A NEW PHENOMENON OF INCREASING INFERTILITY CLINICS IN KERALA: A MORAL AND PASTORAL ANALYSIS

Thesis for Licentiate

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# ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AI</td>
<td>Artificial Insemination</td>
</tr>
<tr>
<td>AL</td>
<td>Amoris</td>
</tr>
<tr>
<td>AI</td>
<td>Artificial Insemination</td>
</tr>
<tr>
<td>AL</td>
<td>Amoris Laetitia</td>
</tr>
<tr>
<td>ART</td>
<td>Artificial Reproductive Technology</td>
</tr>
<tr>
<td>CCC</td>
<td>Catechism of the Catholic Church</td>
</tr>
<tr>
<td>DP</td>
<td>Dignitas Personae</td>
</tr>
<tr>
<td>DV</td>
<td>Donum Vitae</td>
</tr>
<tr>
<td>ET</td>
<td>Embryo Transfer</td>
</tr>
<tr>
<td>FC</td>
<td>Familiaris Consortio</td>
</tr>
<tr>
<td>GIFT</td>
<td>Gamete Intra Fallopian Transfer</td>
</tr>
<tr>
<td>GS</td>
<td>Gaudium et Spes</td>
</tr>
<tr>
<td>HV</td>
<td>Humanae Vitae</td>
</tr>
<tr>
<td>ICSI</td>
<td>Intra Cytoplasmic Sperm Injection</td>
</tr>
<tr>
<td>IVF</td>
<td>In-Vitro Fertilisation</td>
</tr>
<tr>
<td>LTOT</td>
<td>Low Tubal Ovum Transfer</td>
</tr>
<tr>
<td>PROST</td>
<td>Pro-Nuclear Tubal Transfer</td>
</tr>
<tr>
<td>ZIFT</td>
<td>Zygote Intrafallopian Tube Transfer</td>
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</tbody>
</table>
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Fr. Daniel Kozhuvakkattu
GENERAL INTRODUCTION

Many advertising hoardings on the road sides of my journey from my parish to St. John Paul II Institute Changanassery on every week attracted me. Some of them are having the tag line “infertility ends here”- over 30000 happy couples say so.” These hoardings and various advertisements in the television of many in vitro fertilisation (IVF) clinics, also provoked me to think of the morality of these infertility clinics and to assert the magisterial teachings and put forward certain pastoral methods which could help the infertile couples to overcome the sufferings. The couples who are childless, is going through severe suffering. This suffering has physical, psychological and social implications. They do feel no meaning in their life, at times and societal pressures and questions from family members and dear ones, increase their pain. There are various treatment options still some of them may lead to different negative physical, psychical, moral and spiritual consequences in their life. Though the artificial reproductive technologies (ART) may give remedy for the suffering, by giving children, these technologies do not promote the dignity of marriage, sexuality and human life.

The suffering of infertile couples does not justify conceiving a child by any means whatsoever. According to the teachings of the Catholic Church, two values should be considered when seeking to conceive a child: the meaning of marriage and the dignity of child. From the very moment of conception, human life is sacred and this life should be the result of conjugal love. Procreative and unitive dimensions of marriage should be upheld by the infertile couples, if they go through any
fertility treatments.

There is a possibility of suggesting the ARTs as a remedy for the suffering of the infertile couples, without analysing the morality of the act. This tendency of finding the remedy without going through the proper treatments, paves way for several infertility clinics. While analysing the phenomenon of infertility clinics in Kerala, we realise the fact that these clinics are increasing alarmingly. In Kerala, both ayurvedic and allopathic treatments for infertility is available. The doctors of these clinics say that it is not because of infertility is increasing in Kerala, but the tendency to approach these clinics are increasing in order to attain the satisfaction of having a child. In such a situation, this thesis is an attempt to answer the following questions; what is the morality of these clinics and treatments? What should the infertile couples do or what is the remedy for their suffering? What is role of the Church in helping these couples?

There is a misunderstanding among the common people that the Church is always against these technologies and thereby against these couples’ suffering. The magisterial teachings on human love, sexuality, procreation and contraception are not properly reached to the common people, even today. Many couples, do come and say that they did certain things, for e.g. sterilisation after the birth of second child or using contraceptives to prevent pregnancy for a certain period, without the proper knowledge of Church teachings. These teachings are aimed at keeping the dignity of human person because each person is created by God and is in the Image of God. The main concern of the Church is the dignity of the person and the Church upholds this principle throughout the centuries. Therefore the Church is
not against the human sufferings but it suggests the proper moral remedies to her children and the Church tries to be with those people who are suffering.

The aim of this study is to find out the reasons behind the increasing phenomenon of infertility clinics in Kerala and to explain the immoralities of these techniques and the clinics. Explaining the immoralities do not decrease the pain of suffering infertile couples. Therefore, the study aims at suggesting morally accepted treatment options and to explain the way the Church should accompany these couples in their suffering.

The methodology used in this study, is descriptive and analytical. The causes of male and female infertility, available artificial reproductive options in Kerala and the teachings of the Church on morality of these techniques in the last decades are explained using the scientific medical books, journals and the documents of the Church. Many discussions with medical doctors and with the infertile couples also helped in developing this theme. Critical evaluation of the artificial techniques in the light of the teaching of the Church is made in order to explain the immorality of these techniques.

There are various limitations to this study. Though the study was on the increasing phenomenon of infertility clinics in Kerala, there are no scientific works on this topic is available. Certain surveys and more analysis of the situation in Kerala, would have made this thesis much better. Many scientific terms are used in this thesis to explain the infertility and its treatments, but it is without much description.

This study is divided into 3 chapters. These chapters are an attempt to explain the increasing phenomenon of infertility
clinics in Kerala and moral and pastoral reply to these phenomena. The first chapter is attempt to define the term infertility and its causes. This chapter gives scientific reasons behind the suffering of infertility, in men and women. And this chapter also explains the risk factors behind infertility, especially in the context of Kerala. The special reasons which causes infertility in Kerala is also given.

The second chapter explains the main ARTs available and its scientific explanations. What are the techniques mainly used in order to overcome the suffering of infertility. The main problem behind these techniques are they prefer any means to attain the desire of the couples, that is, to have a child. The immoral aspects behind the infertility clinics in Kerala is also added in this chapter.

The final chapter is an attempt to explain the immoral aspect of infertility clinics in the light of the teachings of the Church. The Church, from the very beginning, is focussing on the dignity of the human person and therefore it deny all the artificial means that substitute conjugal act and human sexuality. This chapter also explains the morally accepted treatment methods and other options such as adoption to overcome the suffering of infertility. The final part of this thesis is an attempt to describe the role of the Church in accompanying the infertile couples in their day to day life. Pastoral concern to the infertile couples will help them to realize their suffering and its meaning.

Through these 3 chapters, we try to analyse the various artificial responses to infertility, from the perspective of the Catholic Church and its teaching.
Chapter I
INFERTILITY: DEFINITION AND CAUSES

Introduction
“Be fruitful and multiply” (Gen.1.28). This is the first commandment and the blessing of God to the human being. Being fruitful is really a blessing. Therefore infertile couples think that they are cursed. Struggling with infertility and miscarriage is certainly a great burden for couples to bear, especially when they so deeply desire to have a child and live out their vocation to be open to life and welcome the gift of child from God. As Donum Vitae - Instruction on Respect for Human Life in Its Origin and on the Dignity of Creation: Replies to Certain Questions of the Day - points out, “The suffering of spouses who cannot have children or who are afraid of bringing a handicapped child into the world is a suffering that everyone must understand and properly evaluate. On the part of the spouses, the desire for a child is natural: it expresses the vocation to fatherhood and motherhood inscribed in conjugal love. This desire can be even stronger if the couple is affected by sterility which appears incurable.”1 When we study the problems of infertile couples, we could understand that the physiological deviations or abnormalities can lead to this problem of being infertile. In this chapter we are going to understand the term ‘infertility’, its definition and its causes. The method used in this chapter is descriptive and the studies on the infertility causes in Kerala is also given.

1.1 Definition
Fertility is the ability of a man and a woman to reproduce. Fertilization naturally occurs when male sperm is introduced into a woman’s body through the sexual intercourse and one of the
sperms succeeds in penetrating the woman’s ovum. Infertility is an involuntary reduction in the ability to have children. It is a relative term. Sterility is the absolute inability to reproduce. These medical conditions differ from most others because even normal fertility requires a variable period of time for pregnancy to occur, whereas countless other disorders either are present or they are not. The Centers for Disease Control and Prevention (CDC) defines infertility as “the inability to conceive after one year of unprotected intercourse.” Some think, however that the period of one year is too short in a time in which to make an adequate diagnosis of the difficulty because some women become pregnant after having been apparently infertile for quite a long time.

Fundamental problem of infertility studies lies in the conceptualization and definition of infertility. There have been variations observed in the definitions adopted by medical scientists, social scientists, and other researchers. The variation occurs largely (a) in the reference period used to establish the infertility and (b) in the categorization of women who have experienced pregnancy but not a live birth. Inability to conceive within two years of exposure to pregnancy is the epidemiological definition of infertility recommended by the World Health Organization. Clinical studies often use a one-year period of exposure. One community based study in Egypt considered one year of unsuccessful efforts to conceive as the criterion for infertility. But in demographic studies, it is common to use a period of five years as an exposure time.

1 Congregation for the Doctrine of Faith, Instruction Donum Vitae (22. O2. 1987), II, 8 In AAS 80 (1988), (here after Donum Vitae is used as DV)
80% of the couples achieve conception, if they so desire, within one year of having regular intercourse with adequate frequency. Another ten percent will achieve the objective by the end of second year. As such, 10% remain infertile by the end of second year.

Infertility is a real crisis for a large number of couples in their marital life. Changing life styles, pollution and increasing stress have alarmingly increased infertility levels among couples. Approximately 20% of married couple today face this problem. India is home to 14% of an estimated 80 million infertile couples in the world.

The two different types of infertility are primary infertility and secondary infertility. They vary slightly, but overall are caused by the same problems and treated in the same ways. The biggest difference with these two different forms of infertility is the way that they may be perceived by others and the way that they may make you, as a couple, feel.

1.1.1 Primary Infertility

“The inability to conceive after one year of unprotected intercourse for patients thirty-five years old or younger, or the inability to conceive in a six-month period for those in the over thirty five age group.” Women who have never achieved a first pregnancy are classified as having primary infertility.

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3 Cfr. Ibid.
8 Cfr. Ibid.
1.1.2 Secondary Infertility

“The inability to conceive or carry a child to a term after one or more live births.” In other words, secondary infertility is defined as the “inability to become pregnant, or carry pregnancy to term, following the birth of one or more biological children.” Fertility also includes the inability to carry a pregnancy to term. In other words, secondary infertility indicates previous pregnancy but failure to conceive subsequently. Those who suffer from secondary infertility often feel like they are especially alone as if they do not belong in either the fertile or infertile world. The added pressure of feeling like others may judge you for desiring more children when you already have one or more children is common source of stress. There are even some who feel that secondary infertility is not “real” infertility. “The causes of secondary infertility are often the same as for primary infertility including irregular ovulation, endometriosis, and uterine fibroids. Infection also plays a major role. In addition, some secondary infertility cases stem from trauma received during a first pregnancy or delivery.”

10 Ibid.
12 Ibid. 11.
13 A. RUHI- LOPEZ- C. SANTAMARIA, The Infertility Companion For Catholics…, cit., 8
14 Cfr. Ibid. 8.
16 Cfr. Ibid. 8.
17 S. L. GLAHN, - W. R. CUTRER, The Infertility Companion…, cit., 232
1.2 Causes

“The most obvious cause of infertility is failure of the couple to have frequent successful intercourse.” The success of the coital act refers to likelihood that sperm will be deposited in the vagina in the vicinity of the cervix with each coital episode. Conception depends on the fertility potential of both the male and female partner. “The male is directly responsible in about 30-40%, the female in about 40-55% and both are responsible in about 10% cases. The remaining 10% is unexplained in spite of thorough investigations with modern technical knowhow.”

“There is no single cause of infertility because a successful pregnancy is a multistep chain of events.” About one third of the infertility can be traced to a cause within the woman. In another third of cases, it is the man who faces infertility. The rest of the time both partners have infertility issues or because no cause is found.

Achieving pregnancy includes the following steps: a woman’s ovaries must be able to release a viable egg, which then must be capable of travelling down the fallopian tube. The man must be able to ejaculate, and his sperm must be able to travel to the fallopian tube. The sperm and egg must unite to fertilize the egg. And the fertilised must implant inside the uterus and be nurtured by the body to allow the foetus to develop and grow until it is ready for birth. Problems with any of these steps can mean infertility. Given all the above factors that must work properly in order for conception to occur, combined with the need for adequate hormone levels and proper physiology, it is a miracle women ever pregnant at all.
A problem in any one of a number of key processes can result in infertility. Male and female factors can exist in isolation or combination and fertility investigation, diagnoses and treatment should always be considered in the context of the couple.

1.2.1 Male Infertility

“The male fertility process involves the production of mature sperm that must reach and fertilize the egg … Male fertility also requires many conditions to be met.” They are, “the male must be able to have and sustain an erection, have enough sperm and semen to carry the sperm to the egg and have sperm of the right shape that move in the right way”. Any problem meeting any of these conditions contributes to infertility.

The male spermatogenesis begins only at puberty, but is a continuous, active, dynamic process. New spermatozoa are formed daily. The hormonal function of the testis is not dependent on normal spermatogenesis. “Spermatogenesis is a dynamic process, the germinal epithelium is relatively easily destroyed either partially or totally by infections, irradiation and chemotherapeutic agents.”

19 Ibid 58.
21 H. KONAR, D. C. Dutta’s Textbook of Gynaecology…, cit., 217.
22 A. RUHI- LOPEZ- C. SANTAMARIA, The Infertility Companion for Catholics…, cit., 3.
23 Cfr. Ibid. 3.
24 Ibid. 3.
The important causes of male infertility are: hypothalamic-pituitary disorders (1-2%), primary gonadal disorders (30-40%), disorders of sperm transport (10-20%), and idiopathic (40-50%). Some common causes of male infertility are:

1.2.1.1 Impaired Shape and Movement of Sperm

It occurs when sperm is unable to reach or penetrate the egg due to abnormal sperm structure or impaired sperm motility or mobility. That is, if there is the lack of sufficient mobility of the sperm so that it cannot reach the fallopian tube in time to fertilize the ovum. It is also known today that in certain cases infertility is caused by the inefficiency of the sperm to penetrate the outer layer of the ovum and cause fertilization.

1.2.1.2 Failure to Produce Sperm

In the male, spermatogenesis begins only at puberty, but is a continuous, active, dynamic process. New spermatocytes are formed daily. However, the hormonal function of the testis is not dependent on normal spermatogenesis. Thus, if the entire germinal epithelium (sperm producing tissue) is destroyed, normal hormonal function continues, even though the individual is infertile.

26 Ibid. 6.
27 Ibid.
29 Germinal epithelium is the sperm producing tissue
30 R.N. SHAIN, - C.J. PAUERSTEIN, (eds.), *Fertility Control*…, cit., 60.
32 R.N. SHAIN, - C.J. PAUERSTEIN, (eds.), *Fertility Control*…, cit., 60.
Because spermatogenesis is a dynamic process, the germinal epithelium is relatively easily destroyed, either partially or totally, by infections, irradiation and chemotherapeutic agents. Because sperm are produced in great numbers and have no egress from the testis other than through the ductile system, obstruction of the ejaculatory ducts can eventually result in partial or total destruction of the germinal epithelium.

Failure of the testis to produce sperm may result from failure of the pituitary gland to appropriately stimulate the testis or from inability of the testis to respond to pituitary stimulation because of the absence of the germinal epithelium.

1.2.1.3 Low Sperm Concentration

Low sperm concentration is indicated by a count of ten million or fewer sperm per millilitre of semen. In many instances, no cause for reduced sperm production is found. When sperm concentration is less than five million per millilitre of semen, genetic causes could be involved. In certain persons the count of the sperm is below ten million per one millilitre semen, which will result in sterility.

1.2.1.4 Production of Abnormal Sperm

This can result from infections, irradiation and chemotherapy and trauma. Testicular tumours also result in abnormal spermatogenesis, on both the affected and the normal...
A common cause of production of abnormal sperm is Varicocele – “occurs when a varicose vein in the scrotum that may prevent normal cooling of the testicle, leading to reduced sperm count and motility

1.2.1.5 Undescended Testicle

It occurs when one or both testicles fail to descend from the abdomen into the scrotum during foetal development. Because the testicles are exposed to the higher internal body temperature, sperm production may be affected.

1.2.1.6 Testosterone Deficiency (Male Hypogonadism)

This can result from disorders of the testicles themselves or from an abnormality affecting the hypothalamus or pituitary gland in the brain that produces the hormones that control the testicles. “Testicular trauma and inflammation are recognized causes of hypogonadism.”

1.2.1.7 Infections

Infections may temporarily affect sperm motility. Repeated bouts of sexually transmitted diseases, such as chlamydia and gonorrhoea are most often associated with male infertility. These infections can cause scarring and block sperm passage. A viral infection usually affecting young children, occurs after puberty, inflammation of the testicles can impair sperm production. Inflammation of the prostrate, urethra, or epididymis also may alter sperm motility.

41 Cfr. Ibid.
42 Cfr. Ibid.
44 Chlamydia infection, often simply known as chlamydia, is a sexually transmitted infection caused by the bacterium Chlamydia trachomatis.
45 The most common infectious cause of vas or epididymal obstruction is gonorrhoea.
Abnormal seminal plasma is a common concomitant of prostate infection. Such infections may be sub-acute or chronic and thus asymptomatic, that is producing or showing no symptoms. These infections are nonspecific in nature because they can be caused by a number of different organisms. They usually do not have harmful effect on the individual’s general health, but the presence of the infection in the seminal plasma may impair sperm viability.

1.2.1.8 Genetic Defects

Genetic defects include instances like Klinefelter’s syndrome, which is when a man has two X chromosomes and one Y chromosome instead of one X and one Y. This causes abnormal development of the testicles, resulting in low or absent sperm production and possibly low testosterone.

1.2.1.9 Impaired Delivery of Sperm

This may include sexual issues such as erectile dysfunction, premature ejaculation, painful intercourse, or psychological or relationship problems, blockage of epididymis or ejaculatory ducts: no semen resulting from spinal cord injuries or diseases; anti-sperm anti-bodies, which weaken or disable sperm; cystic fibrosis, which causes a missing or obstructed vas deferens.

1.2.1.10 Retrograde Ejaculation

It is the process in which the semen enters the bladder during ejaculation rather than emerging out through penis. Retrograde ejaculation may occur after prostatic surgery and

48 Cfr. Ibid. 49 Cfr. Ibid.
following spinal cord injury. In such cases sperm may be found in the urine following the orgasm or masturbation.

1.2.1.11 Some General Factors

Obstruction of the epididymis or vas deferens, may be congenital or acquired secondary to infection or vas ligation. The most common cause for this dysfunction is gonorrhoea.

The nerve supply of the male pelvis is such that processes of erection and orgasm require different innervation than those involved in ejaculation. For this reason, such events as spinal cord injury, prostate surgery and the use of certain medications, may have differing effects on male reproductive capacity.

Chronic debilitating diseases, malnutrition or heavy smoking reduce spermatogenesis. Alcohol inhibits spermatogenesis either by suppressing Leydig cell synthesis of testosterone or possibly by suppressing gonadotropin levels.

1.2.1.12 Male Infertility Reasons in Kerala

Main reasons for male infertility in percentage:

<table>
<thead>
<tr>
<th>No.</th>
<th>Reasons for male fertility</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Abnormalities in sperms</td>
<td>35%</td>
</tr>
<tr>
<td>2.</td>
<td>The blockade of the blood vassal of varicose and testicles</td>
<td>30%</td>
</tr>
<tr>
<td>3.</td>
<td>Sexual imbalance and infections</td>
<td>10%</td>
</tr>
<tr>
<td>4.</td>
<td>Damages happened to the thyroid and adrenal glance and variations in the hormone</td>
<td>25%</td>
</tr>
<tr>
<td>5.</td>
<td>Unknown reasons</td>
<td>7%</td>
</tr>
<tr>
<td>6.</td>
<td>Genetical disorder</td>
<td>4%</td>
</tr>
<tr>
<td>7.</td>
<td>Different diseases and use of medicines</td>
<td>2%</td>
</tr>
<tr>
<td>8.</td>
<td>Other reasons</td>
<td>7%</td>
</tr>
</tbody>
</table>
1.2.2 Female Infertility

Infertility problems may be because of either male or female problems or combined. However, the most common problem of female infertility is ovulation problem, tubal blockage, age related factors, uterine problems, sexual disorder and other unknown causes. With the advancement of medical sciences, today, about 85% of causes of infertility can be taken care of using appropriate surgical and medical intervention. Factors which may result in female infertility include:

Failure to ovulate on a regular basis, if at all; obstruction of the fallopian tubes, preventing conception; abnormalities of the uterine cavity or cervix, preventing satisfactory implantation and or maintenance of pregnancy to the point of foetal viability; abnormal cervical mucus, preventing penetration by sperm; and various anomalies involving absence of the ovaries, uterus, cervix, or vagina.

1.2.2.1 Absence of Regular Ovulation

Absence of regular ovulation may accompany various conditions such as emotional stress that related to a change in environment, crisis in interpersonal relationship or pressure to assume a role for which the individual is unprepared, may result in cessation of ovulation and regular menses. “Ovulatory dysfunction accounts for approximately 25% of infertility. Although ovulation can be affected many conditions… the three most common are excessive weight loss or gain, excessive exercise and extreme emotional stress.”

53 Cfr. ibid. 61.
Ovulation disorders occur when disruption in the part of the brain that regulates ovulation causes low levels of luteinizing hormone (LH) and follicle-stimulating hormone (FSH). Even slight irregularities in the hormone system can prevent the ovaries from releasing the eggs, i.e., anovulation.

The ovarian activity is totally dependent on the gonadotropins and the normal secretion of gonadotropins depends on the release of GnRH from hypothalamus. Ovarian dysfunction is likely to be linked with disturbed hypothalamo-pituitary-ovarian axis either primary or secondary from thyroid or adrenal dysfunction. Thus, the disturbance may result not only in anovulation but may also produce oligomenorrhoea. As there is no ovulation, there is no corpus luteum formation. In the absence of progesterone, there is no secretory endometrium in the second half of the cycle. The other features of ovulation are absent.

1.2.2.2 Peritoneal Factors

Peritoneal factors including tubal disease and endometriosis, account for approximately 30 to 40% of reported infertility. They are fairly evenly distributed among the population and are not restricted to any socioeconomic group. Endometriosis “occurs when the uterine tissue implants and grows outside of

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58 Cfr. *Ibid. 58.*
the uterus, often affecting the function of the ovaries, uterus and fallopian tubes. This can lead to scaring and inflammation. Pelvic pain and infertility are common in women with endometriosis.” Premenstrual spotting, dysmenorrhea and dyspareunia are all associated with endometriosis.

1.2.2.3 Polycystic Ovary Syndrome

One of the common causes of infertility is polycystic ovarian syndrome (PCOS), a hormone imbalance condition that affects ovulation as well as other body systems. It’s the most common endocrine problem in all women of reproductive age affecting between 5 to 10% of women during their childbearing years. Women with PCOS either don’t ovulate or ovulate infrequently. A considerable number of women with PCOS are overweight.

PCOS results from too much hormone production, which affects ovulation. Ovaries may not release an egg regularly or may not release a viable healthy egg. Among women who have PCOS, even when a healthy egg is released and fertilised, the uterus may not be receptive to implantation of a fertilised egg.

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62 Oligomenorrhea is a condition in which you have infrequent menstrual periods. It occurs in women of childbearing age. Some variation in menstruation is normal, but a woman who regularly goes more than 35 days without menstruating may be diagnosed with oligomenorrhea.
63 The corpus luteum is a temporary endocrine structure involved in ovulation and early pregnancy. During ovulation, the primary follicle forms the secondary follicle and subsequently the mature vesicular follicle. At ovulation the follicle ruptures expelling the ovum into the fallopian tube.
66 A. RUHI-LOPEZ- C. SANTAMARIA, The Infertility Companion For Catholics…, cit., 5.
This disorder is characterised by a hormonal pattern of low levels of follicle stimulating hormone (FSH), elevated levels of luteinizing hormone (LH), and relatively elevated levels of estrogen. The estrogen inhibits FSH secretion thus preventing proper growth of a follicle to the point of ovulation. Instead the ovary contains multiple cystic follicles. LH stimulates the ovarian stroma to make estrogen or its precursors and thus a vicious cycle is established.

1.2.2.4. Elevated Prolactin

Hyperprolactinemia is the situation in which the hormone prolactin level is highly increasing. This increasing stimulates breast milk production. This may affect ovulation in women who aren’t pregnant or nursing. Prolactin, a hormone involved in the production and release of breast milk, is elevated in nursing mothers. Occasionally a non-nursing woman attempting conception will have an elevated prolactin level. When sufficiently elevated, prolactin blocks ovulation and can indicate a tiny tumour on the pituitary gland.

1.2.2.5. Early Menopause

Early menopause is defined as the absence of menstruation and the early depletion of ovarian follicles before age 40. Certain conditions are associated with early menopause, including immune system diseases, radiation or chemotherapy treatment and smoking. Ovarian failure occurs normally at menopause. If it happens before the age of forty, it is premature menopause.

69 A. RUHI- LOPEZ- C. SANTAMARIA, The Infertility Companion For Catholics…, cit., 5.
70 R.N. SHAIN - C. J. PAUERSTEIN, (eds.), Fertility Control…, cit., 58.
1.2.2.6. Fallopian Tube Damage or Blockage

It usually results from the inflammation of the fallopian tube. Tubal damage may result in pregnancy in which the fertilised egg is unable to make its way through the fallopian tube to implant in the uterus. That is, it is in the ovaries that the eggs mature and from the ovaries that the eggs are released to pass down the tubes. The two fallopian tubes extend from the ovaries to the uterus. Inside they are lined with thousands of small, delicate hairs which push the egg and the sperm - the sperm, of course, going in the opposite direction to the egg from the cervix and up the tube. The most common cause of tubal damage is PID (pelvic inflammatory disease). Micro-organisms enter the pelvic region inflaming the tubes and also damaging the ovaries and the opening of the oviducts with their delicate fimbria (fringe of finger like projections) by scarring and blockage. PID is connected with a variety of factors such as; sexually transmitted disease, insertion of IUD contraceptive, abortion, childbirth, surgery, circumcision, appendicitis, ectopic pregnancy, use of a tube into the uterus to withdraw fluid, etc. often the fallopian tubes are totally closed, preventing access even to the microscopic sperm. Under some conditions, eggs cannot leave the ovaries nor be surgically extracted.

1.2.2.7. Uterine Fibroids

Uterine fibroids are basically benign tumours in the wall of the uterus, common in women in their thirties and forties. Rarely, they may cause infertility by blocking the fallopian tubes. Fibroids interfere with proper implantation of the fertilized egg. “Uterine problems which may result in some degree of infertility include: fibroid tumours which project into uterine cavity; scarring from previous uterine surgery such as dilatation and curettage for therapeutic, or criminal, abortion; and fusion anomalies of the uterus, forming partitions of varying lengths down the centre of the cavity.” Infertility is caused by uterine factors approximately in 5% of cases. There are certain uterine anomalies, the most common of which is a T-shaped uterus. Such abnormalities are associated with foetal wastage and increased frequency of obstetric problems.

1.2.2.8. Pelvic Adhesions

They occur when bands of scar tissue bind organs after pelvic infection, appendicitis or abdominal or pelvic surgery. This scar tissue formation may damage fertility.

1.2.2.10 Cervical Factors

Cervical factors are implicated in no more than 5 to 10% of infertility. In order the conception to take place the spermatozoa must pass through the cervix and it is important to determine if cervical factors are present. “Inadequate cervical
mucus and/or cervical stenosis reduce sperm viability and may follow overzealous procedures such as cryosurgery, cautery and cone biopsy… patients must also be questioned regarding a chronic vaginal discharge or spotting, which may represent chronic cervicitis.”

Cervical incompetence may result in inability to carry a pregnancy to the point of foetal viability. In this condition, the fibres of the cervix have become weakened, usually by previous trauma, so that dilatation or opening occurs when the uterine contents become heavy enough to exert pressure. “Cervical mucus is an essential factor in normal sperm transport. Its consistency may be altered by chronic infection, or by lack of response of the glands to usual hormonal stimulation. In either case the mucus may be impenetrable to sperm during the periovulatory period and thus a cause of infertility.”

1.2.2.11 Luteal Phase Defect (LPD)

In this condition there is inadequate growth and function of the corpus luteum. There is inadequate progesterone secretion. The life span of corpus luteum is shortened to less than 10 days. As a result, there is inadequate secretory changes in the endometrium which hinder implantation.

86 Ibid. 59.
88 Folliculogenesis is the maturation of the ovarian follicle, a densely packed shell of somatic cells that contains an immature oocyte. Folliculogenesis describes the progression of a number of small primordial follicles into large preovulatory follicles that occurs in part during the menstrual cycle.
LPD is due to defective folliculogenesis which again may be due to varied reasons. Drug induced ovulation, decreased level of FSH or LH, elevated prolactin, subclinical hypothyroidism, older women, pelvic endometriosis, dysfunctional uterine bleeding are the important causes.

1.2.2.12 Immunological Problems

Reproductive immunology is a relatively new, controversial, and rapidly expanding sub emphasis in the field of infertility. Immunological infertility may involve specific antibodies that are generated to oppose antigens in the sperm or in the developing embryo itself.

The body’s immune system generally protects against invading bacteria, viruses and other threats to the normal balance. But some women make antibodies that attack not only their own tissue (autoimmune diseases) but also tissue contain the father’s genetic material, such as sperm and embryo, which the woman’s body recognises as foreign and thus as a threat. Antibodies can destroy these foreign cells or can disrupt the blood supply to the embryo, resulting in recurrent pregnancy loss.

1.2.2.13 Female Infertility Causes in Kerala

The main reasons for female infertility given in the Vanitha magazine, given in percentage are as follows:

91 Ibid.
92 Cfr. V. R. JYOTHY “The Infertility is on Hike” in Vanitha..., cit., 10.
<table>
<thead>
<tr>
<th>No.</th>
<th>Reasons for female infertility</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Endometriosis</td>
<td>30%</td>
</tr>
<tr>
<td>2.</td>
<td>Polycystic ovarian diseases which causes anovulation and causes increase in the hormone prolactin. Such women will have milk in the breast without even giving birth.</td>
<td>30%</td>
</tr>
<tr>
<td>3.</td>
<td>Swelling in the uterus and ovaries, due to this the fallopian tubes and uterus get stuck together, not permitting the ovum to pass through.</td>
<td>10%</td>
</tr>
<tr>
<td>4.</td>
<td>Tubal blocks due to abortion, infections and sexual diseases (due to extra marital sexual relations) block the fallopian tubes so that the sperm cannot reach the ovum.</td>
<td>8%</td>
</tr>
<tr>
<td>5.</td>
<td>Hostile cervical mucus (it is the cervical mucus that helps the sperm to move towards ovum, when the mucus is too thick or too thin and when the mucus has chemical reactions, it destroy the sperm).</td>
<td>6%</td>
</tr>
<tr>
<td>6.</td>
<td>Sexual relation not performed at the right time and right way.</td>
<td>4%</td>
</tr>
<tr>
<td>7.</td>
<td>Genetical disorder.</td>
<td>2%</td>
</tr>
<tr>
<td>8.</td>
<td>Due to diseases and consumption of medicines</td>
<td>1%</td>
</tr>
<tr>
<td>9.</td>
<td>Unknown reasons.</td>
<td>5%</td>
</tr>
<tr>
<td>10.</td>
<td>Other reasons.</td>
<td>4%</td>
</tr>
</tbody>
</table>
1.3 Combined Factors

These include the presence of factors both in the male and female partners causing infertility.

One of the general factors is advanced age of the couples. For female ageing beyond 35 years is a possibility for becoming infertile because the quality of the ova produced become poor as getting old. But in male, spermatogenesis continues throughout life, although getting old reduces the fertility. Infrequent intercourse, lack of knowledge of coital technique and timing of coitus to utilise the fertile period are very much common even amongst the literate couples. Anxiety, apprehension and immunological factors also lead to infertility. The lubricants which is used during intercourse can be spermicidal and can lead to infertility. The most common sexual dysfunction is dyspareunia. Dyspareunia is the situation in which the coital becomes difficult or painful. Apareunia is the inability to practice coitus. These two are most often interchangeable.

1.4 Risk Factors

There are various risk factors that cause directly infertility or diminishing the ability of normal coital act. In Kerala, the present day life situations and life styles are very much influencing the risk factors. Possibly, these risk factors determine infertility. Some of them are described here.

1.4.1 Smoking

Studies explain that “infertility increases significantly with an increase in the number of cigarettes smoked per day, particularly

94 Cfr Ibid 543.
95 M. M. SEIBEL, (et.al), eds. Technology and Infertility..., cit., 15.
when the consumption is more than 16 cigarettes. Fecundity decreases directly with the number of cigarettes smoked.” Cigarette smoking also may affect male reproduction, reducing sperm density by 22% on average. Women who smoke are also at increased risk of menstrual abnormalities and early menopause.

1.4.2 Age

There is a growing tendency to delay the childbearing over the last decades. Various reasons for this fact are improved methods of birth control, increased number of women in the work force and the choice by more people to delay marriage. “Even in couples with prolonged unexplained infertility, the age of the woman has been found to be a prognostic factor... older women experience a progressive increase in the risk of spontaneous abortion.” Male fecundity is also reduced with advancing age.

1.4.3 Alcoholism

“It is very possible that an alcoholic develops some psychosexual problems such as impotency (men) and frigidity (women). Physical relationship is very difficult for an alcoholic.” Alcoholism really affects the sperm production in men. Fr. Jose Alencherry writes,

Alcohol slows down the functions of testes in men, their capability of reproduction diminishes. Alcohol can damage the testes temporarily or permanently making the alcoholic impotent or even sterile and it affects his male appearance as well. This situation is aggravated when alcoholism is coupled with problem smoking. It will be difficult for such people to have children.

96 Cfr. Ibid. 97 Cfr. Ibid. 98 Ibid. 15.
99 Cfr. Ibid.
100 J. ALENCHERRY, Alcoholism And The Family, Cana, Thuruthy, 2007, 86.
101 Ibid p.
1.4.4 Other Factors

According to the survey conducted by V. R. Jyothy, conducted on the basis of age, occupation, educational qualifications, life environment, food habits and sexual life, brought out the reasons for infertility among men in Kerala. The reasons for this phenomenon as surveyed are pressures of modern life, pollution, the use of electromagnetic devices, smoking and consumption of alcohol. The testicles of men are fixed outside the body since it cannot even cope up with the body temperature for its functions because it contains very minute and tender cells, if it is exposed to extreme heat or radiation there is all chances of its being destroyed. Most men who come for treatment are found those working in the environment of heat and radiation. Thus, those working in gulf countries, hotels and bakeries, far distance drives, those who work in the furnaces are most among who seek infertility treatment. Users of computer and mobile phone, hi-tech workers are coming treatment in cities like Kochi.

1.5 Population in Kerala

Kerala, a south-western state in India, has caught the imagination of social scientists world over in recent times as a demographic exception or a paradox. In 2001, the state had a total population of 31.8 million, which was 3.1% of the population of India. During the 1950s, the population growth rate in Kerala was one of the highest in India. However, by the 1970s, it began to fall significantly and subsequently became the lowest among the Indian states. During 1981-1991, the growth rate dropped to 14.3% and in the next decade, it dropped further to 9.4% whereas the corresponding figures for India were 23.9% and 21.3%. By 2006, Kerala had the lowest birth rate (around
14.7 per 1,000), the lowest death rate (around 6.8 per 1,000), the lowest infant mortality (13 per 1,000 live births), and the highest life-expectancy at birth (73 years), and the highest literacy rate (91%) in India. It attained replacement fertility level (total fertility rate = 2.1) in around 1987 and is currently experiencing sub replacement fertility level. Thus, among the major states in India, Kerala has pioneered in completing the demographic transition during the last quarter of the 20th century.

1.6 ARTs Clinics in Kerala

In the present world, infertility becomes a severe painful situation for the human being. Fifteen out of hundred couples are facing the problem of infertility at present in the world. There are more than twenty million infertile couples in India. The number is alarmingly increasing and the WHO predicts that by the year 2020, one among the five males will be infertile. Another study predicts that infertility will be increasing by five more percentage.

The number of ART clinics are increasing in Kerala. In 2000, there were only four or five IVF clinics. But today there are more than 40 IVF speciality centres in Kerala. More than that, infertility treatments are provided in the major hospitals in Kerala. And almost all the ART treatments are available in these hospitals too. Interesting fact is that the international ART clinics such as Bourn Hall clinic and Kinder Fertility centre, started their branches in this very small state in South India. Ayurvedic speciality centre for treating infertility is also available in Kerala.

Conclusion

In this chapter, we were trying to analyse the term infertility, its definition and causes. Having no children is a situation in which infertile couples have different social, psychological and even interpersonal relationship problems. Physical challenges and various risk factors lead to the phenomenon of infertility. Knowing these reasons are necessary in order to treat the deficiency and thereby to overcome the problem. The risk factors are explained in the context of Kerala. Instead of knowing the reasons and opting for treatments, many infertile couples opt for ARTs, so that they may have a child by any means. The next chapter is an attempt to explain the various artificial technologies available in Kerala.

105 Cfr. Ibid 22.
Chapter II
INFERTILITY CLINICS IN KERALA

Introduction

The problem of infertility is a great suffering and couples who experience this pain, is in search of consolation. On the threshold of this pain, these couples think of any means, without considering its moral or faith aspects, they opt for treatments and ready to get a child at any cost. This tendency has given birth to various super speciality infertility clinics. The technological developments in the field of artificial reproduction also have its impact in Kerala, as a result many infertility speciality clinics are born here. “Today we hear a lot about infertility management clinics, assisted reproduction, technological reproduction, artificial reproduction etc. cashing in on the desire of the desperate couples infertility management clinics are mushrooming, offering different methods to overcome sterility, often exaggerating their success and charging enormous fees.”106 In this chapter, we are going to analyse some of the most common ARTs available in Kerala and the reasons for increasing tendency of artificial clinics.

107 Cfr Ibid.
2.1 Shift in the Understanding of Sexuality

In catholic tradition, sexuality is essentially linked to reproduction. But the sexual revolution in the 1960’s upholds sexuality is pure energy. According to them, in order to live a meaningful life, we have to be liberated from all the blocks that repress one’s sexuality. For them, marriage bond is a restriction to one’s sexuality, one should be free from unwanted pregnancies and they uphold the spontaneous use of sexuality.

But with the introduction of contraceptives sexuality and reproduction have been bifurcated. By using contraceptive techniques, the couples make decisions about how to relate sexuality and procreation. This separation can be seen in the use of artificial reproductive techniques. At the peak of their suffering, infertile couples tend to find relief from this suffering. They think of any sort of means even turn to ARTs to get out this great suffering experience. This tendency of infertile couples, also give births to various super speciality clinics for infertility treatment.

Medical technology has developed various techniques to overcome many causes of sterility where it cannot be treated by normal medical procedures. Many people who face infertility are inclined to adopt the methods of reproductive techniques as a substitute for normal reproduction of children. It is probably

110 Ibid. 66.
natural to desire for a child of one’s but the real question is a child of one’s own at what price. More and more people seem to think that if the suffering caused by infertility can be relieved, and if children are not harmed, then high-tech reproductive medicine is a good thing. While adopting these techniques to overcome sterility they are more attracted by their effectiveness and not much bothered about the moral issues involved in it.

Kerala is a small state in India, having high literacy rate and well established life situations. There are only 14 districts in this state but there are 27 infertility speciality clinics in 2015. These numbers include the clinics which are working here for long period and also the recently opened clinics. There are also attempts for opening new clinics. There exist a competition among these clinics. The various advertisement in hoardings and in the media are attracting the infertile couples.

2.2 What is ART?
ART has become a very effective and attractive means to overcome infertility faced by thousands of married couples and infertility is a real crisis for a large number of couples in their marital life. The Centers for Disease Control and Prevention (CDC) defines ART as, “all fertility treatments in which both egg and sperm are extracted.” In general, ART procedures

110 Ibid. 66.
113 A. RUHI- LOPEZ- C. SANTAMARIA, The Infertility Companion for Catholics…, cit., 25.
involve surgically removing eggs from a woman’s ovaries, combining them with sperm in the laboratory, and returning them to the woman’s body or donating them to another woman.

ART does not include treatments in which only sperm are extracted and inserted into a woman’s uterine cavity or into the genital tract for conception to occur within the woman. ART does not include procedures in which a woman takes medicine to stimulate egg production without the intention of having eggs retrieved.

ART encompasses all the procedures that involve manipulation of gametes and embryos outside the body for the treatment of infertility. There are different methods of assisted reproduction, different from each other in complexity. Still, “these techniques have a common characteristic, namely the separation of the reproduction of a child from the conjugal act of the couple. Marital act is substituted by a medical procedure. That means where normal coital reproduction is impossible these techniques facilitate non-coital reproduction.”

2.3 The Available Techniques for the Infertility Treatment

Fertilization naturally occurs when male sperm are introduced into a woman’s body through an act of sexual intercourse, and one of the sperm succeeds in penetrating the woman’s ovum and fertilizing it. Artificial fertilization means that male sperm are not united with the female ovum through an act of sexual intercourse, but by some other means.

114 Cfr. Ibid.
2.3.1 Artificial Insemination

Artificial insemination (AI) is the deliberate introduction of sperm into a female’s uterus or cervix for the purpose of achieving a pregnancy through in vivo fertilization by means other than sexual intercourse. Different methods of artificial insemination are IUI and fallopian tube sperm perfusion.

2.3.1.1 Intrauterine Insemination (IUI)

IUI seems to be the starting point of treatments offered by the most mainstream doctors dealing with infertility. IUI is an infertility treatment in which the woman is injected with specially prepared, washed sperm. This technique is a substitute for the normal conjugal act of the couple where the sperm is directly deposited in the genital tract of the wife. In this process the sperm of the husband or donor is introduced into the genital tract of the wife through certain medical aids at the time of ovulation. This will lead to conception. Sperm is injected through a polyethylene catheter within the uterine cavity around the time of ovulation. The indications of IUI are hostile cervical mucus, cervical stenosis, oligospermia (Oligospermia is a male fertility issue defined as a low sperm concentration in the ejaculate) or asthenospermia (asthenospermia is the medical term for reduced sperm motility), immune factors in male and female, impotency or hypospadias of male and unexplained reasons.

122 Cfr. Ibid, 239.
The purpose of IUI is to bypass the endo-cervical canal which is abnormal and to place increased concentration of motile sperm as close to the fallopian tubes. This procedure is often used to treat mild male factor infertility and couples with unexplained infertility. This procedure is opted where the couple cannot have the normal conjugal act because of physical disability in or in cases where there is low sperm count, lower mobility rate, destruction of sperms in the vagina due to certain antibodies, obstruction of the passage of the sperm in vaginal tract etc. The most important factor in intra-uterinal insemination is that even though certain technological aids are used, fertilization takes place within the body, *in vivo*.

IUI may be either AIH (artificial insemination husband) or AID (artificial insemination donor). AIH is also called homologous artificial insemination and AID is called heterologous artificial insemination. In artificial insemination, normally AIH is used, that is husband’s semen is commonly used. In this method, husband’s sperm is injected into the genital tract for conception within the woman’s body. “The essential requirement is that the act of intercourse must be carried through normally. Regrettably the usual instruction to patients is to produce a masturbation specimen, and that is always wrong.”

Today AIH involves washing the sperm in a laboratory procedure to remove antibodies to capacitate the sperm for fertilizing the ovum. With the ability to freeze and store sperm (cryopreservation of the sperm), AIH is also used today to help even a widow to conceive a child by her own husband’s sperm after his death. The overall pregnancy rate is 20.
In AID, the sperm from a donor and not from the husband of the woman, is used and to insert into the woman’s genital tract instead of the uterine cavity. In this case, the donor should be healthy and should be serologically and bacteriologically free from venereal diseases including AIDS and hepatitis. Normally this process is chosen when there is no sperm production in the husband, the quality of the sperm is very poor, or when the husband is a carrier of certain hereditary disorder. AID undermines the need for marriage relation, to have a permanent partner even either heterosexual or lesbian to have and rear a child. Because of the danger that the sperm provided by the donor may carry the HIV and thus threaten the woman and the child with AIDS, today most doctors engaging in AID, use only frozen sperm banks which have quarantined the samples long enough to test for HIV. “The pregnancy rate with AID is about 66 per cent when fresh semen is used and about 41 per cent with frozen semen. This high success rate is to be explained by the fact that usually neither the donors nor the women involved are subfertile or infertile.”

125 Cfr. H. KONAR, D. C. Dutta’s Textbook of Gynaecology…, cit., 239.
128 W. MAY, Catholic Bioethics and the Gift of Human Life, Our Sunday Visitor, Huntington, 2000, 89.
133 Cfr. Ibid
2.3.1.2 Fallopian Tube Sperm Perfusion

In this treatment, large volume of washed and processed sperm is injected within the uterine cavity around the time of ovulation. This causes perfusion of the fallopian tubes with spermatozoa. Fallopian tube sperm perfusion (FSP) which is based on a pressure injection of 4 ml of sperm suspension while attempting to seal the cervix to prevent semen reflux. This technique ensures the presence of higher sperm density in the fallopian tubes at the time of ovulation than standard IUI. “FSP is in short a combination of ovarian hyper stimulation, ovulation induction and intrauterine and intra fallopian tube insemination using a sperm suspension of 4 ml volume.”

2.3.2 In-Vitro Fertilization

IVF became a reality on 25th July 1978 by the birth of the first test tube baby, Louis Brown. In IVF, the male sperm and female ova are placed in a petri dish, small glass dish, with subsequent fusion of sperm and ovum. IVF is one of the most common approaches for achieving pregnancy when facing infertility. IVF is the foundational ART procedure, which involves a process of three stages: ovulation, retrieval and transfer. Ovulation is either induction with medication or monitoring the process of natural ovulation. Sperm density and motility are the two most important criteria for successful IVF.

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135 Cfr. H. Konar, D. C. Dutta’s Textbook of Gynaecology…, cit., 239.
136 H. Konar, D. C. Dutta’s Textbook of Gynaecology…, cit., 239.
137 S. Kanniyakonil, Bioethical Issues a Catholic Moral Analysis…, Cit., 163.
139 S. L. Glahn - W. R. Cutrer, The Infertility Companion…, cit., 151.
Firstly, IVF refers to the joining of female egg and male sperm, outside the woman’s living body, which is known as external fertilization. They are joined in a culture medium in a glass or in a petri dish. After the fertilization, some of the embryos are transferred to the woman’s uterus, where it is hoped that implantation will take place, followed by a natural pregnancy.

In IVF, the woman is usually treated with hormones to alter her natural cycle and stimulate her ovaries to produce a number of eggs. The eggs or ova are extracted with a needle inserted either through the vagina or abdomen using an ultrasound as a guide. Ova are then joined in a laboratory with a carefully washed specimen of semen to allow fertilization. Prior to implantation in the woman’s uterus, embryos are examined in order to select the “best” ones. Usually at least two embryos are implanted and sometimes more with the hope of getting at least one live baby. Overall success rates in terms having living child using IVF range from 16 to 20 percent.

IVF is mainly a way of overcoming female infertility and may be offered under the following circumstances: blockage or malfunction of the fallopian tubes (often the women suffering from this condition have already undergone unsuccessful surgery with a view to correcting the tubal damage), when for some reason both fallopian tubes have been removed, in the case of defective entry of sperm into the uterus or the tubes, either due to: (i) abnormal structure of the cervix (the neck of the womb) or the uterus, or to (ii) the presence of antibodies in the cervical mucus.

141 A. DYSON, *The Ethics of IVF*…, cit., xi-xii.
Couples suffering from unexplained infertility may also be offered IVF. Interestingly enough, however, it has been observed that many such couples conceive while they are awaiting treatment. In addition, in the future, single or lesbian women might seek IVF treatment with a view to achieving pregnancy without sexual contact with a man. There are two types of IVF. It can be either homologous or heterologous.

2.3.2.1 Homologous IVF

In IVF homologous, the sperm and the ovum come from the husband and wife and therefore it is called homologous IVF. Initially homologous IVF was used almost exclusively for wives whose fallopian tubes had been damaged, to enable them and their husbands to have children of their own. But now this procedure has been extended to include male factor infertility and other cases in which no precise cause for the couple’s infertility has been determined. “It is now increasingly possible, to help a married couple avoid conceiving a child who could be affected by a genetically inherited pathology. So anyone who is afflicted by any disease, may now choose to conceive the child in vitro, fertilizing the wife’s ovum with sperm provided by her husband.”

2.3.2.2 Heterologous IVF

According to the nature of the this process, it is called heterologous IVF, as to when couples seek to have children through borrowing sperm, ovum or even embryo from donors to have fertilization, it is called heterologous IVF. In heterologous

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IVF, couples borrow sperm or ovum or even embryo from donors. For instance, when the husband is sterile because of azoospermia or has gone genetic disorder that would cause a risk to progeny, donor sperm is suggested. If the wife lacks ovaries due to surgical removal or because she is suffering from ovarian failure then donor eggs are sought. If both partners are facing situation mentioned above they have to think about borrowing either the gametes or embryos from others.

2.3.2.3 Embryo Transfer

Embryo transfer is part of IVF. The fertilized ova at the 6-8 stage are placed into the uterine cavity close to the fundus about three days after fertilization through a fine flexible soft catheter. Not more than three embryos are transferred per cycle to minimise multiple pregnancy. The process of transfer should be accurate. Small volume transfer using soft catheter under ultrasound guidance gives the best result. “The number of embryos to be transferred depends mainly on maternal age and the embryo quality… excess embryos are cryopreserved for future use… there is increased risk of miscarriage (18%), multiple pregnancy (31%), low birth weight baby and prematurity.”

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144 W. MAY, *Catholic Bioethics and the Gift of Human Life…*, cit., 75.
2.3.3 Zygote Intra Fallopian Transfer

In ZIFT, eggs and sperm are combined as in IVF, but the embryos are immediately transferred to the woman’s fallopian tubes without first being examined in a petri dish. It is also known as pronuclear stage transfer (PROST). The placement of the zygote, following one day of IVF, into the fallopian tube can be done either through the abdominal by laparoscope or through the uterine ostium (the ostium of the uterine tube may refer to the proximal or distal opening of the tube also called the Fallopian tube. The proximal tubal opening (ostium) is located within the uterus at the uterotubal junction and accessible via hysteroscopy) under ultrasonic guidance. This technique is a suitable alternative of GIFT when defect lies in the male factor or in cases if failed GIFT. Results (29-30%), are similar to that of IVF. GIFT or ZIFT is avoided when tubal factors for infertility are present. The risk of ectopic pregnancy is high for GIFT and ZIFT compared to IVF.

2.3.4. Pronuclear Tubal Transfer (PROST) and Tubal Embryo Transfer (TEST)

Both procedures involve embryo transfer to the fallopian tubes. They developed as modifications of GIFT in order to establish whether fertilisation has actually occurred. In PROST the transfer of embryos to the fallopian tube takes place soon after fertilisation, before the first cell-division. (By ‘fertilisation’ is here meant penetration of the ovum by a sperm.) The retrieval of ova and the transfer of embryos are coordinated to take place one day after the other.
In TEST the embryos are transferred at a later stage when they consist of a few cells, and so the transfer takes place sometime after the retrieval of ova. The embryos may even be frozen, allowing a further lapse of time between the retrieval of ova and the transfer of the embryo. Because there is no need to coordinate retrieval of ova and embryo transfer, TEST is more suitable than PROST in situations of ovum donation.

2.3.5 Intracytoplasmic Sperm Injection (ICSI)

ICSI has been in use for the successful treatment of male factor infertility for the last two decades. The technique involves the direct injection of a single immobilised spermatozoon into the cytoplasm of a mature oocyte. The sperm is obtained either via ejaculation or surgical isolation.

ICSI was first described in 1992. ICSI is an addition to IVF in which eggs and sperm are collected as in IVF but a single sperm is injected into a single egg. The resulting embryo grows in the lab until it reaches the eight to sixteen cell stage and then is implanted in the uterus.157 This technique is called ICSI in which experts use a microscopic instrument to inject a single sperm into an ovum and if successful this leads to fertilization of the ovum. The ova fertilized through this technique, are then transferred to the uterus as in any other IVF procedure.

149 Ibid.
150 Cfr. A. RUHI- LOPEZ- C. SANTAMARIA, The Infertility Companion For Catholics…, cit., 40
152 Cfr. Ibid.
This method is proposed as an appropriate technique to overcome sterility in males who do not produce enough sperm or whose sperm lack mobility or lack the capacity to penetrate the outer wall of the ovum to cause conception. Severe oligosper-mia, asthenospermia, teratospermia, presence of sperm antibod-ies, obstruction of male duct system, congenital absence of vas, failure of fertilization in IVF and unexplained infertility are the situations in which ICSI is proposed.

Sperm is recovered from the ejaculate. Otherwise sperm is retrieved by testicular sperm extraction (TESA) or by micro-surgical epididymal sperm aspiration (MESA) procedures. ICSI is found to be very effective compared to other micromanipulation methods like sub zonal insemination (SUZI). ICSI is very effective to reduce the need of AID. Fertilization rate is about 60-70 percent. Pregnancy rate is 20-40 percent per embryo transfer.

2.3.6 Surrogacy

Surrogacy is when an embryo is surgically implanted into a woman’s uterus. The woman is either genetically a stranger to the embryo or has contributed the donation of her own ovum, fertilized through insemination with the sperm of a man other than her husband. She carries the pregnancy with a pledge with to surrender the baby once it is born.161 Sometimes a woman

154 Cfr. Ibid.
156 Cfr. Ibid, 130.
other than the wife will carry the baby through the pregnancy and delivery and surrender it when it is born. In some cases, “the new zygote is transplanted into her womb (the baby has the genetic material from its father and mother, not from the surrogate); or the surrogate is fertilized by the husband’s semen (she is also therefore the genetic mother); or the ovum and sperm might come from unconnected ‘donors’ (the baby would have no genetic inheritance from the husband or wife or the surrogate).”

Congregation for the doctrine of faith (CDF) defines two types of surrogate motherhood. In one “the woman carries in pregnancy an embryo to whose procreation she has contributed the donation of her own ovum, fertilized through insemination with the sperm of a man other than her husband. She carries the pregnancy with a pledge to surrender the child once it is born to the party who commissioned or made the agreement for the pregnancy.” In the second type, “the woman is genetically a stranger to the embryo because it has been obtained through the union of gametes of ‘donor’. She carries the pregnancy with a pledge to surrender the child once it is born to the party who commissioned or made the agreement for the pregnancy.”

A woman without a functional uterus (developmental or hysterectomy), can have her genetic offspring with the help of ART. Embryos are transferred to the uterus of another woman who is willing to carry the pregnancy on behalf of the infertile

160 Cfr. Ibid.
162 Cfr. H. P. DUNN, Ethics for Doctors, Nurses and Patients…, cit., 127-128.
163 DV II, 3.
couple. Surrogate motherhood has strong risks. Apart from the mother deciding to keep the baby, abnormal babies have sometimes become nobody’s children, abandoned by the parents and the surrogate mother.

2.3.7 Gamete Intrafallopian Transfer (GIFT)

This is similar to IVF, that the fertilization takes place outside the woman. On this process, the woman’s ovaries are hyper stimulated (to produce multiple eggs) and the eggs are retrieved, after which they are placed in catheter with sperm with an air bubble separating the sperm and egg.

An egg or group of eggs are placed into a catheter with sperm (provided either by masturbation or by the use of a perforated condom during intercourse), that have been treated and capacitated, with an air bubble separating ova from sperm to prevent fertilization from occurring outside the woman’s body. In GIFT the retrieval of ova and the transfer of ova and sperm to the fallopian tube are performed during the same operation by means of the laparoscopic technique, a procedure involving general anaesthesia. Occasionally, the ova may be retrieved either by a combination of laparoscopy and the ultrasound needling technique. The catheter is then inserted into her fallopian tube, the ovum or ova and sperm arte released from the catheter, and fertilization can then occur within the body of the woman, who can, of course, be the wife of the man whose sperm are used and who could have provided the ovum or ova.

164 Ibid.
166 Cfr. A. DYSON, The Ethics of IVF…, cit.,
GIFT is a more invasive and expensive procedure than IVF but the result seems better than IVF. In this procedure, both the sperm and the unfertilized oocytes are transferred into the fallopian tubes. Fertilization is then achieved in vivo. The prerequisite for GIFT procedure is to have normal uterine tubes. Couples with unexplained infertility problems, husbands whose mobility rate of sperm is low, women with endometriosis or lock in the fallopian tube etc. have this technique recommended to them by the physician.

2.3.8 Low Tubal Ovum Transfer

This is another technique of ART. This procedure, originally designed for women whose infertility was caused by blocked, damaged, diseased fallopian tubes, relocates her ovum, bypassing and circumventing the area of tubal pathology in order to place the ovum into the fallopian tube below the point of damage, disease or blockage so that her own husband’s sperm, introduced into her body by the marital act, can then effect fertilization. It is called low tubal ovum transfer (LTOT), because ordinarily the ovum is relocated in the lower part of the fallopian tube (or at times in the uterus itself).

This procedure evidently removes an obstacle preventing conception from occurring after the marital act has taken place or provides the conditions necessary if the marital act is to be fruitful. All the procedure does is to relocate the wife’s ovum

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174 Cfr. *Ibid*
within her body prior to the marital act. The sperm that fertilize the ovum are introduced into her body directly as a result of the marital act. All those who have addressed this technique agree that LTOT is a morally legitimate way of assisting the marital act because first of all it is only a medical operation and secondly it does not exclude the conjugal act.

2.3.9 Embryo Adoption

Embryo adoption refers to having an abandoned embryo transferred to the uterus of a woman willing to gestate this child to save his or her life. Embryo adoption involves taking cryopreserved embryos that the genetic parents do not plan to transfer and matching those embryos with an adoptive couple. Couples wishing to pursue embryo adoption can network to find their own donors or go through an agency. Agency embryo adoption involves an intermediating organisation that works to match couples wishing to place their embryos with couples wanting to carry and raise them. Non agency embryo adoption involves either a clinic making placements of embryos they have frozen or donors and recipients connecting independently and working out the details themselves.

The list of reasons for pursuing embryo adoption seems to be identical to reasons for doing other forms of third party reproduction. The couples most likely to pursue embryo adoption frequently oppose using donor gametes. Often their underlying

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175 Cfr. A. RUHI- LOPEZ- C. SANTAMARIA, The Infertility Companion For Catholics…, cit., 41.
177 Cfr. Ibid, 205-206.
motivation is that they value the sanctity of human life, even at the one cell stage. Donating couples also view embryo adoption as a way to save their children’s lives to avoid human wastage of their own offspring. Frozen donor embryo transfers represent a small percentage of ART cycles performed. The success rates for frozen donor embryos are lower than for fresh donor embryo transfers.

2.3.10 Cryopreservation of Embryos

In the IVF technique, normally more embryos are produced than needed to be transferred to the uterus of the mother in the first attempt. The left over embryos are either destroyed or saved for the next attempt if needed. In order to preserve such embryos the process of cryopreservation is used. “Cryopreservation of embryos means preserving an embryo, generally at an embryogenesis stage corresponding to pre-implantation, that is, from the fertilization to the blastocyst stage.” This is a process where the human embryos are frozen and kept till we need them for an embryo transfer.

Usually cryopreservation takes place using the left over embryos from the cycle of IVF. In the case of women failing to conceive, they may again use such embryos for subsequent pregnancy attempts. The advantage is that they need not go through the full IVF cycle. Furthermore, spare embryos may be used for embryo donation to another woman or couple. In addition, couples elect cryopreservation of embryos when they need another child in the future or when these embryos should be used for stem cell research.
Many people store the embryos. Hundreds of thousands of embryos are cryopreserved in fertility clinics all over the world. Moreover, cryopreservation of adult humans take place currently, which means the stabilisation of critically ill patients at ultra-low temperatures to allow resuscitation in the future. There are many ethical questions regarding cryopreservation of embryos. For example, what about embryos used for scientific experimentation, destroyed, IVF or adopted by other couples. Although cryopreservation of embryos may relieve the woman of the cost and physical burden of further egg retrieval, it brings with it several medical, moral and legal issues. Even though embryos can be frozen and preserved for later use, the freezing process of embryo is not that easy. 30-40% of frozen embryos do not survive embryo preservation and difficulties also emerge when the couple do not claim them later due to various reasons.

The technology is improved even to cryopreserve the ovarian tissue. Restoration of reproductive function of a woman undergoing chemotherapy or radiotherapy is possible these days with the help of cryobiology. Cryopreservation of ovarian tissue or transplantation may allow natural pregnancy later on. With this method, ovulation using exogenous gonadotrophins can be achieved. Cryopreservation of biological specimens

182 Ibid. 173-174.
causes complex changes in structure and cellular composition, and no single approach has yet proved to be universally effective.

2.4 Increasing Phenomenon of Infertility Clinics in Kerala

As we have mentioned in the introduction of this chapter, Kerala being a small state in India, is a hub of infertility treatment clinics. The latest technological methods are available for reproducing the children artificially, instead of creation. In the beginning of 2000, there were only 5 ART clinics. “The IVF clinics in Kerala have doubled over the past 5 years. A quick count shows that from 20 IVF clinics in 2012, the numbers have jumped to 41 in 2017.” Fertility specialists said that the reason for this phenomenon is not the increased infertility among couples. They pointed out that the problem was that many were increasingly moving towards infertility situations due to late marriages and delay in conceiving.

There are allopathic clinics as well as Ayurveda treatment clinics for ART in Kerala. These clinics use the most modern technologies for reproducing children and at the same time they exploit the infertile couples without any humanitarian consideration. Though the ART clinics are a blessing to the infertile couples, we have to be serious of the unlawful and illegal tendencies beside these clinics. These clinics have become an area of a big industry which aims only at the profit of crores of rupees.

187 Cfr. Ibid.
2.4.1 Is ART a Treatment?

The Indian Council of Medical Research (ICMR) guidelines points out that the ARTs should not be called as a treatment because in the ART clinics the problem of the infertile couple is not cured instead finding a solution with certain artificial means such as injections, medicines and tablets. After going through the process the woman may conceive a child, but if she wants another child she has to undergo the same procedures.

The title ‘infertility treatment’ is not suitable because the infertility is not cured completely. It also gives the direction to call the experts in ART clinics not as doctors but as clinician. Because normally the doctors try to cure the diseases of patients those who approaches them, but in ART clinics they are aiming at the temporal solution.

2.4.2 Temptations in the Advertisements

The advertisements given by the various infertility clinics are the ways of temptations to the infertile couples, at least to try for a child. Dr. Swati Singh, IVF consultant of Craft Hospital and research centre, Kodungallur said, “Earlier, IVF was considered unnatural as well as financially and morally unacceptable. Now there is much more acceptance and if a couple doesn’t conceive naturally, they are willing to give IVF a try.” Some of the advertisement titles in the hoardings and in the media especially in television and in the websites are very attractive. Some of the titles are like, ‘infertility ends here’, ‘a mother is born’, ‘the couples life is joined again’, ‘life begins’ etc. They give it with beautiful pictures of children and mother so that infertile couples are attracted to it. They also bring beautiful taglines such as, ‘the trusted IVF centre in India’, ‘the capital of
IVF’, ‘the only cleanroom IVF in Asia’, ‘the first international infertility clinic in Kerala’ etc.

Dr. Fessy Louis T., the secretary of ISAR (Indian Society for Assisted Reproduction) Kerala chapter, said “on an average 5000 couples undergo IVF treatment at the above mentioned centres every year and 1000 to 1500 IVF babies are delivered in Kerala.” That means the success rate is almost 20 – 30%. But each clinic argues that their clinics are having the highest success rate. There are clinics who holds that there are 50% success for IVF in their clinics. The scientific study proves these advertisements or big tag lines are not 100% trustworthy. ICMR gives directions to take actions against the unrealistic advertisements and it rates these type of advertisements are only for cheap publicity and they are to be banned.

2.4.3 Exploitations in the Fees

IVF treatment cost carries between Rs. 1.25 lakh and Rs. 2 lakh in Kerala. Though IVF is an expensive option, it is now gaining acceptance among Keralites. But the fact is that there is no proper centralised rates for these treatments in Kerala. For different ARTs, the cost varies from clinic to clinics. Before the ART procedures begin, the clinicians are supposed to give counselling to the couples. The main agenda of this counselling is to explain the expenses and the interesting fact is that they don’t reveal the total cost before the procedure. ICMR clearly states this in ART regulation draft bill:

189 Cfr. Ibid 26
191 Ibid.
Assisted reproductive technology clinics shall provide professional counselling to patients or individuals about all the implications and chances of success of assisted reproductive technology procedures in the clinic and in India and internationally, and shall also inform patients and individuals of the advantages, disadvantages and cost of the procedures, their medical side effects, risks including the risk of multiple pregnancy, the possibility of adoption, and any such other matter as may help the couple or individual arrive at a decision that would be most likely to be the best for the couple or individual.

Though the draft bill is formulated in order to stop several exploitations in the field of ARTs, no further step is taken. Therefore the present system continues. This is the same with the price of the medicines prescribed too. These prices vary from place to place and from clinic to clinic. For example, for ICSI treatment in Trivandrum SAT hospital, it costs around Rs. 60000-100000. But another clinic, who have branches in Trissur, Kozhikode and Kannur advertises that ICSI costs Rs. 150000. The same treatment is given to a couple from Wayanad in a famous clinic in Kozhikode for Rs. 450000. The infertility treatments became a big industry and the hidden agenda of these clinics are to attain the maximum profit from the people who approaches the clinic. They exploit the great suffering of the infertile couple in their helpless situations.
2.4.4 Who Approaches the ART Clinics?

“Five years ago, a majority of the women who had IVF treatment were aged above 32. Now, over 50% of them are aged below 30. And repeat patients have increased, with 20% returning for a baby through IVF.” Dr. Swati Singh said that many childless couples waited for 2 to 3 years before they chose the IVF option after five to six counselling sessions. Now, they are willing to go for IVF as soon as they realize that this is the only option left to have a child. Dr. Praveen Kumar of Kinder Women’s Hospital and Fertility Centre said, “Even from lower income groups are seeking IVF treatment. They don’t mind spending any amount to have a baby. The stigma of being childless is too much to handle.”

One of the common trends among couples, who come for infertility treatment, is that some of them think of having a baby three or four years after their marriage. Mostly, women’s average age at the time of marriage would be 25 and 30 in the case of men. Scientific director of CIMAR fertility Centre, Kochi, Dr. Parasuram Gopinath said, “Most of them marry late due to other pre-requisites in life and they do not try for a child soon after marriage. Later on, when they decide to have a child say three years after their marriage, they fail and then they get panic attacks. This is a common scenario.”

198 Ibid.
200 ART Regulation Draft Bill, Indian Council of Medical Research, New Delhi 2010, IV, 20, 8.
2.4.5 Unethical Elements in ART Clinics

The introduction of the ‘donor’ methods in the ART procedures gave rise to more exploitation from the part of the clinics. ICMR ART regulation draft bill suggests that the right information regarding the ART treatment procedures should be given to the couples.

Assisted reproductive technology clinics shall explain to couples or individuals, as the case may be, the choice or choices of treatment available to them and the reason or reasons of the clinic for recommending a particular treatment, and shall clearly explain the advantages, disadvantages, limitations and cost of any recommended or explained treatment or procedure.

Though the bill suggests this, the clinics normally avoid such type of detailed explanations to the clients. The draft bill again suggests certain matters regarding the consent and keeping the records on duty of the assisted reproductive technology clinic to obtain written consent:

No assisted reproductive technology clinic shall perform any treatment or procedure of assisted reproductive technology without the consent in writing of all the parties seeking assisted reproductive technology to all possible stages of such treatment or procedures including the freezing of embryos.

No assisted reproductive technology clinic shall freeze any human embryos without specific instructions and consent in writing from all the parties seeking assisted reproductive technology in respect of what should be done with the gametes or embryos in case of death or incapacity of any of the parties. No assisted reproductive technology clinic shall use any human reproductive material to create an embryo or use an in vitro
embryo for any purpose without the specific consent in writing of all the parties to whom the assisted reproductive technology relates.

The consent of any of the parties obtained under this section may be withdrawn at any time before the embryos or the gametes are transferred to the concerned woman’s uterus.

Duty of the assisted reproductive technology clinic to keep accurate records, is given as following. “All assisted reproductive technology clinics shall maintain detailed records, in such manner as may be prescribed, of all donor oocytes, sperm or embryos used, the manner and technique of their use, and the individual or couple or surrogate mother, in respect of whom it was used.”

The prior written permission from the couples is required for using the sperm and ova of a donor in the ART procedure. But there are several cases reported in which the donor’s sperm or ova is used without the knowledge and consent of the couples in Kerala. The couples who suffer from infertility is ready to undergo the physical hardships of ART treatments and spend any amount of money, only with the wish of having a child of their own. Without the proper written consent, the clinics cannot use the sperm or ova from the donor. This is one of the areas in which injustice is shown to the couples, which questions the stability of these clinics itself. These clinics don’t keep the proper records and they fail in submitting the original bills of the treatment.

201 Ibid. IV, 21, 1-4.
202 Ibid. IV 22, 1.
There also remains the possibility of transferring embryos from this country to another countries for several purposes. The women are given sufficient medicines in order to have ovulation for the purpose one ART treatment. One ovum is required for a particular treatment. The remaining ova are kept for other purposes such as embryo freezing and embryo transferring without the knowledge of the persons by these clinics. The written permission of couples is needed in order to use their sperm or ova for any research or using for another couple. The present laws of this nation is promoting these type of illegal activities or there is no sufficient laws for controlling these type of unethical activities.

Why the ART clinics are increasing day by day in Kerala? A human right activist, K. Kuttan Nair, who protests against the exploitations of ART clinics asks following questions: what does happen to these remaining eggs? Why these clinics are increasing, is it because financial profits? By ovulating women, using some artificial means, the clinicians in the ART clinics collect 10 to 12 ova at a single attempt. At least eight of these ova are fertilized by using sperm either from the husband or from the donor. Among those 8 fertilized eggs, only two or three are infused into the uterus. The net result of these process is that a minimum of 5 fertilized eggs are remaining from every ART process. What does happen to these remaining eggs? Is it the reason why the clinics are increasing? There is at least 1000 IVF treatments every year in major IVF clinics in Kerala, claimed by those clinics. That

204 Cfr. Ibid. 55-56.
205 Cfr. Ibid.57.
means a minimum of 5000 fertilized eggs are remaining in every clinics every year. There is the possibility of using those fertilized eggs for research purposes and for ART treatments, without the prior knowledge and consent of the couples. There is also the possibility of sending those eggs to foreign countries for research purposes and receiving big amount of remuneration. ICMR also prohibits such a possibility in the ART regulation draft bill. “The stand taken by the foreign governments on embryo research opens up the possibility of embryos from developing countries that do not have appropriate national guidelines in this area, being commercially exploited and sold to foreign countries. Therefore sale or transfer of human embryos or any part thereof, or of gametes in any form and in any way – that is, directly or indirectly – to any party outside the country must be prohibited.”

Conclusion

At the verge of the suffering of being childless, the infertile couples seek the possibility of having a child by any means without thinking the morality, the after effects and the exploitations. Most of them are ready to spend any amount of money in order to overcome this inability. This take those couple to the ART clinics, which are technologically advanced and providing the latest artificial means to help those couple. This gave rise to the birth of many ART clinics in the world and also in our country. India remains second in the world not only in population but also in using the ART. For this there is a major contribution from our small state, Kerala. In this chapter, we tried to explain the major artificial methods which are available in this State. The increasing number of infertility clinics in this
state gave also rise to many exploitations and gave rise to certain ethical problems. The infertile couples believe that these clinics are really helping them and sometimes they even don’t realise the exploitations they were undergone. From these assumptions, I would like to focus the attention to the catholic perspective on those artificial reproductive means and ART clinics. The moral evaluation of these phenomenon and the pastoral approach to the infertile couples is explained in the final chapter.

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206 ART Regulation Draft Bill, Indian Council of Medical Research, New Delhi, 2010, 1.6.11.3.
Chapter III
MORAL EVALUATION OF ARTs AND PASTORAL APPROACHES TOWARDS INFERTILE COUPLES

Introduction

The suffering of being infertile is unexplainable. But it doesn’t justify conceiving a child by any means including ARTs. Infertile couples who desperately long for a child are prone to accept the techniques often attracted by their effectiveness without giving much attention to the serious moral issues involved in these procedures. It is pointed out that the revolution in reproductive technology cannot be perceived merely as any other technological achievement for it raises serious ethical issues. More and more people seem to think that if the suffering caused by infertility can be relieved and if children are not harmed, then high-tech reproductive medicine is a good thing. While adopting these techniques to overcome sterility they are more attracted by their effectiveness and not much bothered about the moral issues involved in it.

In the context of Kerala, where the ART clinics are increasing year by year, the moral teachings have its own significance. What these clinics are providing, whether they completely cure the problem or give a substitution to decrease the suffering? What the Church teaches on these techniques are relevant not only in the context of Catholics but for all. There is a possibility for people to set aside the Church teachings by saying that these teaching are not practical. A pastoral approach to infertile couples should present all possible medically safe and
morally acceptable treatments to couples, support their faith, their dignity and their marriage and accompany them throughout their journey with support and care. Those couples should feel that the Church is with them in their suffering and in their joy. In this chapter we see the inseparable connection between the conjugal union and human life, the moral evaluation of the ARTs, technologies compatible with the catholic teachings and the pastoral care to the infertile couples.

3.1 Marriage: The Divine Act of Procreation and Love Continued

“...The desire for a child is natural: it expresses the vocation to fatherhood and motherhood inscribed in conjugal love. This desire can be even stronger if the couple is affected by sterility which appears incurable. The suffering of spouses who cannot have children... is a suffering that everyone must understand and properly evaluate.” The Second Vatican council also teaches, “Marriage, to be sure is not instituted solely for procreation; rather, its very nature as an unbreakable compact between persons, and the welfare of the children, both demand that the mutual love of the spouses be embodied in a rightly ordered manner, that it grow and ripen.” This implies that the mutual love of the couples results in all other responsibilities. Even if this mutual love is not resulting in giving new birth, this love is indissoluble, true and valid. The council continues its teaching, “therefore, marriage persists as a whole manner and communion of life, and maintains its value and indissolubility, even when despite the often intense desire of the couple, offspring are lacking.”

The Church holds that two basic values must be observed when seeking to conceive a child: the meaning of marriage and the dignity of the child. The magisterium of the Church affirms life as a gift of God and also teaches the dignity of marriage, its meaning and purpose, the dignity of the procreation, and the right of the child to be born into a family that is founded on marriage. Pope Pius XII on his *Address to the Second World Congress on Fertility and Sterility*, states that marriage does not confer on couples the right to have children though the desire for a child can be strong and is legitimate.

Since the desire is so strong, the couples who are childless find it very difficult to face the situation of infertility. The Church teaches the morality of artificial techniques and thereby being away from the suffering of the infertile couples and this may lead to the tendency of saying that the Church is not practical. “Intellectual answers alone, even if they are highly logical and reasonable, may not always bring consolation. Other than explaining the Church’s compassionate teaching, to give comfort, emotional care, accompaniment with compassion and support with morally acceptable and medically safe techniques may bring more relief.”

The Church cannot forget the suffering of infertile couples in the pastoral ministry. The Christian charity urges the Church to accompany all who are suffering by giving support and

208 DV II, 8.
210 Ibid.
consolation. And also the Church should understand better the pain of those who are suffering. The Church can pay more attention to the needs of those who are suffering from infertility by promoting and encouraging all the techniques that respect marriage, the family and the rights of the children together with the condemnation of immoral artificial methods. This type of approaches in the pastoral ministry will indeed support those couples, who are actually suffering from the big pain of being infertile.

3. 2 Human Life: Gift of Conjugal Union

The Catholic understanding of human life is based on Catholic faith and theology which is based on Christian revelation as understood in the Catholic tradition which however does not reject any naturally valid consideration by anyone following a different faith. A new life is born in marriage union or in family.

Married love differs from any other love in the world. By its nature, the love of husband and wife is so complete, so ordered to a lifetime of communion with God and each other, that it is open to creating a new human being they will love and care for together. Part of God’s gift to husband and wife is this ability in and through their love to cooperate with God’s creative power. Therefore, the mutual gift of fertility is an integral part of the bonding power of marital intercourse. That power to create a new life with God is at the heart of what spouses share with each other.

212 Ibid.
213 Cfr. Ibid. 2-3.
Pope John Paul II, in *Familiaris Consortio*, affirmed, “fecundity is the fruit and the sign of conjugal love, the living testimony of the full reciprocal self-giving of the spouses.” This does not mean that the other purposes of matrimony is less important. Pope continues, “the true practice of conjugal love, and the whole meaning of the family life which results from it, have this aim: that the couple be ready with stout hearts to cooperate with the love of the Creator and the Saviour, who through them will enlarge and enrich his own family day by day.”

Pope Francis in *Amoris Laetitia* reinstated the teaching of *Familiaris Consortio* by saying, “love always gives life. Conjugal love does not end with the couple... the couple, in giving themselves to one another, give not just themselves but also the reality of children, who are a living reflection of their love, a permanent sign of their conjugal unity and a living and inseparable synthesis of their being a father and a mother.”

*Humanae Vitae* affirms human life is the gift of conjugal union. “…willed by God and unable to be broken by man on his own initiative, between the two meanings of the conjugal act: the unitive meaning and the procreative meaning. Indeed, by its intimate structure, the conjugal act, while most closely uniting husband and wife, capacitates them for the generation of new lives, according to laws inscribed in the very being of man and woman.” *Donum Vitae* teaches,

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218 *POPE FRANCIS*, Apostolic Exhortation *Amoris Laetitia*, Pastoral Orientation Centre, Kochi 2016, n.165. (here after *Amoris Laetitia* is used as AL)


220 DV II A 4.
In reality, the origin of a human person is the result of an act of giving. The one conceived must be the fruit of his parents’ love. He cannot be desired or conceived as the product of an intervention of medical or biological techniques; that would be equivalent to reducing him to an object of scientific technology. No one may subject the coming of a child into the world to conditions of technical efficiency which are to be evaluated according to standards of control and dominion.

In an article, Most Rev. Alexander Sample, Archbishop of Portland writes, “The act of sexual union is a beautiful and powerful expression of the love between the spouses as they completely give themselves over to one another and rejoice in the accompanying sexual pleasure. But this sexual union is at the same time intrinsically and necessarily ordered toward the procreation of new life as the couple cooperates with God’s plan. One does not need to be a theologian or a biologist to see that the conjugal act is about love and new life.” The Catechism of the Catholic Church teaches,

Fecundity is a gift, an end of marriage, for conjugal love naturally tends to be fruitful. A child does not come from outside as something added on to the mutual love of the spouses, but springs from the very heart of that mutual giving, as its fruit and fulfilment. So the Church, which is “on the side of life” teaches

222 Catechism of the Catholic Church, Libreria Editrice Vaticana, Vatican City 1993 n. 2366. (here after Catechism of the Catholic Church is used as CCC )
224 CCC n. 2378
that “it is necessary that each and every marriage act remain ordered per se to the procreation of human life. This particular doctrine, expounded on numerous occasions by the Magisterium, is based on the inseparable connection, established by God, which man on his own initiative may not break, between the unitive significance and the procreative significance which are both inherent to the marriage act.”

This statement affirms that every human life is the result of an expression of conjugal love. Recent Church teaching has tried to integrate the two purposes of marriage into a single perspective, which sees marital sexual love as essentially procreative. Marital love is by its nature fruitful; it generates new life. The God-created expression of marital love, joined to an openness to new life, contributes to the holiness of the couple. “By its very nature the institution of marriage and married love is ordered to the procreation and education of the offspring and it is in them that it finds its crowning glory.” (CCC 1652; GS 48)

“A child is not something owed to one, but is a gift. The “supreme gift of marriage” is a human person. A child may not be considered a piece of property, an idea to which an alleged “right to a child” would lead. In this area, only the child possesses genuine rights: the right “to be the fruit of the specific act of the conjugal love of his parents,” and “the right to be respected as a person from the moment of his conception Life.”

Human life is the gift of conjugal union and this life from the very moment of conception is sacred, is one of the most fundamental teaching of catholic bioethics. Those who forget this aspect try to get a child, in order to avoid the suffering of having no child, at any cost. This understanding of the beginning of
human life is very essential for evaluating the moral aspects of ARTs.

3.3 Moral Problems Related to Artificial Techniques

Advances in science and technology have created an array of temptations to pursue treatments that were not readily available to previous generations. Though the advances in technology are generally good, we cannot assume that what is technically possible is always morally right. Many medical procedures for treating infertility reduce humans to mere biological components, to mere procreative processes at the expense of the unitive bond. “Just as the use of contraception might attempt to create a loving union through sex but intentionally excludes the procreative meaning, so many forms of ARTs might attempt to create new life but intentionally exclude the unitive meaning. Although it happens in different ways, both of these violate the inseparable link between the two meanings of the gift of human sexuality.”

Procreation of new life must be the fruit of marriage and the marital act. These documents (Evangelium Vitae and Donum Vitae) gave three reasons why it is wrong to generate human life outside the marital act: the first was based on the inseparable connection, willed by God; the second, on the “language of the body”; the third on the obligation to regard the child always a person and never as a product. When children are engendered

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226 Cfr. Ibid. 25.
227 Ibid.
228 W. MAY, Catholic Bioethics and the Gift of Human Life..., cit., 69.
through the loving embrace of husbands and wives, the “inseparable connection” and the “language of the body” are fully respected, nor is the child in any way treated as a “product”. When human life comes to be in and through the marital act, it comes as a “gift”, crowning the act itself. The child is “begotten” through an act of intimate conjugal love; he or she is not “made”, treated like a product. They are rightly regarded as “procreating” or “begetting” a child through an act of love; they are not “producing” one, “making” one. Their act is properly one of “procreation” and not one of “reproduction.”

Another ‘Instruction’ entitled *Dignitas Personae*, by the Congregation for the Doctrine of the Faith gives the same understanding on the human life.

Respect for that dignity is owed to every human being because each one carries in an indelible way his own dignity and value. *The origin of human life has its authentic context in marriage and in the family*, where it is generated through an act which expresses the reciprocal love between a man and a woman. Procreation which is truly responsible vis-à-vis the child to be born “must be the fruit of marriage.”

Pope Francis condemns the ARTs which manipulate the reproductive act and the role of the Creator.

The technological revolution in the field of human procreation has introduced the ability to manipulate the reproductive act, making it independent of the sexual relationship between a man and a woman. In this way, human life and parenthood have become modular and separable realities, subject mainly to the wishes of individuals or couples”. It is one thing to be understanding of human weakness and the complexities of
life, and another to accept ideologies that attempt to sunder what are inseparable aspects of reality. Let us not fall into the sin of trying to replace the Creator. We are creatures, and not omnipotent. Creation is prior to us and must be received as a gift.

The magisterium of the Church always teaches the authentic doctrine on the technologies and explains the objections the Church has, to these technologies.

3.3.1 Magisterium on Artificial Insemination

There are two types of artificial insemination methods, which are homologous and heterologous, are described in the second chapter. According to the teachings of the Church both these methods are immoral. (CCC 2376)

3.3.1.1 Teachings on Heterologous Artificial Insemination (AIH)

The Catechism of the Catholic Church states that, “techniques that entail the dissociation of husband and wife, by the intrusion of a person other than the couple (donation of sperm or ovum, surrogate uterus), are gravely immoral. These techniques (heterologous artificial insemination and fertilization) infringe the child’s right to be born of a father and mother known to him and bound to each other by marriage. They betray the spouses’ right to become a father and a mother only through each other.” The idea that a third party’s involvement in the conception of a child – a technician, a doctor or a donor – can be very intrusive. In the cases of donor gametes, the third party invasion of the exclusive marriage covenant is a kind of mechanical adultery.

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229 CONGREGATION FOR THE DOCTRINE OF FAITH, Instruction Dignitas Pers (08.12.2008) n. 6 in AAS 100 (2008). (here after Dignitas Personae is used as DP)

230 AL n. 54.
The main teaching of the Church on the ARTs can be found in *Donum Vitae*. “Through IVF and ET and heterologous artificial insemination, human conception is achieved through the fusion of gametes of at least one donor other than the spouses who are united in marriage. Heterologous artificial fertilization is contrary to the unity of marriage, to the dignity of the spouses, to the vocation proper to parents, and to the child’s right to be conceived and brought into the world in marriage and from marriage.” DV also points out that heterologous artificial fertilisation is immoral because it is “against the unity and fidelity of marriage” and also it “violates the right of the child to be born in a family.”

These reasons lead to a negative moral judgment concerning heterologous artificial fertilization: consequently fertilization of a married woman with the sperm of a donor different from her husband and fertilization with the husband’s sperm of an ovum not coming from his wife are morally illicit. Furthermore, the artificial fertilization of a woman who is unmarried or a widow, whoever the donor may be, cannot be morally justified.

The desire to have a child and the love between spouses who long to obviate a sterility which cannot be overcome in any other way constitute understandable motivations; but subjectively good intentions do not render heterologous artificial fertilization conformable to the objective and inalienable properties of marriage or respectful of the rights of the child and of the spouses.

231 CCC n. 2376.
233 DV II A 2. 234 Ibid. 235 Ibid. 236 Ibid.
3.3.1.2 Teachings on Homologous Artificial Insemination

Many infertile couples and even some theologians think that homologous artificial insemination is morally licit because it can reduce the suffering of the infertile couples by providing a child. In order to evaluate AIH, one must understand the inseparable connection between procreation and conjugal act. “The Church’s teaching on marriage and human procreation affirms the “inseparable connection, willed by God and unable to be broken by man on his own initiative, between the two meanings of the conjugal act: the unitive meaning and the procreative meaning. Indeed, by its intimate structure, the conjugal act, while most closely uniting husband and wife, capacitates them for the generation of new lives, according to laws inscribed in the very being of man and of woman.”

Donum Vitae also affirms, “The moral value of the intimate link between the goods of marriage and between the meanings of the conjugal act is based upon the unity of the human being, a unity involving body and spiritual soul…The moral value of the intimate link between the goods of marriage and between the meanings of the conjugal act is based upon the unity of the human being, a unity involving body and spiritual soul.” The human dignity is to be given importance in married life. “Only respect for the link between the meanings of the conjugal act and respect for the unity of the human being make possible procreation in conformity with the dignity of the person. In his unique and unrepeatable origin, the child must be respected and recognized as equal in personal dignity to those who give him life.”

The moral relevance of the link between the meanings of the conjugal act and between the goods of marriage, as well as the unity of the human being and the dignity of his origin, demand that the procreation of a human person be brought about as the fruit of the conjugal act specific to the love between spouses. The link between procreation and the conjugal act is thus shown to be of great importance on the anthropological and moral planes, and it throws light on the positions of the Magisterium with regard to homologous artificial fertilization.

After analysing the importance of conjugal union and procreation, *Donum Vitae* affirms the following teachings. “Homologous artificial insemination within marriage cannot be admitted except for those cases in which the technical means is not a substitute for the conjugal act but serves to facilitate and to help so that the act attains its natural purpose.” *Donum Vitae* concludes its teaching on AIH by affirming,

If the technical means facilitates the conjugal act to reach its natural objectives, it can be morally acceptable. If, on the other hand, the procedure were to replace the conjugal act, it is morally illicit. Artificial insemination as a substitute for the conjugal act is prohibited by reason of the voluntarily achieved dissociation of the two meanings of the conjugal act. Masturbation, through which the sperm is normally obtained, is another sign of this dissociation: even when it is done for the purpose of procreation, the act remains deprived of its unitive meaning: “It lacks the sexual relationship called for by the moral order, namely the relationship which realizes ‘the full sense of mutual self-giving and human procreation in the context of true love.’”
The Catechism of the Catholic Church also condemns AIH by saying that AIH separate the conjugal act from the procreative act. We read,

Techniques involving only the married couple (homologous artificial insemination and fertilization) are perhaps less reprehensible, yet remain morally unacceptable. They dissociate the sexual act from the procreative act. The act which brings the child into existence is no longer an act by which two persons give themselves to one another, but one that “entrusts the life and identity of the embryo into the power of doctors and biologists and establishes the domination of technology over the origin and destiny of the human person. Such a relationship of domination is in itself contrary to the dignity and equality that must be common to parents and children.”

*Dignitas Personae* also holds the same principles.

With regard to the treatment of infertility, new medical techniques must respect three fundamental goods: a) the right to life and to physical integrity of every human being from conception to natural death; b) the unity of marriage, which means reciprocal respect for the right within marriage to become a father or mother only together with the other spouse; c) the specifically human values of sexuality which require “that the procreation of a human person be brought about as the fruit of the conjugal act specific to the love between spouses”... In light of this principle, all techniques of heterologous artificial fertilization, as well as those techniques of homologous artificial fertilization which substitute for the conjugal act, are to be excluded. On the other hand, techniques which act *as an aid to the conjugal act and its fertility* are permitted.

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The Church is specifically addressing its concern here over the means used in insemination. Part of what makes insemination illicit is that, in the majority of the cases, the sperm is obtained through masturbation. “The deliberate use of the sexual faculty, for whatever reason, outside of marriage is essentially contrary to its purpose.” That means masturbation is a grave sin and it essentially fails to honour the twofold procreative and unitive purpose of the sexual union. The sperm used in these procedures is usually then prepared and washed, and in some cases the best sperm is selected to be injected into the woman, hence some of it remains unused.

3.3.1.3 Moral Evaluation on Artificial Insemination

Artificial insemination is considered as one of the effective artificial method, which is widely used earlier in almost all the clinics in Kerala, to overcome the suffering of infertility. The immoral aspect of these methods are not taken seriously. Human life is a gift. “A child is not something owed to one, but is a gift. The “supreme gift of marriage” is a human person. A child may not be considered a piece of property, an idea to which an alleged “right to a child” would lead. In this area, only the child possesses genuine rights: the right “to be the fruit of the specific act of the conjugal love of his parents,” and ‘the right to be respected as a person from the moment of his conception.”

The child has the right to be born in a family and to be born as gift of the love of the parents. Intervention of a third person- a doctor, a technician or a donor- and the use of technology is against the unitive and procreative dimensions of conjugal love. The methods which are used in artificial
insemination are ‘non-marital.’ Because the marital status of the man and the woman participating in them is accidental and not essential, whereas the marital status of man and woman is essential for a marital act.

Most of the ART clinics in Kerala provide the artificial insemination as a successful option for treating infertility. The people who go for this option also ask what is wrong in opting for artificial insemination. Because the woman gets pregnant by using the sperm either from the husband or from the donor. Here the couple think only of their suffering of having no children and forget to think the child’s right to born in a family. Here comes the importance of the teachings of the Church on artificial insemination.

3.3.2 Magisterium on IVF

Pope Pius XII, who died in 1958, twenty years before the birth of first test tube baby, Louis Browne, was quite farsighted and in his several of his addresses, condemned artificial generation of human life, because in this procedure zygotes were simply used as experimental material and several of them are discarded. He rejected IVF, at that time only a possibility, by saying, “as regard experiments of human artificial fecundation in vitro, let it be sufficient to observe that they must be rejected as immoral and absolutely unlawful.”

244 DP n. 12.
245 CCC n. 2352.
247 CCC n. 2378.
After the Vatican II, the famous encyclical of Pope Paul VI, *Humanae Vitae* also condemned any technological developments which separates the unitive and procreative aspects of the marriage act. The marriage act is not just a biological union, but also a spiritual and personal one. That is to say, if the conjugal act is not open to procreation it will not be a loving and unitive act either. Just as these two aspects cannot be separated to inhibit a pregnancy, neither can they be separated to facilitate it.

*Donum Vitae*, with regard to the ARTs, rejects IVF as immoral.

Development of the practice of *in vitro* fertilization has required innumerable fertilizations and destructions of human embryos. Even today, the usual practice presupposes a hyper-ovulation on the part of the woman: a number of ova are withdrawn, fertilized and then cultivated *in vitro* for some days. Usually not all are transferred into the genital tracts of the woman; some embryos, generally called “spare”, are destroyed or frozen. On occasion, some of the implanted embryos are sacrificed for various eugenic, economic or psychological reasons. Such deliberate destruction of human beings or their utilization for different purposes to the detriment of their integrity and life is contrary to the doctrine on procured abortion already recalled.

249 Cfr. *Ibid.* 72
The connection between \textit{in vitro} fertilization and the voluntary destruction of human embryos occurs too often. This is significant: through these procedures, with apparently contrary purposes, life and death are subjected to the decision of man, who thus sets himself up as the giver of life and death by decree. This dynamic of violence and domination may remain unnoticed by those very individuals who, in wishing to utilize this procedure, become subject to it themselves. The facts recorded and the cold logic which links them must be taken into consideration for a moral judgment on IVF and ET (\textit{in vitro} fertilization and embryo transfer).

3.3.2.1 Teachings on Homologous IVF

\textit{Donum Vitae} asserts the traditional teaching of the Church on reproductive technologies. The catholic tradition always insists on the inseparability of the ends of marriage namely, conjugal love and procreation. This principle excludes IVF as a solution for childlessness in marriage because it avoids the loving encounter of the couple in the conjugal act in the procreation of the child. The child should be begotten and not manufactured as a result of technical action. DV teaches,

The moral relevance of the link between the meanings of the conjugal act and between the goods of marriage, as well as the unity of the human being and the dignity of his origin, demand that the procreation of a human person be brought about as the fruit of the conjugal act specific to the love between spouses.

\begin{thebibliography}{9}
\bibitem{253} DV II.
\bibitem{255} DV II, B 4.
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The link between procreation and the conjugal act is thus shown to be of great importance on the anthropological and moral planes, and it throws light on the positions of the Magisterium with regard to homologous artificial fertilization.

The infertile couples think of opting for homologous IVF without considering the morality of the action. The desire for a child - or at the very least an openness to the transmission of life - is a necessary requirement from the moral point of view for responsible human procreation. “But this good intention is not sufficient for making a positive moral evaluation of in vitro fertilization between spouses. The process of IVF and ET must be judged in itself and cannot borrow its definite moral quality from the totality of conjugal life of which it becomes part nor from the conjugal life of which it becomes part nor from the conjugal acts which may precede or follow it.”

IVF is considered as an intrinsically immoral because of the destruction of a lot of human embryos in the processes. “But even in a situation in which every precaution is taken to avoid the death of human embryos, homologous IVF and ET dissociates from the conjugal act the actions which are directed to human fertilization. For this reason the very nature of homologous IVF and ET also must be taken into account.” Theoretically, it might be possible to use IVF without destroying any embryos. The grave moral problems concerning the rights of the child, unity of marriage, and the integrity act would still militate against the morality of IVF. However, typically, in IVF a woman is given fertility drugs to ensure that she produces several ova which are collected to be fertilized in a petri dish creating several embryos. The healthiest ones are chosen for transfer to the woman’s womb.
Many embryos are discarded or frozen. Freezing kills some more. Some embryos are later used for experimentation, which is always lethal.

Every human life is gift of conjugal love between the husband and the wife. But in homologous IVF, the involvement of a third person is necessary, which is against the unitive end of conjugal love.

Homologous IVF and ET is brought about outside the bodies of the couple through actions of third parties whose competence and technical activity determine the success of the procedure. Such fertilization entrusts the life and identity of the embryo into the power of doctors and biologists and establishes the domination of technology over the origin and destiny of the human person. Such a relationship of domination is in itself contrary to the dignity and equality that must be common to parents and children. Conception in vitro is the result of the technical action which presides over fertilization. Such fertilization is neither in fact achieved nor positively willed as the expression and fruit of specific act of the conjugal union. In homologous IVF and ET, therefore, even if it is considered in the context of ‘de facto’ existing sexual relations, the generation of the human person is objectively deprived of its proper perfection: namely, that of being the result and fruit of a conjugal act in which the spouses can become “co-operators with God for giving life to a new person.

The Catholic Church teaches that marriage is the only morally acceptable framework for human reproduction. Marriage and its indissoluble unity are the only venue worthy of truly responsible procreation. The influence or the enormous use of technology degrades the human dignity. In *Dignitas Personae*, we read,

The Church moreover holds that it is ethically unacceptable to dissociate procreation from the integrally personal context of the conjugal act: human procreation is a personal act of a husband and wife, which is not capable of substitution. The blithe acceptance of the enormous number of abortions involved in the process of in vitro fertilization vividly illustrates how the replacement of the conjugal act by a technical procedure – in addition to being in contradiction with the respect that is due to procreation as something that cannot be reduced to mere reproduction – leads to a weakening of the respect owed to every human being.

**3.3.2.2 Teachings on Heterologous IVF**

The magisterium of the Church condemned unequivocally the involvement of a third party in human procreation. Pope Pius XII stated, “only marriage partners have mutual rights over their bodies for procreation of a new life and these rights are exclusive, non-transferable and inalienable.” *Donum Vitae* also condemns the intervention of a third person.

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260 DP n. 16.
261 DV II A 2.
263 DV II A 2.
in human reproduction in the form of sperm, ova, embryo or surrogate mother. “Heterologous artificial fertilization is contrary to the unity of marriage, to the dignity of the spouses, to the vocation proper to parents, and to the child’s right to be conceived and brought into the world in marriage and from marriage.” That means, recourse to the gametes of a third person constitutes a violation of the reciprocal commitment of the spouses and is a grave violation of the principle of unity in marriage. Besides heterologous IVF deprives the child of its filial relationship with one or both parents can hinder the maturing of its personal identity. According to Donum Vitae, “fertilisation of a married woman’s ovum with the sperm of a donor other than her husband and fertilisation with the husband’s sperm of an ovum not coming from his wife are morally illicit.”

IVF or any ART outside marriage is also to be condemned simply as immoral. According to the natural moral law and divine law, the procreation of new life can only be the fruit of marriage. It is the spouses alone who have a mutual right over their bodies for generating a new life, and this right is exclusive, non-transferable and inalienable. IVF is against the mutual self-giving of their love and their fidelity. Taking sperm or ova from a third person constitute a violation of the reciprocal commitment of the spouses.

The magisterial teaching objects to heterologous IVF also because once it is justified, IVF of an unmarried woman, a widow or a lesbian becomes possible, which cannot be morally justified. Surrogate motherhood also is observed to be morally objectionable because it represents an objective failure to meet the obligations of maternal love, of conjugal fidelity and of
responsible motherhood. It also offends the dignity and right of the child to be conceived, carried in the womb, brought into the world and brought up by his own parents. According to the magisterium the above said reasons lead to a negative moral judgement concerning heterologous IVF.

3.3.2.3 Moral Evaluation on IVF

The Church teaches that medical techniques may only assist the procreative act and not to replace or to substitute it. Conception should take place within the body, and not outside. A corresponding rule governs the treatment of human embryos, who ought to be conceived through the marital act of a loving couple, and not engendered in vitro by a laboratory technician. “The very nature of IVF procedure goes against the God’s design for bringing children into the world. Instead of husband and wife coming together in a physical expression love for one another, a doctor or lab technician acts as a third party that joins the sperm and egg to create a new life.” The concern with procedures like IVF is that the child is viewed as a commercial product instead of a gift from God.

IVF is against responsible fatherhood and motherhood. 

*Humanae Vitae* (10), has given clear norms about the legitimacy of responsible parenthood. Conjugal love requires a husband and wife to have an awareness of their mission of responsible parenthood. “In the task of transmitting life, therefore, they are

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265 Cfr. DV II, 3.
268 Ibid.
not free to proceed completely at will, as if they could determine in a wholly autonomous way the honest path to follow; but they must conform their activity to the creative intention of God, expressed in the very nature of marriage and of its acts, and manifested by the constant teaching of the Church.” When couples use IVF, the children are not the fruit of marriage, which is against the basic teaching on human procreation.

The Church recognizes the legitimacy of the desire for a child and understands the suffering of couples struggling with problems of fertility. Such a desire, however, should not override the dignity of every human life to the point of absolute supremacy. The desire for a child cannot justify the “production” of offspring, just as the desire not to have a child cannot justify the abandonment or destruction of a child once he or she has been conceived.

The desire for a child is insufficient for making a positive moral evaluation of IVF. A child is not an object to which someone has a right, nor can the child be considered as an object of ownership. Rather the child is a supreme gift, the most gratuitous gift of the marriage, and a loving testimony of the mutual self-giving of his/her parents. The child must be respected and recognised as equal in personal dignity to those who give life. IVF is always morally wrong when a child is conceived as the

271 DP n. 16.
product of an intervention of medical or biological technique.

In the IVF procedures, doctors have power over the life of the embryo. They establish the domination of the technology over the origin and destiny of human person. Therefore the generation of the human person is objectively deprived of its proper perfection. It also remains a technique which is morally illicit because it deprives human procreation of the dignity which is proper and connatural. “Such fertilisation entrusts the life and identity of the embryo to the power of doctors and biologists and establishes the domination of the technology over the origin and destiny of the human person. Such a relationship of domination is in itself contrary to the dignity and equality that must be common to parents and children.”

If the human being is to be respected and treated as a person from the moment of fertilisation, then IVF involves the following moral issues: production and indiscriminate handling of human embryos, freezing and preservation of human embryos, destruction of the left over embryos etc. Donum Vitae clearly stated that the destruction of embryos harvested from IVF procedures is equivalent to abortion. By voluntarily destroying human embryos, “The researcher usurps the place of God; and, even though he may be unaware of this, he sets himself up as the master of the destiny of others in as much as he arbitrarily chooses whom he will allow to live and whom he will send to death, and kills defenceless human being.” The net result of certain ARTs, including IVF, are the risks for mother and child, ovarian hyper stimulation syndrome, low birth weight, preterm delivery, infant death and disability among survivors.
Donum Vitae rejects IVF because procedure for obtaining sperm and ova are morally illicit. And also the document asserts any technical means which promote the conjugal act is morally licit. If the technical means facilitates the conjugal act or helps it to reach its natural objectives, it can be morally acceptable. If, on the other hand, the procedure were to replace the conjugal act, it is morally illicit. Artificial insemination as a substitute for the conjugal act is prohibited by reason of the voluntarily achieved dissociation of the two meanings of the conjugal act. Masturbation, through which the sperm is normally obtained, is another sign of this dissociation: even when it is done for the purpose of procreation, the act remains deprived of its unitive meaning: “It lacks the sexual relationship called for by the moral order, namely the relationship which realizes ‘the full sense of mutual self-giving and human procreation in the context of true love.’

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274 DV II 5.
276 DV I 5.
278 DV II 6.
“Dignitas Personae is also underlying the same principle. “All techniques of heterologous artificial fertilization, as well as those techniques of homologous artificial fertilization which substitute for the conjugal act, are to be excluded. On the other hand, techniques which act as an aid to the conjugal act and its fertility are permitted.”

The advertisement hoardings on the roadsides in Kerala and advertisements in TV promote that IVF gives satisfaction of being a father and mother to thousands of infertile couples. Almost all the ART clinics have this IVF in Kerala. IVF really substitute the conjugal act and gives importance for the role of a third party in ‘producing’ a new life. These clinics are not explaining the actual procedures and its expenses to the couples who are approaching them. As a result there occurs a customer – client relationship or a seller – buyer relationship between the clinics and the infertile couples.

3.3.3 Magisterium on ICSI

One of the important, available and modern ARTs, available also in Kerala is ICSI. Intracytoplasmic sperm injection is similar in almost every respect to other forms of IVF with the difference that in this procedure fertilization in the test tube does not take place on its own, but rather by means of the injection into the oocyte of a single sperm, selected earlier, or by the injection of immature germ cells taken from the man. Dignitas Personae teaches, “among the recent techniques of artificial fertilization which have gradually assumed a particular importance is intracytoplasmic sperm injection. This technique
is used with increasing frequency given its effectiveness in overcoming various forms of male infertility.” This document clearly affirms why ICSI is morally illicit.

Just as in general with in vitro fertilization, of which it is a variety, ICSI is intrinsically illicit: it causes a complete separation between procreation and the conjugal act. Indeed ICSI takes place “outside the bodies of the couple through actions of third parties whose competence and technical activity determine the success of the procedure.

Such fertilization entrusts the life and identity of the embryo into the power of doctors and biologists and establishes the domination of technology over the origin and destiny of the human person. Such a relationship of domination is in itself contrary to the dignity and equality that must be common to parents and children. Conception in vitro is the result of the technical action which presides over fertilization. Such fertilization is neither in fact achieved nor positively willed as the expression and fruit of a specific act of the conjugal union.”

3.3.4 Morality of GIFT

Whether a child can be said to be the fruit of married love when intercourse is combined with a practise such as GIFT? In such cases sperm is collected via intercourse using a perforated condom. Here what we have to evaluate is the “proper end” of the conjugal act.

It is not sufficient that the act make sperm available for some later reproductive project. Rather the sperm should be received directly by the woman, and that receiving should itself contribute to the sperm’s eventual union with the ovum. Intercourse should unite the couple completely, and that uniting
should unite the gametes or at least bring them closer together, even if technology must complete the process. The child should be the fruit of sexual act normally performed, not the fruit of a withholding from the union of the couple followed by the withdrawal and reinsertion of the sperm.

3.3.5 Magisterium on Surrogacy

Surrogate motherhood is morally illicit because the child has the right to be carried in the womb of its own mother. Surrogacy goes against the obligations of maternal love, conjugal fidelity and responsible motherhood.284 According to Catholic Church, surrogate motherhood is contrary to the unity of marriage and to the dignity of the procreation of the human person. It represents an objective failure to meet the obligations of responsible parenthood. There is a division between the physical, psychological and moral elements which constitute families.285 Donum Vitae answers to the question, “is “surrogate” motherhood morally illicit?”

No, for the same reasons which lead one to reject artificial fertilization: for it is contrary to the unity of marriage and to the dignity of the procreation of the human person.

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281 Ibid.
283 Ibid 34-35.
285 Cfr. S. KANNIYAKONIL, Bioethical Issues A Catholic Moral Analysis…., cit., 170
Surrogate motherhood represents an objective failure to meet the obligations of maternal love, of conjugal fidelity and of responsible motherhood; it offends the dignity and the right of the child to be conceived, carried in the womb, brought into the world and brought up by his own parents; it sets up, to the detriment of families, a division between the physical, psychological and moral elements which constitute those families.

Pope Francis in *Amoris Laetitia*, while mentioning the problems which women face (AL 54), mentions that the Church “cannot overlook the use of surrogate mothers”. This expression implies that surrogate mothers are also facing ethical problems. They are;

a) Broken bonds: The gestational mother’s bond to the child is treated as if it were important during the pregnancy, and completely irrelevant afterwards.

b) Objectifying women: The gestational mother is used for her womb and then is legally – and perhaps emotionally – set aside.

c) Fewer rights for the mother, compared to adoption: If the gestational mother grows attached to the child, as mothers often do, or if she has concerns about the “commissioning parents,” too bad. Mothers who agree to place a child for adoption can almost always change their minds after the baby has been placed in their arms. Denying gestational mothers the same right is, quite simply, inhuman.

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286 DV II, 3.
287 AL n. 54.
289 DV II.
These moral evaluation gives us the understanding that surrogacy is against the dignity of the individual and therefore it is immoral.

3.4 Moral Evaluation on ARTs

The spread of technologies of intervention in the processes of human procreation raises very serious moral problems in relation to the respect due to the human being from the moment of conception, to the dignity of the person, of his or her sexuality and the transmission of life. The evaluation on the various artificial technologies which are used in human reproduction are against the human dignity, against the dignity of human sexuality, against the right of the child and against the human life itself.

These medical technologies are not neutral tools, rather they have an influence on the well beings of human beings and their dignity. The adverse impact of ARTs are often not visible and widely known. Calculating these risks and benefits go beyond medical and technical data which involves psychological, sexual, financial, moral and social problems. Infertile couples undergo various pressures from society and family which lead them to undertake various treatments. These treatments are mostly puzzling, physically uncomfortable, high costly and without assurance of success which adds more anxieties to the already stressful situation.

Most of ARTs can have tremendous impact on women. ART is a very demanding physical process with far reaching effects on woman’s psychological well-being, her relationship with her partner and society. The risks to women who undergo ARTs vary from simple nausea to death. The high rate of abortions, multiple pregnancies and ectopic pregnancies are
higher among women who undertake ARTs. The hormones which are used for stimulating the ovaries have enormous side effects. There is also other moral and physical problems faced by the infertile couples who undertake ARTs, in order to fulfil the dream of having a children. Even the embryos which are produced in ARTs, have several challenges in the future such as birth defects, congenital abnormalities, epigenetic risks, neurological, cerebral and cancerous risks. By using ARTs, the infertile couples become part of a big fertility business, which is having a big commercial and financial interests. The children who are produced by using the ovum or sperm from donors have problem of their identity and have lot of emotional problems too. Different infertile treatments can cause various difficulties for couples and their families, such as emotional pain during the treatment, which is lengthy and various anxieties. “The children who are born through ARTs procedures, have higher rate of low weight at the birth, longer hospitalisation and around the double rates of perinatal mortality and


291 An ectopic pregnancy is a pregnancy growing outside the uterus. Babies growing outside the uterus do not survive, and if the baby is in the fallopian tube, there is a chance the tube can rupture and cause internal bleeding in the mother, risking her life. Immediate medical attention is extremely important if an ectopic pregnancy is suspected in A. RUHI- LOPEZ- C. SANTAMARIA, The Infertility Companion for Catholics..., cit., 153.


293 Congenital abnormalities can be defined as structural or functional anomalies including metabolic disorders, which are present at the time of birth in Ibid. 53.

294 Errors involving information other than the DNA sequence that is heritable during cell division.

morbidity in comparison with general population, with the same maternal age, number of sons and social status conditions.”

The ART clinics, especially in Kerala, do not reveal the physical and mental burden which the infertile couples have to undergo. They do not reveal the expense of these methods. Various ways of exploitations297 are prevalent in this field. The solutions which are put forward for decreasing the pain and suffering, at times increases it.

3.5 The Relevance of the Magisterial Teaching in the Context of Kerala

The magisterial teachings of the Church uphold the human dignity from the very moment of conception itself. And the magisterium underlines the principle, human life is the gift of conjugal love. There are a lot of scientific developments in the area of ARTs. Most of the ARTs substitute the conjugal act. These methods are against the human nature and dignity. The approach of the most of the ART clinics to the early stage of life, is commercial and technological and these methods destroy the human life in early stages. These clinics always try to satisfy the needs of the clients. These ART clinics are not treating their problem, instead they use artificial methods to substitute the pain of having no children.

The number of infertility clinics are increasing year by year in Kerala. The people, who seek the help of artificial clinics are also increasing due to various reasons such as influence of

296 J. D. V. CORREA- E. SGRECCIA, The Dignity of Human Procreation and Reproductive Technologies: Anthropological and Ethical Aspects…, cit., 90.
297 Exploitations are explained in the second chapter.
298 The fact of increasing number of infertility clinics is explained in the second chapter.
299 Reasons are explained in the first chapter in detail.
the advertisements, pressures from the society and the family, desire for a child at any cost etc. The couples think that children are their right and they forget the fact human life is a ‘gift’ of God. Therefore the couples who do not have children, think the ART clinics are the best option in their difficulty of having children. As a result, couples who do not have children after first and second year of marriage, tended towards these clinics, to have a child. The common reasons behind the fact of increasing infertility are late marriage, post ponding the pregnancy after marriage for several reasons such as career oriented life style, health problems etc. These people who seek the help of these clinics are not concerned with the right of the child, dignity of the human life and sexuality.

The teachings of the encyclicals like *Humanae Vitae*, on the dignity and value of conjugal love is still relevant, where the technologies have great impact. Therefore the magisterial teachings are relevant in the context of increasing phenomenon of infertility clinics in Kerala. The pastors have a great duty in teaching the authentic doctrine regarding the ARTs.

### 3.6 Morally Accepted Treatment Options

The Church, society and family members cannot fulfil their duties towards the infertile couples only by pointing out moral problems associated with the ARTs. They have to be empathetic companions accompanying couples with support and prudence on their life journey by acknowledging, grieving, and providing other safe medical remedies that are morally acceptable and offer them hope on their journey.

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302 Ibid
There is a misunderstanding that the Church always say no to treatments for infertility. The Church’s position on accepted treatments especially treatments for infertile couple underlies the intrinsic value of human life. That means, instead of accessing immoral procedures to achieve pregnancy, the Church in Her wisdom, advocates to heal whatever is not functioning properly in human bodies that causes infertility.

In a nutshell, “anything that helps marital intercourse to be more effective is moral; anything that inserts a third party into the act of conception or replaces intercourse is not.” “Techniques that entail the dissociation of husband and wife, by the intrusion of a person other than the couple (donation of sperm or ovum, surrogate uterus), are gravely immoral. These techniques (heterologous artificial insemination and fertilization) infringe the child’s right to be born of a father and mother known to him and bound to each other by marriage. They betray the spouses’ right to become a father and a mother only through each other.”

The Church bases her stance on the transcendent value of man over the technology. The Church asserts that procreation must not be separated from the personal act of love within the marriage. Dignitas Personae teaches,

Certainly, techniques aimed at removing obstacles to natural fertilization, as for example, hormonal treatments for infertility, surgery for endometriosis, unblocking of fallopian tubes or their surgical repair, are licit. All these techniques may be considered authentic treatments because, once the problem causing the infertility has been resolved, the married couple is able to engage in conjugal acts resulting in procreation, without the
physician’s action directly interfering in that act itself. None of these treatments replaces the conjugal act, which alone is worthy of truly responsible procreation.

There are certain medical technologies which help the conjugal act and which are accepted by the Church, which the infertile couples can make use of. They are:

3.6.1 Use of Perforated Condoms to Circumvent Hypospadias

Hypospadias is a condition of the male penis in which the urethra does not open at the distal end of the penis but on its underside, close to the human body. This prevents the husband from emitting the sperm into the wife’s reproductive tract. The use of perforated condoms would prevent the husband’s sperm being secreted outside his wife’s body and facilitate their entrance into the vagina. 306 This would thus be an instance of a technical means that would remove an obstacle to the fruitfulness of the conjugal act. All catholic theologians who have discussed this procedure agree that it assists and does not replace the marital act and consequently it is morally licit.

303 CCC n. 2376.
305 DP n. 13.
3.6.2 Low Tubal Ovum Transfer (LTOT)

LTOT is originally designed for women whose infertility was caused by blocked, damaged or diseased fallopian tubes. This procedure relocates the ovum, bypassing the area of tubal pathology in order to place the ovum into the fallopian tube below the point of damage, disease or blockage so that her own husband’s sperm, introduced into her body by the marital act, can then fertilisation. It’s called LTOT because ordinarily the ovum is relocated in the lower part of the fallopian tube or at the same time the uterus itself. This procedure evidently removes an obstacle or provides the conditions necessary if the marital is to be fruitful.308 All the procedure does is to relocate the wife’s ovum within her body prior to the marital act. The sperm that fertilise the ovum are introduced to her body directly as result of marital act. Since this procedure also removes a blockage, LTOT is morally licit.

3.6.3 Moving Sperm Deposited in the Vagina into the Uterus and Fallopian Tube

The fruitfulness of some marital acts is impede because the husband’s sperm do not migrate far enough into the reproductive tract of his wife. For this, after the marital act the physician uses some instruments to propel the sperm deposited in the reproductive area into the uterus and the fallopian tube. If this is the way the technical intervention occurs, then it seems

309 Cfr. W. MAY, Catholic Bioethics and the Gift of Human Life…, cit., 89.
evident that it merely removes an obstacle preventing the marital act from being fruitful, supplying conditions necessary for it to be effective. This procedure also assist the conjugal act and does not replace it and therefore it is morally licit.

3.6.4 Other Treatment Options

Beside the above mentioned treatments, there are certain other methods too, which are compatible with the catholic teachings. They are observation of the naturally occurring signs of fertility, appropriate evaluation and treatments for male factor deficiency, postcoital test to assess sperm and viability in “fertile type” mucus (these tests are done to see if the mucus is potentially hostile to the sperm and providing the sperm the necessary nutrients to allow conception), assessment of uterine and structural competence by imaging techniques such as ultrasound, appropriate medical treatment for ovulation dysfunction and appropriate correction of mechanical blocks to tubal patency usually surgical.

The advantages of catholic treatment options are they are medically safe, morally acceptable, promote shared responsibility and strengthens marriage, provide knowledge of a woman’s body, try to address the causes of infertility and thereby a complete cure to the deficiency, allow greater collaboration between physician and patient and the give respect to the dignity of the human person.

313 Cfr. Ibid.
3.6.5 Napro Technology (NPT)

This technology was developed by Dr. Thomas Hilgers and his team in 1976 in Creighton University in Omaha. NPT takes care of infertile couples and respect the dignity of their marriage and family. It goes on to find the treatable causes of infertility with the help of Creighton Model Fertility Care System (CRMS) and then helps women to regain their health through the treatment of the diseases causing infertility. Once the diagnosis and treatment of the disease that caused infertility has been completed, the couple can achieve pregnancy naturally through the life giving and love making act of husband and wife. It also helps and supports the couple with adoption, if all treatments have failed.

NPT engages the couples holistically, treating them as active participants in their own reproductive health. This approach is entirely new in this field. But it does not claim that at the causes or all the abnormal events can be determined. In this system through more research, more causes of reproductive abnormalities will be found and eventually better treatments given. Couples who use NPT and have a baby through that method realize that the existence of their baby depends, not only on their will, but on the will of God who fulfils their desire.

These are certain morally accepted methods, which try to cure the problem of infertility. They do not substitute the conjugal act. But these are not given sufficient importance in Kerala.

317 CCC n. 2379.
318 DP n. 13.
When we check the various websites of these clinics in Kerala, we could realise they are not practising it. Napro technology is presently available only in western countries, but other methods could be practised here too.

3.7 Adoption

Adoption is a wonderful, loving option for infertile couples that should be at the very least considered, discerned and prayed about. According to the Catechism of the Catholic Church, spouses who suffer from infertility after exhausting legitimate and acceptable medical procedures should unite themselves with the Lord’s cross and “give expression to their generosity by adopting abandoned children or performing demanding services for others.” The instruction *Dignitas Personae* teaches, “In order to come to the aid of the many infertile couples who want to have children, adoption should be encouraged, promoted and facilitated by appropriate legislation so that the many children who lack parents may receive a home that will contribute to their human development.”

Pope Francis in the apostolic exhortation, *Amoris Laetitia*, points out the importance of adoption. He mentions adoption as an act of charity.

Adoption is a very generous way to become parents. I encourage those who cannot have children to expand their marital love to embrace those who lack a proper family situation. They will never regret having been generous. Adopting a child is an act of love, offering the gift of a family to someone who has none. It is important to insist that legislation help facilitate the adoption process, above all in the case of unwanted children, in
order to prevent their abortion or abandonment. Those who accept the challenge of adopting and accepting someone unconditionally and gratuitously become channels of God’s love. For he says, “Even if your mother forgets you, I will not forget you” (Is 49:15)

In adoption, there is paternity which is not founded on a corporeal basis, rather it comes from a free choice of the will by a choice of love. But this is a choice that does not cause the existence of the child. Instead, it welcomes someone else’s child that already exists. The act of adoption is configured in this way as a confirmation of the goodness of the existence of a person, as the recognition of his or her unique identity. Here the child feels the love of his or her adoptive parents which is an event of second recognition. Moreover, the basic idea behind adoption is that the childless couple get a child and a new home for the child who is in critical situation. Through adoption the couples help children who have no parents or home etc.

Adoption gives certain types of fruitfulness in married life. Adoption and foster care are the ways of parenting and raising children. Therefore, children, adoptive or natural, must be accepted, loved and cared for on account of being persons in their own right. It follows that we have to always consider the interests of the children for adoption and foster care. Adoption has a great value in marital life. “The choice of adoption or foster parenting can also express the fruitfulness which is a characteristic of married life.”

319 AL n. 179.
321 Ibid.
322 AL n. 82.
Adoption offers a home and a family, to a child who needs it. Every adoption is done within the framework of the family system of those involved. The basic aim of adoption is to give a new family to the adopted child. At the same time adoption also expands the boundaries of the couple’s family. Through adoption, children and couples of different origin and circumstances are brought together, grafted into each other’s lives and made into one family. Couples have to follow adoption laws in each countries.

Though the Catholic Church recommends adoption for infertile couples, it is not appropriate for every infertile couple due to several reasons. It is a distinct call from God and should be discerned prayerfully. Adoption does not cure infertility, but it cures barrenness, it brings a child into the family. Despite the incapacity to have a biological child, couples can have great happiness and fulfilment as parents through adoption.

Adoption, though it do not cures the problem of infertility, it gives relief from having no children. There are certain laws regarding the adoption of a child in India. Therefore those who opt for adoption, should follow these laws.

3.8 Pastoral Approaches

There are infertile couples who need medical, surgical and hormonal treatments to cure the diseases causing their infertility. Sometimes they need compassionate psychological, pastoral and spiritual care. There are couples who need moral guidance while they hope for a child. Others need help to carry the cross of infertility after all their attempts to have a child have failed. Others need help to adopt a child or to channel their energy and good will into caring for nurturing life in the Church’s
different pastoral fields.

The Church, with sincere compassion and empathy for couples struggling with infertility, offers guidance and hope through her teachings on how to understand and approach infertility in a way that reverences and protects the dignity of the human person and respects God’s divine plan for married love. *Donum Vitae* teaches that everyone should understand the pain of infertile couples, “The suffering of spouses who cannot have children… is a suffering that everyone must understand and properly evaluate.” Even the community of believers have special role in accompanying them. “The community of believers is called to shed light upon and support the suffering of those who are unable to fulfil their legitimate aspiration to motherhood and fatherhood. Spouses who find themselves in this sad situation are called to find in it an opportunity for sharing in a particular way in the Lord’s Cross, the source of spiritual fruitfulness.”

Pope Francis in his Apostolic Exhortation *Amoris Laetitia* mentions the suffering of infertile couples and asserts the value of marriage. “Some couples are unable to have children. We know that this can be a cause of real suffering for them. At the same time, we know that “marriage was not instituted solely for the procreation of children… Even in cases where, despite the intense desire of the spouses, there are no children and marriage still retains its character of being a whole manner and communion of life, and preserves its value and indissolubility.”

326 DV II 8.
The need for compassionate pastoral care and support is vital and irreplaceable; at the same time it needs to be adapted to the desires of each couple. Pastoral care for infertile couples should go beyond the mere moral assessment of treatment options. It should approach the suffering of infertile couples with full respect for the dignity of the spouses and the life to be born.

3.8.1 Accompaniment as Given in Amoris Laetitia

Pope Francis says, “the Church wishes, with humility and compassion, to reach out to families and to “help each family to discover the best way to overcome any obstacle it encounters.”330 This is the basis of the pastoral care in the Church. The family life faces many challenges both within the marriage and outside the marriage. These challenges affect the day to day life of every family. Therefore the Church should accompany the families in their daily life to support, to encourage and to be with them. In Amoris Laetitia the term accompaniment refers to accompanying the couples who are divorced and remarried. Still this term has relevance and significance to accompanying families, who face various threats in the family life.

For Pope Francis, “accompaniment does not mean simply walking with those who are divorced and remarried as if to follow them along a wayward path. Rather, it means coming up alongside them, taking them by the hand, and leading them to the objective truth and reality of their situation ...
For Pope Francis, “accompaniment does not mean simply walking with those who are divorced and remarried as if to follow them along a wayward path. Rather, it means coming up alongside them, taking them by the hand, and leading them to the objective truth and reality of their situation … then choose to amend their life according to the law of Christ.”

This accompaniment and pastoral care which is elaborated in *Amoris Laetitia* can be applied to all families who are facing challenges. Therefore this accompaniment is applied to the pastoral care of the infertile couples. The suffering experience of having no children is a great pain. The suffering of the infertile couples is not known to others or not understood properly. Those who are suffering, at times, are alienated too. In order to overcome these problems pastoral accompaniment is required, to be with the suffering couples, to give suitable advices, to guide them for morally accepted treatments, to suggest the option of adoption and to bare the suffering and to take the cross of infertility.

### 3.8.2 Counselling

The role play by counsellors in the life of infertile couples is an important one to face their suffering of infertility. Infertility can cause depression, stress, anxiety and hopelessness. Therefore the need for counselling arises. Couples must be helped to

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understand their feelings of loss and lack of control, recognizing and accepting gender differences in ways of handling and communicating with each other effectively and constructively. The content of counselling may differ according to the patient and treatment choice but still usually comprise some form of information gathering, implications and decision making, support and therapeutic counselling. The basic aim of infertility counselling is to ensure that patients understand the implications of their treatment choice, receive sufficient emotional support and can cope in a healthy way with the consequences of infertility experience.

The field of fertility counselling encompasses a wide variety of services including the provision of therapeutic counselling, aimed at helping couples cope with the psychosocial challenges of infertility, as well as implications counselling that assists couples in decision-making and clarification regarding the compatible and moral treatment methods. Regardless of the form of counselling used, a comprehensive and accurate assessment is the foundation for effective intervention.

3.8.3 Support Groups

Support group means the groups organised by individuals experiencing infertility. There are different infertility support groups since the early 1980s. They are local groups which may function independently from any other organisation or belong to national or international organisations which provide support and information to infertile couples, their families and friends. They also try to bring the problems of infertility couples to the
governments, media and try to make public awareness on these issues. The important function of these groups is to help infertile couples to cope better with the crisis of infertility on both a cognitive level and on emotional level.

3.8.4 Role of the Priests

As pastors of the Church, it is our, priests, duty to teach the faithful the authentic doctrine of the Church. Angelique Ruhi-Lopez and Carmen Santamaria in their book *The Infertility Companion for Catholics* ask the priests and counsellors to do the same.

If you are a priest or a counsellor, explain why the Church teaches what it does, that it is born out of love for its children and not out of a desire to control. Unfortunately, I have heard of several cases of priests telling parishioners who come to them for advice in the area of infertility that they should do whatever their consciences tell them to do. The issue with this is we’re assuming that everyone’s consciences are both formed and informed. Indeed we can’t force anyone to make a moral decision, but we can ensure they have all the information presented to them in order to make a proper decision.

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For this clergy can be trained so that they may encourage youths or young couples to participate in various training programmes or marriage preparation courses. The trained pastors can also guide the infertile couple to avoid all the immoral reproductive technologies that do not respect marriage, family and the persons who are involved in it. At the same time they can introduce all the technologies that respect couples and their human dignity and marriage. The Church is always teaching like a gentle parent, and it has an obligation to help the faithful form consciences by teaching the truth. “Along with a pastoral outreach aimed specifically at families, this shows the need for a more adequate formation… of priests, deacons, men and women religious, catechists, and other pastoral workers.”

It is also the duty of the pastors to listen to the infertile couples and to understand their difficulties. Listening to the infertile couples by the parish priest is very important. Listening has a huge role to play in the ethics of healing because the healer encourages the sufferer to speak in the act of listening. Priests also should be formed well to give information about proper treatments and to give spiritual report. Pastors must be willing to suffer with the couple and must be willing to walk with them with good support in their journey.

3.8.5 Some Pastoral Guidelines

“The main contribution to the pastoral care of the families is offered by the parish, which is the family of families, where small communities, ecclesial movements and associations live in harmony.”340 Therefore the parishes can do certain things to go hand in hand with the sufferings of the infertile couples. Some
example are:

i. Include the intentions of couples who long for children in the prayers of the faithful especially on certain important days.

ii. Start an infertility support group.

iii. The marriage preparation courses should make the participants aware of the challenges of infertility.

iv. Develop a ministry to help the couples with adoption and instruct about all medically and morally safe treatments. This can be in the diocesan level also.

v. Emphasise the value of love giving aspect of married couples who have no children. Convince the infertile couples that marriage and family do not lose any of their significance or value within the family and the society.

vi. Help them to trust in God in the midst of both physical and psychological pain. Make them learn to strengthen themselves especially through the sacraments of Reconciliation and the Eucharist.

vii. Make opportunities for open discussion of all the issues and the sufferings faced by the infertile couples.

337 Cfr. A. RUHI- LOPEZ- C. SANTAMARIA, The Infertility Companion For Catholics…, cit., 39.
Discussion on the morality ARTs is also appreciable.
1. The dioceses or the bishops’ conferences may start life clinics, where people suffering from infertility could be positively helped.

2. As practised by Pope Pius XII, it would be advisable priests in the parish level may continuously remind the teachings of *Humanae Vitae* and the continuous teaching tradition of the Church on life matters to those professionals who are working in the area related to life and child birth.

3. Gatherings of the infertile couples conducted by parishes, foranes or dioceses could be an effective help for those couples, suffering from infertility.

**Conclusion**

This chapter was an attempt to find the Church’s stand on the ARTs and an attempt to evaluate the morality of these technologies. By evaluating and condemning the ARTs do not decrease the suffering of the infertile couples. The Church, as mother, cannot close her eyes on the suffering couples and therefore it promotes all the treatments which cures the infertility and keep the dignity of human person. And it also promotes certain other options like adoption which could give relief to many childless couples. Counselling and the influence of support groups may assist the infertile couples to be involved actively in

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their duties and in society without much hesitation. As the encyclical *Humanae Vitae* points the Church has the role of both the mother (give the love and care) and the teacher (give proper guidance with clarity) (HV 19). Therefore it is the duty of the Church to help the infertile couples in all their difficulties and sufferings and support them to take this cross. There arises the importance of pastoral accompaniment.
GENERAL CONCLUSION

‘A new phenomenon of increasing infertility clinics in Kerala: a moral and pastoral analysis’ is an attempt to find moral and pastoral evaluation of the term infertility, in the light of the teachings of the Church, in the context of Kerala.

In the first chapter we discussed primarily the term infertility. After defining both primary and the secondary infertility scientifically, we explained the causes for infertility. The entire chapter was purely based on scientific explanations on infertility. While explaining the causes, a detailed account of both male and female causes behind the fact of infertility is mentioned. There are also certain combined factors and some risk factors which causes infertility and that too is included in this chapter. These risk factors are explained in the context of Kerala. The survey which gives the reasons for male and female infertility in Kerala, which is given in Vanitha is also included here. Short description regarding the population of Kerala and the numbers regarding the infertility clinics are the final part of the first chapter.

The second chapter had two parts. In the first part of the chapter, tendency of opting for ARTs, in order to have a child at any cost, by the infertile couples, is explained. Then main content of the chapter spoke of various ARTs available in Kerala. There are more than 40 infertility speciality clinics in Kerala. These clinics provide various artificial methods to ‘produce’ children. Artificial insemination is of two types, homologous and heterologous, based on the collection of the sperm used for insemination. Various insemination methods are intrauterine
insemination and fallopian tube sperm perfusion. These insemination methods are the most common artificial methods available in almost all the clinics in Kerala.

After the discussion on AI, in this chapter, our concentration was on IVF. The birth of the first test tube babe in 1978 was a great revolution in the field of ARTs. IVF and embryo transfer is also available in all the clinics in Kerala. Same as inseminations, IVF is also two types, homologous and heterologous, based on the collection of sperm, ova or even embryo is used. In this chapter, various other modern methods, other than AI and IVF is also explained scientifically. They are Zygote intra fallopian transfer, pronuclear tubal transfer and tubal embryo transfer, intracytoplasmic sperm injection, surrogacy, gamete intra fallopian transfer, low tubal ovum transfer, embryo adoption. The present day system of cryopreservation of embryos for the future purposes is also mentioned.

The second part of the second chapter was the main point of this theme. The increasing phenomenon of infertility clinics and the actual situations of these clinics are given there. The question ‘is ART a treatment?’ was answered in this way. It is not completely curing the problem of infertility, instead finding only a temporary solution. Therefore there is various unethical elements in these clinics not only of treatment procedures but also of certain external factors like the cost of the treatment, the medicines used, reliability of the advertisements etc.

The tendency of approaching the ARTs, among the couples, who don’t have children in the first years of married life, without considering the several aspects of these procedures, is increasing. They may be attracted by the advertisements and
they are ready to put aside anything, money, time or even faith, in order to have a child. There is lack of proper laws or guidelines regulating the number of clinics, treatment procedures, keeping the records, medicines prescribed and the cost of the treatment. Therefore without much difficulty, new clinics or even branches are started in Kerala.

The final chapter of this thesis, was an attempt to explain Church teachings on ARTs. As a licentiate student of marriage and family, the morality of these clinics should be analysed from the perspective of faith and morality. When we evaluate these ARTs, anything that substitute conjugal act and its ends, is immoral. Therefore we start the arguments from marriage is the sacrament in which divine act of procreation and love is continued. And before evaluating ARTs, the main teaching on human life was explained. That is, human life is the gift of conjugal love. This is the foundational teaching of the catholic bioethics throughout the centuries.

The second session of the third chapter analyses the ARTs in the light of the teachings of the Church. Homologous and heterologous artificial insemination are evaluated morally especially in the light of Donum Vitae and other recent documents. Homologous and heterologous IVF, GIFT, ICSI and surrogacy are evaluated in the same way. The Church is so vigilant in evaluating the technological developments considering the dignity of human person as the image of God. The magisterial teachings on ARTs have special importance in the context of Kerala, where these ART clinics are increasing alarmingly. In such a context, children are considered to be a product like any other products. Children are considered to be
means for alienating the pain of the parents. ART clinics are like a buying place and the infertile couple are like customers. The couples who do not have children, think the ART clinics are the best option in their difficulty of having no children. These people who seek the help of these clinics are not concerned with the right of the child, dignity of the human life and sexuality. They forget the fact these ART clinics are not treating their problem. Instead they use artificial methods to substitute the pain of having no children.

The Church always upholds the dignity of human person, marriage and sexuality and the dignity of the children and their rights. The Church is not negating all the medical progresses, instead it promotes certain methods such as use of perforated condoms, LTOT, and Napro technology etc. These methods try to cure the problem of infertility, instead of suggesting a remedy. These methods are not substituting conjugal act, instead they facilitate the conjugal act. Adoption is a suitable option for childless couples to overcome the pain of having no children. The final session of the third chapter is the place where we discussed the pastoral role of the Church. The Church or even the society and family should understand the suffering of the infertile couples. Therefore the Church should accompany these couples in their life journey. Pope Benedict XVI and Pope Francis put forward the term ‘accompaniment.’ This accompaniment can be given to those couples in different ways such as through the support groups, counselling, liturgical celebrations, etc. The priests have a vital role to play in accompanying the suffering of infertile couples by being with them, teaching the morality regarding artificial methods, suggesting the morally accepted
treatment options, by special prayer intentions for them during the liturgy, by giving hope through the homilies. Thus only the Church can accompany the infertile couples.

As we conclude, we can say it is a reality that the number of infertility clinics are increasing in Kerala. Fertility specialists pointed out that the problem was that many were increasingly moving towards infertility situations. There are several factors which causes this tendency. Cultural factor of late marriages are increasing in Kerala. People are interested in settling their life before their marital life starts. Even after marriage, they extend pregnancy for three to four years. It’s biologically true that the quality of sperm and ovum diminishes, as the age increases. There are also certain physiological factors such as abnormalities in sperm, the blockade of the blood vassal of varicose and testicles, hormone variations, endometriosis, tubal blockage and uterine problems that cause infertility in male and female. When people enter into marriage with these cultural and physiological factors, they may face the problem of infertility in the first years of their life. The tendency of approaching the ARTs, among the couples, who don’t have children in the first years of married life, without considering the various aspects of these procedures, is increasing. They may be attracted by the advertisements and they are ready to put aside anything, money, time or even faith, in order to have a child. The seeking of the infertile couples to have a child at any cost, also causes the increasing of infertility clinics in Kerala. Medical fields are advanced and the latest technologies in the field of ARTs are available in Kerala. The field of infertility clinics is a highly income generative one and it has become a big business in this state. People have strong desire for a child and they are
ready to pay any price to alleviate their suffering by having a child. This desire is exploited by these clinics, for e.g. the same treatment of IVF cost varies from clinic to clinic. In Indian context there is no special law to regulate these artificial clinics. Though there are many draft bills are brought by various committees, no law has come into force yet. Since there is no restriction, anyone can begin such a clinic. This is also another reason for this increasing phenomenon.

In these clinics, children are produced. These clinics substitute conjugal act with the artificial techniques. These clinics do not cure the problem of infertility instead they give a remedy to decrease the suffering of infertile couples. If the couples want one more child, they have to undergo the same procedures again. In these clinics, the couples are only persons who are provide raw material and the technician play the role of ‘god’. Technician produces human life. He decides everything regarding the birth of the child. My personal experience proves that these clinics are not ready to reveal the functions to outsiders. There are certain immoral practises like using the donor sperm without the consent of the couple, the fertilised eggs are used for various purposes, destruction of frozen embryos etc. These techniques do not give importance to the dignity of the child, to the dignity of human life, to the dignity of human sexuality and forget the basic truth that human life is a gift of God. Here comes the importance of the magisterial teachings of the Church. The Church clearly explains the immoralities behind these techniques. Evaluating and condemning the ARTs, do not decrease the suffering of the infertile couples. The Church should encourage the professionals in medical field to find moral remedies, such as Napro technology,
suitable for infertile couples. These remedies should cure the problems of infertile couples. They should be encouraged to lead a professional life based on their faith, protecting the dignity of human life. Different support groups can encourage those infertile couples to address their suffering. Through various pastoral activities the Church should accompany the infertile couples to take up the cross of infertility.
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CERTIFICATE

This is to certify that the thesis entitled, A New Phenomenon of Increasing Infertility Clinics in Kerala: A Moral and Pastoral Analysis is written by Fr. Daniel Kozhuvakkattu, towards the partial fulfilment of the requirements for Licentiate in Theology with specialization in Family Theology.

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