

A REVISIT OF ASSISTED REPRODUCTION TECHNOLOGY AND THE HUMANIZATION PARADIGM

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Abstract

Assisted Reproductive Technology (ART) has been debated over a period of time between its permissibility and otherwise. While it has been widely accepted in classical terms, religion generally seeks to regulate its varied application according to their various guiding principles. The fact that ART intrudes the domains of human life that undermines human dignity has made countries to establish regulatory laws. However, these laws have been agreed to be rather negligent and not encompassing to protect the human dignity although the question of the limits and definition of dignity is another area of debate as the article mentions. The effects of ART and how present practice undermines human dignity are objectively highlighted. Various religious views are summarized and a case is made for Islam as being the most comprehensive way that looks at the issue from various relevant perspectives and further advocate that bioethics is guided by Islamic rules.

Keywords: Assisted Reproductive Technology, Human Dignity, Bioethics, Religion

1.0 Introduction

Assisted Reproductive Technology (ART) is a general term used to refer to artificial or partially artificial methods to achieve pregnancy or for infertility treatments. Recent advances

in this area especially in the areas of gamete donations and embryo research when unguarded by balanced ethics can lead to lineage disorder and confusion, genetic disorder and other related issues (Kaylen S. M. D., 2013). It can be said that issues are vastly encroaching the domains of human life that undermines human dignity, thus the need for an urgent re-visit (Dondorp, W. 2013). This need becomes more imperative with the fact that each year, over 200 000 babies are born worldwide by ART (De Mouzon et al., 2009; Dobson, 2009) and the number of cycles in Europe (Andersen et al., 2008) and the USA (Wright et al., 2008) steadily growing.

On the other hand, to humanize can be widely defined as actions or constructions to accommodate the limits or needs of human beings, as in the "humanization of science and technology." While science and technology have themselves been extolled as humanizing the world, they have also been criticized as in need of humanization. In social psychology, dehumanization is defined as the process by which one person or group views others as not worthy of humane treatment as is usually the case in wars and genocides. Dehumanizing in this context can also apply to cases where humans are treated in ways that do not befit their humanity and dignity although a unified definition of dignity and humanity of man is yet to be agreed upon. However, for the sake of this article, we shall regard dehumanizing as any act that reduces the essence of man equitable to that of animals or without sanctity. This definition derives from man being a component of body and soul as Islam establishes. Oriental critics and secularist that seek to negate the existence of the soul will rather not buy in to this definition because in their own perspective, science is built on the premise of negating its existence (Johnson, 2010). But advances and contribution of earlier Muslim Scientist and thinkers falsify this claim (Huma, 2012; UNESCO, 2001).

This article focuses on ART because of its possibility of changing the view of human procreation towards the direction of manufacture through the introduction of technical approaches or attitudes into the activity of human reproduction. And for the fact that this direction might affect our general understanding or attitudes about parenthood and childhood, by making sexual reproduction simply one option among many, with no special significance for how we understand the coming-to-be of the next generation. Thus we highlight the effect of ART vis-à-vis the paradigm of humanity and dignity of Man by looking at the question of human dignity in bioethics. It also raises the ethical issues that arise as implications of some ART practices and the side effect at the major stages and to the involved parties. The article

concludes by mentioning various religious views on the topic, summaries these views and identifies the Islamic guidelines as the most realistic and all-encompassing in this respect.

2.0 Human Dignity in Bioethics

The question of human dignity in the realms of bioethics is a concept whose definition is yet to be unanimously accepted for the fact that it can be viewed from various perspectives. Considering the example of a patient being diagnosed with early Alzheimer's disease which according to the diagnosis will lead to an inexorable decline into dementia and dependency, will it be termed as morally acceptable for the patient to stop taking his heart medication with the intention of hastening his end so as not to be a distress to himself and his family? As discussed by some, it is even admirable for such a patient, who finds the prospect of years of dementia humiliating or repellent and who is reluctant to become a burden to his family, to forgo medication and allow heart disease to carry him off in a more "dignified and humane" way. While others are of the opinion that intentionally taking one's life in such instance contradicts the very essence of human dignity. The third group says the personal decision of a competent individual should be respected in such matter and that it does not contradict the concept of Human Dignity. A more correlating example will be if diagnosis reveals that the unborn fetus when born will be deformed such that he will become a burden to himself and his family. The case of debate in this respect is the moral issues regarding either allowing the natural birth of the fetus or aborting it to avert what is perceived as burden!

Mankind generally acquires its definition of human dignity from various sources. Classical definitions vary as some thinkers attack the idea of assigning a special status to man in promoting animal rights (Peter, 1990); others are of a different perspective (Bernard, 1985). Kant in an effort to set a universal paradigm to the dignity of man from a purely rational perspective said men possess dignity because of their capacity for free obedience to the moral law of which they themselves are the authors (Johnson, 2010). Although it is argued (Daniel, 2008) that Kant's account of human dignity does not offer clear moral guidance. In the universal declaration of Human Rights (1948), Charter of the United Nations (1945), also proclaim upholding human dignity but however, its limits and full codes are either narrowly defined or completely missing. Religions on the other hand seem somewhat unified in attributing unique dignity to man that carries with it a full code of moral ethics (Leon, 2003; Qurtubi, 1945). Although this definition from various religious perspectives is somewhat similar, they also vary in some basic and or fine details. (Daniel, 2008) highlighted

the indispensability of dignity understood as Humanity in Bioethics and (Schulman, 2008) agrees to the fact of the crisis of the unguided encroachment of science and technology on the domains of life that undermines human dignity and have tried to make an exegesis on this with the aim of striking a balance.

The aspect of ART that directly affects the question of humanity lies in the methods, values and practices that are associated to it. ART can be described as a double-edged sword that can both mar and benefit based on the guiding principles used in defining the values of its essence. Surprisingly, responsible authorities and stakeholders in proper guiding of this technology have been somewhat negligent. The Charter of the President's Council on Bioethics (2004) made the following summary (Executive Summary, 2004);

- The fields of assisted reproduction, human genetics, and embryo research are increasingly converging with one another.
- There is no uniform, comprehensive, and enforceable system of data collection, monitoring, or oversight for the biotechnologies affecting human reproduction.
- There is minimal direct governmental regulation of the practice of assisted reproduction.
- There is extensive professional self-regulation of the practice of assisted reproduction, but compliance with the standards invoked is purely voluntary.
- There is no comprehensive, uniform, and enforceable mechanism for data collection, monitoring, or oversight of how the new reproductive biotechnologies affect the well-being of the children conceived with their aid, the egg donors, or the gestational mothers.
- There are no nationally uniform laws or policies relating to access to assisted reproduction.
- Given the present framework of regulation, novel technologies and practices that are successful move from the experimental context to clinical practice with relatively little oversight or deliberation. Once in practice, these techniques are used at clinicians' discretion, with little or no external oversight. Use of effective technologies becomes widespread rapidly.

And unfortunately, this trend has only changed but little (Bernard and Rebecca, 2011; Nikolaos, 2010; Anna, 2011).

The argument regarding the right definition of human dignity and its limits are never ending issues due to the fact that our perspectives as human beings is usually affected and

directed by various factors that are uncountable. Thus mankind is in need of a unifying factor that binds it together in order to protect its very existence. This we will argue is usually the result when mankind abandons the general, encompassing and intrinsic principles set for it by its Originator which others refer to as nature. It will surely continue groping in a labyrinth till it seeks to annihilate its very existence. Islam on the other hand has a full body of knowledge that properly defines and guides such technologies (Auda, 2007) such that it only further humanizes man. For that reason, we will limit ourselves to the definition of human dignity as defined by the shariah of Islam (Dusuki and Abdullah, 2007; Auda, 2007).

3.0 ART

Sterility which is the major case ART is supposed to combat has over the years increased drastically. With the statistics in the US alone being one in every five couples (Nikolaos, 2010). This is an increase from 18.5% as reported by Begley (1995). The reason for this drastic increase has not been unanimously agreed by scientists. However various biological and social causes, diet (nutrition) or lack of exercise, pollution, stress and sexual irresponsibility share a portion of responsibility. The deliberate altering or postponement of motherhood has also been pointed as a major cause. So depending on the stage or level of sterility, various ART means as deemed appropriate are applied.

3.1 Common methods of ART

In vitro fertilization (IVF) which means fertilization outside of the body seems to be the most effective ART. It is often used when a woman's fallopian tubes are blocked or when a man produces too few sperm. The woman is first treated with fertility drugs that cause the ovaries to produce multiple eggs. Once mature, the eggs are removed from the woman. They are put in a dish in the lab along with the man's sperm for fertilization. After 3 to 5 days, healthy embryos are implanted in the woman's uterus. A similar method is Zygote intrafallopian transfer (ZIFT) or Tubal Embryo Transfer. In this case, the very young embryo is transferred to the Fallopian tube instead of the uterus after fertilization in the laboratory. Another method is Gamete intrafallopian transfer (GIFT). Here fertilization occurs in the woman's body after the transfer of eggs and sperm into the woman's Fallopian tube. In extreme cases where IVF fails, Intracytoplasmic sperm injection (ICSI) is often used. In ICSI, the embryo is transferred to the uterus or Fallopian tube after a single sperm is injected into a matured egg.

For women who cannot produce eggs or men who cannot produce sperm, ART procedures resort to the use of donor eggs, donor sperm, or previously frozen embryos. This

method is also sometimes used when the woman or man has a genetic disease that can be passed on to the baby. In the case where donor embryos are used and transferred to the uterus of the couples, the child will not be genetically related to either parent. Surrogacy is practiced when a woman agrees to get pregnant for a couple by using her egg and the male sperm and submit the baby to the couples after birth. In this case the baby will not be genetically related to the woman. Gestational Carrier is used for women with ovaries but no uterus or women advised against pregnancy because of a serious health problem. In this case, a woman uses her own egg. It is fertilized by the man's sperm and the embryo is placed inside the carrier's uterus. The carrier will not be genetically related to the baby and gives him or her to the parents at birth.

3.2 Some Ethical Implications

ART has indeed solved the cases of infertility in couples however when a third party is involved in the reproduction case, it results to multiple complicated social issues and implications. Several ethical detrimental concerns can be drawn from a US-based research on 244 non-biological parents (45 male and 199 female) who had used donor spermatozoa within heterosexual or homosexual relationships in which many of the respondents shared their views and challenges such as genetic connection to offspring, search for healthy donors and matching donor to non-biological partner etc (Frith et al., 2012). Such views pose serious ethical issues on such technology. Below, we further highlight implications of unregulated/unguided practice of ART:

- By the introduction of ART it opens up the possibility of changing the view of human procreation towards the direction of manufacture which might affect our general understanding of or attitudes about parenthood and childhood, by making sexual reproduction simply one option among many.
- Destruction of the family structure (Marriage) since single parenthood is promoted in this case.
- Confused lineage: A scenario where five people are in one way or the other related to the child arises. Two sterile couple, two gametes donors, and the gestational carrier. This can pose complicated social problems like inheritance; legal issues talk less of the emotional imbalance this causes to the child in future. A lot of cases of this nature are cited by (Nikolaos, 2010).

- Encourages homosexuality as it gives such couples the chance to forms of family life not provided by natural laws. According to a report, 50% of lesbians within the child-bearing age wish to be become parents and their hopes are kept alive by this despicable new technology (Amato and Jacob, 2004).
- Encourages deliberate delay of motherhood which comes with its one complication and social effects.
- The possibility for a woman to bear a child by using her husband's cryopreserved sperm after his death (post-mortem fertilization). This also introduces complex social and legal issues (Nikolaos, 2010).
- The Commerce of Gametes and Embryos is the driving force that adds to this complexity and has drawn the criticism of reducing man to yet a simple commodity that can be purchased advertised and marketed just as pets or commodities. IVF clinics advertise now for gametes donors (ASRM, 2007). Although some argue that donors are only compensated for their time, efforts, and reasonable expenses, rather than for the gametes themselves. At present, thousands of sperm banks exist in the US (Baum, 2011). In 2000, between \$60 and \$70 is offered to sperm donors per donation (Ethics committee, 2000). This has made some individuals aggressively market their sperm for thousands of dollars per vial, and Internet sperm brokers (Andrew, 2003) such as ManNotIncluded.com, offers baby-making kits to its customers (Goonzalez, 2002). In the early 1980s, multimillionaire Robert Graham established the "Repository for Germinal Choice," which offered infertile couples the opportunity to buy sperm donated by Nobel laureates (Plotz, 2001). In some cases, brokerages like Tiny Treasures solicit a pool of potential donors, create individual profiles (including photographs, biographical data, information on physical characteristics, medical histories, etc.), and establish a database. Egg Donation, Inc. for example seeks in a donor someone who is "bright and attractive, between the ages of 21 years to 30 years, of any ethnic background, preferably who has completed a college degree or is presently pursuing a college degree and is in excellent health." (Egg Donor, 2004) Egg Donation, Inc., advises potential donors that the donor fee "will range from \$3,500 to \$12,000." As to which variables drive cost, the website explains: "Asian and Jewish ovum donors are always in demand. A tall, attractive donor with a masters or doctorate degree will always receive higher compensation than most other donors." Ivy League donors from Tiny Treasures seek anywhere from \$8,000 to \$20,000

compensation for a cycle of ova retrieval. Some couples directly advertise for ovum donors. Such adverts are usually made in campus newspapers, prestigious colleges and universities. One of such at Vassar College offered \$25,000 in exchange for the ova of a “healthy, intelligent college student or college graduate, age 21-33 with blue eyes and blonde or light brown hair” (Shanley, 2002). Another in the Stanford Daily offered \$50,000 (Healy, 2003).

- The opening of such anonymous donations has brought about cases of one individual producing over 150 children (Mark, 2011) which increases the risk of inadvertent incest between half-siblings especially in countries like US and Canada who do not
- have strict laws on how many children individual donors can father unlike France Britain.

Alongside these implications, the practice of ART also has nontrivial effects at various stages of implementations.

3.3 Delivery

One 1993 Canadian study showed that nearly 25 percent of all births facilitated by ART are premature, and 30 percent of the resulting infants had low birth weight (McElrath et al., 1997). While this low birth weight may be attributable to the high rate of multiple pregnancies, one 1987-89 French study reported that even for singleton births facilitated by ART, the rate of prematurity and low birth weight was twice that of children conceived by natural means (Rufat et al., 1994). Another study suggests that women using ART are more likely to induce labor and undergo elective caesarian section delivery (TPCB, 2004).

3.4 Child health

Recent research by the Centers for Disease Control showed that ART babies are two to four times more likely to have certain kinds of birth defects. These may include heart and digestive system problems, and cleft (divided into two pieces) lips or palate (DHHS, 2009). Researchers don't know why this happens. Studies found an overall increase in birth defects after ART (6.4%) compared with non-ART pregnancies (4.8%) (Jane et al., 2010). Children conceived following ART are known to bear higher risk for adverse birth outcomes (Bergh et al., 1999; Sutcliffe and Ludwig, 2007; Katalinic et al, 2004; Koivurova et al, 2002; Schieve et al, 2004). (Karim et al., 2011) found a 40% increase in the overall risk of Congenital Heart Diseases (CHD) in children conceived following ART after taking into account maternal age,

socioeconomic factors, and year of birth. The emergence of this technology further encourages postponed motherhood which also exposes comes with its unique health risk to such mothers and children (Nikolaos, 2010).

3.5 Women Health in ART

Complications to women health can include rupture of the ovaries, cysts, and cancers. The reported incidence of severe ovarian hyper stimulation syndrome is between 0.5 and 5.0 percent (Delvigne et al., 2002). Additionally, adverse side effects of the hormones administered during superovulation have included memory loss, neurological dysfunction, cardiac disorders, and even sudden death (ASRMPC, 2003).

Multiple pregnancies are far more common following ART. Multiple pregnancies pose greater risks to mothers than singleton pregnancies. A woman carrying multiple fetuses has a greater chance of suffering from high blood pressure, anemia, or pre-eclampsia (TPCB, 2004). Because multiple-gestation pregnancies are generally more taxing on the mother's body, they are likelier to aggravate pre-existing medical conditions (TPCB, 2004). Moreover, such pregnancies expose the woman to higher risks of uterine rupture, placenta previa, or abruption (TPCB, 2004).

4.0 Various Religious Views

Many religious groups have stood-firm to antagonize science and technological advancement on such areas as procreation, abortion and infertility therapy and their implicated bioethical impacts (Schenker, 2005). The possible harm the various practice of Assisted Reproductive Technology (ART) can cause to the sacredness of marriage and the sanctity of the embryo are among the two areas several religious groups have heatedly discussed (Dutney, 2007). Thus, based on protecting the sacredness of Marriage and the sanctity of the embryo, and protecting the lineage, Jews (Schenker, 2005), Roman Catholic Church (Benagiano et al., 2011), other Christian denomination (Schenker, 2000) all approve IVF only when gametes are from legally married couples without the introduction of a third party in any way either by surrogacy or gestational Carrier. These views as already mentioned basically are mentioned only to guard the sacredness of marriage and the sanctity of embryos.

On the other hand, in Islam finding remedy to infertility is allowed when the real need arises and encouraged as long as enshrined prohibited limits are not violated. The rules provided by Islam not only seek to protect the sacredness of marriage and the sanctity of the

embryo but revolves round submitting to The Creator and respecting His decree (i.e Human Dignity) and also Morality associated with the practice in terms of privacy. Prohibit anything that unnecessarily bring to man hardship or harm in anyway. The Islamic principles seek in addition to protect the individual socially, morally, spiritually, economically and politically. So according to these principles, the issue of ART is usually viewed from all these perspective because the human being is a social being and cannot be detached from the society as anything done by him in one way or the other affects his society. Thus ART may be permissible subject to certain conditions:

- That there is a real need for that. A delay of one or two years in having children is not an excuse for the couple to pursue this or similar methods. Rather they should be patient, for Allah may grant them a way out soon without them doing anything that is prohibited. This is because Allah says in Surah Ash-Shura 42:49-50 “To Allah belongs the kingdom of the heavens and the earth. He creates what He wills. He bestows female upon whom He wills, and bestows male upon whom He wills. Or He bestows both males and females, and He renders barren whom He wills. Verily, He is the All-Knower and is Able to do all things.”
- The woman should not uncover her privacy before men when there are female staffs available. In a hadith narrated by the authors of Sunan and classed as hasan by al-Tirmidhi and as saheeh by al-Haakim, from Mu’aawiyah ibn Haydah, who said: “I said, ‘O Prophet of Allaah, when should we cover our ‘awrah and when may we uncover it?’ He said, ‘Protect (cover) your ‘awrah from everyone except your wife and those whom your right hand possesses (concubines).’ I said, ‘O Messenger of Allaah, what about when one of us is alone?’ He said, ‘Allaah is more deserving than the people that you should be modest before Him.’”
- It is not permissible for the husband to masturbate; rather he maybe intimate with his wife without penetration, and produce semen in this manner. Imam Shafi’i stated that masturbation is forbidden based on the verses from the Qur’aan 23.5-7. This is because the verses are clear in forbidding all illegal sexual acts (including masturbation) except for the wives or that their right hand possess. And whoever seeks beyond that is the transgressor. "And let those who find not the financial means for marriage keep themselves chaste,

until Allah enriches them of His bounty." 24.33. This verse also clearly orders whoever does not have the financial means to marry to keep himself chaste and be patient in facing temptations (including masturbation) until Allah enriches them of His bounty. From the sunnah of the Prophet (peace be upon him): Abdullaah ibn Mas'ood said, "We were with the Prophet while we were young and had no wealth whatsoever. So Allaah's Messenger said, "O young people! Whoever among you can marry, should marry, because it helps him lower his gaze and guard his modesty (i.e. his private parts from committing illegal sexual intercourse etc.), and whoever is not able to marry, should fast, as fasting diminishes his sexual power." Bukhari: 5066. The hadeeth orders men who are not able to marry to fast despite the hardship encountered in doing so, and not to masturbate despite the ease with which it can be done.

- The woman's eggs and man's sperm should not be kept in a freezer for later use, or another appointment, and there should not be any delay in placing them in the woman's uterus. Rather that should be done immediately without any delay, lest they be mixed with others or be used for other people.
- The sperm must come from the husband and the egg from the wife, and be implanted in the wife's uterus. Anything else is not permissible at all. Regarding this, Allah said in Surah Al-Nahl 16:27: "And Allaah has made for you Azwaaj (mates or wives) of your own kind, and has made for you, from your wives, sons and grandsons, and has bestowed on you good provision. Do they then believe in false deities and deny the Favor of Allaah (by not worshipping Allaah Alone)" and in Surah al-Baqarah 2:223: "Your wives are a tilth for you, so go to your tilth, when or how you will, and send (good deeds, or ask Allaah to bestow upon you pious offspring) for your own selves beforehand. And fear Allaah, and know that you are to meet Him (in the Hereafter), and give good tidings to the believers (O Muhammad). Scholars say tilth is mentioned specifically with regard to a man's wife, which indicates that a woman other than his wife is not appropriate for his tilth.
- There should be complete trust in the doctors who are doing this procedure.
- These rules are adhered to in order to protect the lineage which Islam holds very dearly. For this reason Abu Dawood in hadith 2157 transmitted that it is forbidden to have intercourse with a pregnant widow until she has given birth.

This hadeeth was classed as saheeh by Shaykh al-Albaani in *Irwa' al-Ghaleel*, 187. In this light, the Shareeah also prohibits the sale or donation of such organs or gametes that will violate this protection in order to protect another thing which is dignity and uniqueness of every human being. The shariah does not count the reason of wanting to have a child as validity to go against these established rules and principles.

5.0 Conclusion

This article discussed the need for the ethical revisit to ART and identified the main reason for disunity in the definition and limitation of Human dignity and the imperativeness for a unifying paradigm. It also mentions the implications of unregulated practice of ART as the main drive for this call and highlights the negative effects of ART. It discovered that various religions are united on it being regulated by divine rules and Islam identified as the most comprehensive order that tackles the case from various perspectives and is thus advocated to be the one that guides the bioethics formation.

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