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A Review: On Abortion

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ABSTRACT: - Around 56 million abortions are performed each year in the world, with about 45% done unsafely. Abortion is the ending of a pregnancy by removal or expulsion of an embryo or fetes. An abortion that occurs without intervention is known as a miscarriage or "spontaneous abortion" and occurs in approximately 30% to 40% of pregnancies. Reasons for procuring induced abortions are typically characterized as either therapeutic or elective. An abortion is medically referred to as a therapeutic abortion when it is performed to save the life of the pregnant woman; to prevent harm to the woman's physical or mental health; to terminate a pregnancy where indications are that the child will have a significantly increased chance of mortality or morbidity. A woman has a freedom to do what she wants to do but what she wants does not mean we can take it to any level of irresponsibility. And I think before forty eight days if it happens, it's best; we cannot go to thirty weeks and do abortion. The "Heart beat bill" that is been declared in the US and it declares that any woman who Aborts anything whit a heart beat she is declared criminal immediately.

I. INTRODUCTION

Abortion is the ending of a pregnancy by removal or expulsion of an embryo or fetes. An abortion that occurs without intervention is known as a miscarriage or "spontaneous abortion" and occurs in approximately 30% to 40% of pregnancies. When deliberate steps are taken to end a pregnancy, it is called an induced abortion, or less frequently "induced miscarriage". The unmodified word abortion generally refers to an induced abortion(1).

When properly done, abortion is one of the safest procedures in medicine, 1:1 but unsafe abortion is a major cause of maternal death, especially in the developing world, while making safe abortion legal and accessible reduces maternal deaths. It is safer than childbirth, which has a 14 times higher risk of death in the United States(2).

Modern methods use medication or surgery for abortions. The drug mifepristone in combination with prostaglandin appears to be as safe and effective as surgery during the first and second trimester of pregnancy. The most common surgical technique involves dilating the cervix and using a suction device. Birth control, such as the pill or intrauterine devices, can be used immediately following abortion(3). When performed legally and safely on a woman who desires it, induced abortions do not increase the risk of long-term mental or physical problems. In contrast, unsafe abortions (those performed by unskilled individuals, with hazardous equipment, or in unsanitary facilities) cause 47,000 deaths and 5 million hospital admissions each year. The World Health Organization recommends safe and legal abortions are available to all women(4).

Around 56 million abortions are performed each year in the world, with about 45% done unsafely. Abortion rates changed little between 2003 and 2008, before which they decreased for at least two decades as access to family planning and birth control increased. As of 2018, 37% of the world's women had access to legal abortions without limits as to reason. Countries that permit abortions have different limits on how late in pregnancy abortion are allowed. Abortion rates are similar between countries that ban abortion and countries that allow it(5).

Historically, abortions have been attempted using herbal medicines, sharp tools, forceful massage, or through other traditional methods. Abortion laws and cultural or religious views of abortions are different around the world. In some areas abortion is legal only in specific cases such as rape, problems with the fetus, poverty, risk to a woman's health, or incest. There is debate over the moral, ethical,

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and legal issues of abortion. Those who oppose abortion often argue that an embryo or fetus is a human with a right to life, and they may compare abortion to murder[6].

Those who support the legality of abortion often hold that it is part of a woman's right to make decisions about her own body. Others favor legal and accessible abortion as a public health measured. Induced approximately 205 million pregnancies occur each year worldwide. Over a third are unintended and about a fifth end in induced abortion. Most abortions result from unintended pregnancies. In the United Kingdom, 1 to 2% of abortions are done due to genetic problems in the fetus. A pregnancy can be intentionally aborted in several ways[7].

The manner selected often depends upon the gestational age of the embryo or fetus, which increases in size as the pregnancy progresses. Specific procedures may also be selected due to legality, regional availability, and doctor or a woman's personal preference. Abortion is the ending of a pregnancy by removal or expulsion of an embryo or fetus. An abortion that occurs without intervention is known as a miscarriage or "spontaneous abortion" and occurs in approximately 30% to 40% of pregnancies. When deliberate steps are taken to end a pregnancy, it is called an induced abortion, or less frequently "induced miscarriage". The unmodified word abortion generally refers to an induced abortion[8].

Table 1: Abortion.

Abortion	
Other names	Induced miscarriage, termination of pregnancy
Specialty	Obstetrics and gynecology
ICD-10-PCS	O04
ICD-9-CM	779.6
MeSH	D000028
MedlinePlus	007382

When properly done, abortion is one of the safest procedures in medicine, but unsafe abortion is a major cause of maternal death, especially in the developing world while making safe abortion legal and accessible reduces maternal deaths. It is safer than childbirth, which has a 14 times higher risk of death in the United States[9].

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Historically, abortions have been attempted using herbal medicines, sharp tools, forceful massage, or through other method. Abortion laws and cultural or religious views of abortions are different around the world. In some areas abortion is legal only in specific cases such as rape, problems with the fetus, poverty, risk to a woman's health, or incest. There is debate over the moral, ethical, and legal issues of abortion. Those who oppose abortion often argue that an embryo or fetus is a human with a right to life, and they may compare abortion to murder. Those who support the legality of abortion often hold that it is part of a woman's right to make decisions about her own body. Others favor legal and accessible abortion as a public health measure[12].

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several ways. The manner selected often depends upon the gestational age of the embryo or fetus, which increases in size as the pregnancy progresses. Specific procedures may also be selected due to legality, regional availability, and doctor or a woman's personal preference[13].

Reasons for procuring induced abortions are typically characterized as either therapeutic or elective. An abortion is medically referred to as a therapeutic abortion when it is performed to save the life of the pregnant woman; to prevent harm to the woman's physical or mental health; to terminate a pregnancy where indications are that the child will have a significantly increased chance of mortality or morbidity; or to selectively reduce the number of fetuses to lessen health risks associated with multiple pregnancy. An abortion is referred to as an elective or voluntary abortion when it is performed at the request of the woman for non-medical reasons. Confusion sometimes arises over the term "elective" because "elective surgery" generally refers to all scheduled surgery, whether medically necessary or not[14].

Miscarriage, also known as spontaneous abortion, is the unintentional expulsion of an embryo or fetus before the 24th week of gestation. A pregnancy that ends before 37 weeks of gestation resulting in a live-born infant is a "premature birth" or a "preterm birth". When a fetus dies in utero after viability, or during delivery, it is usually termed "stillborn". Premature births and stillbirths are generally not considered to be miscarriages although usage of these terms can sometimes overlap[15].

Only 30% to 50% of conceptions progress past the first trimester. The vast majority of those that do not progress are lost before the woman is aware of the conception, and many pregnancies are lost before medical practitioners can detect an embryo. Between 15% and 30% of known pregnancies end in clinically apparent miscarriage, depending upon the age and health of the pregnant woman. 80% of these spontaneous abortions happen in the first trimester[16].

The most common cause of spontaneous abortion during the first trimester is chromosomal abnormalities of the embryo or fetus, accounting for at least 50% of sampled early pregnancy losses. Other causes include vascular disease (such as lupus), diabetes, other hormonal problems, infection, and abnormalities of the uterus. Advancing maternal age and a woman's history of previous spontaneous abortions are the two leading factors associated with a greater risk of spontaneous abortion[17]. A spontaneous abortion can also be caused by accidental trauma; intentional trauma or stress to cause miscarriage is considered induced abortion or feticide.

Abortion causes and risk factors: -

1. Infection.
2. Medical conditions in the mother, such as diabetes and thyroid disease.
3. Hormone problems.
4. Immune system response.
5. Physical problems in the mother.
6. Uterine abnormalities.
7. Smoking.
8. Drinking alcohols.

REASON OF ABORTION: - Although abortion occurs in every society and substantial proportion of pregnancies are resolved by abortion worldwide, there is little empirical research on way women obtain abortion[18].

Common abortion reason: - The reason and the percentage of women who gave each one are-

1. Not financially prepared-40%
2. Bad timing, not ready, or unplanned-36%
3. Partner related reasons (including the relationship is bad or new, she don't want to be a single mother, her partner is not supportive, does not want the baby, is abusive, is the wrong guy)-31%
4. Need to focus on her other children-29%
5. Interferes with educational or vocational plans-20%
6. Not emotionally and mentally prepared-19%
7. Health related reasons (includes concern for her own health, the health of the fetus, use of prescription or non- prescription drugs, alcohols or tobacco-12%
8. Want a better Life for a baby than she could provide-12%
9. Influences from family and friends-5%
10. Doesn't want a baby or to place the baby for adoption-4%

Abnormal chromosomes: -When a miscarriage happens in the first 12 weeks, more than half the time it's because of a problem with the baby's chromosomes. Chromosomes contain the genes that determine your baby's unique traits, such as hair and eye color. A baby can't grow normally with the wrong number of chromosomes or with damaged ones[19].

An abnormality in a unborn baby's chromosomes could cause one of several problems. Among the most common are:

1. Blighted ovum (anembryonic pregnancy). No embryo develops.
2. Molar pregnancy, both sets of chromosomes come from the father, while none come from the mother. The placenta doesn't grow normally, and the fetus doesn't develop.
3. Partial molar pregnancy, the father gives two sets of chromosomes in addition to the set from the mother. The embryo may start to develop but soon stops.

Several other chromosomal abnormalities can cause the loss of a pregnancy. These include trisomy (Down syndrome), monosomy (down-syndrome), and other sex chromosome issues.

1. Here are some other things to keep in mind about abnormal chromosomes.
2. There's no way to prevent chromosome problems from happening.
3. As you get older, especially after age 35, your risk for chromosome problems specifically, and pregnancy loss in general, goes up[20].
4. Miscarriages from chromosome problems usually don't happen again in future pregnancies.

Medical Conditions: – A pregnancy loss often results from a problem with the mother's health. Some of these include:

1. An infection such as cytomegalovirus or rubella.
2. Poorly controlled long-term diseases such as diabetes or high blood pressure.
3. Problems with your uterus or cervix, such as fibroids, an abnormally shaped uterus, or a cervix that opens and widens too early, called cervical insufficiency.
4. STD infections such as chlamydia, gonorrhea , syphilis, or HIV.
5. Blood clotting issues that block blood vessels carrying blood flow to the placenta.
6. Diabetes risk doubles if poorly controlled[21].

Lifestyle: - Your habits as the mom-to-be can increase the risk of a pregnancy loss. Here are some habits that are dangerous for a developing baby:

1. Smoking, some studies show an increased risk to a pregnancy even if only the father smokes.
2. Heavy drinking.
3. Using illegal drugs[22].

Environmental Hazards: – In addition to second-hand smoke, certain substances in your environment at home or at work could put your pregnancy at risk. These include-

1. Lead in old water pipes or paint in homes built before 1978.
2. Mercury released from broken thermometers or fluorescent light bulbs.
3. Solvents such as paint thinners, degreasers, and stain and varnish removers.
4. Pesticides for killing insects or rodents.
5. Arsenic found near waste sites or in some well water[23].

Immunologic causes: -

1. HLA system with rejection of paternal antigens.
2. Autoimmune abnormalities.

Endocrine causes: - Luteal insufficiency associated with abnormal ovulation with polycystic ovaries. Hyperprolactinemia, hyperthyroidism, poorly controlled diabetes.

Unknown causes: -

1. In 15-20 % of cases of spontaneous abortion, the causes are not known.
2. The incidence is 0.5 to 2% of all pregnancies.
3. Nasah et al. (1982) found an incidence of 33.8 % in the high risk clinic[24].

Mechanical causes: - Related to the ovum: multiple pregnancies, hydramnios, leading to uterine overdistension, contractions, cervical dilatation and membrane rupture. Uterus (12 % of cases): hypoplasia and hypotrophy, leiomyomas, synechiae or congenital, malformations.

CASES OF ABORTION IN INDIA: -

Abortion incidence in India it estimated that 15.6 million abortions take place in India every year. A significant proportion of these are expected to be unsafe. Unsafe abortion is the third largest cause of maternal mortality leading to death. Of 10 women each day and thousands more facing morbidities[25].

PROBLEMS FORMED AFTER ABORTION: -

1. Emotional side effects after having an abortion
2. Physical side effects after having an abortion
3. Post-abortion check-up
4. Post-abortion pregnancy test
5. Pregnancy remains

Emotional side effects after having an abortion: You may experience a range of emotions after an abortion. How you react will depend on the circumstances of your abortion, the reasons for

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having it and how comfortable you feel about your decision. You may feel relieved or sad, or a mixture of both. Most women will experience a range of emotions around the time of the decision and the abortion procedure[26].

Physical side effects after having an abortion: Recovery after an abortion usually happens quickly. But it is different for every woman. Around 2 or 3 out of every 100 people who have an abortion at less than 9 weeks pregnant may experience emotional and physical side effects. After having an abortion, you'll probably have some period-type pains, stomach cramps and vaginal bleeding. This should start to gradually improve after a few days, but can last for 1 to 2 weeks. This is normal and is usually nothing to worry about. The bleeding is usually similar to normal period bleeding. But you may also pass some small blood clots. After a surgical abortion, you might not have any bleeding until your next period is due. If you have a medical abortion, you may experience short-lived side effects from the medications, such as nausea and diarrhoea. These side effects usually stop within 3 days. General anaesthetic and conscious sedation medication can also have side effects. Severe pain that can't be controlled with painkillers such as ibuprofen[27]. Continuous and heavy bleeding that soaks 2 or more pads in an hour for 2 hours in a row. Abdominal pain or discomfort that is not helped by medication, rest, a hot water bottle, or a heat pad. A high temperature of 38°C or higher. Discoloured or smelly discharge from your vagina. Signs or a feeling that you are still pregnant, such as nausea and sore breasts.

Post-abortion check-up: You will be offered a free post-abortion check-up about 2 weeks after having an abortion. You can have this check up with the GP or doctor you spoke to at your pre-abortion consultation. This will be by phone or video link. This is a temporary change due to the corona virus outbreak. This appointment is optional. You don't have to go. But it is free of charge. You should have it. You're GP or doctor will make sure that the abortion is complete and that you are healing properly[28].

Post-abortion pregnancy test: You will need to take a special pregnancy test 2 weeks after a medical abortion. This is to confirm that you are no longer pregnant. Your GP or doctor will give you the special pregnancy test kit to take home after you have a medical abortion. This is called a low sensitivity pregnancy test. It is different to a normal pregnancy test. Talk to the doctor if:-

1. The pregnancy test is positive, invalid, or you are unsure about the result.
2. Your next period does not come 4 weeks after the abortion.
3. You have feelings or symptoms that you could be still pregnant.

If you are still under 12 weeks pregnant, you are able to have further treatment and the doctor will advise you on the best option for you. The risk of ongoing pregnancy is:

1. 2-3 in every 1,000 surgical abortions.
2. Between 9-12 weeks 2 in every 100 medical abortions.
3. Under 9 weeks pregnant 1 to 2 in every 100 medical abortions.

Surgical abortion you may need to take a low-sensitivity pregnancy test after a surgical abortion, but it is not routine. Your doctor will tell you in the hospital if you will need to take one[29].

Pregnancy remains: If you have an abortion before 9 weeks of pregnancy, you will usually have it at home. You can decide how to dispose of the remains. They can be flushed down the toilet or wrapped in tissue and disposed of as you wish. If you have an abortion between 9 to 12
weeks, you will have it in a hospital. Hospital staff should explain the options available for disposal of the pregnancy remains. This will be done in a sensitive manner. They will help you make a decision that is right for you. If you do not wish to make a decision about your pregnancy remains, the hospital can make a decision for you. They can dispose of the remains[30].

Drug used for Abortion:

S. No.	Drug Name	Mechanism of Action	Duration to use during Pregnancy	Other use	Referance
1	Misoprostol (cytotec)	A prostaglandin analogue, binds to myometrial cells to cause strong contractions, which leads to expulsion	Pregnancies upto 12 weeks.	Ulcer prevention, Labor induction, Early pregnancy loss, Postpartum bleeding.	31

		of tissue, also causes cervical ripening with softening and dilation of cervix.			
2	Misoprostol (cytotec)	The compound inhibits the activity of endogenous or exogenous progesterone results in irreversible inhibition of progesterone receptor complex.	For first-and second-trimester medical abortion.	Cushing's Syndrome, Symptomatic leiomyoma.	32
3	Oxytocin (pitocin)	It works by increasing the concentration of calcium inside muscle cells that control contraction of the uterus. Increased calcium increases contraction of the uterus.	Between 24 and 33 weeks of gestation.	Veterinary medicine	33
4	Carboprost (hemabate)	It works on prostaglandin F receptor sites in uterine muscle to increase contractions and induce labor. It is used to terminate pregnancies and control uterine bleeding.	During Second trimester and to treat uterine bleeding after delivery.	Postpartum.	34
5	Cervidil (dinoprostone) (prostin e2)	Dinoprostone stimulates the production of prostaglandin F2a (PGF2a), which sensitizes the myometrium to endogenous or exogenously administered oxytocin.	During the Second trimester. As well as in case of missed abortion or intrauterine fetal death upto 28 weeks of gestational age.	Cervical effacement.	35

II. DISCUSSION

Over the last decade in India important advance have been made toward improving the availability and accessibility of safe abortion services. At the same time other developments have barriers to care. And while the literature

reveals a clear and compelling story about the way of abortion is experienced by some Indian women those who live in communities and state where research has been conducted – there remain large part of the country where little is known about the numbers. Type or consequences of abortion and discuss the recommendations for improving access to safe abortion we provide a few examples from the literature that illustrate certain points

1. **The demand for safe abortion survives:** Like woman all over the world woman in India may find themselves pregnant at a time when they feel incapable of continuing the pregnancy and thus seek out abortion – whether because of a desire to limit the child of their family or space birth their physical or emotional well-being or other factors related to the pregnancy
2. **Improving the provisions of safe medical abortion:** Many woman are able to seek medical abortion services from certified providers others live in areas with no such providers or face other difficulties accessing certified facilities these barriers highlights the need to consider new way of providing medical abortion services. India is not exploited by drug sellers and chemists offering ineffective or unsafe methods to women womb who may not otherwise be able to afford legal abortion services.
3. **Addressing vulnerabilities among young and unmarried women:** Young and unmarried women represent a subset of the population in India that is particularly vulnerable with regard to their sexual and reproductive health care needs. In addition most communities and providers offer little support to young women in seeking safe abortion survives and as a result these women often experience delays in obtaining services or turn to unsafe providers. Young and unmarried women – including their need for contraceptive services-around sexual activity and abortion should be prioritized

There can be many reasons for having an abortion

As if abortion becomes necessary in any condition for the safety of the mother then abortion should be done in that condition. Or the baby who is going to be born has a disorder that we cannot survive for a long time after the birth. In that condition abortion should be done.

Should not have an abortion

Just don't do it no matter what people say. Who knows if the baby gonna rock the world in future? I think its total sin. Think about the precious soul who doesn't know why that is there and waiting for the day he/she can finally come out. Would it be right to tell that soul that he /she can't see the world with his wonderful shiny eyes? Why gotta do that? Let him/her be there. Abortion is banned in generally in India if it is not cause properly.

III. CONCLUSION:

A woman has a freedom to do what she wants to do but what she wants does not mean we can take it to any level of irresponsibility. And I think before forty eight days if it happens, it's best; we cannot go to thirty weeks and do abortion. The "Heart beat bill" that is been declared in the US and it declares that any woman who Aborts anything whit a heart beat she is declared criminal immediately. And there are certain cases where we see pregnancy brought by rape, pregnancy in teens and also pregnancy with fatal anomalies and they are still forced to have these children.

In this country, there have been many people who have killed their own child. There was a time when women had no means to prevent pregnancies, today there's a substantial means. Allowing the child to grow and want to abort the child it's not okay. It's not good to Abort because it's alive, it's a living life, and a fetus as a life is the most helpless life. A fetus is totally in our mercy. We must treat it with utmost compassion because of our convenience we can't do whatever we want. At village they just take some paddy granules and put in the mouth, it goes, get stuck somewhere and the child dies it terrible way. As we all know that pregnancy is most sensitive and beautiful god gift. So aborting is also Very serious issue that needs to be taken care properly.

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