [10].

Schreiber and colleagues reported that Mifepristone and Misoprostol are efficacious in women with pregnancies of 8-9 gestational weeks whether administered concurrently or one after the other 36-48 hours later [11].

#### 4. Conclusion

Medical termination of pregnancy act 1971 was implemented in whole of India except Jammu and Kashmir in 1972. Now the act is enforced in Jammu and Kashmir as well. But as per the need the act was amended from time to time. Recently it was amended in 2021 and many things included and added from the act to make the challenging restrictions easy like abortion period increased from 20 to 24 weeks etc. from the act in keeping women's health in mind. This act gives right to safe abortion to married woman only not to unmarried women. Pregnant unmarried women by themselves or with family members used to go for unsafe abortion and that is the leading cause of deaths due to unsafe abortion. Many reasons are there for unintended pregnancies. Examples of unsafe abortion are i. taking abortion pill without knowing the adverse effects of the medications ii. Abortion by untrained professionals iii. Carrying out the procedure on non facilities settings. The common medications used for medical abortion are Misoprostol and Mifepristone. The observed adverse effects of these drugs are diarrhoea, abdominal cramps, nausea, vomiting, flatulence, headache and backache, loss of appetite, menstrual irregularities and vaginal bleeding. Abortion sometimes creates serious complications. Unsafe abortion takes around eight lives every day as per the report of United Nations Population Fund's State of the World Population Report 2022.

The judgement from the Supreme Court is like a revolution for women's health and women's future. According to the judgement, unmarried woman can also approach towards safe abortion up to 20 weeks from the date of gestation. Safe abortion means abortion will be carried out by trained medical professionals in approved hospitals having facility settings using modern surgical and medical methods. The study reveals that medical abortion with medications like Mifepristone and Misoprostol is much advantageous than surgical method of abortion. Safe abortion will save many lives and will be beneficial for overall women's mental and physical health.

## Compliance with ethical standards

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Disclosure of conflict of interest

The authors declare that there is no conflict of interest.

Statement of ethical approval

The present work does not contain any studies performed on animals/humans subjects by any of the authors.

Statement of informed consent

Informed consent was not required for this study.

## References

[1] Vishwanath A. Supreme Court's abortion ruling [Internet].New Delhi. The Indian express. © 01/10/2022 [Updated 30/09/2022; Cited 01/10/2022]. Available from: www.indianexpress.com.

- [2] The Medical termination of pregnancy act 1971. The Gazette of India. Ministry of law & Justice. New Delhi. August 10, 1971.
- [3] The Medical termination of pregnancy (Amendment) act 2021. The Gazette of India. Ministry of law & Justice. New Delhi. March 25, 2021.
- [4] Safe abortion: technical and policy guidance for health systems. Second edition. Geneva, Switzerland: WHO Press; 2012.
- [5] State of the World Population Report 2022 [Internet]. New York. United Nations Population Fund. © 2022 [Cited 2022 Oct 01]. Available from: www.unfpa.org.
- [6] Sharma VN. Essentials of Pharmacology. 3<sup>rd</sup> edition. New Delhi. CBS publishers and distributors. 2007.
- [7] Barar FSK. Essentials of Pharmacotherapeutics. 4th edition. New Delhi. S.Chand & company Ltd. 2007.
- [8] Bhojwani P, Meena P, Verma GS. Efficacy of combination of tablet Mifepristone and Misoprostol for first trimester pregnancy termination at different gestational age. International Journal of Reproduction, Contraception, Obstetrics and Gynecology. 2018; 7(1):248-252.
- [9] Li YT, Hsieh JCH, Hou GQ et al. Simultaneous use of Mifepristone and Misoprostol for early pregnancy termination. Taiwanese Journal of Obstetrics and Gynecology. 2011; 50:11-14.
- [10] Murthy AS, Creinin MD, Harwood B, Schreiber C. A pilot study of Mifepristone and Misoprostol administered at the same time for abortion up to 49 days gestation, contraception. 2005; 71:333-336.
- [11] Schreiber CA, Creinin MD, Harwood B, Murthy AS. A pilot study of Mifepristone and Misoprostol administered at the same time for abortion in women with gestation from 50-63 days. Contraception. 2005; 71:447-450.