

Pre natal diagnostic techniques health and social care essay

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The Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994, was enacted and brought into operation from 1st January, 1996, in order to look into female foeticide in India. Rules have besides been framed under the Act. The Act prohibits finding and revelation of the sex of fetus i. e. antenatal sex understanding by misapplying different pre-natal diagnostic techniques and processs. It besides prohibits any advertizements associating to pre-natal finding of sex and prescribes penalty for its dispute. Any individual who contravenes the commissariats of this Act is punishable with imprisonment and mulct.

Recently, PNDT Act

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and Rules

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have been amended maintaining in position the emerging engineering and new pre-natal diagnostic techniques for choice of sex before and after construct and jobs faced in the working of execution of the ACT and certain waies of Hon'ble Supreme Court after a PIL was filed in May, 2000 by CEHAT and Ors, an NGO on slow execution of the Act. These amendments have come into operation with consequence from 14th February, 2003

Pre-natal diagnostic techniques and procedures

Prenatal diagnostic proving involves proving the fetus before the birth (prenately) inorder to find as to whether the fetus has certain abnormalcies, including certain familial or self-generated familial upsets. Some of these trials, such as echography and certain blood trials, are frequently portion of everyday prenatal attention. Ultrasonography and blood trials are safe and sometimes assist find whether more invasive antenatal familial trials (such as chorionic villus sampling, amniocentesis, and transdermal umbilical blood sampling) are needed.

Prenatal diagnosing enables early diagnosing of inborn anomalousness and familial upsets in the underdeveloped embryo. The population hazard of holding a kid with some inborn abnormalcy, whether genetically and/or environmentally determined, varies between 3 and 5 % . In households at hazard of a familial upset the chance of holding an affected kid can transcend several fold the population hazard, hence in these households prenatal diagnostic process should be purely applied.

Advanced conceiving techniques every bit good as cytogenetic and molecular biological science methods provide the agencies to name prenatally legion inborn structural deformities and familial upsets in high-hazard households. Early diagnosing in utero can turn out indispensable to direction of the gestation, antenatal and postpartum medical attention, and intervention. It is besides important to doing informed determinations about going on or ending the gestation.

Familial guidance in association with modern antenatal diagnostic process constitutes a basic component of care of inborn anomalousness and familial upsets. The procedure of antenatal guidance and diagnosing is committed chiefly to reassigning information which aims to assist the parents:

1. To understand and admit the indicants for antenatal diagnosing,
2. To understand the medical facets of doing the diagnosing of a familial disease or a inborn abnormalcy (by qualifying the upset, form of heritage, the hazard of holding an affected kid in consecutive coevals) ,
3. To do informed picks about the adequate for a given pathology and acceptable diagnostic strategy (by depicting the possible diagnostic methods and processs, their benefits, restrictions and hazards) .

Harmonizing to World Health Organisation (WHO) and European Commission 's recommendations, antenatal diagnosing should be voluntary and performed merely in order to get cognition about fetal wellness position (as described by medical indicants) . Feasibility of antenatal diagnosing should be equal, just, and available to anyone, irrespective of the twosome 's or

medical practitioner 's attitude towards expiration of gestation. In instance of having an unnatural consequence, the determination about expiration of the gestation should be made independently by the adult female or the twosome. Peoples doing such determinations should non be discriminated against, whatever determination they have made: either ending the gestation or giving birth to a disabled kid.

Methods of antenatal diagnosing can be divided into:

- (a) Non-Invasive ; and
- (B) Invasive techniques.

Non-invasive procedures

Non-Invasive techniques are used for naming inborn anomalousness and hazard appraisal of given familial upsets (testing)

Ultrasound:

Routine obstetric ultrasound scan: - Everyday obstetric ultrasound scanning performed by the obstetrician pull offing the gestation. Standards for normal gestations provide for four scans carried out at: 11-14 hebdomads, 21-26 hebdomads, 27-32 hebdomads, and 40 hebdomad of gestation.

High-resolution ultrasound scan and Doppler surveies: - Performed in any gestation with an increased hazard of fetal structural abnormalcies, isolated or portion of a familial syndrome. Womans are referred for high-resolution ultrasound to specialist Centres pull offing bad gestations. In recent old ages 3-dimensional ultrasound (3D) and 4-dimensional ultrasound (4D) have started to play an increasing function in antenatal diagnosing. They can be <https://assignbuster.com/pre-natal-diagnostic-techniques-health-and-social-care-essay/>

applied in measuring facial characteristics, cardinal nervous system abnormalities and skeletal defects.

Fetal echocardiography: - Performed at 18-23 weeks of gestation in the presence of an increased hazard of cardiac defect (for illustration: cardiac defect in a parent or sibling, unnatural modus operandi ultrasound)

Magnetic resonance imaging (MRI)

MRI is used in combination with ultrasound, normally at or after 18 weeks ' gestation. MRI provides a tool for scrutiny of fetus with big or complex anomalies, and visual image of the abnormality in relation to the full organic structure of the fetus. Apparently MRI is a riskless method.

Maternal serum biochemistry proving

Invasive procedures

Invasive process involve direct scrutiny of fetal cells or tissues. Classical cytogenetic, molecular and biochemical methods (performed on amniotic or chorionic cells) are the most often used in antenatal invasive diagnosing. The process should take topographic point in specialized Centres that manage bad gestations. When using invasive methods all indications and standards need to be carefully evaluated as there is a considerable hazard to the gestation

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Invasive techniques include:

Chorionic villus sampling (trophoblast cells analysis)

Amniocentesis (amnionic fluid cells analysis)

Cordocentesis (Percutaneous Umbilical Blood Sampling)

As per The Pre-conception and Pre-natal Diagnostic Techniques (Prohibition of Sex Selection) Act, 1994, pre-natal Diagnostic Techniques includes

Ultra-sonography

Fetoscopy

Taking samples of amnionic fluid, embryo, blood or any tissue or fluid of pregnant adult females before or after construct,

Testing samples in Genetic Laboratory to observe familial upsets, abnormalcies or sex-linked diseases

Out of the above stated antenatal techniques, the most normally used sex-determination trial is ammicentesis. It was used as an assistance to observe any abnormalcy in the unborn kid. But over the old ages it has been used to find the sex of the fetus. In India since 1978 the trial is being used as a sex finding or sex preselection trial. Since so the trial has become highly popular and has led to a mushrooming of private clinics which perform the trial all over the state. Earlier physicians employed the controversial amniocentesis trial done between 14-18 hebdomads to find the sex of the foetus. The ultrasound technique has besides been improved. The sex of a fetus can be

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determined by more sophisticated machines within 13-14 hebdomads of gestation by trans-vaginal echography and by 14 to 16 hebdomads through abdominal ultrasound. These methods have rendered sex finding cheap and easy. Some sophisticated method like Erison method which separates the Ten and Y Chromos from the sperm and so Injects back merely Y chromos into the uterus to guarantee a male child have besides been developed. And they cost around Rupees 15, 000 to 25, 000.

The problem of foeticide in india

The Women who constitute half of the human population have been discriminated, harassed and exploited irrespective of the state to which they belong, forgetful of the faith which they profess and unmindful of the timeframe in which they live. Everywhere adult females are confronted with many challenges. Female foeticide is possibly one of the worst signifiers of force against adult females where a adult female is denied her most basic and cardinal right i. e `` the right to life ". The phenomenon of female foeticide in India is non new, where female embryos or fetuss are selectively eliminated after pre-natal sex finding, therefore extinguishing miss kid even before they are born. As a consequence of selectiveabortion, between 35 and 40 million misss and adult females are losing from the Indian population. In some parts of the state, the sex ratio of misss to boys has dropped to less than 800: 1000. The United Nations has expressed serious concern about the state of affairs. The long standing tradition of boy penchant, coupled with medical engineering now gives to the position witting Indian households, the pick between payment of big doweries for their girls or riddance of girls. The traditional method of acquiring rid of the unwanted miss kid was female

infanticide, where the female babe was done off with after birth in assorted ways - either by poisoning the babe or allowing her choking coil on chaff or merely by oppressing her skull under a charpoy. With the promotion of medical engineering sophisticated techniques can now be used or instead misused, to acquire rid of her before birth. Through ultrasound scans and amniocentesis, the sex of the fetus can be determined during the gestation of the adult female and so the fetus is aborted if found to be female.

In Indian society, female foeticide has emerged as a firing societal job during the last few old ages. The miss kid in India is treated right from her birth as an extra load, an excess oral cavity to feed, a liability and another adult male 's belongings. The birth of a boy is regarded as indispensable in Hinduism and many supplications and munificent offerings are made in temples in the hope of holding a male kid. Modern medical engineering is used in the service of this faith driven devaluating of adult females and miss. Woman is created at par with adult male in all facets. `` Womans have equal rights with work forces upon Earth ; in faith and society, they are a really of import component. Divine Justice demands that the rights of both sexes should be every bit respected since neither is superior to the other in the eyes of Heaven. " These important statements from the Bahai 's authorship are regarded by Bahai 's as looks of the Divine Will. To deprive adult females randomly of their rights and privileges, or to strip them to even being born or killing them in babyhood is both immoral and unfair, a misdemeanor of God 's jurisprudence. It has a damaging consequence on the society and the persons who are involved in this pattern are responsible for such Acts of the Apostless.

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But does the Indian society accept this world? If so why female foeticide and female infanticide are on the addition? The sex ratio has altered systematically in favor of male child since the beginning of the twentieth century, and the consequence has been most pronounced in the provinces of Punjab, Haryana and Delhi. It was in these provinces that private fetal sex finding clinics were foremost established and the pattern of selective abortion became popular from the late seventies. Worryingly, the tendency is far stronger in urban instead than rural countries, and among literate instead than illiterate adult females. No uncertainty, if this pattern continues it will upset the societal balance and it may take to serious jobs like addition in sexual offenses, sharing of adult females within and outside marriage and greater insecurity to adult females.

Female foeticide and Female Infanticide

Female foeticide is aborting the female babe in the female parent 's uterus. Whereas female infanticide is killing a babe miss after she is being born. The pattern of killing the female kid after her birth has been predominating in our society for many old ages. But foeticide is the bequest and part of the advancement made by the medical scientific discipline. Amniocentesis was introduced in 1975 to observe fetal abnormalcies but it shortly began to be used for finding the sex of the babe. Ultrasound scanning, being a non-invasive technique, rapidly gained popularity and is now available in some of the most distant rural countries. Both techniques are now being used for sex finding with the purpose of abortion if the fetus turns out to be female.

With the coming of denationalization and commercialisation, the usage of pre-natal diagnostic engineering is turning into a thriving concern in India. This is chiefly for the intent of sex finding selective abortion of the female fetus. The abuse of engineering merely reinforces the secondary position given to girl kids in such a manner that they are culled out even before they are born.

Compared to infanticide, foeticide is likely a more acceptable agencies of disposing off the unwanted miss kids. Infanticide can be an overtly barbarian and cold pattern while foeticide that is carried out by skilled professionals is a medical pattern that uses scientific techniques and accomplishments and reduces the guilt factor associated with the full exercising.

The nose count 2001 and the recent intelligence studies informations indicate a inexorable demographic image of worsening female to male ratios. Surprisingly the most affected provinces are progressive provinces like Punjab, Haryana, Delhi and Gujarat. Harmonizing to UN norms, male-female ratio in the universe is normally 1050 females for 1000 males. But in India, this ratio is dropping down to about 850 per 1000. In Human Development Survey Report besides, India is placed in 124th place among 173 states. It is a fact that our state is much behind compared to other states in regard of instruction, wellness and gender discrimination⁷.

The chief causes of worsening sex ratio in India society is due to female foeticide and female infanticide. Foeticide is a misdemeanor of a right of an unborn kid i. e. right to life. It besides has deduction on the wellness of the female parent. At the wider degree, it affects position of adult females and

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has serious ecological and demographical branching. It is a grave job that affects the life and wellness of society. And yet the job of female foeticide and female infanticide has received small attending.

Pre-Natal Sex Selection and the Law

Parliament has realised the grave deductions originating out of the abuse of the pre- natal diagnostic techniques and hence intended to modulate its usage merely for certain medical intents. The Government has realized that maltreatment of techniques for finding of sex of the fetus taking to female foeticide is prejudiced against the female sex and besides affects the self-respectand position of adult females. With the above aims, the Parliament has passed the Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act 1994 ; which came into force from 01. 01. 1996.

Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994: This Act provides for the ordinance of the usage of pre-natal diagnostic techniques for the intent of observing familial or metabolic upsets or chromosomal abnormalcies or certain inborn deformities or sex-linked upsets and for the bar of the abuse of such techniques for the intent of pre-natal sex finding taking to female foeticide. The statute law seeks to accomplish the undermentioned aims.

Prohibition of the abuse of pre-natal diagnostic techniques for finding of sex fetus, taking to female foeticide.

Prohibition of advertizement of the techniques for sensing or finding of sex.

Regulation of the usage of techniques merely for the specific intent of observing familial abnormalities or upsets.

Permission to utilize such techniques merely under certain conditions by the registered establishment.

Punishment for misdemeanor of the commissariats of the Act ; and

To supply deterrent penalty to halt such cold Acts of the Apostles of female foeticide.

The PNDA Act, nevertheless, for all purposes and intents has proved to be a toothless piece of statute law. The job with the Act is twofold: Interpretation of the Act and Execution of the Act.

Despite the purpose and intent of the Act being broad and all encompassing, it has been interpreted by the ultrasonologists, the abortionists, the physicians and more shockingly the authorities likewise, to except pre-conceptual sex choice.

A PIL request was filed in the Supreme Court by the Centre for Enquiry into Health and Allied Themes (CEHAT) , Mahila Sarvangeena Utkarsh Mandal (MASUM) and Dr. Sabu M. George pressing effectual execution of the Act. The Supreme Court passed an order on 4th may 2001

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which aims at guaranteeing the execution of the Act, stop uping the assorted loopholes and establishing a broad media run on the issue. The 2nd end of

registering the PIL is the amendment of the Act to include pre-and during construct techniques, like X and Y chromosome separation Pre-implantational Genetic Diagnosis (PGD) . The order mostly concerns merely the execution of the Act and setting the needed substructure in topographic point. However, the order entrusts the duty of analyzing the necessity to amend the Act to the Central Supervisory Boards, maintaining in head emerging engineerings and the troubles encountered in the execution of the Act and to do recommendations to the Cardinal Government.

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The Supreme Court besides observed: -

`` It is unfortunate that for one ground or the other, the pattern of female infanticide still prevails despite the fact that soft touch of a girl and her voice has comforting consequence on the parents. One of the grounds may be the matrimony jobs faced by the parents coupled with the dowry demand by the alleged educated and/or rich individuals who are good placed in the society. The traditional system of female infanticide whereby female babe was done off with after birth by poisoning or allowing her choking coil on chaff continues in a different signifier by taking advantage of progress medical techniques. Unfortunately, developed medical scientific discipline is misused to acquire rid of a girl kid before birth '' .

Pre-Conception And Pre-Natal Diagnostic Techniques (Prohibition of sex choice) Act 2002:

Based on the Supreme Court order and the recommendations of the Central Supervisory Board, the Parliament on December 20 passed the Pre-construct and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act 2002. Some of the relevant commissariats of this Act are stated below:

The Act provides for the prohibition of sex choice, before or after construct.

It regulates the usage of pre-natal diagnostic techniques, like ultrasound and amniocentesis by letting them their usage merely to observe:

1. Genetic abnormalcies
2. Metabolic upsets
3. Chromosomal abnormalcies
4. Certain inborn deformities
5. Haemoglobinopathies
6. Sexual activity linked upsets.

No research lab or Centre or clinic will carry on any trial including echography for the intent of finding the sex of the fetus.

No individual, including the 1 who is carry oning the process as per the jurisprudence, will pass on the sex of the fetus to the pregnant adult female or her relations by words, marks or any other method.

Any individual who puts an advertizement for pre-natal and pre-conception sex finding installations in the signifier of a notice, round, label, wrapper or any papers, or advertises through inside or other media in electronic or print signifier or engages in any seeable representation made by agencies of

billboard, wall picture, signal, light, sound, smoke or gas, can be imprisoned for up to three old ages and fined Rs. 10, 000.

Right to Life of Foetus

Our Constitution provides for the Right to Equality under Article 14 and right to populate with self-respect under Article 21. Sexual activity - sensing trials violate both these rights. Right to life is a well- established right and is recognized by assorted international instruments. Now the inquiry is, Does a fetus enjoy this right? We do not hold a definite reply. Globally, Constitutions recognize the holiness of life, yet have failed to adequately protect the life of fetus. Judicial dictums are besides non conclusive and vary in different legal powers. In India the right to life is guaranteed to every individual under the Constitution of India. The construct of personhood complicates the place of legal position of fetus. Often tribunals shy from replying this inquiry due to complex issues that arise in finding this inquiry - like when does foetus attains personhood? This inquiry is perplexing the tribunals worldwide. There is a despairing demand for the tribunals to come clear on this critical issue and acknowledge the rights of the fetus.

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In India, Article 21 of the Constitution guarantees the life and autonomy of every individual.

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But it is dubious if this would include the life of fetus as the significance is restricted by the usage of the word individual. The Indian Constitution has recognized the right to life under Article 21 as besides recognized in several cases. But this is barely available to the unwanted miss kid. Hence the right of the miss kid may be construed in broader footings and should be inferred as: -

Right to be born and non to be aborted merely because she is a miss.

Right to stay alive after birth and non to be killed at any minute after birth.

Right of the miss kid to her head her organic structure, right to childhood and compensate to a healthy household environment.

However there are a figure of legislative acts that indirectly provide protection to the life of fetus. The Indian penal codification under assorted commissariats makes doing miscarriage an offense.

Decision

Peoples both in rural every bit good as in urban countries have to be made cognizant about the demand of a female kid in the societal surroundings as that of a boy. A progressive statute law entirely can non work out societal jobs. The people must be cognizant of the progressive statute law which has certain deterrent facts. Many adult females are compelled to undergo trials and seek abortion on acceptable every bit good as unacceptable evidences under irresistible impulse. A new spirit has to be imbibed propagating that a female kid is non a expletive. It is non a liability. It is non a drain on the economic system. It is non an instrument through which dowery has to be

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given. A feeling has to be nurtured that she is the girl, she is the female parent and she is the life spouse.

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Foeticide can non be controlled unless the equation alterations and households begin to value their girls more than they do at nowadays. It does non take much to kill an infant girl even without the assistance of engineering, if she is unwanted. Among all the factors, which need attending, instruction is the most of import. In parts of South Asia where instruction and employment chances for adult females are comparatively high, the female to male ratio is comparable to that the developed states. For case in Sri Lanka the sex ratio is 102 adult females per 100 work forces and in Indian province of Kerala 104 adult females per 100 work forces. This reflects towards the deep frozen manifold, short and long-run effects of instruction on the outlook and life form of people.

If we want to halt the female foeticide or disregard of adult females, we have to halt looking for speedy holes and alternatively face the job forthrightly.

There is no manner to guarantee the healthy endurance of babe miss unless households find them deserving fostering. That is so a complex undertaking, which allows for no easy short-run solutions. Militants ' intercession has non led to controlling sex finding trials. The existent challenge before us is to calculate out ways in which a realisation of the value of girls can be enhanced in the eyes of their ain households. All those who have a interest in it apart from the authorities governments, like adult females 's group, wellness groups, non-governmental organisations, the

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academe, the media and most significantly the medical professionals have to play their portion to see that the commissariats are implemented and the commissariats are strengthened by amendments of the act. Unless societal action is supplemented with prompt execution of the commissariats and the ordinances under the jurisprudence meant to halt female foeticide, such patterns will go on to boom. To guarantee smilings on the faces of our young person, both male child and miss, allow us escalate joint attempts to root out unhealthy societal elements, 'Now ' since future depends upon what we do in the present.

Days are non so far, when there may be outgrowth of the state of affairs where brides will non be available for the matrimony of the boies to keep line of descent and go on the human race of even those people who believe on long standing tradition of boy penchant, that `` lone boies can offer Pyre Pindadana, Mukhagni, among others and non the girls ". Therefore it is felt that the mentalities of the people should be changed right from now towards the importance of the miss kid in the household.

There is an pressing demand to change the demographic composing of India 's population and to undertake this barbarous signifier of force against adult females. The passage of any jurisprudence is non sufficient, Torahs must be adhered to and applied strictly, before any alteration in the position of adult females can take topographic point. In spite of the Pre-natal Diagnostic Techniques (Prohibition of Sex Selection) Act umteen incidences of female foeticide are taking topographic point in India. There is still extreme contention as to who will function as the watchdog to command the abuse of

the pattern of female foeticide. Promoting gender balanced society involves aiming behavioral alterations in society which in bend involves a long term community based intercession, consciousness programmes, programmes to advance girl kids 's right, turn toing myths related to sons/ girls and concerted attempts to alter the mentality of people. Sensitization of medical practitioners, implementing a system of moralss in the medical profession and monitoring of medical services available to people is an pressing demand. It is so clip to stimulate attempts to set genders equality at the top of development docket and contribute in whatever manner we can to give chances to girl kids to blossom and reflect.

Apart from the above, a feeling has to be inculcated in the heads of the people that she is the girl, she is the sister, she is the female parent and she is the life spouse of a adult male.