CHAPTER - 5, PART - II
THE TTBs CURRENT AFFAIRS AND FUTURE
COMPLICATIONS IN INDIA

5.1 The attitude of infertile couples : Social pressure, dilemma and desire to beget TTB :-

As discussed in chapter 2 and 3 of Part-I of this thesis, we have seen that at least ten per cent of all married couples have an infertility problems and the impact of infertility has the tendency to shake the individual couple as well as the society. Here we would see the extent to which such couples can go and have gone in India in search of a baby; in order to save themselves from social pressure to start a family by begetting a child. The dilemma and desire to beget TTB run parallel in their mind. Facing unsuccessful attempts to have a child of their own, turn their faces pale and torn. Like a drowning man who catches at a straw; the infertile couple does anything, even chant MANTRA, for begetting TTB. Then taking off from a Guru, sadhu or Hermit's hut, the couple lands unto some clinic dealing with IVF. Some of the tales of such pales reveal their experience of facing infertility and circumstances making decision to go for TTB at any cost and even with the help of DI in close collaboration with the IVF officials. We have already gone through the tale of Mani Chawda and her husband for producing First TTB of India in Chapter 6 of Part-I of this thesis. Some of the other known tales of begetting TTB are as follows :-

(a) Mannu Singh, a TTB was born at JFMRC through a caesarean section. His father Karam Veer Singh while explaining his experience facing social pressure
for procreating a child reveals, "Left to ourselves, we would probably never have
gone for IVF, but the societal pressures were becoming unbearable. I grew tired
of old women who kept pestering us with advice to go to this or that guru". It was
the impact of such pressures that finally, as suggested by his friends, the couple
went to JFMRC where after numerous tests the gynaecologist finally established
that the cause for lack of conception was the presence of anti-sperm anti-bodies
in Lakshmi Yadav, the mother of the TTB Mannu Singh. However, doctor told them
that IVF would solve their problem to which the couple agreed and Lakshmi Yadav
was lucky. The very first embryo implanted was successful. Being contented and
happy she said, "Thank God, my child is normal and healthy". Her pale face did
not remain pale but glowed with love for her child when she confessed, "It was
not as though I desperately wanted to become a mother and have a child of my
own, but I love him immensely now". The total cost of begetting Mannu Singh was
nearly Rs. 90,000 (Rupees Ninety Thousand) as revealed by his father Karam Veer
Singh.¹

(b) Gautam, another TTB born of JFMRC in October 1992, is a son of Jaipur
based bureaucrat, who got him after nine years of married life. Soon after their
marriage, they discovered that Gautam's mother suffered from twin problems. Her
fallopian tubes were blocked and worse, she suffered from tuberculosis of uterus.
The hospital rounds became a routine for them, but no hospital, not even the
prestigious All India Institute of Medical Science in New Delhi, could cure her.
They were finally told to adopt a child and give up hope of having their own baby.
Gautam's mother who was desperate to have her baby confessed, "those who made
such suggestions appeared to be my enemies". Finally they landed at the JFMRC,
where the wife was first treated for tuberculosis and, once that was cured, microsurgery
for opening her fallopian tubes was performed. But she was still unable to conceive and gynaecologists finally recommended IVF. Gautam's mother claimed that he was extraordinary, not because he was a test tube baby but because he was hyperactive and revealed, "I do believe that test tube baby are more active than ordinary babies because the most motile sperm is selected by the Doctor for fertilising the egg". However his parents are worried about the impact of an attitude of the society which they believe is still quite backward and may not accept a test tube baby easily. Many people had come to their resident to find out how the TTB looks like and that if TTB looked any different from other children as they believed that a TTB grows in test tube instead of his mother's womb and is not delivered like any ordinary baby. They further revealed that they have even stopped telling people that Gautam is an IVF baby. But they have no plan to hide this information from Gautam when he grows up and reveal, "We would definitely like him to know to what lengths we had to go to have him."²

(c) Shailesh, still another TTB born at JFMRC after 10 (ten) years long married life of Pushpa Chauhan and her husband. They belong to village Dausa, nearly 60 km from Jaipur. "Mrs. Chauhan reveals that doctors had all along maintained that there was a problem with her husband's sperm count. But, she insisted Shailesh was very much her husband's son. 'They took his semen before my eyes', she said, and he is very much our own boy. Hundred percent, he is ours'. Judging by the emotional tie the child seemed to enjoy with his father, no one would express any doubts about his paternity".³

(d) The tale of PARVATI, 29 years old housewife, and her husband Dev, who got pregnancy after nine years of their marriage, is one of the ever publicly known DI cases because generally the couple and the physician do not disclose this
secrecy. They discovered that the sperm count of Dev's semen was too low to achieve pregnancy. Parvati says she was shattered at the news because even as a young girl she had always the aim to become a mother which did not seem to be possible after this news. It was Dev though, who was more devastated. However after a lot of thinking he accepted the diagnosis and decided to go in for DI for two reasons, one because they had little choice and another because adoption was not an option for them as both wanted to experience child birth. DI would also give their family an authenticity adoption could not. But it was not an easy decision. Parvati tells that she was very nervous about having a baby by some strange man; it did not seem wrong, but it did not seem right either... she has accepted DI but it was so strange. It took six months of deliberation, argument struggle before the two presented themselves again at the clinic where their physician picked out a donor who resembled Dev in terms of height, physique and complexion. Parvati kept her temperature charts to show when she was ovulating and got hormone shots every time the doctor inseminated her. It took several months and several attempts before she got pregnant.

As her delivery date approached, Parvati found herself getting increasingly apprehensive. She says: "There is an uncertainty. We have placed total faith in our doctor since we had no control over his selection of a doctor for us. Often I find myself wondering about who he is, what he looks like, what his medical and cultural background is". But it is something she would not like to discuss with her husband or the doctor. Dev accepts that his initial reaction to the news put a lot of strain on his relationship with his wife. But he says he got over it after a month or so. Then he laughs and adds, "The next step as I see it now, was funny. I did a round of all the temples I could think of and also consulted a lot of priests. One,
I remember asked my wife to chant a mantra four lakh times over a period of three months. He promised she would conceive after that - the catch here being that she was not to have any sexual contact with me. Now I wonder how she would have conceived." This tour of the ridiculously sublime, however did help Dev in sorting out his emotions. By the time he should up at the clinic he was ready for DI and the baby.

Doctor's opinion, "his doctor feels that he does not foresee any future problems of bonding between Dev and his child. According to him thousands of men around the world every year get past the lack of biological connections and come to love the child the same way that natural parents do. And even though they can never forget that it was their sperm which created the baby, they are thankful for the gift of a child. No matter what society says."4

From these tales, it becomes crystal clear that even the TTB boomers are also conscious about the danger they or their TTBs are likely to face if the TTBs happen to be DI product. Their psychological and emotional attachment is apparent from the insisting attitude of Shailesh's mother Mrs Chauhan when she says, "They took his semen before my eyes and he is very much our own boy. Hundred percent he is ours". Also Parvati's internal feelings with wonder to know about the look, physique, status etc. of the donor who is not known to her; but she would not like to discuss all this with her husband and doctor, as it may spoil her relation with her husband Dev and pose danger to matrimonial life of which she is very much aware. Further what about the TTB when he grows up and comes to know all about what Parvati and Dev have done to bring him in this world. The possibility of his thinking about the biological origin (donor) cannot be ruled out. As discussed earlier in chapter-3 above even he may question Parvati and Dev for all this, may not
appreciate them, may haunt for his biological origin and abandon Dev if not Parvati as Dev had no contribution for his birth. In what manner the TTB would react depends upon his mental attitude. But these psychological feelings and emotional ties are dangerous for the harmonial relationship and if they develop the relationship between them shall be at stake.

5.2 Donor insemination, donors and sperm banks: The process of donation and functioning of sperm bank in India:

As we have seen while dealing with the modes and methods of begetting TTB in chapter-5 of part-I that donor insemination comes into play when the couples suffer infertility from husband side, i.e. male infertility where the semen is defective and sperm count is so low or nil rendering the achievement of pregnancy impossible.

Donor insemination or DI is the use of sperm, provided by an anonymous donor, to inseminate and hopefully impregnate a woman. DI is of standard answer to male infertility. In addition, those people who fear known hereditary disorders may also choose DI. The first requirement of DI is the donor itself.

Not enough donors for test tube babies is the general opinion of experts of TTBs in India. They agree that one of the major difficulties in running a sperm bank is of getting good quality sperm. This is mainly because donors are discouraged by the long battery of laboratory investigations that must be performed before a donated sample is declared safe and unable. These tests include VDRL for syphilis and other tests to rule out the possibility of sperm hepatitis and so on. When they are told all this they throw up their hands and say, "I am not interested in donating sperms, it is you who wanted it", explains Dr Hinduja.
require that the only those who have produced two normal children should be accepted as donors. "This complicates things even more", says Dr Hema Purandare. The other major problem is that of ensuring a regular supply of liquid nitrogen, without which the extremely low temperature (-196°C) at which the sperms have to be stored, cannot be maintained. "It is too much of a headache to look after the facility in private", says Dr Geeta Pandya who runs a sperm bank.

"The liquid nitrogen tanks have to be replaced every three to four days. And what if the plant is not working just on the day when I need a fresh supply?" Asks Dr Hinduja who helped to set up a private sperm bank in a north west Bombay suburb two years ago and has been associated with it ever since.

Therefore it is clear that there is scarcity of donors in India. Apart from the defects explained by the doctors herein above, most of the Indian males may also refrain from donating their semen on the religious grounds, particularly the Muslims and also on ethical grounds apart from the attitude of preserving the traditional line of heritage to maintain the chain of family generation. They may not like to allow their biological origin to go beyond the traditional bondage of their blood relation to procreate the generations that will go in other hands. There are also psychological and emotional factors which may further restrict many to go for donating sperm. Still others may also apprehend the improper nourishment of the outcome of their sperm if so donated in the hands of unknown people.

In fact it is a healthy sign that there are not enough donors for TTBs in India. This would help to check the increasing demand for TTBs through DI and discourage the process of begetting TTBs by DI in India and help in avoiding the future complications that are apprehended and discussed in chapter-3 above.
SPERM BANKS :-

So far there are about 3 to 4 sperm banks in Bombay. There is some disagreement as to when such facilities were actually set up. "Dr Geeta Pandaya claims she started the first sperm banks in Jaslok Hospital in the year 1974. But Dr Indira Hiduja says that the first sperm bank in Bombay and very probably the first in India was set up by Dr Aniruddh Malpani in Colaba in 1988. The Birth Defects Centre run by Dr Hema Purandare and Dr Amrit Chakravarty in Bombay also set up its own sperm preservation facility at approximately the same time".11

In an around November-December 1994 there was a news that a sperm bank is going to be established in India with foreign collaboration but it evoked little comment, as M. Habibulla states, "Recently, an inconspicuous news item in a national daily affirmed that a sperm bank was soon to be established here with foreign collaboration. Surprisingly, the news has evoked little comment".12 He also expressed his views that before setting up a sperm bank in our country, we should make sure that it is in the best interest of the Indian public.13

In view of the Indian tradition and way of maintaining the families and continuing chain of generations, the system of begetting TTB with DI deserves not only to be discouraged but also totally banned and for that matter there is absolutely no necessity of opening more sperm banks in India.

The existing process of sperm donation and sperm banks in India :-

The selection of sperm donors and maintenance of records is not systematic and proper in India. Most of the times the selection of sperm donors is done by the doctors and some times by the test tube baby boomers. "Some couples are so
desperate to have a baby that they bring anyone along to be the donor. Little do they realise the kind of complications this could cause”, says Dr S. Sahi who will be starting an in vitro facility at Sahi Hospital. While most accuse doctors of making eugenic decisions for their clients when they buy sperm of only particular individuals (most likely medical students, being easily available) what they are really worried about is the lack of genetic screening given to the sperm of these donors. Today, a majority of inseminations in India are done using fresh semen. Indian doctors continuing using donors who contribute sperm one-to-one basis without screening.

What exactly is happening at Malpani's Sperm Bank in Bombay is the selection of sperm donors are selected by conducting a battery of test including blood test and detailed studies of the donor's and his family's medical background as also his educational background. Donations are made by masturbations, in a quiet room on the clinic premises.

"Once the donor is selected by Malpani's clinic, he is handed a bottle in a brown bag and directed to a room. 'Suitable' magazines are scattered around to get things moving. Despite the fact that some donors complain that all the 'best' mates are sometimes missing, most men are able to do the job. In the West, wives and girlfriends are known to help; in India, they continue to be bashful or more often than not ignorant of their husband's generosity with his genes.

Once the donation is complete, the seminal fluid is diluted, at the ratio of 50:50, with cryo-preservatives to protect sperm from the shock of freezing, first to -70 degrees celsius and then to -196 degrees celsius. Next, the fluid is sucked into straws which are colour and number coded, and help pending the outcome of
blood tests to ensure that the donor is free of AIDS, hepatitis and other disorders. The sperm at Malpani's clinic is not used until blood tests conducted three months later confirm donor's good health.

At the time of insemination, the straws of semen arrive frozen. One straw is allowed to thaw for a few minutes and a semen sample is examined under a microscope to make sure that the sperm are moving well. The next stage is the loading of the straw into the 'gun' with which the semen is inserted into the vagina to start a journey which might result in a wailing infant nine months later”.

At present there are number of IVF clinics operating in India without maintaining any facilities of requisite standard as required for the purpose of preserving the sperm. Mostly the donor insemination is done by obtaining fresh semen from the donor. Since many of the doctors busy in this field are reluctant to disclose the number of cases done by them for begetting TTBs to the infertile couples through DI it is very difficult to ascertain as to how many cases of DI inseminations have been done in India. Also whether the requisite medical tests are done or not remains uncertain. What is apprehended is that with this kind of affairs, the danger of spreading fatal diseases like AIDS apart from the genetic diseases is very high. It also paves the ways for corruptions, exploitation and mal-practices, which is not a healthy sign for the Indian society. Sooner such things are banned or restricted better it is for India.

5.3 Misuse of the medical science in the field of TTB in India :-

The medical science has no doubt brought a sigh of relief to the infertile couples all over the world including India and infact TTB is a boon of medical
science. But the important aspects of this recent development of medical science has to be appreciated from the point of its best use only and must be discouraged and condemned so far it is likely to be misused and in fact in certain states some clinics are boosting of their success of having produced all TTBs boys particularly in Jaipur (Rajasthan). But in fact they are hardly aware of the damage which they are causing to the society by producing only the TTB boys. Even if they are aware, they are not bothered for that. They are busy in their own affairs to create more and more TTB boys and thus attract the traditional Indian craze for begetting boys for which the baby boomers are easily attracted and get jumped into the fray. Neither the TTB boomers nor the doctors engineering such production are realising the effect that if the same trend carries on indefinitely, a time will come where there will be only males or the maximum males in the society creating disproportion between the male and female sexes. This would further lead to many social complications starting from the problems of marriage, leading to the untoward situation and of incidents of rape, of exploitation, unrest and havoc in the society.

Production of TTBs only boys, is definitely sex selection and for that matter misuse of the technique. Next relevant question is, how has this sex selection become possible? The answer is, obviously, by a newly developed technique of medical science which in fact, has been desired to give benefit and relief to the infertile couples and not for the purpose of creating disproportion of sexes in the society and that too going ahead only for male sex selection. Going on producing the TTBs only boys being definitely a misuse of the technique, deserves to be condemned particularly in India where the craze for son is ever green. In this context Alka Basu, demographer of Indian Institute of Economic Growth in New Delhi also has expressed the views stating that an adverse male female ratio would cause social
Further her views are reflected in these words, "Throughout the world, she said, there was a bias in favour of men but, as a rule, it had been found that as society modernises and scientific knowledge advances, male preference declines. This usually means that when a small family norm is promoted, people are willing to settle for two female children, too.

In contrast’, Alka Basu said, ‘India is witnessing modernisation and popularisation of the small family norm, without a social acceptance for two daughters. People still prefer male children and are misusing scientific advancement to get boys at any cost’.

At the moment, she said, people do not realise the damage it would cause to the society. They are more concerned with their family composition, but when, some generations later, it becomes difficult to find women to marry their sons to, they will wake up to the dangers.

‘When this situation becomes a reality’, Ms Basu said, ‘Social customs like dowry will be replaced by customs like paying a price for getting a wife. But that won’t necessarily be to women’s advantage because adverse male-female ratio also means the chances of sexual crimes increasing rapidly.’

A more subtle effect might be to entrench sexism. Most couples would not want girls, but if they do, it would only be as a second child, denying girls the advantages possessed by a first child, which include assertiveness and self-confidence, to mention only two”.23

It is thus clear that from the very inception of this newly developed technique of begetting TTB, its misuse has been pressed into action instead of respectfully
utilising the technique for its desired use. This definitely needs a check, control and halt, lest it would cause irreparable damage to the society in India.

5.4 Increasing demand of TTBs by crazy baby boomers coupled with commercialisation of IVF clinics in India :-

As we have seen in Chapter - 6 of Part-I of this thesis, that in Bombay alone the TTBs are being produced in thousands, followed Jaipur, Calcutta, Delhi, Madras, Ludhiana and even Guwahati. It makes crystal clear that there is definitely increase in demand of the TTBs and the baby boomers are running from pillar to post, ready to do anything for begetting TTB and even the huge amount involved in process of begetting TTB has hardly been of any deterrent effect on them; as initially the doctors used to charge anything between 10 to 15 or 20 thousand rupees as the expenses per cycle for achieving pregnancy through IVF, the prevailing market rates per cycle have gone to the extend of Rs. 40,000 or more. It is also not sure that by one time insemination the pregnancy will be achieved, sometimes it is achieved after third or fourth attempt; thus costing more than a lakh for a TTB. Still the demand for TTB is on the hike. The Doctors who are supposed to follow the discipline of their professional ethics and duties towards the society but they are also gradually inclining towards commercialisation and attracting the baby boomers by directly or indirectly assuring them to get a TTB boy which in India where the lust for son predominate the society is likely to fetch good dividend. But the consequence which the society has to face as discussed in chapter-3 above of this thesis are not being realised by these interested TTB boomers and the doctors.

The lust and search for the ways and means of begetting TTBs by the baby boomers and on being successful to have achieved the same particularly by way
of DI definitely bring thrill of joy to them. However little they realise now about the danger they are aheading for a future. In fact the society in India has not given any sanction to DI children. In chapter-3 above, while dealing with the legal implications of TTB in India we have seen that there is serious apprehended danger of many legal implications and social complications including the ethical and emotional impact of this relation. For the system of inheriting the property in India there is a need of recognition of paternity and even the other members of the same family in which a TTB by DI has been obtained, are likely to throw out TTB so obtained from the ambit of legal heirs entitled to inherit the family ancestral property. Under such circumstances, the TTB procreated by DI may badly be deprived of the ancestral property of the baby boomers to which such TTB would have been entitled to had he be been born as NBB or a TTB with the biological origin of the baby boomers themselves. Besides this, such TTB may hunt for in search of his or her biological origin totally disregarding the relation of the baby boomers by the efforts of which he or she has taken birth. Together with all this, many other situations as discussed in chapter-3 above, amply suggest that the present thrill of joy of this baby-boomers on their success of begetting TTB through DI is very temporary one and in fact it is a dangerous thrill aheading for creating bumerang grill in the form of legal implications and social complications around them out of which it will be very hard upon them to come out. Therefore it is essential that the apprehension of such danger is taken care of before it is too late to control. Public awareness in this regard would help longway to overcome the situation.

5.5 Role of press and media in respect of TTB in India :-

Overwhelming with the invent of solution to the infertile group in and around the world, the press and other media has been highlighting the achievements as well
as the problems of begetting TTBs all over the world. But particularly in India, the role of the press and the media has given only coverage to the achievements of producing TTBs at various IVF centres highlighting their success and has remained silent on its implications. Particularly the media in India has not been able to and bring to the notice of the people about the misuse of the technique of begetting TTB as discussed herein above. Instead of pointing out such misuse, many attractive headlines, such a "First Test Tube Baby Born of a Rare Case, Renewed Hope for Childless, Test Tube Babies Born, Two Test Tube babies Born, Jaipur Tops in Test Tube Baby, So on and so forth has been the news of the day. Hardly there has been any criticism on the point that the babies so produced are only boys and that how only boys have been produced. The first such action has been initiated by conducting investigations by Seema Paul who concluded, "Rajasthan's success in the laboratory could well upset the sex ratio, leading to havoc. The probable misuse of scientific advancement also becomes a grave moral question". She has investigated the matter by personally visiting the concerned IVF at Jaipur in order to find out as to why all test tube babies boys? And found that by the scientific technique sex selection has been misused.

In short, instead of criticizing and opposing the sex selection and the arrangement of surrogate mothers, Donor insemination etc., the media gave much importance to the achievements of IVF children.

5.6 Sex Selection : A conflict of thoughts :-

Regarding sex selection of TTBs, there are different opinions even amongst the doctors running the IVF clinics for begetting TTBs in India. Some of the doctors are strictly against the sex selection through IVF for begetting TTBs and some are
in favour of such sex selection. Those who are against for selecting sex as such; apart from Alka Basu whose views have already been discussed above; are Dr Indira Hinduja and Dr Sadhana Desai both of Bombay. Dr Indira Hinduja admits that she does receive pleas from some patients for male child but she never agrees on ethical grounds. So is the case with Dr Sadhana Desai who always tells the desperate patients requesting for male baby that the world's first TTB was a girl and so are the first one in Australia, America, France and even India.

However among those who support sex selection through IVF for TTBs are Dr Baidyanath Chakraborty, Dr Pranob Dasgupta, Dr Sudharshan Ghosh-Dastidar all of Calcutta. According to Dr Baidyanath Chakraborty who has produced 11 IVF babies since 1986 says, "If it is for getting healthy babies, I'm not against sex selection. There are some genetic diseases that children inherit from their parents, like haemophilia, which is controlled by a sex-linked gene. It is almost exclusive to male babies, women can carry and pass it on to their sons without being affected themselves".31

Dr Pranob Dasgupta is fully in favour of sex selection, He says, "I strongly in favour of it. I, for one, am ready to go to court in support of it. To n.c, it is the best way to avoid unwanted pregnancy". He further says, "A couple has every right to opt for a boy or a girl. And if the technology is available to them, why not take it to them? Couples who are keen to have a male baby often settle for one child, so sex selection techniques can also alleviate population burdens".32

Dr Sudharshan Ghosh-Dastidar is also in favour of sex selection. In 1991 he offered sex selection to couples and got seven male babies out ten attempts. He says, "I am in favour of pre-selection because it helps what I call planned families.
A woman has every right to opt for a male or female baby". To him, the real problem lay in the success rate of pre-selection techniques and he says, "I would be glad if they are 100 per cent efficient. I think women would not go in for abortions if they got babies of their choice."  

Apart from the Doctors who are not in favour of sex selection we find that Prabha Devi Agarwal, the mother of Durga, India's first unconfirmed IVF baby born on October 3, 1978 was also definitely against sex selection. She says, "Why should a couple hanker for a child of a particular sex? I know there is a mania among Indian couples to have a boy. I also know that among Marwaris the dowry problem has a big role to play in this odd desire. But when I conceived Durga, I did not want a male baby".

However majority of the people in India is happy to get son in their family though not directly in favour of sex selection. The general attitude of the people in India has always been in favour of a son and with the help of IVF technique not only the infertile couples but also the fertile couples keenly interested to have son are likely to avail the technique of IVF to fulfill their aim of begetting a son. Under such circumstances definitely there is a danger of creating disproportionate ratio between the male and female sexes where the females will be missing in the society leading to the problems of marriage and other problems, as already discussed hereinabove. Therefore there should be a check and control over sex selection through IVF techniques.

No doubt the IVF through sex selection helps to the people to control their family and enables them to exercise their right to beget male or female child. But this exercise of right and use of IVF technique cannot be allowed to become a cause
of social problems, they have no right to deprive the female sex as well to become a member of the society. It may be desirable in some extreme cases where the couple had already two or more daughters or sons that this technique may be allowed to help such couples to beget a son or daughter if they so desire that too only with the active participation of couple and without of any third party participation. But for the first pregnancy itself if the use of this technique is pressed into service, it would definitely be a misuse of the technique and hence should be banned to that extent. The law in this connection is required to be more deterrent in order to save the society from becoming victims of the social evils that would arise because of disproportionate ratio of sexes. For that matter the use of IVF technique and act to beget male baby out of the first pregnancy should be made criminal offence punishable under the law, whereas the people opting for female babies through IVF technique may be provided with suitable incentives in order to encourage female births out of the first pregnancy so as to curve the trend of lust for begetting only boys in India.

After having seen the current affairs of TTB and future complications in India, we can proceed further to analyse particularly the legal implications and complications of DI and surrogacy in India and few pertinent questions involving law point which are yet to be answered as well as solution to DI and surrogacy in the next chapter.
NOTES AND REFERENCES (CHAPTER - 5, PART - II)


2. Ibid.

3. Ibid., p. 17.


5. Ranjana Mathur, "WHAT IS DONOR INSEMINATION?", n. 4, p. 45.


7. Ibid.

8. Ibid.

9. Ibid.

10. Ibid.

11. Ibid.


13. Ibid.


16. Ibid., p. 45.
17. Ibid.

18. Ibid., n. 5.

19. Ibid.

20. Ibid.


23. Ibid., p. 15.


30. Ibidl, p. 16.

31. Ibid.

32. Ibid., p. 17.

33. Ibid.

34. Ibid.