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ABORTIONS THE RISING CRITICAL CATASTROPHE OF SOCIETY: A COMPREHENSIVE COMMUNITY BASED SURVEY

Mithun A. Thombare*, Sachin V. Suryavanshi

Satara College of Pharmacy, Satara-415004. (M. S.) India

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For Correspondence:

Mithun A. Thombare

Satara College of Pharmacy, Satara-415004. (M. S.) India

E-mail:

mithunthombare@gmail.com

ABSTRACT

Complications of unsafe abortion are a major public health issue women facing in developing countries. In India, abortion is legal for a broad range of medical and social reasons. Officially, women can access safe abortion services by trained medical personnel in registered facilities, and minors need consent from their husband or father. In practice, limited access to authorized abortion providers, the threat of forced contraceptive acceptance, the financial costs associated with legal abortion, the stigma associated with induced abortion, and low levels of awareness regarding the legality of the procedure bar women from safe abortion services. As a result, women often resort to untrained clandestine practitioners operating under unsafe conditions. The consequences of abortions performed under such circumstances range from life threatening to chronic reproductive tract morbidity such as infections, chronic disability and infertility. In India each year an estimated 453 women die due to maternal causes for every 100,000 live births. This statistic masks the vast variation among states. While national and state estimates are imprecise, they are able to represent certain trends. Orissa and Madhya Pradesh had approximately 738 and 711 maternal deaths per 100,000 births. Among the large states, Kerala has a singularly low ratio of 87 maternal deaths reported per 100,000 births. On an average, roughly fifteen percent of maternal deaths are thought to result from unsafe abortion. This project reviews the literature and survey on safe and unsafe abortion services, abortion facilities and providers, complications of unsafe abortion, and availability of post abortion care.

INTRODUCTION

Abortion is possibly the most divisive women's health issue that policy makers and planners face particularly in developing countries where safe abortion facilities are not available to most women. The health risk of abortion multiplies manifold if a woman has to resort to it repeatedly. Given the fact that women in India have little control over their own fertility and also have poor health, the chances are very high that they may not only experience abortion, which includes both spontaneous and induced abortion, once but perhaps more than once.

In India, where abortion has been legalised for over forty-two years, various surveys suggest that abortions are responsible for 10-20 per cent of all maternal deaths [1]. While there is no reliable estimate of the magnitude of abortions that take place, a few sporadic studies tend to suggest that the proportion of women resorting to abortion could be alarming [2]. Very few studies have tried to present some kind of valid estimates about the incidence of abortion both at the local and national level. This huge data gap in the area of abortion is to some extent due to the fact that safe and legal abortion services are far and few between with the result that a large number of women receive abortion services from illegal sources and these are never reported. Further, the lack of awareness about abortion services and its legal status, and more significantly, the sociocultural contexts of abortion also confound the reliability of abortion data.

Abortion is an extremely sensitive topic and it is perhaps unreasonable to expect reliable figures for abortion in a country like India where even vital registration - the mere recording of births, deaths and marriages - is far from being accurate, complete or reliable.

Although there are indications of a steady increase in the number of abortions over the years [3], data on knowledge, attitude and behaviour related to abortion are not very conclusive. Sporadic studies tend to suggest that the acceptance is greatly influenced by the social, economic and demographic characteristics of the acceptor including attitudes. Most studies in recent years that have concentrated upon the characteristics of women seeking abortion in India have, by and large, focussed on urban women and have analysed clinic data. These studies have shown that the majority of women who seek

induced abortion come from nuclear and middle class families [4, 5]. Thus, in the absence of reliable information on the magnitude of abortion and the characteristics of the acceptors, it is difficult to ascertain the true extent to which abortions are performed in any area. Obviously, there is a need to widen the scope of such studies by including several other relevant characteristics of women that might indicate the cultural and social contexts in which the abortion is sought.

In this context, a community based survey of physicians was done for the first time at ground scale and community based data on abortion has been collected. Moreover, the statistics were compared with available data of National Family Health Survey done in 2011 and in literature so as to get a clear picture of awareness about abortion, associated complications, requirements, facilities, provisions and MTP Act 1971 regulation.

LITERATURE SURVEY-

Abortion is the termination of pregnancy by the removal or expulsion from the uterus of a fetus or embryo prior to viability. An abortion can occur spontaneously, in which case it is usually called a miscarriage, or it can be purposely induced. The term *abortion* most commonly refers to the induced abortion of a human pregnancy. Abortion, when induced in the developed world in accordance with local law, is among the safest procedures in medicine. However, unsafe abortions result in approximately 70,000 maternal deaths and 5 million hospital admissions per year globally [6]. Induced abortion has a long history and has been facilitated by various methods including herbal abortifacients, the use of sharpened tools, physical trauma, and other traditional methods. Contemporary medicine utilizes medications and surgical procedures to induce abortion. The legality, prevalence, cultural and religious status of abortion varies substantially around the world. Its legality can depend on specific conditions such as incest, rape, fetal defects, a high risk of disability, socioeconomic factors or the mother's health being at risk. In many parts of the world there is prominent and divisive public controversy over the moral, ethical, and legal issues of abortion.

Types of Abortion-

1) **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. A pregnancy can be intentionally aborted in 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 patient preference. 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; prevent harm to the woman's physical or Mental health; terminate a pregnancy where indications are that the child will have a significantly increased chance of premature morbidity or mortality or be otherwise disabled; 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.

2) Spontaneous / Miscarriage-

Spontaneous abortion, also known as miscarriage, 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 known as a "premature birth" or a "preterm birth". When a fetus dies in uterus 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. 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 patient history of previous spontaneous abortions are the two leading factors associated with a greater risk of spontaneous abortion. A spontaneous abortion can also be caused by accidental trauma; intentional trauma or stress to cause miscarriage is considered induced abortion or feticide.

Method of Abortion-

1) Medical abortions-

Medical abortions are those induced by abortifacient pharmaceuticals. Medical abortion became an alternative method of abortion with the availability of prostaglandin analogs in the 1970s and the antiprogestogen mifepristone in the 1980s. The most common early first-trimester medical abortion regimens use mifepristone in combination with a prostaglandin analog (misoprostol or gemeprost) up to 9 weeks gestational age, methotrexate in combination with a prostaglandin analog up to 7 weeks gestation, or a prostaglandin analog alone [7]. Mifepristone-misoprostol combination regimens work faster and are more effective at later gestational ages than methotrexate-misoprostol combination regimens, and combination regimens are more effective than misoprostol alone. This regime is effective in the second trimester [8]. In very early abortions, up to 7 weeks gestation, medical abortion using a mifepristone-misoprostol combination regimen is considered to be more effective than surgical abortion (vacuum aspiration), especially when clinical practice does not include detailed inspection of aspirated tissue. Early medical abortion regimens using mifepristone, followed 24–48 hours later by buccal or vaginal misoprostol are 98% effective up to 9 weeks gestational age. If medical abortion fails, surgical abortion must be used to complete the procedure.

2) Surgical abortions-

a) Vacuum Aspiration-

Up to 15 weeks' gestation, <u>suction-aspiration</u> or <u>vacuum aspiration</u> are the most common surgical methods of induced abortion. *Manual vacuum aspiration* (MVA) consists of removing the <u>fetus</u> or <u>embryo</u>, <u>placenta</u>, and membranes by suction using a manual syringe, while *electric vacuum aspiration* (EVA) uses an electric pump. These techniques differ in the mechanism used to apply suction, in how early in pregnancy they can be used, and in whether cervical dilation is necessary.

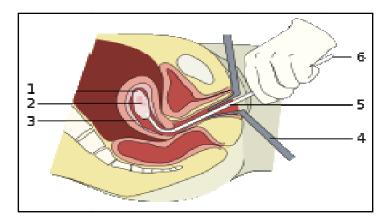


Fig. 1: A vacuum aspiration abortion at eight weeks gestational age (six weeks after fertilization); 1: Amniotic sac, 2: Embryo, 3: Uterine lining, 4: Speculum, 5:

Vacurette,

6: Attached to a suction pump.

MVA, also known as "mini-suction" and "menstrual extraction", can be used in very early pregnancy, and does not require cervical dilation.

b) Dilation and Curettage (D and C)-

It is the second most common method of surgical abortion, is a standard gynecological procedure performed for a variety of reasons, including examination of the uterine lining for possible malignancy, investigation of abnormal bleeding, and abortion. <u>Curettage</u> refers to cleaning the walls of the <u>uterus</u> with a <u>curette</u>. The <u>World Health Organization</u> recommends this procedure, also called *sharp curettage*, only when MVA is unavailable.

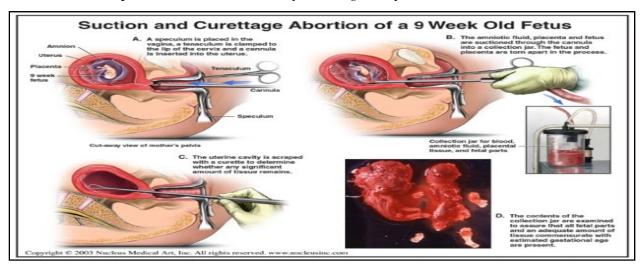


Fig. 2: Suction and curettage method.

c) Dilation and Evacuation-

It consists of opening the <u>cervix</u> of the uterus and emptying it using surgical instruments and suction. Premature labor and delivery can be induced with <u>prostaglandin</u>; this can be coupled with injecting the <u>amniotic fluid</u> with hypertonic solutions containing <u>saline</u> or <u>urea</u>. After the 16th week of gestation, abortions can also be induced by <u>intact dilation</u> and <u>extraction</u> (IDX) (also called intrauterine cranial decompression), which requires surgical decompression of the fetus's head before evacuation. IDX is sometimes called "partial-birth abortion".

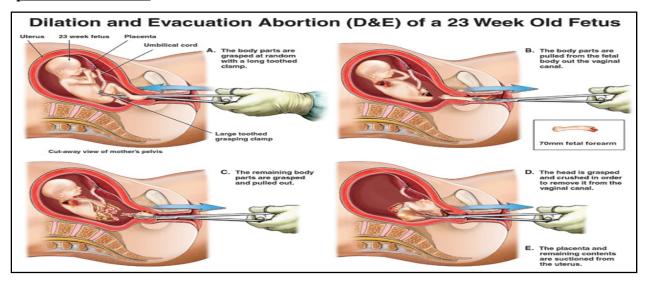


Fig. 3: Dilation and evacuation method.

In the third trimester of pregnancy, abortion may be performed by IDX as described above, induction of labor, or by hysterotomy. <u>Hysterotomy abortion</u> is a procedure similar to a <u>caesarean section</u> and is performed under <u>general anesthesia</u>. It requires a smaller incision than a caesarean section and is used during later stages of pregnancy. First-trimester procedures can generally be performed using <u>local anesthesia</u>, while second-trimester methods may require <u>deep sedation</u> or <u>general anesthesia</u>.

3) Other Methods-

Historically, a number of herbs reputed to possess <u>abortifacient</u> properties have been used in <u>folk medicine</u>: <u>tansy</u>, <u>pennyroyal</u>, <u>black cohosh</u>, and the now-extinct <u>silphium</u>. The use of herbs in such a manner can cause serious even lethal side effects, such as <u>multiple</u> <u>organ failure</u>, and is not recommended by <u>physicians</u> [9]. Abortion is sometimes attempted by causing trauma to the abdomen. The degree of force, if severe, can cause

serious internal injuries without necessarily succeeding in inducing <u>miscarriage</u> [10]. In Southeast Asia, there is an ancient tradition of attempting abortion through forceful abdominal massage [11]. Reported methods of unsafe, <u>self-induced abortion</u> include misuse of <u>misoprostol</u>, and insertion of non-surgical implements such as knitting needles and clothes hangers into the uterus. These methods are rarely seen in developed countries where surgical abortion is legal and available [12].

Abortion Safety-

The health risks of abortion depend on whether the procedure is performed safely or unsafely. The World Health Organization defines unsafe abortions as those performed by unskilled individuals, with hazardous equipment, or in unsanitary facilities. Legal abortions performed in the developed world are among the safest procedures in medicine [13]. Vacuum aspiration in the first trimester is the safest method of surgical abortion, and can be performed in a primary care office, abortion clinic, or hospital. Complications are rare and can include uterine perforation, pelvic infection, and retained products of conception requiring a second procedure to evacuate [14]. Preventive antibiotics (such as doxycycline or metronidazole) are typically given before elective abortion, as they are believed to substantially reduce the risk of postoperative uterine infection [15]. Complications after second-trimester abortion are similar to those after first-trimester abortion, and depend somewhat on the method chosen. There is little difference in terms of safety and efficacy between medical abortion using a combined regimen of mifepristone and misoprostol and surgical abortion (vacuum aspiration) in early first trimester abortions up to 9 weeks gestation. Medical abortion using the prostaglandin analog misoprostol alone is less effective and more painful than medical abortion using a combined regimen of mifepristone and misoprostol or surgical abortion. Some purported risks of abortion are promoted primarily by anti-abortion groups, but lack scientific support. For example, the question of a link between induced abortion and breast cancer has been investigated extensively. Major medical and scientific bodies (including the World Health Organization, the US National Cancer Institute, the American Cancer Society, the Royal College of Obstetricians and Gynaecologists and the American Congress of Obstetricians and Gynecologists) have concluded that abortion does not cause breast cancer, although such a link continues to be promoted by anti-abortion groups [16]. Similarly, current scientific evidence indicates that induced abortion does not cause mental-health problems. The American Psychological Association has concluded that a single abortion is not a threat to women's mental health, and that women are no more likely to have mental-health problems after a first-trimester abortion than after carrying an unwanted pregnancy to term. Abortions performed after the first trimester because of fetal abnormalities are not thought to cause mental-health problems [17]. Some proposed negative psychological effects of abortion have been referred to by anti-abortion advocates as a separate condition called "post-abortion syndrome", which is not recognized by any medical or psychological organization.

Unsafe Abortion-

Women seeking to terminate their pregnancies sometimes resort to unsafe methods, particularly when access to legal abortion is restricted. They may attempt to self-abort or rely on another person who does not have proper medical training or access to proper facilities. This has a tendency to lead to severe complications, such as incomplete abortion, sepsis, hemorrhage, and damage to internal organs [18]. Unsafe abortions are a major cause of injury and death among women worldwide. Although data are imprecise, it is estimated that approximately 20 million unsafe abortions are performed annually, with 97% taking place in developing countries. Unsafe abortions are believed to result in millions of injuries[19] and approximately 37,100 deaths annually as of 2010, accounting for 13% of all maternal deaths. Groups such as the World Health Organization have advocated a public-health approach to addressing unsafe abortion, emphasizing the legalization of abortion, the training of medical personnel, and ensuring access to reproductive-health services. Forty percent of the world's women are able to access therapeutic and elective abortions within gestational limits [20], while an additional 35 percent have access to legal abortion if they meet certain physical, mental, or socioeconomic criteria [21]. While maternal mortality seldom results from safe abortions, unsafe abortions result in 70,000 deaths and 5 million disabilities per year. Complications of unsafe abortion account for approximately an eight of maternal mortalities worldwide, though this varies by region. Secondary infertility caused by an unsafe abortion affects an estimated 24 million women. The rate of unsafe abortions has increased from 44% to 49% between 1995 and 2008. Health education, access to family planning and improvements in health care, during and after abortion has been proposed to address this phenomenon.

Abortion Incidence-

There are two commonly used methods of measuring the incidence of abortion-

- 1) Abortion rate number of abortions per 1000 women between 15-44 years of age.
- 2) Abortion percentage number of abortions out of 100 known pregnancies (pregnancies include live births, abortions and miscarriages).

The number of abortions performed worldwide has remained stable in recent years, with 41.6 million having been performed in 2003 and 43.8 million having been performed in 2008. The abortion rate worldwide was 28 per 1000 women, though it was 24 per 1000 women for developed countries and 29 per 1000 women for developing countries. The same 2012 study indicated that in 2008, the estimated abortion percentage of known pregnancies was at 21% worldwide, with 26% in developed countries and 20% in developing countries. The abortion rate may also be expressed as the average number of abortions a woman has during her reproductive years; this is referred to as total abortion rate (TAR).

Reasons for Abortion-

The reasons why women have abortions are diverse and vary across the world. Some of the most common reasons are to postpone childbearing to a more suitable time or to focus energies and resources on existing children. Others include being unable to afford a child either in terms of the direct costs of raising a child or the loss of income while she is caring for the child, lack of support from the father, inability to afford additional children, desire to provide schooling for existing children, disruption of one's own education, relationship problems with their partner, a perception of being too young to have a child, unemployment, and not being willing to raise a child conceived as a result of <u>rape</u> or <u>incest</u>, among others . Some abortions are undergone as the result of societal pressures. These might include the preference for children of a specific sex, disapproval of single or early motherhood, stigmatization of people with disabilities, insufficient economic

support for families, lack of access to or rejection of contraceptive methods, or efforts toward population control (such as China's one-child policy). These factors can sometimes result in compulsory abortion or sex-selective abortion. An additional factor is risk to maternal or fetal health, which was cited as the primary reason for abortion in over a third of cases in some countries and as a significant factor in only a single-digit percentage of abortions in other countries [22]. The rate of cancer during pregnancy is 0.02–1%, and in many cases, this leads to consideration of abortion to protect the life of the mother, or in response to the potential damage that may occur to the fetus during treatment. This is particularly true for cervical cancer, the most common type which occurs in 1 of every 2000-13000 pregnancies, for which initiation of treatment "cannot co-exist with preservation of fetal life (unless neoadjuvant chemotherapy is chosen)." Very early stage cervical cancers (I and IIa) may be treated by radical hysterectomy and pelvic lymph node dissection, radiation therapy, or both, while later stages are treated by radiotherapy. Chemotherapy may be used simultaneously. Treatment of breast cancer during pregnancy also involves fetal considerations, because lumpectomy is discouraged in favor of modified radical mastectomy unless late-term pregnancy allows follow-up radiation therapy to be administered after the birth. It is possible to greatly reduce exposure to radiation with abdominal shielding, depending on how far the area to be irradiated is from the fetus [23].

Abortion Risks-

- 1) **Death:** The leading causes of abortion related deaths are hemorrhage, infection, embolism, anesthesia, and undiagnosed ectopic pregnancies. Legal abortion is reported as the fifth leading cause of maternal death in the United States, though in fact it is recognized that most abortion related deaths are not officially reported as such.
- 2) Breast Cancer: For women aborting a first pregnancy, the risk of breast cancer almost doubles after a first-trimester abortion and is multiplied with two or more abortions. This risk is especially great for women who do not have children. Some recent studies have refuted this finding, but the majority of studies support a connection[24].
- **3) Cervical, Ovarian and Liver Cancer:** Women with one abortion face a 2.3 relative risk of cervical cancer, compared to non-aborted women, and women with two or more

abortions face a 4.92 relative risk. Similar elevated risks of ovarian and liver cancer have also been linked to single and multiple abortions. These increased cancer rates for post-aborted women are apparently linked to the unnatural disruption of the hormonal changes which accompany pregnancy and untreated cervical damage.

- 4) Uterine Perforation: Between 2% and 3% of all abortion patients may suffer perforation of their uterus, yet most of these injuries will remain undiagnosed and untreated unless laparoscopic visualization is performed [25]. The risk of uterine perforation is increased for women who have previously given birth and for those who receive general anesthesia at the time of the abortion [26, 27]. Uterine damage may result in complications in later pregnancies and may eventually evolve into problems which require a hysterectomy, which itself may result in a number of additional complications and injuries including osteoporosis.
- **5) Cervical Lacerations:** Significant cervical lacerations requiring sutures occur in at least one percent of first trimester abortions. Lesser lacerations, or micro fractures, which would normally not be treated may also, result in long term reproductive damage. Latent post-abortion cervical damage may result in subsequent cervical incompetence, premature delivery and complications during labor. The risk of cervical damage is greater for teenagers, for second trimester abortions [28].
- 6) Placental Previa: Abortion increases the risk of placenta previa in later pregnancies (a life threatening condition for both the mother and her wanted pregnancy) by seven to fifteen folds. Abnormal development of the placenta due to uterine damage increases the risk of fetal malformation, perinatal death, and excessive bleeding during labor [29].
- 7) Handicapped Newborns in Later Pregnancies: Abortion is associated with cervical and uterine damage which may increase the risk of premature delivery, complications of labor and abnormal development of the placenta in later pregnancies. These types of reproductive complications are the leading causes of handicaps among newborns.
- **8) Ectopic Pregnancy:** Abortion is significantly related to an increased risk of subsequent ectopic pregnancies. Ectopic pregnancies, in turn, are life threatening and may result in reduced fertility.

- 9) Pelvic Inflammatory Disease (PID): PID is a potentially life threatening disease which can lead to an increased risk of ectopic pregnancy and reduced fertility. Patients who have a chlamydia infection at the time of the abortion, 23% will develop PID within 4 weeks. Studies have found that 20 to 27% of patients seeking abortion have a chlamydia infection. Approximately 5% of patients who are not infected by chlamydia develop PID within 4 weeks after a first trimester abortion. It is therefore reasonable to expect that abortion providers should screen for and treat such infections prior to an abortion.
- **10**) **Endometritis:** Endometritis is a post-abortion risk for all women, but especially for teenagers, who are 2.5 times more likely than women 20-29 to acquire endometritis following abortion.
- 11) Immediate Complications: Approximately 10% of women undergoing elective abortion will suffer immediate complications, of which approximately one-fifth (2%) are considered life threatening. The nine most common major complications which can occur at the time of an abortion are: infection, excessive bleeding, embolism, ripping or perforation of the uterus, anesthesia complications, convulsions, hemorrhage, cervical injury, and endotoxic shock. The most common "minor" complications include: infection, bleeding, fever, second degree burns, chronic abdominal pain, vomiting, gastrointestinal disturbances, and Rh sensitization.

12) Other:

- a) Increased risks for women obtaining multiple abortions: In general, most of the studies cited above reflect risk factors for women who undergo a single abortion. These same studies show that women who have multiple abortions face a much greater risk of experiencing these complications. This point is especially noteworthy since approximately 45% of all abortions are repeats.
- **b)** Increased risks for teenagers: Teenagers, who account for about 30 percent of all abortions, are also at a much higher risk of suffering many abortion related complications. This is true of both immediate complications, and of long-term reproductive damage.

c) Increased risk for contributing health risk factors: Abortion is significantly linked to behavioral changes such as promiscuity, smoking, drug abuse, and eating disorders which all contribute to increased risks of health problems [30] For example, promiscuity and abortion are each linked to increased rates of PID and ectopic pregnancies. Which contributes most is unclear, but apportionment may be irrelevant if the promiscuity is itself a reaction to post-abortion trauma.

NEED OF PRESENT INVESTIGATION

The Medical Termination of Pregnancy Act of 1971 greatly liberalised the indications for which abortion is legal in India. The Government intended for this Act to reduce the incidence of illegal abortion and consequent maternal morbidity and mortality. However, 42 years after the groundbreaking legislation, the majority of women seeking abortion still turn to uncertified providers for abortion services because of the barriers to legal abortion. While some uncertified providers offer safe services, many provide unsafe abortions that result in complications or death. Women with access to fewer resources, for example low-income rural women and adolescents, are among those most likely to turn to unsafe abortion and have complications. Studies suggest that the choice of specific provider is most often not made by the woman inducing abortion but with or by her husband or other family members. While the incidence of abortion in India is unknown, the most widely cited figure suggests that around 6.7 million abortions take place annually. According to government data, only about 1 million of these are performed legally. The remaining abortions are performed by medical and non-medical practitioners. Levels of unsafe abortion are very high in India, though abortion is legal for a broad range of indications, and available in the public and private health sector. In this background, we thought of doing a community based survey of physicians regarding abortion for the first time at ground scale with a primary purpose of collecting community based data on abortion, so as to get a clear picture of awareness about, understanding about, information regarding, clinical conditions demanding, methods adopted for, associated complications, risk factors, government facilities and provisions for abortion and MTP Act 1971 regulation.

OBJECTIVES

- 1) To identify and explore the reasons why women and decision-makers go for abortion and select a specific method.
- 2) To study the legal aspects of Medical Termination of Pregnancy (MTP) Act, 1971, Amendments there under, Pre-conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) (PNDT) Act, 1996.
- 3) To focus on the numerous dimensions of provision of abortion services in the public and private sectors.
- 4) To do local studies to estimate incidence of abortion in Satara district territory and to study birth order specific induced abortion ratio in the Satara locality.
- 5) To study the effect of socioeconomic and demographic factors on the acceptance of induced abortion.

METHODOLOGY

For assessing the awareness, understanding about, information regarding, clinical conditions demanding, methods adopted for and risks associated with abortion; a ten point questioner was designed covering vast information. For evaluation on the basis of above said points, we selected the most relevant and well qualified personals as community representatives i.e. Registered Medical Practitioners (RMPs, particularly gynaecologists). The questioner was distributed amongst 60 RMPs of different areas, age group and practicing experience in Satara district and their responses, feedbacks were then combined together to derive results and conclusions.

ANNEXURE – A

ABORTIONS THE RISING CRITICAL CATASTROPHE OF SOCIETY: A COMPREHENSIVE COMMUNITY BASED SURVEY

Name:	
SURVEY QUESTIONS-	
1. Are you aware of general pregnancy act?	Yes∖No
2. Do you give information regarding abortion to the patients?	Yes\No
3. Do you go for abortion only in clinical condition?	Yes∖No
4. Do you go for abortion without clinical condition?	Yes∖No
5. Is there any risk factor during abortion?	Yes\No
If Yes Please Specify	

- 6. Which one method you would prefer for abortion.
- a) Medical agent b) Vacuum aspiration c) Dilation & curettage d) Self Induced
- 7. In how much weeks of gestation period you go for abortion?
- a) 1 to 7 Weeks b) 8 to 9 Weeks c) 10 to 15 weeks d) 16 weeks & onwards
- 8. What is the frequency of abortion per month?

Please specify the number in the box

- 9. Which is the most common reason for appropriate
- a) Pre-maturity b) Life threatening condition
- c) Sex
- d) Disease state
- 10. In which age group abortion is commonly carried out?
- a) 14-18 years
- b) 18-24 years
- c) 24-28 years
- d) 28 to onwards

RESULTS AND DISSCUSSION

The physician's response questioner leaflets and data sheets were analyzed, subjected to systematic calculations needed; so as to obtain results in terms of percent response for different parameters based each question. The results obtained were then subjected to tabular and graphical representation as follows:

It was found that all physicians were having a good knowledge about MTP Act, 1971 provisions and said that they counsel their patients properly before and after abortion in great detail. Also they proposed to practice abortions only in much critical clinical conditions demanding it and not in any other means at all.

Table 1: Yes/No type questions response

Sr. No.	Discussion Point	% Physician Responded (Yes)	% Physician Responded (No)
1.	Awareness about MTP Act 1971.	100 %	0 %
2.	Patient counseling regarding abortion.	100 %	0 %
3.	Abortion only in clinical conditions.	100 %	0 %
4.	Abortion without clinical conditions.	0 %	100 %

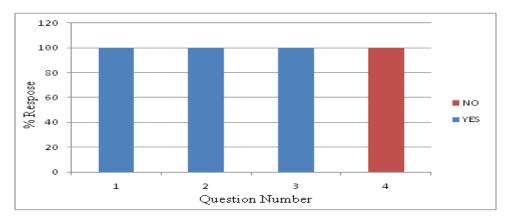


Fig. 4: Yes/No type questions response

On asking about the risk factors associated with abortion all of them responded positively for a high degree of risk during abortion. The various associated risk conditions oftenly found amongst post-abortive patients were hemorrhage, bleeding, sepsis, anemia, lack of transportation, hypertension, injury to viscera, uterine perforation, cervical laceration, placental previa, ectopic pregnancy, pelvic inflammatory disease (PID), endometritis, uterine infection and post-abortional infertility etc.

Table 2: Preferred Method for Abortion response

Que. 6:	Which one method you would prefer for abortion?				
Options	a) Medical agent	b) Vacuum aspiration	c) Dilation & curettage	d) Self induced	
% Physician responded	30 %	16.16 %	53.33 %	0 %	

While asked about methods of abortion, it was found that method is selected by considering the gestational period or preborn age of fetus and suitability of patient. Amongst the various methods available dilation and curettage was found most widely used one.

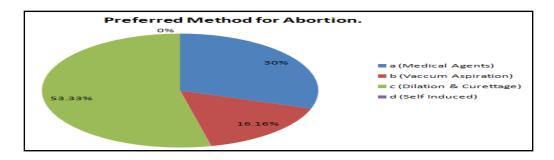


Fig. 5: Preferred method for abortion response

In reply to the gestational period in which they perform most of the abortions they quoted 8-9 weeks generally, but no one has reported to go for abortion after 16 weeks.

Table 3:	Gestation	Period	for	Abortion	responses
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Que. 7:	In how much weeks of gestation period you go for abortion?				
Options	a) 1 to 7 weeks	b) 8 to 9 weeks	c) 10 to 15 weeks	d) 16 weeks & onwards	
% Physician responded	33.33 %	50 %	16.66 %	0 %	

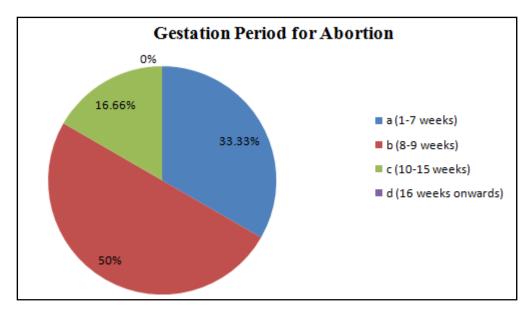


Fig. 6: Gestation Period for Abortion response

In regard to the frequency of abortion it was found that the highest frequency was in range of 10-15 per month at Government Civil Hospital, Satara, while lowest frequency range of 1-2 was found at a private maternity home. A normal frequency of abortion in range of 4-6 per month was reported from most of the physicians. While searching about the most common reason for which they opt abortion it was found to be life threatening conditions of patients like systemic lupus erethematous, hypercoaguability in pregnancy, uterine cancer, pregnancy induced severe hypertension, anemia, psychosis, depression, diabetes mellitus and thromboembolic disorders etc.

Que. 9:	Which is the most common reason for abortion?				
Options	a) Pre-maturity	b) Life threatening condition	c) Sex	d) Disease state	
% Physician responded	3.3 %	60 %	0 %	36.66	

Table 4: Common Reason for Abortion response

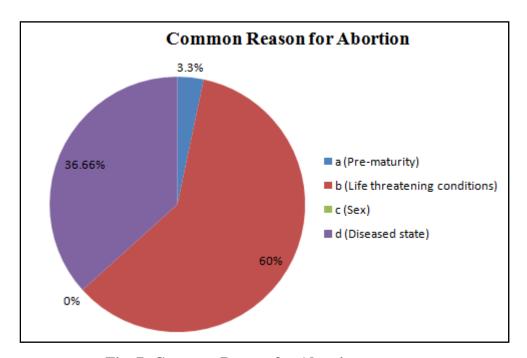


Fig. 7: Common Reason for Abortion response

While reporting about the common age group in which most of abortional cases they handle, no one has reported any case in age group of 14-18 years, and 18-28 years group found to oftenly recorded for abortion.

Table 5: Common Age Group for Abortion response

Que. 10:	In which age group abortion is commonly carried out?			
Options	a) 14–18 years	d) 28 onwards		
% Physician responded	0	43.33 %	56.66 %	0 %

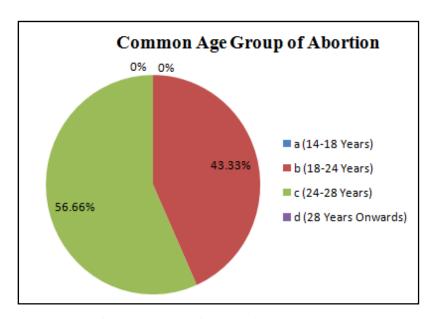


Fig. 8: Common Age Group of Abortion response

CONCLUSIONS

From the present study many striking features emerges that represents the actual picture of abortion in community, MTP Act knowledge and government facilities and policies designed for empowerment of women healthcare. To conclude a long path yet to be travelled as there is need to overcome lacunas in women healthcare system by modifying and implementing rules and regulations strictly against offences and contravention regarding abortion; so as to have a perfect, strong and well secured women healthcare scheme.

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