Sharmin Islam

Ethics of Assisted REPRODUCTIVE MEDICINE

A Comparative Study of Western Secular and Islamic Bioethics

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The International Institute of Islamic Thought London · Washington

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THE INTERNATIONAL INSTITUTE OF ISLAMIC THOUGHT P.O. BOX 669, HERNDON, VA 20172, USA www.iiit.org

LONDON OFFICE

P.O. BOX 126, RICHMOND, SURREY TW9 2UD, UK www.iiituk.com

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Sharmin Islam

^{*(}SWT) – *Subhānahu wa Taʿālā*: May He be praised and may His transcendance be affirmed. Said when referring to God.

List of Abbreviations

AI	Artificial Insemination
AID	Artificial Insemination Donor
AIH	Artificial Insemination Husband
ART	Assisted Reproductive Technology
CM	Commercial Motherhood
HESC	Human Embryonic Stem Cell
IOL	Islam Online
IVF	In Vitro Fertilization
NBAC	National Bioethics Advisory Commission
OIC	Organization of Islamic Conference
SCNT	Somatic Cell Nuclear Transfer
Q	Qur'an

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Foreword

Bioethics is a little understood but hugely important field in the world of genetics, advanced medicine, and medical ethics. As medical ethics informs both medical practice and health care policy, it is vital that the various perspectives of bioethicists (those who examine the ethical and moral issues of health care) are understood and debated. This is particularly important as developments in modern medicine (controversially stem-cell research, human cloning, and the right to end life) can lead to potentially harmful practices being legitimized through health care policies into practice, with the general public largely unaware that some powerful lobbying is taking place behind the scenes. What is ethical, and what is not? Who decides and on what basis?

Ethics of Assisted Reproductive Medicine compares and contrasts Western and Islamic models of bioethics to argue that the Islamic perspective provides a viable and clear alternative that goes beyond the dominance of the secular perspective and its utilitarian, consensus and various other philosophical bases, to give Revelation and spiritual understanding precedence. The latter essential because it is bioethics that is largely defining what constitutes human life and it is bioethics that is spearheading and influencing policy on matters which frankly concern us all and which are likely to have huge societal impact. These include highly controversial matters such as the right to rent out wombs under various surrogacy agreements, the right to experiment on embryos, and the right to die as opposed to being hooked up to life support machines.

Ethics has many meanings and the whole debate is intrinsically a moral one with secular philosophical ideas of human rights and the quality of life slowly replacing those of the sanctity of life and sexual reproduction. Human cloning, surrogacy, and IVF, are some of the more hotly contested topics. The author analyzes these rigorously and

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objectively, addressing the perspectives of both the secular Western and Islamic models, and fundamentally how each has chosen to framework its own understanding of the issues at hand. Where they converge and where they diverge. Human cloning is a case in point and the subject of chapter eight – a hugely debated issue, the possibilities of which took the world by storm with the birth of Dolly the sheep. The moral and human implications of what many perceive as an almost Frankenstein science are not only astonishing, but bizarre, and also speak volumes of where developments in advanced medicine, if left unfettered, could lead humanity, and why bioethics has such a critical role to play in this regard.

Western bioethics has tried to make sense of the many complex problems it is challenged with but solving them without a real sense of direction is proving to be an almost impossible task. Is it right for a woman to act as surrogate for her sister or for a woman to artificially impregnate herself with sperm purchased from an anonymous sperm bank donor? What if any are the psychological implications for the mother or resultant offspring? Does the right of an infertile couple to conceive using whatever method is available override the rights of the donor child? As the author points out, if anything a shared sense of understanding and direction is missing in Western secular analysis. And direction is precisely what the Islamic model has proven capable of. Its intrinsic strength, and straightforward statement of principles with regards to addressing some of the most complex problems whilst safeguarding the Qur'anic and Shari^cah position, is worthy of note. In contrast, often burdened by the paradox of choice with so many opinions fighting for attention, the Western secular model can appear confused, unsure as to which position to firmly adopt.

The author analyzes all these and many other issues exploring the philosophical underpinnings of Western secular bioethics (deontology versus consequentialism), from Hippocrates' principle of "do no harm" to modern concepts of autonomy and human rights. What we are left with is a deeper understanding of what it is to be human and how important human identity actually is, as well as the more chilling prospect of bioethicists determining public health care policies and sanctioning medical procedures according to what is regarded in

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their world view as relevant – in other words a secular understanding which sees the human body as little more than tissue, organ, and brain, not soul, consciousness and mind.

This study is being published to widen discourse, invite scholars to respond, and hopefully pave the way for further research. Since it deals with some critical and difficult issues, doubtless readers may agree with some of the issues raised, and disagree with others, but it is hoped that for the most part both general and specialist readers will benefit from the perspective offered and the overall issues examined.

Where dates are cited according to the Islamic calendar (hijrah) they are labelled AH. Otherwise they follow the Gregorian calendar and labelled CE where necessary. Arabic words are italicized except for those which have entered common usage. Diacritical marks have been added only to those Arabic names and terms not considered modern.

The IIIT, established in 1981, has served as a major center to facilitate serious scholarly efforts based on Islamic vision, values and principles. The Institute's programs of research, seminars and conferences during the last thirty years have resulted in the publication of more than four hundred titles in English and Arabic, many of which have been translated into other major languages.

We express our thanks and gratitude to the author for her cooperation throughout the various stages of production. We would also like to thank the editorial and production team at the IIIT London Office and all those who were directly or indirectly involved in the completion of this book including Shiraz Khan, Sara Mirza, and Dr. Maryam Mahmood. May God reward them all for their efforts.

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Preface

Infertility today is a major medical problem, in fact one of the most common faced by couples wishing to start a family. Although advances in medicine, through IVF and various forms of assisted reproductive technology (ART), have made it possible for infertile couples to conceive, their use in addition to the many other techniques employed to overcome childlessness, have raised their own ethical-religious as well as legal problems. From medical professionals simply trying to help patients we move into the realm of ethics and the issues raised by such practices. The bioethics approach, in the guise of its various traditions, differs in solving these problems. This work compares and contrasts the Western secular approach with that of the Islamic bioethical perspective, with reference to their epistemological and ontological dimensions, in order to judge the moral worth of these new forms of reproductive intervention. A phenomenological method is employed consisting of logical reasoning and critical reflection to indicate points of agreement, disagreement and interdependence (if any). In view of the extensive nature and scope of ART, discussion has been limited to artificial insemination (AI), in vitro fertilization, surrogacy and human cloning.

Key findings of the study are that Western secular bioethics in relation to ART has a consequential stance, while Islamic bioethics has both a deontological and consequential tone. Although it would thus appear that broadly speaking, both systems of bioethics hold an incommensurable relation to each other, and are moreover different in their foundational principles, the relationship is nevertheless not one of absolute confrontation. As such no watertight compartment should be drawn between them. On the contrary, what should be noted, and as the study reveals after detailed discussion and analysis, is the fact that there also exist many points on which both agree. In other words comparative analysis reveals a relational difference between them rather than a state of absolute contrast.

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The desire to have children is a natural and very strong human instinct. If a heterosexual couple decides to start a family, they can proceed to conceive a child by means of sexual intercourse. However, some couples fail to conceive due to medical reasons. Infertility can be defined as the failure to produce a viable pregnancy within a year of regular sexual intercourse without the use of contraception.¹ The problem of infertility is an emotionally difficult one and as old as recorded history. Irrespective of religion, place, community, culture and time, people facing this problem have tried hard to overcome it.

In order to comprehend the causes of infertility, it is important to understand the process of normal pregnancy. Let us assume that on the evening of the 13th day of the wife's menstrual cycle, the husband has sexual intercourse with her. After penetration, the front and back walls of the vagina come together and thereby it takes only a small amount of semen to fill the vagina and cover the cervix. Within 20 to 30 minutes, enzymes from the prostate liquefy the semen. Some of the semen will now flow out of the vagina. The first wave of sperm rushes rapidly upwards, swimming against the downward current of the uterine contractions. Within 5 minutes after ejaculation, they will be swarming the fallopian tubes. The second major wave of sperm enters into the cervix crypts residing there over the next few days. From here, a constant stream travels up the uterus and the fallopian tubes. During their stay in the female genital tract, the surface charges on their heads are altered by the female genital fluids, a process known as capacitation; it is only after capacitation that the sperm can fertilize the egg. Around the 14th day of the menstrual cycle, ovulation takes place in a woman whose menstrual cycle is 28 days. As the egg is released, rhythmic contractions of the tube and its microscopic brush border draw the egg into its open-ended funnel. There, the egg is immediately surrounded by sperm. It is in this funnel that fertilization takes place.² Thus, the developmental process of a baby starts with the process of fertilization. It is the union of two special cells or gametes: an egg and a sperm to form a zygote or fusion cell. Strictly speaking, the zygote is a fertilizing egg causing union of the genetic material from the mother and father.³

In fact, infertility is a pathological condition that affects only heterosexual couples. A homosexual couple cannot be said to be infertile in any meaningful sense. It is the achievement of biomedical scientists that has made it possible to detect the causes of infertility. According to their opinion, infertility may be caused by certain 'defects' in the wife or husband.

Male infertility takes place if the husband produces no or few sperm. Infertility also occurs if he produces sluggish, immotile or abnormal sperm. He may have an insufficient volume of seminal fluid, an excessive amount of fluid which over-dilutes the sperms, may be impotent, may not ejaculate or ejaculate prematurely. Even ejaculation may be discharged into his urine.⁴

Female infertility may occur due to anovulation in which the ovary does not produce an egg. Usually the cause is when the ovaries do not get adequate hormonal stimulation from the pituitary gland. Other causes are the absence of ovaries, hormonal disorders, tumours etc. The eggs may ripen but fail to escape because of scarring from endometriosis or infection. Infrequent ovulation also causes infertility in women. In some cases ovulation does occur but then the ovaries fail to produce pregnancy-sustaining hormones over the next 14 days. Defective fallopian tubes are also a cause of infertility. This is either due to a fault in picking up the egg or an obstruction to sperm and egg transport. Even theoretically, the tubal environment may also be

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hostile to fertilization. The woman may not have any uterus. Even abnormalities present at birth or resulting from fibroids, infection or abortion prevent implantation taking place. If the cervix of the woman produces thick mucus instead of thin and clear mucus at ovulation, it may immobilize the sperm of the husband. An absence of a vagina or a thick hymen causes infertility in rare cases.⁵

Often couples that wish to have a child but are unable to conceive become frustrated and turn repeatedly to a physician for treatment. In other words, the impact of infertility upon a couple sometimes becomes a significant problem in life. But today such difficulties can be set in the context of new possibilities that are being explored in the laboratories of medical science. Many strategies have been developed to bypass infertility and enable a couple to become parents. Until recently the treatment for infertility was mainly undertaken by surgery to correct anatomical defects and was mostly uncontroversial from an ethical and religious point of view. But the dramatic and tremendous development in biomedicine in recent years has changed the situation drastically. One of the most controversial topics in reproductive ethics is the use of new technologies and new social arrangements to facilitate child bearing. This has basically transformed the process of procreation from a private personal relation between husband and wife into an artificial process, undertaken in a laboratory with, in many instances, the involvement of a third or fourth party in the process.

Different technologies that have been developed to overcome infertility include the following:

- a) Artificial Insemination
- b) In vitro Fertilization
- c) Surrogate Motherhood
- d) Human Cloning
- e) Gene Replacement Therapies
- f) Artificial Embryo Donation
- g) Ectogenesis
- h) Embryo Adoption
- i) Egg Transfer etc.

During the last few decades, the world has seen tremendous development and ever-newer innovations in the fields of bio-medical research. One of the most prominent breakthroughs has been the successful sequencing of the human genome by the human genome project. This advancement has allowed us a little glimpse into the language used by God to create life. There have been many advancements in the fields of artificial organ transplantation, genetic engineering, gene therapy and assisted reproduction. The technology of cloning has added a new spectrum to this field. Although human civilization is benefitting from these innovations in many ways, many of them are also creating a number of ethical issues. In fact, as Kuhse has rightly observed, "New medicine calls all in doubt."6 During his presidential address to the American College of Surgeons in October 2001, R. Scott Jones noted, "to function effectively in the health care system... to navigate in a trillion dollar industry, we need compass: medical ethics."7

Therefore, ethical inquiry is necessary when we are unsure of the direction in which we are heading. It cannot be denied that such advances in recent medicine will cure many medical dilemmas and previously incurable diseases. But such new developments must not be left to proceed along the wrong path without proper ethical guidelines. Moreover, different ethical systems of thought view these problems from different angles. These changes in the procreative processes challenge basic religious and ethical concepts. Reproduction is an especially sensitive issue because of the way it intersects with traditional views, including religious views, about the moral status of the fetus, women's social roles and the family. At one end of the spectrum are those who believe that reproduction should take place only in a traditional marriage as a result of sexual intercourse between a man and a woman. At the other end are those who condone any attempt to reproduce those results from informed choices and that only the high probability of serious harm justifies limits on such choices. In between lies a vast array of possible ethical positions, expanding in number as new options become available. We shall confine our discussion here to Western secular and Islamic bioethics to judge whether these newer inventions are blessings for human beings or a curse. We shall

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also undertake a comparison between these two approaches in order to discover points of similarity, difference and interdependence (if any).

It is worth mentioning at this point that in view of the extensive nature and scope of assisted reproductive technologies, we will be restricting examination to four important and current issues: Artificial Insemination (AI), In vitro Fertilization (IVF), Surrogate Motherhood and Cloning.

Purpose and Scope of the Study

The general purpose of this study is to examine and discuss the philosophical basis of the Islamic and Western secular viewpoints as presented on bioethical issues. The more specific purpose of the study is wholly expository and in fact a theoretical intellectual enterprise. I do not intend to recommend the establishment or otherwise of a bioethics but do attempt to demonstrate the importance of considering ethical values when dealing with medical practice. The work therefore studies the broad outlines of Islamic legal philosophy by comparing and contrasting with Western secular bioethics.

What must be clearly stated at the outset is that the present work is not, strictly speaking, a study of the legal aspects of the Western secular philosophical and Islamic ethical viewpoints of bioethics per se. Rather, it is a study of the philosophical basis of both Western secular and Islamic viewpoints with special reference to their epistemological and axiological aspects, as the problem deserves analytical study for epistemological and axiological reasons. The contention here is that in order to deal with bioethical issues, not only do legal aspects have to be considered, but the whole concept of man vis-à-vis a knowledgebased approach. Theories of value have in addition to be developed. In other words, before legal rules can be established, bioethical issues must be examined, and discussion on the basic concept of man in relation to the development of knowledge initiated. In the absence of such a philosophical comprehension, any move to establish an ethical procedure is deemed unwise and indeed unfounded, that is not based on solid grounds.

Comparative philosophy, a sub-field of philosophy, is a very recent phenomena and its exploration a very current development. It encourages and brings together rival philosophical positions to understand one another better and to set right the limitations and inconsistencies within the different positions. In other words, philosophers work on problems by intentionally setting into dialogue sources from across cultural, linguistic, and philosophical streams. "The ambition and challenge of comparative philosophy is to include all the philosophies of global humanity in its vision of what is constituted by 'philosophy.³⁹ It is challenging in the sense that its scope and subject matter is wider than other branches of philosophy. Comparing Western secular bioethics with Islamic bioethics is problematic because the former is a combination of vast philosophical outlooks such as utilitarianism, deontology, virtue ethics, communitarian ethics, feminist ethics and so on, exacerbated by tensions with other traditions and internal conflict.

We must be very clear that the aim of comparative study is not the creation of a synthesis of different traditions in philosophy, which is what world philosophy does. Rather it is a unique approach, in the sense that it helps us to learn a new way of thinking about, and a new way of approaching things, as well as a new way of interacting. Comparative study within philosophy took place in the 18th century in Western philosophy, the main focus being on Eastern philosophy and highlighting Confucianism and Buddhism. As a whole, mainstream Western philosophy has been slow to accept this new trend in philosophy. Philosophy departments rarely put elements of comparative philosophy on their curricula, and comparative philosophers often find it difficult to publish their work in mainline journals.⁹

With regards to Islam, a literature review reveals that a comparative study of philosophy with reference to Western secular and Islamic ethics is almost non-existent. It is generally said that there is a radical difference between Western secular and Islamic bioethics in the pursuit of philosophy. Western secular bioethics is generally differentiated from the Islamic approach by its exclusively rational approach to what constitutes reality and the human being, and denial of the role of faith in a supernatural being. Following on from this, we are

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familiar with Islamic and Western ethics being portrayed as opposed to one another and Western bioethics as always being anti-Islamic and vice versa. In contrast to secular rationalism, the core of Islamic bioethics is divinity. Islamic bioethics is based on divine revelations, on a divine order, which is firmly based on some articles of faith, spiritual guidance from God, belief in the hereafter etc. If these articles of faith were to be removed from Islamic ethics, it would de-spiritualize the whole system. This is why we cannot speak of some aspects of Islamic bioethics without referring to or quoting divinity. Hence, the very core and main foundation of Islamic bioethics is the Divine Allah and faith in Him. Western secular bioethics, as mentioned, is based on the absoluteness of human reason. It is a way of thinking, and a system, which emerged during the Renaissance in Europe as a backlash or mutiny against the dictatorship of the Church, more specifically its stance towards scientists and scientific discoveries, as epitomized in the Galileo affair. The severe backlash from scholars contributed towards the reshaping of modern Western secular philosophy and subsequently bioethics. So these are the points of clear and distinct confrontation. Given historical tensions and rivalries between Europe and the Muslim world it was a common and even laudable exercise for scholars, and even ordinary citizens, to highlight differences between the two. Muslims, for instance, are delighted to declare that Islamic ethics is superior to Western secular bioethics. Western secular trends in bioethics on the other hand regard the philosophical mode employed by them to be non-existent in Islamic bioethics.

This is not a healthy intellectual approach. It allows Western philosophy to remain stubbornly insular regarding Islamic philosophy, and confrontation of this nature is detrimental to the acquisition of knowledge. I aim to show that even though Western secular bioethics and Islamic bioethics do hold divergent opinions with respect to their interpretation of the world, they are not however poles apart. Indeed, in the interests of dialogue and advancing knowledge, a harmonious and inter-related intimacy between them is, in my opinion, feasible.

Research Methodology

The present study is descriptive, qualitative and non-hypothetic. It

employs the mixed-mode method. However, to a certain extent, it also makes use of the phenomenological method to explore Islamic and Western secular perspectives' core (essence) views or practices on bioethics. This is because phenomenology deals with essences of objects, or phenomena as they present themselves in human consciousness. It is hoped that this approach will allow greater understanding of the essence of the objectivities, or realities of the data under study. The phenomenological approach consists of:

- a) Accumulation of data: This study starts with a broad review of some current ethical literature with special reference to bio-medical ethics. The key principles of the phenomenological approach are then clarified, followed by an exploration of how these might be applied in practice. The phenomenological method is applied to explore the essence of bio-medical ethics. The objective being to understand the meaning of the qualitative data gathered from the study. Accumulation of data describes what is important about matters of fact. This task will help us to choose a starting point for discussion on assisted reproductive medicine. A huge collection of data is required to obtain a clear vision of the Western secular philosophical and Islamic ethical perspectives and to compare and critically evaluate them. This great mass of data once identified and collected, must be systematized and distilled to elucidate meaning. That is to say, it should be related as meanings and not as facts.
- b) Construction of meaning: Wholes, or the systematization of data.¹⁰ This is in order to reach an understanding of the essence, structure or principles of the data under study.

While applying a phenomenological method, this study has also employed a comparative approach.

Approached from another angle, the methodology of this study will also be synthetic and analytic: synthetic in the sense that it will consolidate all aspects of the problem under discussion into a comprehensive view of the world. As in ethical decision-making, the study

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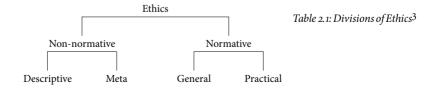
will also follow critical reflection or logical rules and predictability of principles and theories and an analytic method.

From the very beginning, bioethics has felt the need for a coherent and explicit methodology, a specified method of study. But instead of formulating one bioethicists used the terms, approach, principles, theories and methodology in an almost synonymous way. Although bioethics is concerned with some practical issues related to life sciences, its basic foundation is rooted in philosophy. Therefore, the correct approach to bioethics must come from philosophy which is designated as "a disciplined, critical reflection following logical rules."¹¹ Logical reasoning followed by critical reflection is the main tool of philosophical enterprise. This study therefore adopts a mixed-mode method with critical reflection as its methodology, the latter (critical reflection) also including ontology and epistemology.

Western Secular Bioethics

Ethics

In this study we use the term Western secular ethics to mean a particular type of Western thought pattern concerning ethical values which developed in a unilaterally quantitative fashion from the seventeenth century onwards. This thought pattern was based upon the foundation of European Judeo-Christian tradition, but its direction and purpose was very different to that of mediaeval Christianity. Thus, at least within the stream of Western thought, the question 'what is ethics' has been debated for centuries. Ethicists could not, however, arrive at a common definition of the term, although we can without doubt say that ethics is concerned with the rightness and wrongness of human conduct. It is the systematic study of what a person's voluntary actions ought to be with regard to himself, others and the environment around him. It helps people to rationally decide in conflicting moral dilemmas.¹ Ethics is an important branch of philosophy. In short, we think it would be better to characterize ethics as a "philosophical study of morality."2 Ethics can be divided as follows:



Two of these approaches describe and analyze morality without taking moral positions and these approaches are therefore called 'non-normative.' The remaining two approaches involve taking moral positions and are therefore 'normative.' Under the non-normative approach, first comes descriptive ethics. The goal of descriptive ethics is to obtain empirical knowledge about morality. Anthropologists, sociologists and historians who study morality employ this approach in their investigations. Meta-ethics involves analysis of the meanings of central terms in ethics, such as 'right, 'obligation,' 'good,' 'virtue,' and 'responsibility.' The function of general normative ethics is to establish an ethical theory that provides a general answer to the question 'what is morally right and what is morally wrong?' Practical normative ethics is a step further than general normative ethics. It employs tools (theories and principles) of normative ethics in order to justify positions on particular moral problems such as research involving human beings, suicide, crime and punishment, and so on. In general, the attempt to delineate practical action guides is referred to as practical ethics. Practical ethics emerged as an independent discipline in the 1960s and is now regarded as the most important branch of ethics. Like business ethics or engineering ethics, bioethics is a branch of practical normative ethics.

Bioethics

Bioethics is a composite term derived from the Greek words *bios* meaning life and *ethike* meaning ethics. Therefore, it can be defined as the systematic study of human conduct in the area of life sciences and health care in so far as this conduct is examined in the light of moral values and principles.⁴ Samuel Gorovitz defines it as "the critical examination of the moral dimensions of decision-making in health related contexts and in contexts involving the biological sciences."⁵ In fact, many issues of bioethics are perennial and people involved in clinical medicine and in biological research have reflected on the moral limits of their activities as long as those activities have existed.⁶ The range of bioethics is wide. Some provocative questions posed by bio-ethics are: should we have any access to new reproductive medicine? Should infertility be treated? Is surrogacy an acceptable policy?

Can we try to make ourselves more 'perfect' by adding better genes to our fertilized eggs? Would human embryonic stem cell research be permitted at any rate because it destroys human embryos? Can we clone human beings? Should we allow doctor-assisted death to hasten the deaths of the terminally ill? Should an adolescent who has struggled through painful disease treatments without success finally be allowed to refuse further treatment? Should every citizen have a right to good health care? What about the ethics of organ transplantation? And so on.

Bioethics covers a broad range of social issues such as those associated with public health, occupational health, international health and the ethics of population control. It extends beyond human life and health to embrace issues affecting animal and plant life, as for example in topics dealing with animal experimentation and competing environmental claims.⁷

Unlike other branches of philosophy, as a branch of applied normative ethics, bioethics has an interdisciplinary approach. It is interdisciplinary in the sense that other disciplines of knowledge can stimulate the discussion of bioethics. As the ethics of life sciences, it surely has an interdisciplinary feature. Law, sociology, anthropology and political study may also overlap with bioethics. A number of nonphilosophers are even of the opinion that that some explication of its interdisciplinary character will be beneficent for bioethics itself.8 This argument is right in the sense that when a bioethicist is talking about the ethics of assisted reproductive medicine, a sociologist can help him by supplying data about the infertility rate in a certain area. When a bioethicist is talking about the morality of abortion, a sociologist may make him aware of public opinion on abortion. He will never judge abortion from a moral point of view. His role is limited to the collection and presentation of facts. It is the bioethicist who will bear the burden of interpreting and analyzing the moral validity of the data in the light of ethical principles and theories.9 But as an interdisciplinary study, we think it is more closely related to life sciences because it deals directly with ethical issues related to life sciences. In fact, in spite of several factors influencing bioethical decision-making, bioethics has its own methodology, principles and theories developed in

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normative flavor, and if one moved way from these, it would be impossible to make a bioethical judgment.

Principles of Bioethics

To generate ethical discussion on bioethics, a conceptual framework is necessary. Three general moral principles have been advanced to aid ethical discussion in bioethics. These are: autonomy, beneficence and justice.

Autonomy

In bioethics autonomy stands for personal liberty where the individual is free to choose and implement his own decisions, free from deceit, duress, constraint or coercion. Autonomy must involve the following criterion: the action must be intentional. It may be guided by others, but the final decision must be taken by the person concerned in ethical decision-making. In autonomous decision-making, no external pressure or constraint should have any role. Suppose that before undergoing open heart surgery, a patient consults the doctor, members of his family friends etc. Ultimately, if the decision of the patient is not imposed by any external constraints then it is considered autonomous. If however external constraints do occur, then it is not counted as autonomous. Sometimes, internal phenomena such as intense fear, acute pain or persistent discomfort may have an effect on decision-making. We act autonomously only if we are sufficiently free from all kinds of internal constraints.

Many philosophers have spoken about autonomy. The strongest arguments in favor of the justification of autonomy have come mainly from deontologists, especially the German philosopher Immanuel Kant. According to Kant, "Autonomy of the will is the property the will has of being a law to itself."¹⁰

Beneficence

Beneficence is a principle which ordinarily refers to acts of mercy and charity, and may indicate any action that benefits another. More

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specifically, the principle of beneficence may include the following four elements:

- 1. One ought not to inflict evil or harm.
- 2. One ought to prevent evil or harm.
- 3. One ought to remove evil or harm.
- 4. One ought to do or promote good.¹¹

Philosopher William Frankena arranged the elements of beneficence in order of precedence. In bioethics, beneficence usually stands for a doctor's obligation to do good to the patient. He will also abstain from doing any harm to the patient. It is best stated in the Hippocratic Oath and in the pledge of the American Nurses Association, "The nurse's primary commitment is to the health, welfare and safety of the client."

Justice

The word "justice" is highly attractive, simple and instantly calls to mind concepts of fairness, just deserts and entitlement. A common and sensitive issue in health management is the struggle for the distribution of scarce resources. In the debate over the allocation of health care resources, different theoretical positions have been advanced.¹²

Bioethical Theories up to 1990

A conceptual framework is essential to determine the rightness or wrongness of action in life sciences. Contemporary ethicists explicate ethics of action in the light of the following mutually exclusive ethical theories:

- 1. Teleology.
- 2. Deontology.

Any ethical theory that determines the rightness and wrongness of human action as exclusively a function of the goodness and badness of the consequences resulting directly or indirectly from that action is a teleological theory. Deontological theory conversely declares that the rightness and wrongness of human action is not exclusively a function of the goodness and badness of consequences. So the ethical theory in which the rightness and wrongness is fixed as completely independent of the goodness and badness of the consequences is deontological.

Utilitarianism

The most prominent teleological theory is utilitarianism. The basic idea behind utilitarianism is that an action or practice is right (when compared to an alternative action or practice) if it leads to the greatest possible balance of good consequences or to the least possible balance of bad consequences in the world as a whole. This theory is based on the principle of utility according to which we ought always to produce the maximal balance of positive value over disvalue (or the least possible disvalue, if only undesirable results can be achieved). Its classical systematic formulation is found in the philosophy of Jeremy Bentham (1748-1832) and John Stuart Mill (1806-1873). Utilitarianism is mainly based on 'the greatest happiness principle.' According to Mill, "the greatest happiness principle holds that actions are right in proportion as they tend to promote happiness; wrong as they tend to produce the reverse of happiness."¹³ In the case of deciding whether to donate 10 thousand dollars to a rich man or to five needy people, the utilitarian response will favor the five poor people. Utilitarianism however, does have some flaws.14

There are two contemporary versions of utilitarianism – act utilitarianism and rule utilitarianism. The basic principle of act utilitarianism can be stated as follows: A person ought to act so as to produce the greatest balance of good over evil, everyone considered. But these rules in turn are justified by an appeal to the principle of utility. For example, keeping promises is regarded as a good rule in our society. Yesterday I promised to go to my friend's house in the morning, but all of a sudden, my brother passed away. I was so sad that I forgot to inform my friend that I would not be able to see him at the fixed time. I have broken a utility rule in order to maximize utility. I am not unjust and wrong here according to the utilitarian approach of morality.

Imagine a situation in the 1950s when kidney dialysis machines were scarce. A committee in charge of allocation had to decide who was to be given priority for the dialysis: a civic-minded woman of 40 with four children and a husband or an unmarried man of the same age who was known to be a drifter and an alcoholic. It seems clear that the consequences of saving the woman's life would be far superior to those of saving the man's. If the woman were to die, a lot of people would be affected in very substantial ways (her children, husband and the community in general). However, is it right to accord an individual access to a scarce medical resource on the basis of his or her social role? If a regulation like this were to be set up, would not those whose lives are less socially effective become somewhat depressed? On the other hand, perhaps the negative consequence could be balanced by a positive one, in that people may be more inclined to become socially useful.¹⁵ When we consider an action right on the basis of a set of rules that we judge to be most likely to bring about the best consequences most of the time then this is rule utilitarianism. The basic principle of rule utilitarianism may be stated in this way: A person ought to act in accordance with the rule that if generally followed, would produce the greatest balance of good over evil, every one considered. These rules in turn are justified by an appeal to the principle of utility. Normally we prefer to live by the best rules that our society seems to approve of, such as the rules of truthfulness, honesty, trustworthiness, justice etc. Rule utilitarianism is labelled as a "direct" or "extreme" form of utilitarianism because of its straightforward approach to the principle of utility. It directly asks, "What good and evil consequences will result directly from this action in this circumstance?" and not, "what good and evil consequences will result generally from this sort of action?"

For example, suppose a woman of 35 is diagnosed with breast cancer (which is incurable) by doctors when she is 3 months pregnant. Now, what if thinking of the uncertain future of her baby, she decides to terminate the pregnancy? Normally killing is considered a very bad thing in society. But in this case, proponents of rule utilitarianism would try to justify the action with reference to at least one exception to the rule against killing.¹⁶ Another important teleological theory is ethical egoism. The main principle of ethical egoism runs as follows: A person ought to act so as to promote his or her own self-interest. An action is right when it generates the greatest balance of good over evil for the actor. So the rightness or wrongness here is determined on the basis of consequences produced by it. Ethical egoism is not free from some limitations.¹⁷

Deontological (Duty-Oriented) Theories

Deontological or duty-oriented ethics states that the basic rightness or wrongness of an action depends upon its intrinsic nature rather than upon the situation or the consequences. There are several different deontological ethical systems. But the most famous deontological ethical system is Immanuel Kant's formulation. Kant based his ethical theory on the crucial fact that we are rational beings. And a central theme of this rationality is that principles derived from reason are universal. According to him, an act is right only if it is done not to satisfy our self-interest but to satisfy our reason. The ultimate basis for the validity of moral rules lies in pure reason, not in intuition, conscience or utility. Morality is, therefore, derived from rationality, not from experience and obligation, and is grounded not in the nature of man or in the circumstances of the world but in pure reason. These universal truths apply to all people, for all time, in all situations.

An action could be considered to be right when it is done because it is a duty. 'Duty for duty's sake,' as Kant famously said. That is, the person's motive for acting must be recognition of the act as resting on duty. An action has moral worth only when performed by an agent who possesses a good will, and a person has a good will only if moral duty is based on a universally valid rule, and this is the sole motive for the action.

Kant's supreme principle which is called 'the moral law' is expressed in several ways in his writings. An action could be known to be right when it is in accordance with a rule that satisfied a principle he called a 'categorical imperative.' By categorical imperative, he meant they do not admit exceptions. An 'imperative' is a command derived from a principle. A categorical imperative is categorical he argued, because it admits of no exceptions and is absolutely binding. It is imperative because it gives instruction about how one must act. As Kant famously observed, "one must act to treat every person as an end and never as a means only."¹⁸ Every person has a worth and dignity. Man is the Supreme Being on earth. We should never treat another being exclusively as a means to our own ends.

On the basis of Kant's maxim, every person has a perfect duty to others not to lie, we can establish a rule for physicians that they should not lie to the patient. If a patient who is diagnosed as terminally ill by a physician, inquires about his/her prognosis, the physician, motivated by a desire to protect the patient from the psychological turmoil that would accompany knowledge of his/her real condition, may be tempted to lie. But action in the name of beneficence (an imperfect duty) may never be at the expense of a perfect duty.

A very important feature of Kant's deontology is not to treat man as a means. It follows that in this case it would be morally wrong for a biomedical researcher to use human research subjects for his study if the immediate aim were the successful completion of the study, that is, the actual objectives possibly being personal recognition amongst the scientific community, a handsome remuneration, etc. If the researcher wished to avoid using research subjects merely as a means, then on the basis of Kant's theory, he ought to seek a rational decision with regard to their personal participation. Thus, respect for the persons involved would necessitate the researcher to honor the requirement of voluntary informed consent. Kant's theory overtly appears neat and attractive but the question remains as to its compatibility with the practical approaches of ordinary life.¹⁹

Another important formulation of deontological ethics is found in what is known as contract theory proposed by John Rawls.²⁰

When somebody makes an ethically oriented decision, he consciously or unconsciously approaches the implications of the abovementioned principles. Sometimes one favors the patient's autonomy, sometimes paternalism is preferred. This depends on one's preference of values as well as the specific situation. Ultimately, in clinical practice one's consensus plays a great role in decision-making.

Western Secular Bioethics

The Progress of Contemporary Theories Following the 1990s

No doubt teleological and duty-oriented (deontological) ethics have some strength, combine a variety of moral considerations into a surprisingly systematized framework, and are centered on a single major principle. Until the 1990s no decision in a medical context was taken without reference to these dominant theories. Anyone facing a contextually bioethical related moral dilemma would have to turn to either deontological or teleological theories of bioethics to resolve it. However, by the 1990s, certain philosophers and ethicists began to systematically critique these theories. It was argued that these theories were simply being applied to generate satisfactory solutions to concrete problems and in doing so were actually affirming a similar conception of moral life, oriented around universal principles and rules. It was further argued that both dominant approaches should not be given the level of attention and importance they had received in the past.

Three popular replacements to the traditional theories exist:

- 1. Virtue ethics (character-based).
- 2. The ethics of care (relationship-based).
- 3. Casuistry (case-based reasoning).²¹

Virtue Ethics

We have already noticed that obligations and rights are the main constructs of the traditional theories. Beyond obligation and rights, there exists another aspect, and that is the person or agent who performs the act. It is the quality or character of a person with which virtue ethics is concerned. The primary focus of virtue ethics is the heart of the moral agent making the decision to a right action rather than his reasoning power.²²

Virtue ethics is primarily concerned with personal character and moral habit rather than a particular action. A good virtuous character manifests itself in a display of traits which include honesty, truthfulness, justice, compassion, friendliness and so on. Actually no comprehensive list of virtues exists. Beauchamp and Childress have mentioned five virtues applicable to physicians: trustworthiness, integrity, discernment, compassion and conscientiousness.²³ Gardiner has argued that virtue ethics has some priorities over the traditional principles of bioethics.²⁴ However, sometimes it may strike us that, like consequentialism or deontology, virtue ethics cannot supply man with a straightforward direction towards life. It is true that it argues for a noble attitude towards life, due to its emphasis on the quality of the heart. But what is meant by becoming a 'virtuous person?' One cannot be associated with so many qualities at the same time. According to deontology, the right action is the one specified by a particular rule of some sort. Again, on the basis of utilitarianism, the right action is the one that produces the best consequences. By contrast, virtue ethics wants to purify the soul of the agent who performs the act. Is it totally possible to purify the heart of a person? Man's soul is an abstract entity. Is it possible to isolate a cross section of it and verify it empirically? We should have a clear conception about virtue and vice - why virtue is different from vice, who is virtuous, who has a vice and so on? Can there be any sharp contrast between them?

Virtue ethics has the capacity to make physicians committed to patients even when this may conflict with their own self-interests. A true physician must acquire some good qualities in order to treat his patients properly. There are many cases in which an exact decision regarding the rightness or wrongness of an action cannot be determined without referring to virtue. For example, in some cases, emotional attunement and sympathetic insightfulness are more powerful than medications. So we cannot ignore the virtue ethics approach in medicine. Recently Johnson has forwarded some criticisms against the virtue ethics approach in bioethics. He explains and analyses the accounts of right actions offered by Christine Swanton and Michael Slote, neither of whom relies on the view that right actions are characteristics of virtuous persons.²⁵

Virtue ethics is a good addition to the theory of bioethics. It may be an excellent start to advance ethical decision-making in bioethics or any professional ethics, because it is concerned with the basic characteristics of the decision-maker.

The Ethics of Care

Like virtue ethics, the ethics of care is not opposed to the affective component of moral life, but it gives special attention to empathy and concern for the needs of others, that is, on caring. It also gives importance to interpersonal relationships, sympathy, compassion, fidelity, love, friendship and so on. But significantly, it is against any kind of a deontological or utilitarian approach.

The ethics of care is also serious about the abstract principle of obligation, because these principles may neglect affective components of moral life. Caring and responsiveness to others' needs is often morally preferable to detached, dispassionate moral evaluation. For example, the ethics of care strongly affirms a health care professional's heart felt dedication to a patient, without conditioning its value on good consequences or respect for persons. The abstract nature of recently dominant theories also tends to cover up certain morally salient experiences - such as being a woman, a minority, a relative or some other close relationship.²⁶ The scope of the ethics of care is very broad. It should not be based on any principles or rules. There must be good ways through which physicians will deal with their patients. But we cannot fix them in terms of rigid principles or rules, because every patient is different, and every case is different. Here we observe some similarity with virtue ethics, because in virtue ethics the space-time factor is also equally important.

Casuistry or Case-Based Reasoning

The next alternative and challenge to classical theories has come from casuistry or case-based reasoning. Instead of focusing upon traditional theories and principles, this approach concentrates on narratives, paradigm cases and precedents established by previous cases. Practical wisdom is essential to determine which of various principles or rules are suitable to apply in an intricate or ambiguous case.²⁷ An analogy to case law is very useful in understanding case-based reasoning. In case law, the normative judgment of courts of law becomes authoritative and these judgments set a precedent for later judges who assess other cases even though the particular features of each new case will not be the same. A case under current consideration is placed in the context of a set of cases that shows a family resemblance and the similarities and dissimilarities are assumed. The relative weight of competing values is presumably settled by the comparisons to analogous cases. Moral guidance is provided by an accumulated mass of influential cases which represent a consensus in society and in institutions reached by reflection on cases. That consensus then becomes authoritative and is extended to new cases.²⁸

Casuistry appeals to many people in medical contexts because of the thoughtful and practical method it employs for making complicated choices in contexts of uncertainty. Nevertheless it is not free from criticism. Bracci for example opines that contemporary casuistry as a form of Aristotelian phronesis draws on assumptions about shared norms and experiential wisdom that provides shaky foundations for bioethical reasoning today. A new prudence exploits several narratively-informed dialogical virtues as argumentation aids in the service of bioethical deliberation. These virtues have the power to strengthen critical thinking and contribute to morally justified decisions through self-scrutiny, moral imagination and prudential listening patterns.²⁹ In contrast to bioethicists who think that their cases are based on "real" events and thus are not motivated by any particular ethical theory, Chambers explores how case narratives are constructed and thus the extent to which they are driven by particular theories.³⁰ Two other contemporary ethical theories are:

- 1. Communitarian ethics.
- 2. Feminist ethics.³¹

Communitarian Ethics

The term "communitarian ethics" may have been derived on the basis of the term "community." Man is a social being, as Aristotle remarked. Our values, our conceptual schemes, our very identities are engendered, shaped and nurtured within the confines of community. So a good society will concentrate not only on individual rights but also on the good of the larger community.

Callahan pointed to the possibility of a cultural bioethics to serve as a counterpoint to the mainstream of bioethics. According to him, a communitarian bioethics would start by looking at both individual responsibility and the social dimension of the moral life. A communitarian bioethics is essential to flourish with an analysis of the way in which culture shapes personal choices by creating the context and drawbacks of those choices. There is a common but usually unmentioned assumption that has worked against the emergence of both a communitarian ethics and an ethics of personal responsibility. The assumption is that in a pluralistic society, we should not try to develop any rich, substantive view of the common good. A communitarian ethics would seek to blend cultural judgment and individual judgment. The cultural judgment requires a common effort and a public discourse as well. The personal judgment requires self-analysis and the cooperation of others, its own form of public discourse to form a judgment.32

According to Thomasma, a perfect world society would promote liberty within the community. His view is a mean between cultural relativism and anti-relativism, between the undeniable differences of cultures and the undeniable basis of individual human rights.³³ It is not so easy to seek the answers to all medical problems in a communitarian light because remarkable diversity exists among the different communitarians. For example, how can the question of physicianassisted suicide be resolved using communitarianism as a platform? For communitarians such as Alasdair MacIntyre, the emphasis upon history, traditional practices and virtues lead to the wholesale abandonment of liberal individualism and the embrace of a rather conservative political agenda. More moderate communitarians, conversely, tackle the situation in other ways. Some of them, who are politically quite "progressive," highlight the importance of social meanings and communal values and try to preserve a more modest role for individual rights.³⁴ So, a balanced and perfect society cannot ignore both liberty and the community. They are two sides of the same coin.

Feminist Ethics

It is difficult to define 'feminism' because of its varying sub-ideologies

and subgroups which include liberal feminists, traditional Marxist feminists, radical feminists, socialist feminists and cultural feminists (among others). But a common theme that emerges from amidst these disparate groups is that each is opposed to discrimination on the basis of gender.³⁵

Feminists also want to highlight gender bias in bioethics. To fully grasp how pervasive and powerful these biases are, one only needs to examine the history of the construction of the biomedical body. Western cultural history shows that the female body has been understood and valued in a drastically different fashion to that of the male. The transcendent body, the "generic" human is universalized as masculine and the female body is excluded from ethical paradigms. What is being considered here is not the real, physical body, but rather its cultural construct.³⁶ The sharp dichotomy between conceptions of man and woman is closely linked to the Cartesian dualism between mind and body which dates back to the 17th century. This mind-body dualism ultimately became interwoven with the male/female divide. Due to their assumed superior intellectual capabilities, men were aligned with the mind, and as a result of their reproductive capacities, women were solely associated with the body. Thus it was assumed that men could transcend their bodies to reach a stance of pure reason, uncontaminated by the senses. On the contrary, the intimate female relationship to reproduction inherently disallowed the bypass of the body.³⁷

Feminist perspectives in bioethics have been neglected due to the deeper structural elements of the field. From the very beginning, bioethics has been preoccupied with abstraction, which has necessitated a top-down approach based on the four principles. In this case, the preference for generic, abstract principles has resulted in the erasure of distinguishing concrete factors, such as gender, race and class. By viewing the individual as autonomous, self-determining and apart from other relationships in the deontological view of Kant and the utilitarian view of Mill, bioethics marginalizes groups that are integral to physical and emotional subsistence, including feminists.³⁸

However, feminism which aimed at providing a more inclusive account of the categories of human nature and human experience has ironically been under attack for failing to do so precisely. Women of color in particular have alerted feminists to their racist assumptions and practices. Their main point of criticism was that the categories of women's experience and women's nature which feminism has promoted are blind to the variables of race, ethnicity and class. A long term effect has been that feminists now put less stress on questions relating to the differences between women and men and more on the differences among women.³⁹

In reality, there are many points of agreement between communitarian and feminist critiques of liberalism. The individualism implied by liberal models of ethics is ignored by both communitarians and feminists. Instead, they emphasize the importance of embodiment and social location in the moral life of the person concerned. The liberal focus on impartial reasoning is similarly nullified by both communitarians and feminists. They rather advocate for an epistemology that is far more skeptical. Nevertheless, although feminism shares many perspectives with communitarianism, it does not endorse it unambiguously as a model of ethics. Rather, it is very suspicious of the social conservatism which communitarianism often implies. In the sphere of restructuring relationships, there are many unresolved debates among feminists.⁴⁰

Perhaps the most pressing controversy, in both theory and application, is what type of model of moral truth and knowledge is appropriate for feminists to hold. In the present flow of globalization, a key concern for all is how to advance an account of value that is applicable across traditions and cultures. We cannot ignore our increasing sensitivity to the reality of cultural, ethnic, racial and gender differences and the social and the embodied character of human nature and experience in advancing such an account of value. Nevertheless, feminists should not only recognize the contextuality of knowledge, but also arbitrate between different values, principles and commitments. Otherwise, feminism will reduce the claims of its theory and praxis to personal whim.⁴¹

Western Secular Bioethics and Secularism

In the study of bioethics, an acquaintance with the historical development of knowledge is an important factor for the clear understanding of present conceptions. This is because the past supplies the key to the present and future, which provides ample justification for a review of the concepts involved in bioethics in the light of the evolutionary growth of the general philosophical concepts of the West. This section a) briefly reviews secularism to illustrate its historical and epistemological structure, and b) extends the epistemological root embedded in Western secular bioethics.

Meaning of Secularism

The term 'secular' originates from the Latin *saeculum* and conveys a meaning with a marked dual connotation of time and location. Time refers to a sense of the 'now' or present sense and location to a sense of the 'world' or 'worldly.' In other words, secular means 'this age' or 'the present time' and ultimately signifies events, specifically contemporary, in this world.⁴² 'This world' here naturally signifies the visible world in which we live as opposed to the world which is invisible and transcendental. Secularism consciously denounces all forms of supernaturalism and the agencies devoted to it, advocating nonreligious or antireligious principles as the basis for personal morality and social organization.⁴³ Therefore, secularism is the practical exclusion of God from human thinking and living. Secularists who deny the existence of God, and adherents of secular humanism, look upon religion and any divine influence on the world and man as pure superstition.⁴⁴

Surprisingly, secularism can be seen as associated with Christianity, in that it characteristically evolved in the historical context of Christian Europe. Europe's communal experience was closely related to the institution of the Church, in terms of the relationship between the individual believer and the Church on the one hand, and between the Church and the State on the other. How much Christianity was the result of the actual teachings of Christ and how much a result of the teachings of early Church fathers and various ecumenical decisions is a question for debate. Suffice it to say that from its early history Christianity could be said to have walked the corridors of power and state. The philosophy of a supposed early historical detachment of Church and State is contradicted by the Church's link with the State under the Byzantine Greek Emperors and by the Church's link with the Holy Roman Empire in a state of fitful collaboration.⁴⁵ The implications of this in actual practice impelled the consequent historical aggression against non-Christian communities, paralleled by an inevitable religious intolerance within the different brands of the Christian community. Then came an urge for some kind of tolerance, at least amongst the different versions of Christianity, which culminated in the demand for secularism, that is, for some kind of peaceful civic co-existence, if impossible to be realized under the protective wings of the Church, then surely desired outside the Church. Therefore, secularism can be regarded in one sense as merely Europe's escape from the dreadful experience arising as a result of the implementation of the teachings of orthodox Christianity, and as a repudiation of the irreconcilable claims of individual conscience and priestcraft on the one hand and the claims of rival churches within the same community on the other.⁴⁶

Philosophical Background of Secularism

It is sometimes claimed that secularization has its roots in biblical faith. Meaning that how much is Christianity the result of prophetic teaching and scripture and how much the result of theological debate, philosophical and metaphysical conflict and absorption of Hellenistic philosophy. In other words, secularization is the outcome of the misapplication of Greek philosophy in Western theology and metaphysics, which in the 17th century logically led to the scientific revolution enunciated by Descartes who opened the doors to doubt and skepticism.⁴⁷

During the Renaissance, in the 15th and 16th centuries, the birth of modern science was a significant event which subsequently helped to shape the features of modern philosophy. Unlike medieval philosophy, modern philosophy has often thought of its discipline as little more than the handmaiden of science. The new modern spirit of the Renaissance era finally erupted in open revolt against authority and tradition. It was the revolt of nation against Church. It was a revolt for individual truth against the compulsion of ecclesiastical organization. The development of nationalism, together with opposition to the scholastic alliance of theology were the forerunners of the two great

reform movements known as the Renaissance and Reformation. whereby the authority of the Church over the conscience of people gradually weakened and man started to assert his intellectual freedom. Respect for Christianity gradually diminished supplanted by faith in rationalism and human reason which explains the rationalistic nature of modern philosophy. Human reason is regarded as the highest authority in the pursuit of knowledge. It is naturalistic because it seeks to explain man's inner and outer self without recourse to supernatural presuppositions. The father of modern philosophy, French philosopher Rene Descartes (1596-1650) aimed to establish the existence of self by his cogito ergo sum argument. He successfully proved the existence of the self, the existence of individual objects. But these things do not exist independent of the mind. The problem arises when trying to prove the existence of God. Since His Being in thought, His Essence, cannot be known and since His Being is identical with His Existence, it implies that His existence cannot be known. Evidently, the existence of God, and other metaphysical matters, were a matter of faith rather than philosophical truth, up until that is the German philosopher Immanuel Kant in the 18th century. Kant proved the existence of God for the sake of morality. In a word, the philosophical trend captured man as the measure of all things denying any reliance on supernatural reality. Modern philosophy is classified as rationalistic and empiricistic as it accepts reason or experience as the source of knowledge. Descartes, Spinoza, Leibniz and Wolff are important rationalist philosophers and Bacon, Hobbes, Locke, Berkeley and Hume are designated as prominent empiricist philosophers of the modern times of the 17the century. 18th century philosophy was characterized as the philosophy of the Enlightenment. It represents the culmination of the entire intellectual movement that was initiated in the 16th and 17th centuries. The respect for human reason and human rights which were the characteristic features of modern philosophy became universal in the 18th century philosophy of the Enlightenment. It was indeed a continuation of the Renaissance. In France, as a consequence of social, political and ecclesiastical oppression, the Enlightenment received its most radical defense. Jean Jacques Rousseau and Kant were the important representatives of this age.

Descartes opened the doors to doubt and skepticism and successively in the 18th and 19th centuries and in our own times, to atheism and agnosticism, to utilitarianism, dialectical materialism, evolutionism and historicism.

Even Existentialist philosopher Frederich Nietzsche declared God as dead. Then came the phenomenology of Edmund Husserl and the existentialism of Martin Heidegger. This was further fortified by recent advances in linguistic analysis contributed by the philosophers of language, notably those belonging to the Vienna circle. They vigorously rely simply on human reason and avoid Christian scripture in acquiring knowledge in any way.

Western Secular Bioethics: Logical Derivative of Secularism

As a multidisciplinary subject, bioethics is not purely a philosophical enterprise. A large number of experts have contributed to the formulation of bioethical principles, as we have seen in the previous chapter. So we must be cautious in formulating the statement that Western bioethics is the outcome of the secularization of philosophy in the West. It is however undoubtedly true to say that in secular bioethics religious convictions are eschewed as irrelevant or unnecessary.

Bioethics is a creature of its time and history. In fact, theology dominated bioethics at its inception in the1960s and 1970s.⁴⁸ This was partly due to the prominence of Christian theologians and Jewish scholars such as Daniel Callahan, McCormick, Paul Ramsey, Joseph Fletcher, Leon Kass, Seymour Siegel, David Feldman etc. who were involved in this branch of study, and partly to the dominance of theological language and methods.⁴⁹ But now the scenario is changed.

According to Callahan, "the most striking change over the past two decades or so has been the secularization of bioethics." He also comments, "The field has moved from one dominated by religious and medical traditions to one now increasingly shaped by philosophical and legal concepts." "The consequence has been a mode of public discourse that emphasizes secular themes: universal rights, individual rights, individual self-direction, procedural justice, and a systematic denial of either a common good or a transcendent individual good."⁵⁰

Between 1960 and 1970 a great controversy arose regarding the nature of value judgment, and whether it is absolute or relative. Paul Ramsey and others spoke in favor of the role of religion in value judgment but Francis Crick and others spoke in favor of ethical relativity. Theologian James Gustafson pushed hard for broader participation in deliberations on scientific advances. He called for a clearer formulation of values to be offered by those advances, preparing the way for one of the major methods to be used in bioethics. This is "consensus."51 In other words, these sensitive and alarming current issues should not be left up to just doctors and scientists. Input from both philosophers and theologians must be brought to the table to provide an evaluation of the broader values involved. In order to determine the necessary role of philosophers and theologians many seminars were arranged and distinguished speakers spoke. Ultimately the obvious contribution of philosophers and theologians was confirmed but the search for a neutral ethics through the consensus was in force. As there is no neutral ethics, the goal ultimately turned in to secular ethics by assuming that secular ethics could not in any way be "normative" (take a principled stand on what is right or wrong).52

Engelhardt expressed the underlying factors regarding these transitions in this way: "In bioethics, the journey from the religious orthodoxies of the Middle Ages, through the rationalist hopes of modernity, to the disappointments of post-modernity, spanned less than 30 years. One has during this brief period been brought to look for theoretical and rational guidance, and then one is shown little guidance is in fact available".⁵³ The sociologist John H. Evans looks into this issue in such a way that when scientists were being challenged by theologians for jurisdiction in the 1960s, bioethicists and theologians had equal numbers of influential authors. But there were more theologians than bioethicists. By the mid 1980's, the scenario changed and bioethics was second only to science in producing influential authors, it had the greatest number of influential authors followed by science, philosophy, law and finally theology, which had only one.⁵⁴

Inevitably, given the force of secular philosophy, bioethics had to undermine religious perspectives. The increasing interest in, and demand for, bioethics ultimately lead to the foundation of different centers of study in the field, established by certain eminent scholars and thinkers of the 1970s, who wanted to move beyond mere seminars and discussion programs on the subject. The most prominent of these are the Hastings Center, the Kennedy Institute of Ethics at Georgetown University, and the Society for Health and Human Values. The Hastings Centre was founded in 1969 by William Gaylin and Daniel Callahan, and many prominent figures have worked here including Henry Beecher, Paul Ramsey, James Gustafson and Robert Veatch. Its primary focus was on issues of death and dying, behavior control, genetic engineering, genetic counseling, population control, and the conjunction of ethics and public policy. In 1971, the Hastings Center published its first Hastings Center Report considered to be the early dictionary of secular bioethics. To quote Jonsen, "The index of the Hastings Center Report over the next years defined the range of topics that were becoming bioethics and constituted a roll call of the authors who would become its proponents."55

So in this way in the history of bioethics religious perspectives became marginalized and the secularization of ethics took center stage, using consensus as a moral standard. Modern and contemporary American and British analytical philosophers were pioneers in this direction. A kind of normative secular bioethics emerged as a subject. Step by step, the scholars involved in these early think tanks began to sketch out the nature, subject matter and the method of the newly born field.

The question of what has played the greatest role in formulating a secular bioethics is a controversial one. What is nevertheless undeniable is that Western bioethics has now become secular. What then precisely is Western secular bioethics? The answer is found in the metaphysical and epistemological foundations of intrinsically knowledge centered paradigms. Given the details of the worldview that is constructed on this basis, bioethics seems to be premised on a medical science that sees the body as a chemical-mechanical machine functioning according to material laws, independent of the abstract concept. According to this model, everything we need to know about mankind can be obtained by studying the body's parts. Meaning that anything related to the subtle aspects of a human organism such as the

mind and soul, became relegated, forgotten, denounced or referred to as simply religious discourse. Bioethics in this fragmented order became a branch of practical ethics, which holds the view that man is capable of self-fulfillment without recourse to any source of knowledge, other than empirical findings, in other words, without recourse to the guidance of the transcendental or supernatural Supreme Being.

Conclusion

As bioethics has today become more interdisciplinary, many individuals in the fields of law, theological ethics, political theory, the social and behavioral sciences, and the health professions carefully address mainstream issues of bioethics without finding ethical theory essential or breathtakingly attractive. Moreover, although many moral philosophers are presently actively involved in problems of biomedical ethics, such as clinical and corporate consultations, policy formulation, and committee reviews, it is an open question as to what their role as moral philosophers should actually be and whether they can successfully bring ethical theories and methods to bear on problems of practice. Three prominent interconnected areas of bioethics in the last quarter of the century are: (1) general normative moral theories (from utilitarian and Kantian theories to principlism, casuistry, virtue ethics, feminist ethics, particularism, and the like); (2) moral and conceptual analyses of basic moral concepts (informed consent, the killing/letting-die distinction, and the like); and (3) methodology (how bioethics proceeds, e.g., by use of cases, narratives, specified principles, theory-application, reflective equilibrium, legal methods, and the like). An unresolved problem in philosophical ethics is whether (2) or (3) can be successfully addressed without addressing (1). In fact, bioethics needs philosophical theory and stands to profit from it, and better conceptions of method and applied argument are needed.56

Bioethics is no doubt a very useful tool in philosophy and medicine. However, as a discipline it is still in its infancy, both in terms of theory, principles and methods. Furthermore, and as generally conceded, the challenges it faces are both complex and extremely difficult given the subject matter. Meaning that unlike the concrete problems of perennial philosophy, bioethicists have to deal with the complicated and emergent practical affairs of daily life. They do not have to face reflective questions such as 'what type of life would be better?' but rather have to stand by the bedside of a patient facing the dilemma of whether to let that patient die or not, and if so why. In addition they then have to explain the reasoning behind their decision to ordinary individuals in a language they can understand without recourse to deep argumentation. Convincing laymen after all is not the same as dealing with philosophers who would easily comprehend. This double role is not easy to play; to be rational and at the same time easily approachable, is not an easy task. What is clear is that medicine needs bioethics, for without the latter's proper guidance medicine will inevitably go off-track. It is true that bioethics is today being shaken to its very core amidst questions of its actual identity and methodology, however, if bioethics needs any modification in its conceptual framework this should be done within bioethics itself, that is within its normative set up.

With the incredible advancement of biomedicine, the 21st century is facing some of the most controversial biomedical ethical issues known to man, the central concern of which is the issue of life, and more specifically human cloning, the human genome project, and stem cell research. Religious opposition has emerged as a clear voice which will not be silenced and debate rages over the sacredness of life versus the promise of cures. Bioethicists must approach matters with extreme caution. The issue is urgent but cannot be left to the unfettered decision of physicians alone, because science is concerned with 'is,' and ethics with 'ought' and this has become a moral debate if nothing else. Without proper safeguards there is little doubt that the whole edifice of medicine will court a very dangerous state of affairs in the coming years, which would be unfortunate and unwanted. But the demand of the day is that bioethics should bridge the gulf that is rapidly developing and address the issues urgently, by rectifying the rules of morality, reviewing their principles and theories and instead of avoiding typical philosophizing, debate in a simple manner in front of the scientific community. Not an easy task by any mean but vital nevertheless.

Bioethics emerged with the promise of being able to provide proper direction to medicine and biology. It started its journey as a scholarly, reflective, academic discipline. However, as medicine and biology became established as major social practices, there grew simultaneously an interest in finding a moral perspective from which to guide this practice. Today, bioethics is treated as a scholarly endeavor to guide health care policy. The interdisciplinary character of bioethics sometimes leads to problematic situations, in that without proper training or a basic degree in Ethics or Philosophy, some young people take it upon themselves to become involved in an intricate conceptual analysis of ethical issues and assessment of arguments. Core bioethicists should re-think its future prospects and direction in a new way. They should be serious about the subject's status and value in the realm of knowledge. Part of the problem lies in bioethics still being dependent on the abstract phenomenological method of philosophy. As it has not developed its own methodology of study, it is sometimes called a 'demi- discipline.'57 It is true that no humanities subject could articulate a definite and clear-cut methodology of its own, but rather only some conventional ways of thinking. Bioethics is no exception. What must be borne in mind though is that the role of the bioethicist in society is seemingly greater than that of the hard-core philosopher by the distinguishing fact of the former having to handle immediate issues of life and death. Socrates did not have to be present at the bedside of a terminally ill patient to decide whether he had a right to live or not. Bioethicists do not have the luxury of theorizing, they deal in real world issues requiring immediate solution. In fact it is the bioethicist's business to solve this issue, not the physician's. Because the stakes are so high the discipline cannot remain fixated in time, content with whatever stage of development it has reached. Quite the reverse, bioethics needs to constantly refine and demonstrate its principles and knowledge base in light of modern developments, discourse and phenomena, and should try to interact with doctors frequently and have at least some preliminary knowledge of medicine and biology. Of course, preliminary knowledge seeking workshops for clinicians to acquaint themselves with the theoretical background of bioethics could be developed, and do serve a purpose. However, it

would be better if bioethicists could be trained in basic aspects of medical science in a hospital. This would allow them to detect and deduce ethical questions properly. As mentioned earlier in discussions on methodology, the approach of empirical research is an important tool to aid bioethics. Bioethicists could also frequently consult with other specialists of interdisciplinary studies. Revised theories would need to be constructed in a simple, easy to understand, and cogent manner to allow for their communication and comprehension by health related persons, patients and policy makers, to ultimately convince them. It should be remembered that the best normative theory can only, and in fact should only, be provided by the bioethicist and no one else.

Although bioethics is still a very young domain of knowledge, it has a very positive and promising future. There are already doctorate and post doctorate programs in bioethics in various universities across the world. As science is moving fast, bioethics has to keep pace. This is especially important as "the professionalization of the field has been a slowly evolving process informed by few studies and little good data regarding what has been happening 'in the trenches."⁵⁸ As bioethics bears direct relation with science and in particular with biotechnology, it is very likely that the near future will see it having to abandon its interdisciplinary character and move towards establishing itself as an independent discipline.

Islamic Bioethics

Sources of Islamic Ethics

Islam means submission to the will of Allah in all aspects of life and in fact is a complete way of life. As such, unlike in the West, Muslim societies make no distinction between the spiritual and the secular. Islam aims at shaping both individual lives as well as society as a whole in ways that will ensure that the kingdom of Allah is established on earth and that peace, contentment and well-being fill the world.¹ Islam is translated into practice through the codification of divine revelations to the Prophet Muhammad* (SAAS) by way of instructions (prescriptions and proscriptions) that regulate daily life. These are hereafter referred to as the Shari^cah or Islamic Law. The Shari^cah is the epitome of the Islamic spirit, and next to the Qur'an, the most revered manifestation of the Islamic way of life. Indeed, it is the kernel of Islam itself.² The four sources of the Shari^cah in descending order of importance are: the Qur'an, the Sunnah (practice of Prophet Muhammad), consensus of the ^culamā' (ijma^c)</sup>, and analogy (*qiyās*).

The basic framework for jurisprudence is the Qur'an, which is the prime directory on all matters of human life. It is God Almighty's revelation to the Prophet Muhammad, and no Muslim can adopt a view

^{* (}ŞAAS) – *Şallā Allāhu ʿalayhi wa sallam*. May the peace and blessings of God be upon him. Said whenever the name of Prophet Muhammad is mentioned.

that contradicts it. However despite its comprehensive guidance and rich variety of specific rules and general principles, the Qur'an does not explicitly focus on every possible situation that a Muslim may face. For cases not explicitly addressed in the Qur'an, Muslims resort to the Sunnah as a secondary source of guidance.

Where the Sunnah itself is not clear-cut and open to interpretation or application, Muslims seek guidance from learned Islamic jurists (*culamā*') by way of consensus (ijma^c). The ijma^c usually takes the form of official pronouncements or fatwas that provide specific guidance on the issues at hand. In certain situations, Islamic jurists also invoke analogies (*qiyās*) from the Qur'an and Sunnah in order to clarify the rules relating to the issues raised.

The highly complex and technologically advanced nature of the modern world is giving rise to problems of immense difficulty particularly in the area of medicine. These include genetic engineering, the permissibility of eating genetically altered food, gene therapy, in vitro fertilization, organ transplants and so on. These types of issues cannot be addressed by the Shari^cah in a limited sense without recourse to its fifth component, ijtihad, introduced by the Prophet Muhammad to solve complex problems such as these. Ijtihad is independent reasoning. Technically, this term refers to the effort exerted by a qualified jurist (faqīh/mujtahid) to arrive at the meaning intended by the Lawgiver in the textual sources of Islamic Law and apply it to its subject-matters in the real life of human beings. The door to ijtihad although shut for centuries is now beginning to open. Ijtihad requires that a Muslim, man or woman, should be thoroughly familiar with the sciences of the Qur'an and Sunnah, comprehend the wider purposes of the Shari'ah and understand Arabic correctly. According to Syed, ijtihad in complex issues of law should be undertaken by trained scholars.3

The Qur'an is considered immutable and absolute and Muslims must be faithful to the Shari'ah. Nevertheless, from this universal Shari'ah the 'ulamā' are expected to formulate specific and precise laws and rules adjusted to the geographical and historical context. This is the task of ijtihad. When the Sunnah also leaves open some questions of interpretation or application, Muslims have to look into

ijtihad. Ijtihad is a very broad source of Islamic law and comes after the Qur'an and the Sunnah. It is the ability to analyze a verse of the Qur'an or a typical situation within the relevant cultural and historical context and then form an appropriate solution without violating the basic principles of the Qur'an and the Sunnah. Ijtihad is the source or methodology which gives Islamic law its adaptability to new situations and the capacity to tackle all new issues and problems. The sources of Islamic law other than the Qur'an and the Sunnah are essentially manifestations of itihad. Ijma^c and *qiyās* are not possible without the approach of ijtihad.

Islamic Jurisprudence Amidst Modern Medicine

Islamic Medicine, like philosophy, has passed through distinct (broadly three) stages of development, with each of its three stages being characterized by a dominant mode of ijtihad. In the initial stage (0-1370 AH) scientific developments were such that the Qur'an and Sunnah were sufficient to derive any law concerning medicine. The intermediate stage (1370-1420 AH) witnessed a different character due to drastic technological and social changes. This paved the way to deriving medical laws from secondary sources: (a) the two transmitted ones, *maṣādir naqliyyah* of analogy, *qiyās*, and secondary consensus, ijma^c, and (b) the logical ones, *maṣādir ʿaqliyyah*, that are *istiḥsān*, *istiṣhāb*, and *istirsāl* etc.4

Istiḥsān (Equity in Islamic Law)

Istiḥsān is a highly important branch of ijtihad and has played a prominent role, and made important contributions in the adaptation of Islamic Law to the changing needs of society. *Istiḥsān* literally means to deem something preferable. In its juristic form, *istiḥsān* is a method of exercising personal opinion in order to avoid any rigidity and unfairness that might result from literal application of law.⁵

An example of *istiḥsān* is the decision taken by 'Umar ibn al-Khaṭṭāb to suspend amputation of the hand (a '*ḥadd*' penalty for theft prescribed by the Qur'an and Sunnah) due to the existence of a famine at the time which was forcing people to steal. In this case Islamic law

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was suspended as an exceptional measure due to an exceptional circumstance. Al-Sarakhsī, a major jurist, considers *istiḥsān* as a method of seeking ease in legal injunctions believing it to be in accordance with the Qur'an (2:185). Hashim Kamali remarks that the Prophet's Companions (*Şaḥābah*) and successors ($Tābi^c \bar{u}n$) were not mere literalists, but often based their rulings on their understanding of the spirit and purpose of the Shari^cah. Kamali provides a modern example: oral testimony was once the standard form of evidence in Islamic law. Today in some cases photography, sound recordings and laboratory analysis have become a more reliable means of proof, able to replace oral testimony in many cases. A clear method of *istiḥsān* is applied here.⁶

There is no $q\bar{a}ti^c$ (definitive) authority for *istiḥsān* in the Qur'an and the Sunnah.⁷ Nevertheless, verses 34:18 and 39:55 of the Qur'an have been quoted in support. Similarly, a very famous hadīth, "*Lā darara wa lā dirār fī al-Islām*" (no harm shall be inflicted or tolerated in Islam), has also been used. *Istiḥsān* is intimately related to '*ra'y*' (opinion) and *qiyās* (analogical deduction). *Ra'y* is an important component in both *qiyās* and *istiḥsān*. The Ṣaḥābah were careful not to apply *ra'y* at the expense of the Sunnah. *Ahl al-Ḥadīth* mostly avoided using *ra'y*. On the other hand, most *fuqahā*' (experts in Islamic jurisprudence) liberally used *ra'y* in deducing law.

Many view that one kind of *istiḥsān* is essentially *qiyās khafī* (hidden analogy) and that *istihsān* is a departure from *qiyās jali* (obvious analogy) to *qiyās khafī*. Modern jurists have stated that the essential validity of *istiḥsān* is a fact.

Istishāb (Presumption of Continuity)

Istişhāb literally means courtship or companionship. In $U \ z u \ al$ -Fiqh, *istişhāb* denotes the presumption of the existence or non-existence of facts. It can be used in the absence of other proofs of the Shari^cah.

A large number of scholars have validated it. In its positive sense, *istiṣḥāb* presumes the continuation of a fact (marriage or a transfer of ownership for example) till the contrary is proved. However, the continuation of a fact would not be proved if the contract is of a temporary nature (for instance, *ijārah*, a type of leasing). *Istiṣḥāb* also presumes the continuation of the negative. Due to having a basis in probability, *istiṣhāb* is not a strong ground for the deduction of the rules of the Shari^cah. Hence when it comes in conflict with another proof, the latter is given priority. There are four types of *istiṣhāb*:

- 1. *Istiṣḥāb al-ʿadam al-aṣlī*, which means that a fact or rule which had not existed in the past is presumed to be non-existent.
- 2. *Istiṣḥāb al-wujūd al-aṣlī*, which signifies that the presence of that which is indicated by law or reason is taken for granted. For example, a husband is liable to pay '*mahr*' by virtue of the existence of a valid marriage.
- 3. *Istiṣḥāb al-ḥukm*, which presumes the continuity of general rules and principles of law. For example, when there is a ruling in the law (whether prohibitory or permissive), it will be presumed to continue.
- 4. *Istiṣḥāb al-waṣf*, which means to presume continuity of an attribute until the contrary takes place (such as, clean water will be continued to be treated as clean water).⁸

The *`ulamā'* of usul are in general agreement on the first three types of istishab. More disagreement takes place regarding the fourth. Some important legal maxims have been found on istishab. These are:

- 1. Certainty can not be disproved by doubt (*al-yaqīn la yazūl bi al-shakk*).
- 2. The presumption of generality until the general is subjected to limitation.
- 3. The presumption of original freedom from liability (*barā'ah al-dhimmah al-aṣliyyah*).
- Permissibility is the original state of things (*al-aşl fī al-ashyā' al-ibāḥah*).9

^cUrf(Custom)

^cUrf literally means custom. Custom therefore, has some place in determination of rules regarding $hal\bar{a}l$ (lawful/permissable) and

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'*harām*' (forbidden) in the Shari'ah. The rules of fiqh which are made on juristic opinion (*ra'y*) or ijtihad have often been formulated in the light of prevailing custom. There is nothing wrong in departing from them if the custom on which they are founded changes in the course of time. This rule is applicable in the case of *'urf* of the Muslim nations and when the *'urf* is not in conflict with the rules, essence and spirit of Shari'ah. *'Urf* of non-Muslims must be very carefully examined.

It should be remembered that *curf* and ijma^c are not the same in meaning. *Curf* is essentially a local or national practice whereas ijma^c is an agreement of *culamā* across places and countries. There are other differences which are not substantial in character.¹⁰ Although *curf* is not an independent proof in its right, it can play a useful role in interpreting and implementing Islamic law. It is also mentioned that the rise of codified statutory legislation in modern states, has to some extent minimized the demand of *curf*.

Maşlahah Mursalah (Considerations of Public Interest)

Maşlahah literally means benefit or interest. *Maşlahah mursalah* refers to unrestricted public interest. Al-Ghazali notes that *maşlahah* consists of considerations which secure a benefit or prevent harm but are harmonious with the objectives (*maqāşid*) of the Shari^cah. These objectives consist of protecting the five essential values: religion, life, intellect, lineage and property.¹¹

The majority of scholars have advocated *maşlaḥah*. The following conditions are essential to validate *maşlaḥah*: (a) The *maşlaḥah* must be genuine, (b) The *maşlaḥah* must be general (*kulliyah*) – that is it secures *maşlaḥah* for all. (c) It must not be in conflict with clear *Naṣṣ*. To face situations in a changing world, *maşlaḥah* is a major instrument in the hands of jurists of Islam.¹²

Revealed Laws Prior to the Islamic Shari^cah and the Fatwas of the Ṣaḥābah

The $ahk\bar{a}m$ (laws) of Islam (Shari^cah) are self-contained. The rules of Islamic Shari^cah should not be sought in other religions because the rules of other faiths do not constitute a binding proof for Muslims.

The Qur'an refers to the previous Shari^cah in three forms:

- The Qur'an may refer to a previous Shari^cah and make it also obligatory on the Muslims. For example, fasting was prescribed on earlier nations and has also been prescribed for Muslims (2:183). Such rulings of the previous Shari^cah are parts of the Islamic Shari^cah.
- 2. The Qur'an (or Sunnah) may refer to a ruling of a previous Shari^cah and may abrogate it. For instance, some Jewish restrictions on food have been withdrawn for Muslims in the Qur'an (6:146).
- 3. The Qur'an may mention a ruling of a previous Shari^cah without mentioning whether it is upheld or abrogated (5:35, 5:48). The majority of Jurists consider these to be part of the Shari^cah of Islam which must be followed by Muslims.

The fatwa of the Sahabah means an opinion reached by a Companion by way of ijtihad. The fatwa of a Companion is a source of guidance which merits careful consideration (though not binding except in the case of their clear ijma^c).

Sadd al-Dharā'i^c (Blocking the Means)

Sadd means to block, while *dharā*'*i*^c signifies means. In $u \\in u \\in$

A general principle adopted by jurists regarding the matter is that 'preventing harm takes priority over securing a benefit.' Authority for *Sadd al-dharā'i*^c is also available in the Sunnah. Prophet Muhammad forbade a creditor to take a gift from a debtor (as it could lead to incurring interest). He also forbade the killing of hypocrites (as it could lead to dissention within the community, and also to wrongful killing based on suspicion).

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According to Abū Zahrā' and Shāṭibī, most '*ulamā*' have accepted it in principle and differ only in its application. On the basis of their probability of leading to evil ends, *dharā'i*' have been divided into the following four types:

- 1. Means which definitely lead to evil. These means are completely forbidden.
- 2. Means which are most likely to lead to evil and rarely lead to benefit. For instance, the selling of weapons during war time and selling grapes to a wine-maker. Most of the scholars have invalidated such means.
- 3. Means which frequently lead to evil, but there is uncertainty or even dominant improbability. Scholars differ widely on the illegality of such means.
- 4. Means which rarely lead to harm such as digging a well in a place which is not likely to cause harm, or speaking a word of truth to a tyrannical ruler. Scholars have ruled in favor of the permissibility of these means.¹³

Reflection of Islamic Law in the Modern Period of Medicine (1420 AH Onwards)

Towards the end of the intermediate period, further advancements in medical intervention strained $qiy\bar{a}s$, with the result that its analysis and conclusions were no longer robust or even reliable. The underlying cause is that current issues of medicine are drastically different in nature and context to be analogous. For example, surrogate motherhood is analogous to foster motherhood on biological grounds. But would it be justified? The obstacles in the application of $qiy\bar{a}s$ can be overcome in the modern period of law of medicine by using the theory of purposes of the Law, maqāṣid al-sharī cah, to derive robust and consistent legal rulings. Maqāṣid al-sharī cah is not a new theory. It has been around and there was no serious necessity to apply it.¹⁴

Maqāṣid al-sharī^c*ah*, or the higher objectives, intents and purposes of Islamic law, is geared towards:

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- 1. *Ḥifẓ al-Dīn* (protection of religion);
- 2. *Hifz al-Nafs* (protection of life);
- 3. *Hifz al-Nasl* (protection of progeny);
- 4. *Hifz al-*^c*Aql* (protection of the mind); and
- 5. *Hifz al-Māl* (protection of wealth).

This classification is permanent and clearly describes the paramount and basic necessities of human beings. These aims need protection, preservation and promotion.

The first purpose is the protection of $d\bar{\imath}n$ (*hifz al-dīn*). Protection of $d\bar{\imath}n$ within the domain of medicine refers to the maintenance of health. Health here stands for both physical and mental health. Nobody is capable of doing *`ibādāt* (worship) properly if he is not sound both physically and mentally. Every act done according to the way of Allah is a form of worship, *`ibādāt*, in Islam.

The second purpose is the protection of life (*hifz al-nafs*). In Islamic teachings, both birth and death are controlled by Allah in the absolute sense. But as long as man is alive he deserves a better life. Herein lies the role of medicine, which should ensure a good life for every human being. Medicine is able to offer an enhanced quality of life. The preservation and continuation of life is possible when the physiological function of the body remains correct. Medicine is also able to relieve patho-physiological stress by preventive, curative and rehabilitative measures.

Life is sacred and its sanctity is guaranteed by the Qur'an (2:84-85, 4:29, 5:32, 6:151, 17:33, 18:74, 25:68). Every life is as important as any other life. So destroying the life of one person is equivalent to destroying the life of all humans (25:32).

Therefore, the first principle of Islamic medical ethics would be to preserve life. The protection of life is the second most important goal of the Shari^cah, coming second only to the protection of the $d\bar{\imath}n$. Legal compensation for bodily damage is regarded as the replacement of lost earnings, and not paying for the value of life. Here the compensation stands for the legal provision to provide sustenance to surviving relatives in case of death. It is also a token for sustenance to a person whose organ has been severed and who cannot therefore work to

support himself. The quality of life is multidimensional and it can be improved physically (making it free from disease and offering a comfortable environment and basic necessities), mentally (through calmness, the absence of neurosis and anxiety and having a purposive life) and spiritually (having a correct relationship with Allah).¹⁵

The third purpose is the protection of progeny (*hifz al-nasl*). The protection of progeny bears significance in medicine when medicine aims at caring for children so that their health is ensured. For the successful birth of children, care for pregnant women, prenatal medicine and peaediatrics are important. Good health is a prerequisite for healthy adulthood, procreation and the continuation of human life. As Islam encourages reproduction, it advocates the treatment of infertility.

Protection of the mind (*hifz al-*^c*aql*) in relation to medical ethics signifies the necessity of treatment of any physical or mental disease. Recovery from a disease surely brings about mental tranquility.

The fifth purpose is the protection of property or wealth (*hifz almāl*). The wealth of any community depends on the productive activities of its healthy citizens. Medicine contributes to the generation of wealth by the prevention of disease, promotion of health and the treatment of disease.

Thus, the Shari^cah's rules and principles fall under one of three categories and their preservation: (a) absolute necessities ($dar\bar{u}riyy\bar{a}t$), (b) exigencies ($h\bar{a}jiy\bar{a}t$) and (c) embellishments ($tahs\bar{n}iyy\bar{a}t$).

The five items listed above belong to the necessary $(d\bar{a}r\bar{u}r\bar{i})$ category. If they are disrupted, then the stability and equilibrium of an individual and family are disrupted, as well as social life itself. Any civilization that wishes to survive must uphold and protect these five essentials.

Having explained the concept of ethics based on the purpose of the Shari^cah, we now turn attention to the ethical philosophy of Islam. We begin by introducing the standard of judgment delineated by Islam with regards to ethical and unethical behavior as well as outlining the motivating force that, according to the tenets of Islam, should play a major role in opting for the 'good' and avoiding the 'bad.' As stated previously, the five items of preservation belong to the category of

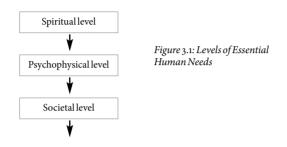
Absolute Necessities	Description	Example of Application
Preservation of Religion	It refers to the maintenance of health. <i>Shadat</i> in Islam stands for every act done according to the way of Allah. Health here stands both for physical health and mental health.	Nobody is capable of doing <i>Clbādāt</i> properly if he is not sound both physically and mentally.
Preservation of Life	The primary purpose of medicine is to main- tain as high a quality of life as possible until death.	Medicine contributes to the preservation and continuation of life by making sure that phys- iological functions are well maintained. It also relieves pathophysiological stress by preventive, curative, and rehabilitative measures.
Preservation of Progeny	Medicine contributes to the fulfillment of this function by making sure that children are cared for well so that they grow into healthy adults who can bear children. Since healthy families are the foundation of a healthy soci- ety, this warrants that attention be given to our family institution as it represents the basis for our social stability and harmony. Furthermore, the support system for the youth must give primary attention to the growth of spiritual, moral, mental, emo- tional, and physical health of both parents and children.	The treatment of male and female infertility ensures successful reproduction. Care for pregnant women, prenatal medicine, and pediatric medicine all ensure that children are born and grow healthy.
Protection of the Mind	Medical treatment plays a very important role in the protection of the mind.	The treatment of physical illnesses removes stress that affects the mental state. Treat- ment of neuroses and psychoses restores intellectual and emotional functions. The medical treatment of alcohol and drug abuse prevents deterioration of the intellect.
Preservation of Property	The wealth of any community depends on the productive activities of its healthy citizens.	Medicine contributes to the generation of wealth by the prevention of disease, promo- tion of health, and treatment of any diseases.

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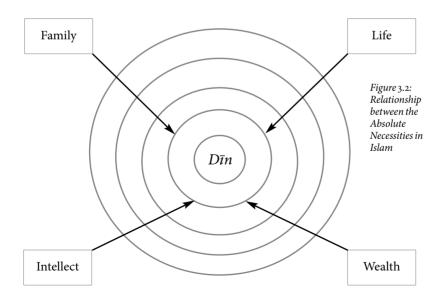
Table 3.1: The Primary Necessities in Islam

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absolute necessity $(d\bar{a}r\bar{u}r\bar{i})$. If disrupted, the stability and equilibrium of an individual, family and social life are disrupted. Any civilization that wishes to survive must preserve and protect these five elements. Underlying this thinking is Islam's doctrinal position that man is the vicegerent of God on earth.



Regarding the relationship between the primary purposes which represent the absolute necessities, Imran Ahsan Khan Nyazee writes: "The relationship that exists between the primary purposes may be highlighted by visualizing outer shells serving or protecting the inner



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shell or shells. Thus, the innermost shell is represented by the preservation ($ibq\bar{a}$ ') and protection (hifz) of $d\bar{\imath}n$. This represents the foremost purpose of the Shari^cah. The relationships described above indicate purposes have a higher priority than others, that is, they would be preferred in case of clash between two interests."¹⁶ Thus, the preservation and protection of religion ($d\bar{\imath}n$), as we have pointed out earlier, has preference over the preservation and protection of life; life has a higher priority than progeny; progeny is prior to intellect (^caql); and intellect is preferred over wealth or property.¹⁷

According to the Qur'an, a Muslim has to discharge his moral responsibility to all of humanity, society, and creation. The Qur'an urges us to purify our souls from self-seeking egotism, tyranny, a lack of restraint and indiscipline. It calls towards piety ($taqw\bar{a}$) and God-consciousness. The Qur'an says:

Consider the human self, and how it is formed in accordance with what it is meant to be, And how it is imbued with moral failings as well as with consciousness of God! To a happy state shall indeed attain he who causes this [self] to grow in purity, and truly lost is he who buries it [in darkness]. (1:8-10)

The Qur'an induces feelings of moral responsibility and fosters the capacity for self-control. Furthermore, it generates kindness, generosity, mercy, sympathy, peace, disinterested goodwill, scrupulous fairness and truthfulness towards all creation in all situations. The five purposes of the Shari^cah concern both the individual and collective, as shown by the following figure.

Dīn	Life	Family	Intellect	Wealth
Public	Public	Public	Public	Public
Private	Private	Private	Private	Private

Figure 3.3: Relevance of the Primary Necessities with reference to Private and Public Affairs

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What has been highlighted is a summary of the Qur'anic inspired concept which offers humanity an integrated, balanced equilibrium for the sustained improvement in well-being of all mankind. The scheme has wide connotations in relation to well-being, far beyond mere fulfilment of psychological, mental and bodily needs (as has been suggested by certain dominant thinkers). What it demonstrates is the need for physical health as well as economic growth and development to run parallel with efforts to fulfill spiritual and mental needs.

Rules Regarding Solving Conflicting Cases

Cases such as that of terminal illness may cause the principles of protection of life and protection of wealth to come into conflict. Care for the terminally ill consumes a lot of resources and resolution must refer to the principles of the Law, $qaw\bar{a}^cid\ al-shar\bar{\tau}^cah$, that are described below.¹⁸

First Principle: Intention

Intention is extremely important in decision-making. If a man tries to kill a man but fails he will still be judged on the basis of his intention to murder though he failed.

Although ancient the medical profession has always suffered the same tug of war, an oscillation between respect for patients and their wishes and the tough responsibility of duty and obligation with regards to their medical needs. Renowned Muslim scholar and jurist, Al-Shāfiʿī, once remarked, "People cannot dispense with two groups of individuals: the scholars for their (the people's) religion and the physicians for their (the people's) bodies."¹⁹

There are many issues concerning medical procedures and decisions that are hidden from public view. A physician may carry out a procedure for a stated reason that overtly seems plausible while hiding a different intention within.

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Islamic Maxim	Description	Example of Application
Intention: Matters are to be considered in light of their objectives.	All work is recognized according to the intention behind it.It calls upon the physician to consult his inner conscience.	A practical example is use of morphine for pain relief in terminal care when the actual intention may be to cause respiratory depression that will lead to death.
What matters are the inten- tions and not the literal meaning.	This sub-principle is used to refute use of legal argu- ments based on literal translation of the text to justify immoral acts.	The interpretation of the hadith on embryological development to justify abortion on demand before ensoulment.
Means are judged with the same criteria as the intentions.	This sub-principle implies that no useful medical purpose should be achieved by using immoral methods.	This implies that no useful medical purpose should be achieved by using immoral methods.
Doubtful things are better avoided.	This principle protects against unnecessary medical interventions in long-standing anomalies or defor- mities that do not appear to cause any discomfort.	This principle protects against unnecessary medical interventions in long-standing anomalies or defor- mities that do not appear to cause any discomfort.
The origin of things is permissible.	All medical procedures are considered permissible unless there is evidence to prove their prohibition.	Medicine should contribute to the preservation and continuation of life by making sure that physiologi- cal functions are well maintained. It also should fine ways and means to relieve pathophysiological stress by preventive, curative, and rehabilitative measures.
All matters related to the sexual function are pre- sumed forbidden unless there is evidence to prove permissibility.	This is an exception to the above general rule of per- missibility to be otherwise, i.e. there are certain conditions and procedures related to the sexual and reproductive functions.	Biomedical ethics in Islam is not value free.

Table 3.2: Legal Maxims on the Principle of Intention

Second Principle: Cause No Harm

Harm must be removed.²⁰ This principle has been derived from the hadith that "no harm shall be inflicted or tolerated in Islam" ($L\bar{a}$ darara wa $l\bar{a}$ dir $\bar{a}r$ $f\bar{i}$ al-Isl $\bar{a}m$). Some of the variant renderings of the maxim al-dararu yuz $\bar{a}l$ read as follows: "Harm must be eliminated but not by means of harm" (al-dararu yuz $\bar{a}l$ wa $l\bar{a}kin l\bar{a}$ bi darar); and "Harm is not eliminated by another harm" (al-dararu la yuz $\bar{a}l$ u bi al-darar). The hadith under discussion has provided the basis of numerous other maxims on the subject of darar, including for example, "A specific harm is tolerated in order to prevent a more general one" (Yutahammal al-darar al-khās li daf al-darar al-cām), "Harm is eliminated to the extent that is possible" (al-dararu yudfa^cu bi-qadr

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al-imkān) and "A greater harm is eliminated by means of a lesser harm" (*yuzāl al-darar al-ashaddu bi al-darar al-akhaff*).

Islamic Maxim	Description	Example of Application
Cause no harm. Harm must be eliminated.	The physician should however cause no harm in the course of his work.	The physician should however cause no harm in the course of his work
Injury should be prevented or mitigated as much as is possible.	Any potential harm to the individual and society has to be prevented as much as possible. This resembles the proverb "prevention is better than cure".	Medical intervention is justified on the basic princi- ple that injury, if it occurs, should be relieved.
To repel a public harm a private damage is preferred.	One has to succumb to the damage which is private in nature in order to prevent social harm.	As above.
The prevention of harm has priority over the pursuit of a benefit of equal worth.	If the benefit has far more importance and worth than the harm, then the pursuit of the benefit has priority.	
A lesser harm is committed in order to prevent a bigger harm.	If confronted with two medical situations both of which are harmful and there is no way but to choose one of them, the lesser harm is committed.	Combating communicable diseases, the state may have to restrict movements of a citizen or even destroy his property be achieved.
Prevention of harm has pri- ority over pursuit of a benefit of equal worth.	An injury should not be relieved by a medical proce- dure that leads to an injury of the same magnitude as a side effect.	In a situation in which the proposed medical inter- vention has side effects.
The individual may have to sustain a harm in order to protect public interest.	Medical interventions that are in the public interest have priority over the consideration of individual interest.	The state cannot infringe on the rights of the public unless there is a public benefit too.

Table 3.3: Legal Maxims on the Principle of Do No Harm

Third Principle: Certainty

What is to be done when there is no clear rule? All acts are permissible unless there are clear prohibitions.²¹

Islamic Maxim	Description	Example of Application
Predominant conjecture.	Everything in medicine is probabilistic and relative.	Medical practices cannot operate at the level of conjecture (<i>zann</i>), or pure doubt (<i>shakk</i>).
Predominant conjecture.	Treatment decisions are based on a balance of probabilities.	The principle protects against unnecessary medical interventions in long-standing anomalies or defor- mities which do not appear to cause any discomfort

Table 3.4: Legal Maxims on the Principle of Certainty

Fourth Principle: Hardship

Hardship begets facility (*al-mashaqqah tajlibu al-taysīr*). This is in accordance with the general Islamic principle that Islam is as an easy religion which cannot be made difficult or a burden for its followers. The Qur'an says, "God wills that you shall have ease, and does not will you to suffer hardship" (2:185).

Islamic Maxim	Description	Example of Application
Hardship: its meaning in a medical setting	Any condition that will seriously impair physical and mental health if not relieved promptly.	Hardship mitigates all the Shariʿah rules and obligations.
Hardship shall bring allevia- tion, or hardship begets facility.	The presence of difficulty requires that allowances be made to effect ease. This principle embodies the fact that Islamic Law is built upon achieving ease and not upon imposing hardships.	Medical interventions that would otherwise be pro- hibited actions are permitted under the principle of hardship if there is a necessity, (<i>darūrah</i>).
Necessity legalizes the prohibited, <i>al-darūrāt</i> tubīņu al-maḥzūrāt.	The genuine difficulties are considered as necessity (<i>darūrah</i>). Whenever difficulties present them- selves, the Law makes provisions to facilitate mat- ters. The condition for such measures to be taken is that the difficulties are real and not imagined.	Under the principle of hardship, secrets may be revealed under necessity, <i>darürah</i> . In cases of court litigation, the caregiver could testify in criminal cases that involve injustices.

Table 3.5: Legal Maxims on the Principle of Hardship

Fifth Principle: Custom

The generally accepted standard of medical care is defined by custom. What is considered customary is what is uniform, widespread and predominant. The customary must also be old and not a recent phenomenon so that there is a chance for a medical consensus to be formed.

Relevance for Bioethics

Morality deals with (1) what behavior we ought to do and (2) what kind of person we ought to be. Islam has laid down some universal fundamental rights for humanity as a whole which are to be observed and respected under all circumstances. In order to achieve these rights, Islam prescribes not only legal safeguards but also a very dynamic and effective moral code.

The Qur'an states:

It is not righteousness that you turn your faces towards East or West; but it is righteousness to believe in Allah and the Last Day, and the Angels, and the Book, and the Messengers; to spend of your substance, out of love for Him, for your kin, for orphans, for the needy, for the wayfarer, for those who ask, and for the ransom of slaves; to be steadfast in prayer, and practice regular charity; to fulfill the contracts which you have made; and to be firm and patient, in pain (or suffering) and adversity, and throughout all periods of panic. Such are the people of truth, the Allah-fearing. (2:177)

However, according to the ethical philosophy of Islam, knowledge of good and evil, that is the standard of distinguishing between the two, is a part of man's primordial nature. Amongst many other concepts this human nature also includes moral concepts such as justice, truthfulness, honesty, helping the weak, freedom in one's personal affairs etc. And although their application may differ in practical life in response to varying circumstances, yet the concepts themselves have never been questioned and are, and have mostly remained, universally accepted. It is for this reason that ethical values such as justice, honesty, trustworthiness and truthfulness etc. have never been questioned philosophically, even though considerable practical deviation or a huge difference in their practical application may exist.

Conclusion

It should be apparent from the preceding discussion that the Qur'an remains the primordial Islamic epistemological premise. Furthermore, it should be clear that the authentic Sunnah forms the supportive instrumental-cum-normative epistemological premise, and that ijtihad forms the instrument of *Ahkām* formation and is subject to continuous evolution, change, extension and determination. It should also be obvious secondly, that the methodology of deriving knowledge is presented in the Qur'an as a discursive, that is, interactive-integrative phenomenon, incessantly occurring both inter- and intra-systems. Thirdly, the precept of *Tawhīd* forms the essence of the

Qur'anic reality in which is premised the universally discursive process of unification of knowledge. Islamic bioethics is nothing but an extension of its legal dimension. Ethical guidelines in Islam are both fixed and variable. The fixed moral and legal principles are broad enough to encompass the needs of all times and places. The detailed applications are variable and change according to the environment and time. There is an elaborate system of checks and balances as well as legal directions provided in the Islamic legal system within the framework of Qur'anic epistemology. The moral imperative of Islam, encompassing biological and medical ethics, is intimately related to its epistemology.

The Philosophical Relevance of Western Secular and Islamic Bioethics

The core concept in the Western secular and Islamic perspectives on bioethics is that of human nature in relation to man's existence, knowledge and value system. Philosophy is concerned with essentially three questions: What is real? What is true? What is good? The first concerns ontology, the study of reality and existence. The second concerns epistemology. How do we know? How do we know that something is true or otherwise? What are the conditions and limitations of knowledge? The third concerns axiology, i.e., ethics and aesthetics. Hence, it is important to study through comparative analysis the views of both the secular and Islamic perspectives on ontology, epistemology and axiology.

Relevance of Ontology

Western secular philosophy restricts reality to the natural world, the material world being regarded as the only level of truth. The denial of the reality and existence of God is implied in modern and postmodern thought. Everything is considered a progression, a development or an evolution of what lies in eternal matter. The world seen from this perspective is (i) an independent, eternal universe and (ii) a self-subsistent system evolving according to its laws. In short, secularism has removed any sense of the sacred from the modern and post modern (Western) conception of existence.

The 17th century witnessed science taking from materialistic philosophy the notion of matter as being the basic component of nature.¹ Furthermore, it reinstated the ancient notion of Greek philosophy of Man being the measure of all things. This fuelled the rise of skepticism and subjectivism. As biology in the 17th century began to branch off from philosophy, it too like the other sciences, absorbed from philosophy the notion of matter as being the principal basic element of the universe, and something which could be studied from the point of view of both its physical and chemical properties. Anatomy and physiology fulfilled roles similar to that of physics while chemistry concerned itself with the body of chemical composition. Hence, every existent is considered to be a progression, a development or an evolution of what lies in the eternal matter.² Therefore, Western medicine has its own ontological framework.

Islamic ontology is radically different from Western philosophical ontology. It falls into the category of monotheistic creeds whose adherents believe in the oneness of God. This concept is referred to in Islam as $Tawh\bar{\imath}d$. It affirms that there is only one God for the entire cosmos. He deals with it as He pleases without anyone sharing His authority, or helping Him. In Islam God stands alone, Majestic and Powerful. Consider the following Qur'anic verse:

God – there is no deity save Him, the Ever-Living, the Self-Subsistent Fount of All Being. Neither slumber overtakes Him, nor sleep. His is all that is in the heavens and all that is on earth. Who is there that could intercede with Him, unless it be by His leave? He knows all that lies open before men and all that is hidden from them, whereas they cannot attain to aught of His knowledge save that which He wills [them to attain]. His eternal power overspreads the heavens and the earth, and their upholding wearies Him not. And He alone is truly exalted, tremendous. (2:255)

Muslim philosophers have elaborated on the existence of God by studying His names and through these His attributes, known famously as the Ninety-Nine Names of God. They refer to God's Reality of Being by which they mean that which is not mixed with anything, and in which there is no limit, essence, imperfection, or privation. This is what is called the 'Necessary Being' ($W\bar{a}jib \ al-Wuj\bar{u}d$). If the 'Necessary Being' did not exist, then nothing at all would exist.³ There is a type of vision of reality and truth known as absolute idealism. Absolute idealism views reality as an all-inclusive and absolute spirit and all sensible particulars as its finite but progressive manifestations. Islamic idealism may in a sense also be called absolute because it also designates an absolute and all-inclusive spirit, in fact the ultimate being, Allah, with all sensible particulars being His finite but progressive manifestations (all creation points to His existence and control).

This has some affinity with the German philosopher Hegel's notion of absolute idealism wherein reality is seen as thought or reason or an all-comprehensive mind and nature only its externalization or self-manifestation. In Hegel's interpretation, the laws of thought are also the laws of reality, and therefore identical with each other. Reality, according to Hegel, is a universal, all-absorbing mind (which is pure thought) in a ceaseless process of manifesting and realizing itself. Initially it becomes unconscious and fully indeterminate. But by the very force of its nature, it evolves dialectically and becomes more and more determinate and perfect. The absolute and finites are related as a whole and parts. Neither is real without the other but the whole is prior and determines the parts.

Islamic ontology also designates God as the ultimate Truth and Reality and superior compared to all elements in the external world. But there is a difference: Islam's ontology identifies the Absolute with God, Hegel's ontology does not. In addition in Islamic ontology the Absolute Being is subject to worship but for Hegel this is not so. God as an objective reality is present in the consciousness of man. This consciousness is called 'faith' in Islamic terminology.

Is there any external reality? Islamic ontology asserts that there is an external world independent of our experience. We experience only a part of it. The part which remains un-experienced but which is significant to human life is revealed to the prophets and translated in terms of the ordinary experiences of man.⁴ In Islamic ontology, man is God's creature and vicegerent on earth. Thus, Islamic thought builds upon the notion of man being both a servant and vicegerent of God on earth. Man is endowed with a soul and physical entity, and hence consists of both matter and spirit or the physical and spiritual.

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In Islamic ontology man is certainly not the measure of all things, yet he is honored with tremendous status as the crown of creation. The Qur'an states:

Now, indeed, We have conferred dignity on the children of Adam, and borne them over land and sea, and provided for them sustenance out of the good things of life, and favoured them far above most of Our creation. (17:70)

Man is both a servant of God, like other living creatures, and also importantly His steward (vicegerent) on earth. The Qur'an's appraisal of man is a contrasting one: Man is the highest and most honored of God's creation but at the same time is also represented as being ungracious, weak, greedy, and full of haste. Man is called upon to realize the best within himself, to elevate his character to the highest levels. The Qur'an mentions the purpose of man's life as well as his primordial status thus:

And [tell them that] I have not created the invisible beings and men to any end other than that they may [know and] worship Me. (51:56)

Verily, We create man in the best conformation. (95:4)

And He imparted unto Adam the names of all things; then He brought them within the ken of the angels and said: "Declare unto Me the names of these [things], if what you say is true." (2:31)

Thus Islamic ethics is a sub-system of its ontological and epistemological concepts. The Islamic view is anchored in the belief that human beings are unique and special, that our actions in this life have profound consequences for the next and that morality is absolute and provides a basis for the compassionate care of our fellow human beings.

In medicine, according to Muslim philosophers, man is to be studied from the standpoint of an organism and not from that of a mechanism. What is man? Not a piece of matter, not a piece of machinery, not a chemical factory, nor a bundle of physical energies or a complex of desires and sensations, or a modus of thought, feeling and action. He is all these by turn but something more; he embraces all these aspects but transcends them all; he is a complex and mysterious entity comprising of mechanism and organism and matter and consciousness; in fact a supra-sensible integrated whole.

As objective idealism, Islamic metaphysics announces that the universe has a definite purpose. What is this purpose? The Qur'an maintains the view that the powers of reflection, if they are properly used, lead not only to the cognition of reality, but also to the knowledge of the purpose of creation. It refers to people who so reflect:

[and] who remember God when they stand, and when they sit, and when they lie down to sleep, and [thus] reflect on the creation of the heavens and the earth: "O our Sustainer! Thou hast not created [aught of] this without meaning and purpose. Limitless art Thou in Thy glory! Keep us safe, then, from suffering through fire!"(3:191)

Through proper reflection people are able to know that the world has a higher purpose partly towards realization of values. In Islamic ethics, values are rooted in the very heart of reality, and all processes and movements of the world are seen as being directed towards their realization.

Relevance of Epistemology

This branch of philosophy is concerned with the study of knowledge and the nature, limits and validity of knowledge. It deals with such questions as "Does truth exist?" "What can I know?" and "How can I know?"

Bacon was the father of the objective and realistic tradition in modern philosophy, and his works established deductive methodologies for the scientific method. Descartes was the first to establish a complete division between spirit or mind and matter. He gave an entirely mechanical turn to science which attempts to explain the universe we live in.⁵ However, with development of this so-called scientific revolution and the ideological progression of a materialist, man centered conception of the world, the sense of the sacred has virtually all but disappeared from the modern and postmodern (Western secularist) conception of knowledge. Today reason and rationality, based on sense experience, rule supreme, denying any role to intuition and religion. In other words, revelation and religion are entirely rejected as a source of true knowledge.

Islam does not deny reason, it affirms it and positively demands the use of intelligence and 'aql to acquire knowledge, but it goes beyond this also to include the internal and the spiritual. In other words that knowledge of reality and the ultimate nature of things can be established with certainty by means of both our external and internal senses and faculties, reason and intuition. In Islamic epistemology, knowledge is based on divine revelation. Revelation is the backbone of Islamic epistemology. The Qur'an is composed of the divine words of Allah revealed to His messenger Muhammad. Its verses have the miraculous quality of expanding in meaning with progress in human knowledge. As the Qur'an was revealed to the Prophet Muhammad, he was capable of properly comprehending its meaning and applying it to the social conditions around him as well as explaining it to people. The acts and sayings of the Prophet enshrined in the hadith form an important key to understanding the Qur'an. In order to comply with the spirit of the age, there are the sources of ijma^c (consensus) that knowledge is absolute or objective and not merely relative and human

What is the nature of the visible world and how is it related to knowledge of the unseen? Is the human mind capable of complete knowledge of the invisible? In Islamic epistemology, absolute knowledge belongs to Allah alone. Aside from revelation as an objective source of knowledge, man has also been granted by Allah an organ of cognition known as the heart (*qalb*) which is the locus of the intellect (*`aql*). With the help of this organ man is able to perceive at the highest level of human perception and comprehend the highest source of knowledge (divine Revelation). Thus man perceives from the lowest sensory perception to the highest spiritual perception.

The following table will assist in clarifying the three levels of human perception and the relationship of the various elements associated with the three levels.⁶

Level of Perception	Perceptual Process	Faculty
Sensory perception	Sight, hearing, smell etc.	Eyes, ears and other senses
Rational perception	Cognition, reasoning, insight etc.	<i>Aql</i> (mind)
Spiritual perception	Intuition, intellection and inspiration	^c Aq/(heart)

Table 4.1: Islamic Epistemology at a Glance

As the table shows, in contrast to Western secular epistemology, which recognizes only sensory and intellectual perception, Islamic epistemology recognizes all levels of perception in man. Through the senses, man acquires knowledge of the physical environment. Through the mind, we have analytical and synthetic knowledge which includes metaphysical phenomena. Knowledge of the intellect (*`aql*) involves the experience of spiritual realities, e.g., elevation of the self or attaining nearness to Allah. Although all these levels of knowledge are true, there is still a hierarchy of knowledge. The lowest level is the level of sensory perception and the highest level is the spiritual perception.⁷

Hence Islamic epistemology is not purely empiricistic, unlike its Western counterpart, nor is it purely rationalistic depending only on reason, as Western rationalist philosophers would have it. It is not intuitional as Bergson and other intuitionists argue. It gives importance to all these sources but emphasizes mainly revelational knowledge given by Allah. Man has been given the power of reason, an intellectual enterprise which is to be governed by revealed knowledge. He cannot fully exercise his reason. Here, some similarity is evident with Kant's philosophy. For convenience we examine the first problem of "Is knowledge of reality possible?" Kant's analysis of theoretical reason led him to deny the possibility of metaphysics. In the process of knowing, our mind applies its categories of intuition, i.e., (perception) and understanding upon the raw material of the external world and the thing in-itself always remains unknown. The positivists following the same tradition have turned their backs upon metaphysics and look upon the function of philosophy to generalize the results of science or to analyze the important concepts.

Islam also asserts that human intellect has limitations and it cannot know whole reality.

Oh, verily, unto God belongs whoever is in the heavens and whoever is on earth: hence, what is it that they follow – those who invoke, beside God beings to whom they ascribe a share in His divinity? They follow but the conjectures [of others], and themselves do nothing but guess. (10:66)

Divinely guided intellect can however at least form such an idea of reality which is necessary for a good life.

Relevance of Axiology

The third area of concern for philosophy is the question of axiology. Axiology is the science of human values and deals with ethics and aesthetics. Ethics relates to the question of what is good and what is bad. Technological advances in medicine together with changes in society following the second World War have made ethical decision making an increasingly complicated exercise. Patients have higher expectations and ethical decisions are having to be made in an atmosphere of economic limitation, intense public scrutiny and anti-theistic worldviews. Furthermore, there has been a huge change in attitude towards the value of human life. From the ancient past spanning the time from Hippocrates up until around 40 years ago, almost all medical practitioners have viewed human life as sacred. This has now changed. Medical professionals today make ethical decisions according to a variety of criteria, which may include emotion, reason, conscience, consensus, regard to consequences, and adherence to human authority, or arbitrary moral principles, such as the four famous principles of autonomy, beneficence, non-maleficence and justice. These may help us in deciding how we should behave but none of them are infallible. Emotions may change. Reasons may fail or start from flawed assumptions. Conscience can be absent or oversensitive.

Consensus itself changes over time and is subjected to prejudice and perversion, consequences are often difficult to judge before the event and human authorities are not infallible. Neither are arbitrary principles the answer. Consider autonomy, beneficence, nonmaleficence and justice. They contain three major flaws. First, the principles themselves are not defined i.e. beneficence (doing good) and maleficence (not doing bad) are not defined so it is left to the individual to decide what is a good action in any given circumstance. Secondly, the four principles themselves conflict in almost all situations. Which principle in this case should take precedence? If our understanding of 'doing no harm' conflicts with patient autonomy, then which principle should carry most weight? Thirdly, there is the issue of personhood. Who qualifies as a person that we should do well to and not harm? Many bioethicists today regard embryos, fetuses, severely handicapped infants and those with dementia as non-persons to whom no responsibility is owed. The consequence of problems such as these is that the four principles cannot be used reliably to predict what one should do in a given situation of ethical conflict. In fact, they can invariably be used to justify almost any course of action whatsoever. These are all based on the ontological and epistemological framework of Western secular philosophy. Its ontological platform is that the validity and reliability of any data must be based on the following criteria:

- a) observable by senses
- b) quantifiable by senses
- c) measurable by senses, and
- d) definable by senses.

In other words, sensory observation and logical inference are criteria of truth. As the epistemological foundation of Western secular philosophy relies on human reason alone as a source of knowledge and rejects intuition or any authoritative knowledge, values in this scheme of things therefore have no objective standard.

Thus, in Western secular bioethics, values are treated only as human interest, whether personal or collective. The external world becomes indifferent to them. A subjective-objective distinction is evident here. Western secular bioethics regards values as human phenomena which are relative to human observations and experiences. Besides, values do not have a supernatural origin and are never conserved and realized through the will of a transcendental being. The universe manifests itself physically and all conscious behavior is only a more complex form of physical processes. Therefore, values have no significance beyond the human sphere. As a natural corollary of absolute idealism, Islamic ethics views standards of value as absolute, objective and eternal, and in fact emanating from the Divine. So vital is the study and preservation of values that as discussed they are paired with the idea of needs and divided into a hierarchy of three categories (*darūriyyāt*, *hājiyāt* and *taḥsīniyyāt*, which in turn are subdivided into various elements to be preserved). Western secular bioethics sees in contrast a rather fluid, subjective version of values with as a result each ethicist interpreting value-laden issues in his/her own way.

In contrast, Islamic ethics provides a clear and authoritative source of value on what is ethically good and bad according to well defined principles found in the Qur'an, prophetic tradition, and human reasoning etc. These principles are derived directly from revealed knowledge. While emotion, reason, conscience and other human attributes may have their merits, we turn to authoritative sources to provide a definitive guideline of how we should behave. Thus, the legal value of human action using Islamic principles can be categorized as follows:

- *Mubāḥ* Every act which is not specified as being mandatory, commendable, detestable or forbidden is *mubāḥ*. Simply speaking, acts which are permissible are *mubāḥ*.
- *Mustahab* This refers to that which is commendable/recommen-ded but is nevertheless not obligatory. For example, to perform salah more than the minimum requirement of the five daily prayers.
- *Fard* This stands for that which is mandatory, for example the five daily prayers.
- *Makrūh* This refers to that which is considered detestable and discouraged but not forbidden because it does not constitute a

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major moral sin. For instance, smoking is not forbidden but is strongly discouraged.

• *Harām* – *Harām* acts are those which are absolutely unlawful and prohibited for a Muslim such as adultery, murder, drinking alcohol and so on. A Muslim must be extremely careful in abstaining from that which is *harām*.

Artificial Insemination and Western Secular and Islamic

Bioethics: A Comparative Analysis

Background

In 1909 an unusual letter was published in the professional journal *Medical World*. It was from a Mr. A. D. Hard a wealthy businessman who had, according to the letter, managed to conceive a child through channels other than normal sexual intercourse. Mr. Hard mentioned a Dr. William Pancost, Professor at Jefferson College of Medicine. During discussions in a class at which Hard happened to be a student Dr. Pancost had referred to the case of an infertile couple, specifically the husband, who a medical check up had revealed to be incapable of producing sperm. Hard claims that it was the suggestion of the whole class that the wife could be inseminated by the "best-looking member of the class" that led in 1884 to Dr. Pancost impregnating the woman with sperm donated by Hard.

The letter further claimed that this whole procedure was shrouded in utmost secrecy. Indeed, even the husband and wife had at first been kept in the dark! The patient conceived and ultimately gave birth to a son. Only then was the husband told the truth and although was pleased with the delivery did not intend to inform his wife. This case in the U.S.A. is generally acknowledged to be the first recorded instance of artificial insemination in a human patient.¹

Definition, Reasons and Types

Artificial insemination (AI) is a technique in which the sperm is placed in the female reproductive tract by mechanical methods that precludes sexual ejaculation into the woman's vagina.²

Therefore, three points can be derived regarding AI based on this definition: (a) AI is a technique in which sperm is placed in the female reproductive tract by mechanical methods rather than sexual intercourse; (b) The man does not ejaculate into the woman's vagina; and (c) The sperm has to be placed into the female reproductive tract with an instrument.

Male infertility involves the following features: (a) inability to produce any sperm at all (azoospermia); (b) too low a sperm count to make impregnation of the female likely (oligospermia); (c) dysfunctional sperm cells despite adequate production in numbers, making the sperm insufficiently motile to make their way past the vaginal canal and through the fallopian tubes diminishing their chances of reaching and penetrating the ovum; (d) neurological conditions that make ejaculation impossible; and (e) impotency due to diseases such as diabetes mellitus.³ In these circumstances, AI can help the male partner overcome childlessness.

Although AI was first used to remedy male infertility, it has also been utilized for a number of other reasons. For example, certain physiological or physical constraints may be responsible for a couple's inability to conceive a child. Statistics indicate that about 10 percent of all married couples are incapable of producing a child. Among these cases, 40 percent are due to male infertility.⁴

Female infertility involves the following features: (a) a vaginal environment that is biochemically inhospitable to sperm; (b) an unusually small cervical opening that prevents further progression of the sperm; (c) the uterus lying in an abnormal position. In these cases, AI is a suitable aid to conceiving. In the first instance, if the sperm can avoid passing through the vagina, they have a better chance of surviving. In the second and third instances, AI may be used to deliver the sperm to an advantageous position for fertilization, a position they otherwise might not reach on their own accord.⁵ Certain genetic factors may also be responsible for infertility. Both male and female may be carriers of a recessive gene for a genetic disorder such as Tay-Sachs disease. The male may carry a dominant gene for a genetic disorder as in the case of Huntington's disease. In both cases, in order to prevent the unborn child from inheriting a genetic disorder, the couple may select sperm of a healthy donor to impregnate the ovum. A married couple facing these difficult situations will consider AI. Single women who wish to have children may also opt for AI.⁶

There are two types of AI depending on the source of the sperm employed in the procedure: Artificial Insemination Homologous (AIH) and Artificial Insemination Heterologous/ Donor (AID). In AIH, the sperm is collected from the male partner. The name of the process is commonly abbreviated as AIH and the 'H' frequently refers to the 'husband.' However, the male partner does not necessarily denote the legal husband. That is, a legal marriage bond is not a strict requirement in this procedure. Rather, the male partner needs only to be the functional equivalent of a husband.⁷

Before undertaking AIH, the semen has to be certified normal and that it does not and cannot enter the cervical canal in the usual way.⁸ These are just one set of criteria. Nowadays, AIH is carried out even in cases of poor quality semen.

AID uses sperm from a donor other than the 'husband.' It is employed when the problem is one of the irreversible sterility of the 'husband.' AID is recommended when the male is unable to produce any sperm at all (a condition called 'anospermia'), or the number of sperm he produces may be too low to make impregnation of the female likely (a condition known as 'oligospermia'). Even when a sufficient number of sperm cells are produced by the husband, they may not function normally. They may lack sufficient motility to make their way past the vaginal canal and through the opening to the uterus. When the husband suffers from a neurological condition that makes ejaculation impossible, or from a disease such as diabetes, he may be impotent.⁹

Artificial Insemination

Artificial Insemination from the Perspective of Islamic Bioethics

Procreation is a part of the divine teleology of Allah and this is mentioned clearly in the following verse of the Qur'an:

O Mankind! Be conscious of your Sustainer, who has created you out of one living entity, and out of it created its mate, and out of the two spread abroad a multitude of men and women. And remain conscious of God, in whose name you demand [your rights] from one another, and of these ties of kinship. Verily, God is ever watchful over you! (4:1)

However the Qur'an also mentions that some couples are left barren. Infertility is a fact of life that must be confronted and sometimes it can be overcome through treatment. The Prophet Muhammad said, "Seek treatment: for Allah has created a cure for every sickness. Some treatments are known, others are not."¹⁰

Therefore, couples can try to overcome their childlessness through treatment if it does not violate the principles of the Shari^cah.

In Shari^cah AI is acceptable under the following conditions: (a) it must be between a lawfully wedded couple; and (b) it is not valid after a divorce. The European Council for Fatwa and Research states, "It is permissible for the wife to use the sperm of her husband for fertilization unless she is divorced or the husband dies."¹¹

The view that AI should take place between lawfully married couples is based on the fact that in Islam sexual intercourse can only take place between married couples bound by an authentic marriage contract. The child to be born also has some rights: he/she must be the legitimate offspring of a lawful couple and should lawfully inherit the property of his/her parents. All these basic rights are ensured when the act of reproduction takes place during the marriage span and not after the death of the man or after divorce of the parents.

As such AIH does not create any ethical problem within the boundary of Islam. However, there should be absolute surety that the sperm being injected into the uterus of the woman are those of the husband. The abuse of AI procedures may be prevented and other related activities of AI may be better monitored through acts of legislation. The procedure should be conducted under meticulous and safe laboratory conditions. All members of the team such as doctors, nurses, and technicians should be reliable and of strong moral standing.

Currently, sperm and fertilized ova are preserved in a sperm bank in frozen states. This begs the question: is a man allowed to preserve his sperm in a frozen state? Furthermore, is it permissible to sell the sperm? There is nothing wrong with freezing sperm and ova as this does not violate all the functions and objectives of marriage and family. However, serious caution must be taken to ensure that the sperm is not mixed with sperm donated by others, and that only the husband's sperm alone is used to impregnate the wife. With regard to donation of sperm the answer is only in the case of promoting research. A fatwa issued by The European Council for Fatwa and Research states: "In case the wife is separated from her husband (i.e. by divorce or death), it's permissible for her then to get rid of the frozen sperm or its remnants."¹²

Regarding AID, Islamic ethics is very negative. One of the most prominent contemporary Islamic scholars, Dr. Yusuf al-Qaradawi, states:

Islam safeguards lineage by prohibiting $zin\bar{a}$ and legal adoption, thus keeping the family line unambiguously defined without any foreign element entering into it. It likewise prohibits what is known as artificial insemination if the donor of the semen is other than the husband.¹³

Using donor eggs or donor sperm is prohibited in Islam as this obliterates lineage, which is a highly protected aspect of the faith. And the practice is considered akin to adultery. Note that Islam makes adultery a punishable crime in order to preserve lineage. The Qur'an mentions:

And He it is who out of this [very] water has created man, and has endowed him with [the consciousness of] descent and marriage-tie: for thy Sustainer is ever infinite in His power. (25:54) One of the reasons lineage is critical is that by not knowing someone's correct (biological) lineage one may inadvertently marry one's half-brother, half-sister or any other close relative with whom marriage is forbidden. These situations have dangerous repercussions, causing harm not only to the individuals involved, but also in the long run, to society as a whole.

Moreover, the outcome of such procedures would be an illegitimate child according to the tenets of the Shari^cah. Meaning that if a child is conceived through a donor of sperm other than the husband then this fertilization is considered illegitimate. Who does the child legally belong to? The mother or the father (the sperm donor)? What rights does he/she have? According to the *ḥanafī madhhab*, based on the hadith (found in Bukhārī and Muslim): "The child belongs to the marriage bed", the husband is to be considered the father and the child has inheritance rights, at least.

In Islam, every person has the right to be the legitimate child of his or her parents. The right of the child to legitimacy is not something the parents can tamper with, even if they both agree that this is something they want to do. It is true that having a child is a blessing, but in order to have a child, we should not cross the limits set by God.

We conclude that Islamic bioethics permits AIH provided that proper precautions are taken so that no foreign element other than the sperm of the husband is present. It prohibits AID at any rate for the greatest welfare of society as a whole. A very coherent and logical form of social justice is reflected here. AID from the Islamic standpoint presupposes that goodness is not a narrow concept; the ontology of good bears an all-inclusive character. The Islamic perspective on AI is dynamic and focuses on long term good rather than the temporary satisfaction of desires.

Western Secular and Islamic Bioethical Perspectives: A Comparative Analysis

Analysis will be followed by answers to the following research questions:

1. Is artificial insemination by the husband ethically appropriate?

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- 2. Would artificial insemination by a donor be a problem? If so, why?
- 3. What about the provision of single, unmarried women?
- 4. Would homosexuals have any access to this assisted reproductive technology?
- 5. What is the problem with post humous semen retrieval?

The first point of ethical commensurability between Western secular and Islamic ethical views is that both welcome modern technology to assist infertile couples. The striking point of similarity between them is that both see no major ethical difficulty in AIH.

Couples that remain infertile and cannot conceive through normal means can try to overcome childlessness through treatment if this does not violate the principles of Shari^cah.

As Islamic bioethics is principle-oriented and divine, it cannot bypass the command of Allah in any matter. Allah says:

Now, indeed, We have conferred dignity on the children of Adam, and borne them over land and sea, and provided for them sustenance out of the good things of life, and favored them far above most of Our creation. (17:70)

Allah created all things in the universe for the benefit of mankind and to be used properly. He says:

[And remember that] it is God who has created the heavens and the earth, and who sends down water from the sky and thereby brings forth [all manner] of fruits for your sustenance; and who has made ships subservient to you, so that they may sail through the sea at His behest; and has made the rivers subservient [to His laws, so that they be of use] to you; and has made the sun and the moon, both of them constant upon their courses, subservient [to His laws, so that they be of use] to you. And [always] does He give you something out of what you may be asking of Him; and should you try to count God's blessings, you could never compute them. [And yet,] behold, man is indeed most persistent in wrongdoing, stubbornly ingrate! (14:32-34)

Moreover, Allah has given every person a life that consists of the body,

mind and intellect. This life is a trust, which man has to keep as perfect as possible until Allah regains it by death. But man must also protect life, mind, progeny, religion and property. These are the barriers within which we must remain and not transgress.

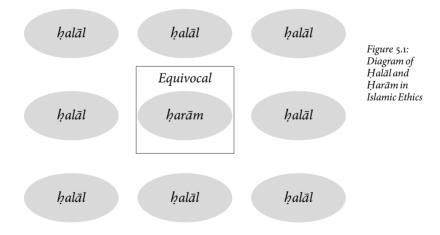
In a Western secular context, most of the ethical issues concerning AI are related to AID, and not AIH. Thus, aside from posthumous semen retrieval, most moral debate is concerned with AID and therefore the issue of donors. However, occasionally philosophers also look critically at the issue of AIH with some arguing against AI altogether (both AIH and AID) criticising the separation of reproduction from sex. That is seeing it as a violation of the natural process in which reproduction takes place in the context of loving physical acts between husband and wife.¹⁴ To put it simply, the whole process makes conception a mechanical act. Further, artificial insemination requires male masturbation which needs moral scrutiny because it is also an unnatural act given the natural end of sex.¹⁵ The whole process can be seen as a horrible interference in the procreative process and a violation of something which is 'unspeakably profound' to be left to random selection.¹⁶ Actually, the inseparability principle loses its significance because it prevents a couple from having children, and so does not carry sufficient weight. Therefore, here a distinction is made between 'means' and 'end.' In order to achieve an end, the means must be intrinsically good. In this context, the Islamic as compared to the Western secular approach to bioethics, is flexible allowing infertile couples to have access to AIH.

With reference to the Qur'anic verse: "...and who are mindful of their chastity, [not giving way to their desires] with any but their spouses – that is, those whom they rightfully possess [through wed-lock]: for then, behold, they are free of all blame, whereas such as seek to go beyond that [limit] are truly transgressors" (23:5-7), the majority of scholars have declared masturbation to be *harām*.¹⁷ However, in the context of AI, masturbation is feasible if the intention is to collect semen (sperm) for the purpose of AI between legally married couples. According to Islamic jurists, an important principle of Islam is that "necessity removes restrictions."¹⁸ For example, with regards to certain prohibited foods Allah states in the Qur'an:

He has forbidden to you only carrion, and blood, and the flesh of swine, and that over which any name other than God's has been invoked; but if one is driven by necessity - neither coveting it nor exceeding his immediate need - no sin shall be upon him: for, behold, God is Much-Forgiving, a Dispenser of grace. (2:173)

So, AIH using masturbation (if essential to treat infertility) does not create any ethical problems for Islam within the boundary of Islamic ethics. In allowing the use of $har\bar{a}m$ under necessity, Islamic ethics is true to its essence and general principles. Its spirit is to make life easy and less oppressive for mankind and to lift the burdens and yokes imposed by earlier systems and religions.¹⁹

In Islam, the range of permissible things is extremely vast and the sphere of prohibited things is very small. The first principle established by Islam is that things created by Allah where the benefits derived from them are essentially for men's use, are permissible. Nothing is $har\bar{a}m$ except what is prohibited by a sound and explicit *naş* (*naş* refers either to a verse of the Qur'an or a clear, authentic and explicit Sunnah of the Prophet Muhammad). If the *naş* is not sound, i.e., in the case of a weak hadith, or if it is not explicit in stating the prohibition, the original principle of permissibility applies. The Islamic scholars have derived the principle of permissibility of things from the clear verses of the Qur'an.²⁰ The following diagram clearly shows this fact:



The diagram clearly illustrates the positive attitude of Islamic ethics towards permissibility. A very small portion of the diagram fills the gap of *harām* and most is occupied with *halāl*. For example, AIH is permitted, but it must be within legal marriage and the life span of the two spouses. Otherwise, how could progeny be protected? Up to a certain point, Islam says, 'yes' but at a definite point, this yes becomes a 'no.' Islamic ethics has a tendency to say 'yes' to every technological use provided this does not conflict with basic Islamic beliefs and principles. Islamic ethics only declares 'no' in very limited cases. Thus, any scientific innovation that does not go against the principles of the Shari'ah is permitted for use and benefit. Why should people be deprived of the positive aspects of modern medicine? This is the dynamic spirit of Islam. Here Islamic ethics is based on a wider concept of good.

Some bioethicists in the Western secular perspective are not concerned as to whether AI takes place between married couples or not,²¹ whilst others, as mentioned earlier, reject AIH altogether on the grounds that it makes conception a mechanical act.²² The whole issue is painful, sensitive and fraught with emotion. Yet remarkably, Islam has presented a middle way, a solution which ingeniously moderates between these two extreme views. Islam's answer to this 21st century problem is a very balanced and logical one, mediating a path which allows for utilisation of the new reproductive method so long as the procedure takes place between husband and wife within their marriage span. Allah says:

And thus have We willed you to be a community of the middle way, so that [with your lives] you might bear witness to the truth before all mankind... (2:143)

In the Western secular philosophical context, ethical judgment on the use of AID is twofold. It is both positive and negative in ethical measurement. It is argued that AID offers certain potential psychological benefits over the alternative of adoption, because both husband and wife can be involved in the pregnancy from conception onward, sharing the experience of delivery and the early days of the baby's life. There is a chance that the child's physical appearance will at least resemble that of the mother. Furthermore, if there are several children they are more likely to resemble one another. There is no subconscious fear about the sudden appearance of the natural mother as there may be in the case of adoption. Also, of course, the desire on the part of the mother to carry a child is satisfied in contrast to adoption.²³

However, there are two sides to this coin. Looking at benefits one cannot ignore the harm. Involvement of a third party (through donor sperm) may make the mother guilty of committing adultery whether or not the act is justified to alleviate the pain of infertility, and whether or not conscience can rest with itself knowing that the whole process is mechanical anyway and does not involve the actual act of sex with a stranger. In our ordinary lives, customary morality is often more powerful than rational morality. In fact, it is especially true in primitive personalities however sophisticated or cultured they are.²⁴ How do we alleviate conscience, what feelings induce the ability to absorb a stranger's semen, what does the mother actually feel? The questions are tied: the wife may possibly feel 'cheated' by discovering the sterility of her mate. The desire to procreate despite this discovery may become, in part, an act of revenge toward the barren husband.²⁵ If AID is successful, the wife may harbor a complex feeling that the new life she bears within her has no relation to the love she has for her husband.²⁶ The situation would be to some extent complex if she secretly yearns to meet the man who 'helped' her when the husband could not.²⁷

Interpreted from an Islamic perspective, although AID is not legally a punishable crime, it is still morally wrong and prohibited from the perspective of Islamic ethics. The famous jurist Mustafa al-Zarqa has said that the act does not fulfil the pre-requisites of *zinā* and does not meet the condition of adultery. Therefore, the punishment of *zinā* is not applicable.²⁸ The prohibition would be much stronger if AID is used without the knowledge and consent of the husband for this involves deceit and destroys trust (*amānah*). That is part of the marriage contract. Concealing this fact and registering the husband as the father amounts to perjury.

The psychological threat to the husband is perhaps greater than that of the wife. Man's sense of ego is stronger than that of the female. If a man discovers that he is unable to impregnate his wife, he may suffer from an inferiority complex, and this would be a threat to his masculinity. Attempting AID may make the situation worse. He may feel jealousy towards the donor because of his inability to procreate. "AID, thus, threatens to evoke very deep-seated feelings of helpless dependence in relationship to women and also feelings of inadequacy in relation to other men."²⁹ The husband may psychologically withdraw from the home, engaging in his work or other forms of self-achievement by which he may hope to regain his sense of masculinity.³⁰ Sometimes, in order to overcome this type of problem, doctors often ask the husband to press the plunger of the syringe to allow him to feel that he himself has made his wife pregnant. But it is doubtful whether this act would improve the complex situation.

There is also the possibility that once having consented to AID the husband later changes his mind. In this case, he may resent the child and even repudiate it, again making the family situation worse. Sometimes, the husband may even ask the doctor to obtain a donation from the husband's brother to maintain the bloodline within the husband's own kinship group. If this is done without the knowledge of the wife it would be a violation of professional and marital confidence. So, AID is not a proper solution to male infertility.³¹

The dangers of psychological damage on the husband and wife may also impact the psychological development of the child, who may naturally pine for knowledge of, and connection to, the missing halves of him/herself. In the words of one particular donor sperm offspring: "We don't want money.... We have the fundamental questions that everyone has growing up. Where did I come from? Who am I? Do I have their eyes, their nose, their hair"?³² "People don't realize how painful this is," says Cordray, now 48. "I feel a part of me is not complete. I want to know what (my biological father's) family is like. I want to know where I came from."³³ Consider also the case of Bary Stevens. Following the death of his "adoptive" father at the age of 18, Stevens was to eventually learn that he had been born through AID, at a private clinic in London. Even in his late 40s, he set out to uncover his missing genetic heritage.³⁴ In this context, Islamic scholars Ayatullah Makarim Shirazi and Ayatullah Ja^cfar Subhani highlight another point. They believe that psychologically speaking, in the training and rearing of children and in arranging the necessities of their lives, natural emotions play a very important role, because they prepare the father to provide the necessities of life for his children. In fact, this human emotion is created only when the father considers the child a part of himself. But if he knows that the child does not belong to him but to some one else, he may be reluctant concerning his duties and responsibilities.³⁵

The danger is that, philosophically speaking, the husband and wife resorting to AID may not be doing so intrinsically to raise children as such, but rather to satisfy psychological egoism. Morality is being associated with self-interest here and this will eventually harm the children. So, motivational factors are important and do have a longterm impact. Parents will not realize the real underlying reasons for their motives of course, judging their actions to be based on goodness rather than the pursuit of their own best and long-term advantage. This type of decision-making falls under the rubric of what is called "ethical egoism," a theory which states that moral agents ought to do what is in their own self-interest. It assumes that human beings are inherently selfish creatures. In the case of AID craving for children is fulfilled at the cost of the children's interest. This violates the 'categorical imperative' of Kant which states that, "What makes an action right is that the agent treats human beings as ends in themselves." Instead of treating children as ends, what we have in AID is parents using them as means. Conversely to treat children as ends in themselves and never merely as means would be to express a sense of the intrinsic value of the human spirit, something which has profound moral appeal. Another very famous way of formulating the core idea of the categorical imperative is that rational creatures should always treat other rational creatures as ends in themselves and never as only means to ends. But in this case, parents are underscoring the categorical imperative of Kant.

In the author's opinion as the consequences of practicing AID are not good, it is condemned in Western secular bioethics. Here, bioethicists use 'consequentialism' as their philosophical tool of argumentation. Similarly, anticipating all these kinds of ethical dilemmas,

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Islamic ethics forbids the practice from the start, designating as *harām* (forbidden) entrance of any foreign element other than the husband's sperm into the uterus of the wife. Islamic ethics also foresees the difficulties associated with AID. It seems that there is an affinity between both approaches with regards to judging the validity of this practice and its negative effects. Their approach and rationale however differs. Islamic ethics forbids AID not only on the grounds that it is not good for children but also because it fails to fulfill the 'principle of progeny.' Protection of the family bond is paramount as well as the identity of the child and parents. Although Islamic ethics has a very flexible outlook towards life, it is highly conservative when it comes to protection of lineage, for in its view if the family and lineage were to break down, then the whole of civilization would collapse.

An important ethical issue arises when discussing the question of whether or not to disclose the identity of a child and the best approach. Proponents in favor of disclosing the true genealogy of a child to him/her argue that it would circumvent the risk of accidental disclosure and the damage this may cause. Thus parents may decide that to clearly apprise the child at an appropriate age would contribute to a healthier relationship. There is no parallel to truthfulness in life. Disclosure is necessary because knowledge of genealogical heritage may be crucial if the child suffers any genetic illness or needs a reliable family medical history. Also, if undisclosed, AID makes way for marriage between half-siblings. Semen from the same donor is often used with women who live in the same geographic community and who may represent a rather homogeneous ethnic or social group. The danger would be that AID children of the same donor would have a marital relationship.³⁶

Societal welfare, as well as society itself, is threatened if the ideals of truth are not practiced. This is highlighted by G.D. Mitchell who maintains that secrecy over donations of semen or embryos attacks the whole practice of truth-telling, on which society and our daily commerce with one another depends. Regarding why receiving donated sperm and oocytes are harmful to society, he writes: "Firstly, a donation is frequently shrouded in secrecy and of a kind that leads members of families to be deceitful. Secondly, it gives rise to births of

children who are denied adequate, or at least normal, knowledge of their genetic origins."³⁷

Actually, secrecy and deceit are not essential concomitants of sperm and oocyte donation. There must be pure frankness and free information about the entire transaction. Isolated and particular instances in which people are less than frank with one another do not threaten society. Mitchell speaks about a society in which children can never trust what they are told about their origins because the mere existence of artificial insemination and oocyte donation, which are sometimes undeclared, means that children in normal families can never be sure of any answer they are given. Mitchell's second worry is that it cannot be right to support processes which may well lead to the creation of children suffering some kind of deprivation which children born in the usual way may not expect to endure. According to Mitchell, "This is knowledge which helps a child acquire an identity; he knows where he belongs. Not to have this knowledge may be said to deprive him of a natural right. So should we, as a society, and the profession of medicine in particular, connive at producing children who begin life with a disadvantage?"38

Every person wants to know their real origin, their roots, and such arguments in favor of AID disclosure seem very strong. However, as infertility specialist Dr. Richard Casey notes, it is difficult finding donors even with assurances their identities will be safeguarded:³⁹

It would be virtually impossible if they knew that at a future date they may have some people knocking at their door, saying, "You're my dad, and I wanted to see you." The primary concern is the donor, who is making the whole thing work.⁴⁰

Would revelation of the use of AID be of serious concern to a husband? It's a momentous question. Consider the hypothetical case of Mr. L, a handsome man in his late 30s. He has been to university, has a good job, and is married to a highly educated woman. Yes he is in a quandary, should he keep the use of his conception by AID a secret or reveal it, and if he chooses to reveal it, when and how? What if it causes serious emotional disturbance and throws his life upside down? Preoccupation with concealment or disclosure of the secret could open up a whole other can of worms i.e. other concealed issues and unconscious conflicts seeking revelation: who am I and where did I come from? Unsatisfactory answers to these cardinal questions during the pre-oedipal and oedipal stages of development can create a complex dilemma to overcome.⁴¹

Epistemologically, in Western secular bioethics debate over encouraging or not encouraging the truth about AID is centered upon what is termed the 'correspondence' and 'pragmatic' theory of truth. Schneider and Mitchell's arguments correspond to the reality that is out there, that is, the essence of the truth of judgments about facts resides in their correspondence with reality. Conversely, arguments against disclosure ultimately have no bearing on what is the essence of truth, opting instead for a measure of prudence and practical utility.

In fact, while Western secular bioethics debates the question of whether or not to reveal the existence of AID, Islamic ethics is under no confusion, condemning it from the start, to protect the chastity of women and keep a child's identity intact. The Islamic ethics approach can be summed up as a 'couple only method' or a 'two valid parties method'; any entry of a third party into marital affairs is not allowed. It would not be out of place to view this is as a clash between deontology and consequentialism. Islamic ethics holds a deontic view while Western secular bioethics prefers a consequentialist view, that is thinking only about the after-effect of any action. However, as the Islamic approach has shown, the issue need not be complex. It's a simple matter of suggesting to childless couples that on adoption of a child they disclose to the child all the facts of the adoption. This way the child will have respect for the parents. Indeed, deception is not good practice in any aspect of life.

An ethical question also arises regarding the status of a child born through AID. It is a striking question, as the involvement of a third party is evident, would the child be illegitimate? Against such a possibility, Western bioethicists claim that the marriage bond is not a strict monopoly on totalitarian grounds. AID is surely not adultery if fidelity in marriage is considered to be a personal affair rather than a merely legal relationship. This is feasible in two ways. Firstly, artificial insemination mutually agreed upon by husband and wife would not involve any broken faith between them. Secondly, no personal relationship is entered into with the donor at all. So the charge that AID is adultery is a legalism, not a personal or moral objection at all. Interpreted in this way, AID would acquire a new dimension of thought.⁴² Fletcher emphasizes the 'personal' character of the marriage bond rather than any notion of a physical bond. He is unfettered by concepts of the rightness or wrongness of given physical acts, apart from the significance love assigns to them. Moreover, he exalts the superiority of the spiritual over the physical in the scope for an alternative offered through the technology of AID. He therefore welcomes this choice when it is the result of mutual trust and agreement between husband and wife.

Helmut Thielicke holds a different view, stating that the introduction of donor semen violates the *mysterium* of marital fellowship and the psychophysical unity of husband and wife. This violation also manifests itself when the fulfillment of motherhood, which is not accompanied by the fulfillment of fatherhood, breaks down the personal solidarity of the married couple.⁴³ Helmut Thielicke's perception has no conflict with the ethics of Islam. Islamic ethics holds views similar to those of Helmut Thielicke regarding the refutation of AID, although the reasons are different. Modesty and chastity are vitally important in Islam. It leaves no stone unturned to protect them. This is why it has laid down a perfect ethical code which fully guarantees the preservation of modesty and chastity. The Qur'an impresses upon mankind the value of modesty and chastity in a marvelous way. The Qur'an says:

Verily, for all men and women who have surrendered themselves unto God, and all believing men and believing women, and all truly devout men and truly devout women, and all men and women who are true to their word, and all men and women who are patient in adversity, and all men and women who humble themselves [before God], and all men and women who give in charity, and all self-denying men and self-denying women, and all men and women who are mindful of their chastity, and all men and women who remember God unceasingly: for [all of] them has God readied forgiveness of sins and a mighty reward. (33:35) But how to maintain modesty and chastity? Answer, through legal marriage between a man and woman. Although in AID formal adultery is not committed between a man and woman, yet the introduction of a stranger's sperm (of a man which a woman is not legally married to) into the uterus still fails to purify it. While Thielicke argues for the psycho-physical character of marriage, Islamic ethics highlights not only this feature of the marital bond, but also its spiritual character. The married couple are conjoined to each other and spiritually oriented to Allah, who is the Legislator of the total scheme of the universe. In fact, Islam makes faith and religion the basis of all human society and the mainspring for the network of its relationships.⁴⁴

It also poses an ethical question as to whether AID weakens the basis of the family bond. In Western secular bioethics, it is argued that if the family bond is regarded as a matter of common blood, this is purely a reversal of the charge based upon the danger of incest. The genes and chromosomes that could be brought into the family by the husband (which could not enter, in any case, because of infertility) are just as foreign as those of the donor unless he is a blood relation. Now, if the incest objection has any weight, the chances are that conception by AID will not weaken the family's kinship ties as much as they would have been, had the husband been fertile. Also in primitive culture, all parentage outside the preferred limits of consanguinity is thinning out ties of kinship. Such are the inconsistencies in culture which disallow consanguineous marriage but treat blood kinship as the requirement of inheritance and property rights. In an ethics parameter, it is a reactionary view.45 Thus the objection raised by Fletcher is more empirical, in the sense that it refers to the breakdown of the family since donor insemination would be the cause of divorce.

Compared to Fletcher's view, Islamic ethics explores a different outlook in this case. Just as the smallest molecule of water is made up of neither hydrogen nor oxygen alone, but a chemical combination of both, so the unit of humanity is made up of neither man nor woman alone, but a combination of both. They are a complete unity, one complementing the other. The unit of the whole of humanity is the family, a divinely inspired and ordained institution according to Islam. The family does not evolve through human experimentation based on trial and error. It is an institution that emerged with the creation of man. The human race is a product of this primitive institution and not the other way round.⁴⁶ The bond that secures the family is the institution of marriage (*nikāḥ*). Thus the institutions of marriage and family, one complementing the other, occupy a very significant position in the total scheme of Islam. One of the most important purposes of marriage is to procreate. The Qur'an states:

Your wives are your tilth; go, then, unto your tilth as you may desire, but first provide something for your souls, and remain conscious of God, and know that you are destined to meet Him. (2:223)

Certainly, this permission to 'cultivate' lies only within the bonds and span of marriage, which is a sacred covenant. Therefore, the approach of Islamic ethics is very different to that of Western secular bioethics.

In Western secular bioethics, ethicists worry about the risk of selective breeding associated with AID. Meaning that in response to the preferences of parents, doctors and clinics may attempt to match the mother with a genius, good-looking, sperm donor to create the 'perfect' child. The darker undertones of this concern the eugenics movement, a type of social Darwinism which was followed by the Nazis (National Socialist Party) in Germany with a view to creating a master race that would rule the world. In any case, nobody would want to accept AID without, pragmatically if for no other reason, raising the issue of the pedigree of the donor. Everyone wants value for their money and this after all is a transaction of sorts. In fact, there is at least one sperm bank in the U.S. that accepts donations from people of extraordinary talent or intelligence. It even aims at obtaining the sperm of Nobel Prize winners! A newspaper article mentions the case of a woman impregnated with sperm taken from this bank of 'genius' sperm who had previously lost custody of her children for abusing them by trying to make them intellectually successful.⁴⁷ Needless to say the issue of selective breeding is irrelevant for Islamic bioethics as it prohibits this practice from the very outset.

Artificial Insemination

Bioethicist Dr. Nigel Camer speaks about donor sperm in terms of human dignity and honor. He refers to a book well-known in the bioethics field, If I Were a Rich Man, Could I Buy a Pancreas?, and strongly argues against sperm donation. According to Dr. Camer, things are bought and sold, not people, human dignity should prevent us from doing so. When we are involved in buying and selling body parts for the purpose of making babies, we are moving rapidly towards the notion that children are chattel because we have designed them. Moreover, this is also moving far away from the context of sexual love, and in this way babies are made, not procreated.⁴⁸ In fact, from the standpoint of ethics, our concern should not only be the correct end, but also the correct means. AID separates the meaning of 'personal' and 'human' from physical, bodily processes. So instead of conceiving a child through love-making and the life-giving dimensions of sexual intercourse within the context of marriage, in AID, sperm is simply taken from a donor and implanted elsewhere, a cold process devoid of love and sexuality and therefore all meaning. This is also the concern of Islamic ethics. Islamic ethics is also against AID as it involves participation of a foreign element in the act of procreation other than the husband.

AID children may also grow up facing legal complexities including in particular those of inheritance. The relationship between the child and the mother begs no question. But if the mother is married and conceives a child through AID, the child may not be considered legitimate. In a small number of U.S. states, if the husband consents to AID, then the child is considered his legitimate child.⁴⁹ If he denies the child's legitimacy, he bears a heavy burden of proof that he did not consent. The sperm donor also has a chance to be granted fatherhood of the child. However, he is likely to be protected by anonymity in the records of the sperm bank. The law tends to favor private sources of support for children. For this reason, the child may receive support from the inseminator. Otherwise, an AID child born will have no natural father and hence fewer potential sources of support than that of illegitimate offspring. The question still remains whether the husband's consent to AID should make any difference to the possible liability of the sperm donor for support. Like adoption, it is likely that

the liability of the donor would be cut off by the husband's consent to AID. Again, a question arises: who is then to bear the burden of proving the husband's consent or non-consent in a case in which the child has no support from him and seeks support from the donor?⁵⁰ Islamic ethics does not have to handle this type of problem because it does not pave the way for it in the first place, forbidding the practice itself.

In order to bypass all these ethical difficulties, it is sometimes asserted that adoption would be a better solution to infertility than AID. However, this misses the point. Parenthood does not depend on the presence of a biological relation but on the decision to conceive offspring. So, there is no good reason for considering adoption a better solution than artificial insemination. It is better that we uphold and defend reproductive freedom and let people decide how and when to procreate instead of adoption.⁵¹ Islamic ethics does not allow AID, this is clear. But when it comes to adoption Islam regards this as a blessed act especially with regards to orphans, and recommends it provided that one is clear that there is no biological relationship between the parents and the adopted child. Meaning that adoption does not end the blood relationship between the child and his real parents and siblings. In addition the child must retain his or her own biological family name (surname) and does not change his or her name to match that of the adoptive family.

...Nor has He made your adopted sons your (biological) sons. Such is (only) your (manner of) speech by your mouths. But Allah tells (you) the Truth, and He shows the (right) Way. Call them by (the names of) their fathers; that is juster in the sight of Allah. But if you know not their fathers's (names, call them) your brothers in faith, or your trustees. But there is no blame on you if you make a mistake therein: (what counts is) the intention of your hearts. And Allah is Oft-Returning, Most Merciful. (Qur'an 33:4-5)

The ethical question also arises as to whether single women, unmarried heterosexual couples, or same sex couples should or should not have access to AID. If a single woman wants to be a mother by way of artificial insemination, naturally it is an attack upon the traditional family structure. For instance, who is the father of the child? Is it mandatory to have both father and mother in a family? May a child

Artificial Insemination

have two fathers and one mother or two fathers and two mothers? These types of complex questions are associated with AID.

Western secular bioethicists may not have any ethical issue with an unmarried woman using AID. For example, Fletcher remarks that it is a disturbance in the social order that AID opens the way to unmarried motherhood without violating the prohibition of adultery. It is true that some women, condemned by war to spinsterhood, have candidly embraced this policy. Anybody who thinks that AID is adultery, no debate waits for him. If we hold that sexual intercourse is genuinely inter-personal, then there is no good reason for rejecting AID for unmarried women and others on that ground. For instance, can a woman in Florida commit adultery with a man in Manitoba (because she receives the donation by air mail)? This practice is less weighty on other grounds such as the alleged hardship of women who have to look after children without any male support. But, is this not a common problem faced by widows? The present criticism is exactly parallel to the objection that contraceptives open the way for extra-marital sexuality without violating the prohibition against unmarried motherhood. To conclude, AID for unmarried women it is argued is surely not adultery.52

Procreative liberty as a matter of Constitutional Doctrine, "is a negative right against state interference with choices to procreate or to avoid procreation."⁵³ Robertson posits, while neither the state nor particular persons have any positive duty to provide reproductive resources or services, their duty is not to impede someone from seeking such means. He not only advocates ethics of personal autonomy, family and community, but also guards against excessive governmental control of reproduction, which "may extend beyond exhortation and penalties to Gestapo and police state tactics."⁵⁴ On the contrary, in Islamic ethics, although man has been given freedom of will, he cannot go against the principles of the Shari^cah.

Then there is the controversial issue of lesbians or single women's access to AID. John Harris argues that any attempt to prevent lesbians or single women from bearing and rearing children would be wrong in three important ways. Firstly and most importantly, anyone denied the chance to have offspring which they want to have, is denied something almost universally acknowledged to be one of the most worthwhile experiences and important benefits of life. This is applicable to both men and women. Secondly, people who are singled out as secondclass citizens or inferior beings and deemed unfit to have children are wronged. Not to permit homosexuals or single people to be candidates for in vitro fertilization, artificial insemination or adoption is to label such people as unfit for one of the most important roles in life. Thirdly, when these people manage to have children despite society's endeavors to prevent them, they are usually subjected to more careful and conspicuous scrutiny than more normal parents. This, according to Harris, is also a separate, significant and identifiable misdeed.⁵⁵

He further states that to subject anybody to these wrongs and injuries without the weightiest and clearest of justifications for doing so is clearly unjustifiable. There is no reason to think that homosexuals or single parents are bad parents. We never compulsorily remove children from the care of a surviving parent when one parent has died. Nor do we in the case of divorce award custody to third parties who are couples rather than to one of the estranged partners.⁵⁶ The way in which we could remedy this imbalance is to implement a policy of regulating all parents by screening would-be parents in advance. But a significant difficulty lies in this because we have no clear idea of what criteria should be adopted to mark someone a fit and proper parent.

Another problem in screening potential parents would be the injustice of such a procedure, because the act of screening would inflict substantial punishment on people in advance and in lieu of their deserving them. More practical arguments focus on the undesirability of creating a massive state-controlled apparatus required to operate the scheme, and the problem of dealing with persistent offenders not deterred by financial means. The conclusion is thus naturally drawn, according to Harris, that it would be far more preferable (and easier) to allow unrestricted parenthood through artificial insemination as well as adoption and fostering and to allow all types of surrogate motherhood in a context which deprives parents of the custody of their children only if they severely mistreat or neglect them.⁵⁷

Rickard outlines four propositions to test whether providing medically administered ART (Assisted reproductive technologies) to

socially infertile women (lesbians and single women) is a legitimate intervention or not. Any of them, if valid, would be sufficient to exclude socially infertile women from ART.

- 1. An intervention is medically valid only when it is the only effective option. It will not be appropriate when there are other effective non-medical options available. For example, adoption would be a possibility and there would also be the chance of having sexual intercourse with a male (because they are still medically fertile).
- 2. There is a difference between medical responsibility and personal responsibility. An intervention is only medically legitimate when it is not called upon to correct the foreseeable consequences of people's preferences, or to compensate for life circumstances that have merely been a little unfavorable in certain ways.
- 3. Medical interventions correct problems in patients' normal functioning. They do not enhance people's capacities beyond their level of normal functioning.
- 4. Medical interventions are for medical conditions. To recommend a physiological intervention to overcome a non-physiological cause of childlessness is to act outside the confines of sound medical practice.⁵⁸

Ultimately, he finds none of the four propositions to be valid leaving no reason to exclude socially infertile women from ART. There are surveys that reveal that being childless can be associated with feelings of loss of status and self-esteem, as well as raising questions of identity for women for whom social and gender based expectations to procreate are strong. Finally, the distressing condition of childlessness is acutely felt by lesbians and single heterosexual couples. It would be better to call them "socially childless" rather than socially infertile. Rickard states that as proposition four above also fails to be valid, there is no reason to exclude lesbians and single heterosexual women from ART procedures.⁵⁹

In contrast to Rickard's view, Islamic ethics prohibits lesbians from having children through AID. In fact, in stark contrast Islamic ethics condemns the practice of AID for lesbian as well as other women. Some ethicists in a Western secular philosophical context are of the opinion that there is absolutely no foundation for the view that homosexuality is wrong.⁶⁰ However, Islamic ethics clearly holds the opposite view in relation to the right of homosexuals to assisted reproduction.

Different technologies developed over the last few decades have opened the way for the possibility of posthumous reproduction. For instance, different techniques of semen preservation exist. Today, semen cryopreservation is common practice in the U.S. and elsewhere. Men may store their sperm at a sperm bank worried that their sperm may become damaged, possibly by exposure to harmful chemicals at work, or through disease. For the most part however, sperm banks are used by men willing to donate their sperm for artificial insemination. In the procedure, the sperm bank first ascertains the donor's medical and social background, and if he passes this criterion, pays him a fee for the sperm. The sperm bank then contacts doctors and other medical professionals using donor sperm in techniques like artificial insemination. Doctors in turn offer the sperm to infertile women to conceive and charge a fee for this.⁶¹ Posthumous reproduction can be achieved even in cases where a man has not stored semen during his lifetime. Current medical technology makes it possible for physicians to retrieve sperm from a deceased male within twenty-four hours of his death.⁶² The wife of the deceased person can use the sperm of the dead husband for procreation. This raises questions regarding the ethical validity of this practice.

The status of the deceased person also raises ethical questions. Metaphysically a person disappears from his body at death but the dead body still continues to command respect.⁶³ Although people in some cultures believe that organs and physical structures of the once living are no longer important, some societies do not deal with the matter so lightly, including Western society. Nevertheless, this almost sacred respect for the deceased person is not held to be absolute. Most people in Western society support certain exceptions, for example, for postmortem examinations and for organ or tissue retrieval for transplantation. The potential benefits to the medical profession, the family and to society as a whole are so important that the barriers to

procedures such as autopsy have been removed so long as every procedure is carried out with the maximum possible respect for the departed person.⁶⁴ Still, many retain a natural revulsion to the idea of a human body being cut, opened and inspected.

There has also been some aesthetic, cultural and religious resistance to the idea of organ retrieval and transplantation. Some accept it, harboring specific reservations about the disrespectful treatment of dead bodies in certain circumstances, others reject it altogether. For instance, Frader has criticized the practice of providing artificial support to a pregnant corpse to bring the gestating fetus to viability, maintaining that this represents a profound disrespect for the dead body.⁶⁵

Actually, the act of posthumous conception raises a large number of complex ethical and social issues. The well-being of the child is a highly crucial issue in this context. The decision to help a woman conceive by use of the sperm of her deceased partner, whether voluntarily frozen for that purpose before death or retrieved posthumously, should consider the welfare of the coming infant. This calculation is enormously difficult and conclusions reached may vary depending on the social circumstances and personal values of those involved. But the key point is that the child's interest cannot be overlooked.⁶⁶ So Orr and Siegler have sketched out a restrictive outlook towards posthumous sperm retrieval which would limit insemination to those cases where the deceased man has provided explicit consent for such a procedure. As such, this conservative view dominates current law and practice.

In contrast to Orr and Siegler, is a view which permits insemination and conception in cases where posthumous conception has been completely refused or where there is no reasonable evidence that the dead man has desired it. Parker explains the phenomenology of procreative desires which supports the permissible view and which is compatible with requirements concerning the interests of the decedents, concepts of medical infertility and the well-being of the coming offspring.⁶⁷ But how would Parker tackle the issue in the case of property left to one's children given that other children (as yet frozen sperm or embryos) may come along at some possible future date,

decades after one's death? What would be the rule governing distribution of property? In these circumstances, we can have a look at something called 'Rule Against Perpetuities' This runs as follows: "No interest is good unless it must vest, if at all, not later than twenty-one years after the death of some life in being at the creation of the interest." To illustrate, consider T leaves a will that leaves Z "to my son Y, and then to my first grandchild to reach twenty-five." The contingent remainder following Y's life estate violates the common law Rule even if T's oldest grandchild is 24 at the time of his death, because the remainder might vest more than twenty-one years from the death of the relevant lives-in-being. To clarify, suppose all living grandchildren die and a new grandchild is born after T's death. Y then dies before the grandchild reaches age four. In fact, the grandchild's interest could not vest until more than twenty-one years later. The outcome is that the gift is therefore void, since only T, Y, and the grandchild who is alive at the time of T's death can be used as lives-in-being. So violation of the Rule leads to receipt of the property in question by someone else, to whom the grantor did not intend to convey the property. Because the Rule is a rule of logical possibility, the mere existence of the new reproductive technologies, which offer the opportunity for post-mortem conception, threatens to make many future interests involving children and other descendants void.⁶⁸ So, how should we deal with the request for sperm collection after death? We should remember that compared to autopsy and organ retrieval, sperm retrieval has more immediate consequences to the deceased and also his own legacy. There is a difference in kind between autopsy and organ transplantation on the one hand and sperm retrieval on the other. Giving consent for autopsy or organ transplantation is to benefit people, but requesting sperm collection after death without the deceased's consent (but with the consent of his family members) is different. In the former case, the family giving consent for organ transplant is motivated altruistically to benefit others. With sperm collection this is not the case, we must have consent from the deceased person in a clear written or verbal form, otherwise such requests should be declined. Even with consent, how strictly should we judge a man's will to produce children or preserve his family name? In this

respect some would suggest adoption as a good alternative and thus make the use of technology unjustified. The evidentiary standards for such a decision are in fact hard to define and far from clear.⁶⁹

In Israel under a new directive the law allows a woman to use her husband's sperm after his death even in the absence of his clear consent while alive. This is inconsistent with the situation in the U.K. Indeed it was the effect of the U.K.'s strict law on requiring prior consent that led to the case of Diane Blood in 1997, who had to seek permission from the courts to be inseminated with her dead husband's sperm.⁷⁰

In fact, different governments have different laws and thus there is a difference of opinion in Western philosophical thinking regarding the acceptance of posthumous semen retrieval. Suspecting a bad future for the coming offspring, Orr and Siegler call for a restrictive attitude towards posthumous semen retrieval for reproduction. They hypothetically defend it provided the deceased has given consent. On the other hand Parker supports it categorically. But, Hoffman and Morriss condemn the practice highlighting the problem of wealth distribution.

In contrast, Islamic ethics holds a clear-cut negative view regarding posthumous semen retrieval. In the Islamic framework of ethics, marriage is seen as a legal contract between spouses, becoming invalid after divorce or death. Therefore, posthumous semen retrieval to produce children is regarded as a violation of the marriage contract and morally and legally unethical. Regarding the use of a dead husband's sperm kept separately by a wife in a semen bank for AIH, Sheikh ^cAbdul-Khaleq Hassan Ash-Shareef comments:

[I]t is not permissible for the woman to use the frozen sperm of her husband after divorce or after his death. The issue is permissible only when both the husband and wife are living together (i.e. they are not divorced) and both of them are alive. Hence, it is not permissible for the ex-wife or the widow to use her husband's frozen sperms after his death or after divorce. The woman may face a very difficult situation as regards to this, especially when she gets pregnant, while her husband is dead or she is divorced.⁷¹

So even if a deceased husband has given consent, it is not morally and legally permissible within the parameters of Islamic ethics to use the sperm. Moreover, while neither Orr nor Siegler mention any difficulty faced by women using the frozen sperm of their dead husband, Islamic scholar Sheikh ^cAbdul-Khaleq Hassan Ash-Shareef focuses on this point clearly.

Philosophically, decision-making on this matter varies between the interpretation assigned to it by Western secular bioethics and Islamic bioethics due to the anthropological explanation of the concept of man. Western secular philosophy asserts a materialistic interpretation of man: man is composed of a body, a soul, and a mind, with the mind or soul mere functions of the body and not separate spiritual entities. Modern empiricist philosopher David Hume reduces the mind to a series of impressions and ideas, to a process of fleeting experiences. The human mind is nothing but a bundle or collection of different perceptions which succeed each other with an inconceivable rapidity and are in a perpetual flux and movement. The connecting strings which bind discrete perceptions into a bundle are the laws of association by resemblance, contiguity and succession (cause and effect). More or less similar views have been expressed by many other empiricists such as William James, Bertrand Russell and so on. The metaphysical status of the soul or mind is different from the body, according to Islamic ethics. In Islamic ethics, the characteristic of the body is extension and existence in some place, but the soul has a spiritual dimension. A clear dichotomy exists. When a person dies, his/her soul passes from one stage to the next; it does not die but just changes its location. It is immortal. It will be rewarded or punished according to its deeds in the physical world. Allah says:

Whoever does what is just and right, does so for his own good; and whoever does evil, does so to his own hurt. (41:46)

[Be conscious, then, of] the Day when every human being shall come to plead for himself [alone], and every human being shall be repaid in full for whatever he has done, and none shall be wronged. (16:111)

Because in the Western secular philosophical context, the body and soul are not considered separate entities but two separate manifestations of the same entity, Orr and Siegler have highlighted the consent of the deceased as a prerequisite regarding the use of semen to procreate after death. But as the mind-body dualism is a very basic feature of Islamic ethics, according to this approach once a person dies, he is dissociated from all phenomenal affairs, and the marital bond is automatically dissolved. As Muslims cannot procreate outside of the marital bond and span, the sperm of a deceased man is prohibited from entering the uterus of the wife. While Hoffman and Morriss foresee the difficulty in inheritance rights, Islamic ethics, in addition to this problem, condemns this practice for its metaphysical foundation.

Table 5.1 summarizes a comparison between Western Secular and Islamic Bioethics in relation to AI:

lssue	Western Secular Bioethics	Islamic Bioethics
Artificial Insemination husband (AIH)	Mostly yes, sometimes denied	Yes and encouraged
AIH after divorce	Controversial	No
Posthumous semen retrieval in AIH	Controversial	No
Artificial Insemination donor (AID)	Legally permitted. Ethically controversial	Strictly prohibited
Donor Insemination for lesbians	Legally permitted. Ethically controversial	Strictly prohibited
Donor Insemination for gay couples	Legally permitted. Ethically controversial	Strictly prohibited
Donor Insemination for heterosexual single women	Legally permitted. Ethically controversial	Strictly prohibited

Table 5.1: Comparative Study of Western Secular Bioethics and Islamic Bioethics in Relation to AI

Ethics of Assisted Reproductive Medicine

Conclusion

This chapter illustrates that AIH is easily accessible within Islamic bioethics, although some Western secular bioethicists raise objections against this practice. In Western secular bioethics, different arguments exist both for and against the practice of AID. Islamic bioethics strictly condemns AID for the greater good of the child, the donor and the would-be parents. Islamic bioethics rightly acknowledges the fact that the apparent welfare of the couple will override other complicated situations created by society, such as those the West is facing today. Islamic bioethics evaluates everything on the basis of totality without violating the principles of Almighty Allah. Whilst it is undoubtedly true that having children is a blessing, it should also be borne in mind that there are limits to the nature by which conception can take place, and these should not be crossed. People may argue that the Western approach makes AI easily available and that in comparison the Islamic approach is far too rigid, limiting human freedom. But the issue is one of morals and in particular the moral welfare of children. Western society's plea for procreative liberty assumes a number of things to legitimise easy access to AI, one of these is that AID children will not seek to be raised or supported by the donor father. In reality these children pine for knowledge of, and connection to, the missing halves of their very selves. Disputing the issue of whether to disclose or not disclose the identity of sperm donors is therefore a complete waste of time, and the whole exercise in the name of procreative liberty, ultimately harms society by harming the very institution that is its foundation, the family. Weak family ties and confused identities do not make for strong, stable societies.

Conversely, the axiology of Islam is far-sighted and broad, not limited to short-term benefit. Its effects are far-reaching and its ultimate aim is the greatest welfare for mankind.

6

In Vitro Fertilization: Western Secular and Islamic Bioethics Perspectives

Background: Birth of Louise Brown

In 1978 a remarkable thing happened, Louise Brown the world's first test-tube baby was born in the U.K. Women like Louise's mother who had been unable to have children, lined up for the procedure and doctors all over the world moved to duplicate the treatment. What the birth of this baby meant was that for the first time in human history a man and a woman could reproduce without needing to be together, all that was required was to donate sperm and egg. A new era in reproduction was ushered in.

Obstetrician Patrick Steptoe and physiologist Robert Edwards were the doctors behind the test-tube success. Edwards disproved the previously held belief that gonadotrophic hormones could not make a mammalian ovary release its eggs. Having done this, he was able to give barren women a carefully balanced mixture of the hormones, progesterone and estrogen, which the ovaries normally release to thicken the uterine lining to receive a fertilized egg. Secondly, he proved that human sperm needed to be capacitated for conception, i.e., that chemicals inhibiting penetration of the egg had to be removed from the head of the sperm. Previously, many scientists had believed that capacitation required exposure to uterine secretions. But one night in 1965, Edwards collected his own semen and added it to a ripe human egg in a dish. The next morning, he observed through a microscope that the characteristic cell division of human embryology, that is a zygote, had been created. Steptoe's role was based on fiber optics – extremely thin tubes equipped with tiny lights that help inspect interior body cavities. Fiber optics revolutionalized certain areas of medicine such as gastroenterology since previously doctors could only infer what was happening on the inside from external signs or through operating. In fact, this new technology was a factor in the development of infertility assistance.¹ Steptoe slipped an instrument, called a laparoscope, through a small slit in Lesley's 'bikini line' and guided it into her ovaries where he searched among hundreds of eggs for the one being primed for ovulation. This was extremely difficult but once he had found the egg, he then had to insert another thin tube to suction it out. Without Steptoe's perfection of this delicate procedure, in vitro fertilization (IVF) would still be a dream.²

Lesley Brown had been trying for nine years to conceive without success. Due to the scarcity of babies she was further not able to adopt any. It was later discovered that Mrs. Brown's fallopian tubes had been severely damaged by ectopic pregnancies in previous years. She then went for treatment under Patrick Steptoe. Steptoe started by removing an egg from her ovaries for fertilization outside the fallopian tubes with a laparoscope. Her husband's semen was then introduced to the egg in a petri dish containing a culture fluid of salt, potassium chloride, glucose and a bit of protein. Examination under a microscope revealed that a sperm had penetrated the ovum. The resulting preembryo was cultured for two and a half days. The pre-embryo was then mixed with a supportive fluid, placed in a syringe and injected through Lesley's dilated cervix into her uterus.³ Ultimately, Lesley was declared pregnant. Before this, many women had had eggs successfully fertilized in vitro but a smaller number had had eggs implanted with a resulting pregnancy. A few of those who had become pregnant, subsequently lost the embryo or fetus within a few months. Everybody was thus eager to observe Lesley's case. It was a normal pregnancy with some minor problems. On 25th July, 1978, a baby girl was born by caesarian section at Oldham General Hospital.⁴ The baby was named Louise Joy Brown and was the first IVF child in the world. Immediately after the birth of the baby, the father expressed his

reaction in this way, "For a person who's been told he and his wife can never have children, the pregnancy was 'like a miracle.' I felt 12 feet high."⁵

IVF: Reproductive Physiology

In vitro is a Latin phrase meaning 'in glass.' In embryology it is used in contrast to *in utero* or 'in the uterus.' Normally, human fertilization takes place *in utero*, strictly speaking in the fallopian tubes as already mentioned. IVF then is fertilization that is carried out artificially outside the woman's body and in a test-tube.⁶ The popular press often refers to children conceived through IVF techniques as 'test-tube babies.'

Reasons for IVF

The primary reason for attempting IVF was to by-pass unhealthy, damaged or blocked tubes whose functions were inadequate to produce a normal pregnancy. If a woman's fallopian tubes are blocked, the egg cannot travel to the uterus. In fact, the motive of IVF was to replace tubal function by bringing the sperm into contact with the egg *in vitro* and then transfer the embryo into the uterus. One of the most common grounds for attempting IVF is unsuccessful tubal surgery. Tubal surgery may be considered impossible in cases of extensive tubal diseases where the resulting tubal function would be poor. Tubal ectopic pregnancy is a serious complication of tubal surgery. For this reason, some women will ignore a major surgical reconstructive procedure although they still wish to resolve their problem of tubal infertility.⁷

Male infertility also may act as a factor in IVF when the number, movement or structure of sperm is considered to be abnormal. Successful fertilization has been obtained in the case of men with concentrations of sperm as low as 5 million per milliliter of semen where the normal count ranges from 20 to 100 million sperm per milliliter of semen. When sperm counts are significantly reduced, however, there is often a high incidence of sperm abnormalities that may impair the effectiveness of IVF. Moreover, there is no chance of pregnancy when the sperm movements are less than 40 percent of those seen normally.⁸

Like artificial insemination, IVF separates conception from sexual intercourse. But it actually takes this separation one step further.⁹ Doctors also apply this technique when there is no clear cause for the infertility.¹⁰ Therefore, IVF can bypass most causes of infertility, including irreversibly blocked fallopian tubes, anti sperm antibody problems, endometriosis, cervical problems, very low sperm counts etc.

IVF: Technical Procedure

For the technical procedure of IVF, please refer to Leeton et al.¹¹ Sometimes micromanipulation techniques are effective to make IVF a complete success. These techniques are as follows: zygote intra fallopian transfer (ZIFT), intra-vaginal culture (IVC), uterine lavage embryo retrieval (ULER), partial zona dissection (PZD), intracytoplasmic sperm injection (ICSI), DNA transfer, cytoplasmic donation (CD) etc.¹²

Ethics of IVF: Islamic Bioethics Perspectives

We can formulate a discussion on the ethics of IVF from the perspective of $Maq\bar{a}sid\ al$ -Sharī^{cah} as follows:

IVF and the Preservation of Progeny (Hifz al-Nasl)

IVF & THE PRESERVATION OF PROGENY IN THE LIGHT OF THE NECESSITY OF PROCREATION

Islamic bioethics has a positive attitude towards IVF provided it is carried out by a legally married couple. For married couples, procreation is not only encouraged but also a necessity, *darūriyyāt*. As IVF aims at procreation, this technique is totally welcome in Islamic bioethics.

Two stories of infertility mentioned in the Qur'an reflect the necessity of progeny. One is the story of Abraham and his wife Sarah, another is that of Zakariyyā. Regarding the first couple's desire for children, the Qur'an states:

And his wife, standing [nearby], laughed [with happiness]; whereupon We gave her the glad tiding of [the birth of] Isaac and, after Isaac, of [his son] Jacob. Said she: "Oh, woe is me! Shall I bear a child, now that I am an old woman and this husband of mine is an old man? Verily, that would be a strange thing indeed!" Answered [the messengers]: "Dost thou deem it strange that God should decree what He wills? The grace of God and His blessings be upon you, O people of this house! Verily, ever to be praised, sub-lime is He!" (11:71-73)

[And when he saw that the guests would not eat,] he became apprehensive of them; [but] they said, "Fear not" – and gave him the glad tiding of [the birth of] a son who would be endowed with deep knowledge. Thereupon his wife approached [the guests] with a loud cry, and struck her face [in astonishment] and exclaimed: "A barren old woman [like me]!" They answered: "Thus has thy Sustainer decreed; and, verily, He alone is truly Wise, All-knowing!" (51:28-30)

Zakariyyā's craving for children is expressed in the Qur'an in the following ways:

In that self-same place, Zachariah prayed unto his Sustainer, saying: "O my Sustainer! Bestow upon me [too], out of Thy grace, the gift of goodly offspring; for Thou, indeed, hearest all prayer." Thereupon, as he stood praying in the sanctuary, the angels called out unto him: "God sends thee the glad tiding of [the birth of] John, who shall confirm the truth of a word from God, and [shall be] outstanding among men, and utterly chaste, and a prophet from among the righteous." [Zachariah] exclaimed: "O my Sustainer! How can I have a son when old age has already overtaken me, and my wife is barren?" Answered [the angel]: "Thus it is: God does what He wills". (3:38-40)

The Qur'an also says:

An account of the grace which thy Sustainer bestowed upon His servant Zachariah: When he called out to his Sustainer in the secrecy of his heart, he prayed: "O my Sustainer! Feeble have become my bones, and my head glistens with grey hair. But never yet, O my Lord, has my prayer unto Thee remained unanswered." (19:2-4)

Ethics of Assisted Reproductive Medicine

And [thus did We deliver] Zachariah when he cried out unto his Sustainer: "O my Sustainer! Leave me not childless! But [even if Thou grant me no bodily heir, I know that] Thou wilt remain when all else has ceased to be!"

And so We responded unto him, and bestowed upon him the gift of John, having made his wife fit to bear him a child: [and,] verily, these [three] would vie with one another in doing good works, and would call unto Us in yearning and awe; and they were always humble before Us. (21:89-90)

Parenthood is a very natural instinct of the human heart. To quote from the Qur'an:

Let not, then, their worldly goods or [the happiness which they may derive from] their children excite thy admiration: God but wants to chastise them by these means in this worldly life, and [to cause] their souls to depart while they are [still] denying the truth. (9:55)

So, IVF treatment fully satisfies the first criteria of the purposes of Shari^cah if undertaken by a legally married couple. To quote Dr. Muzammil Siddiqi, former President of the Islamic Society of North America: "based on the principle that the *Shari^cah* came to protect and preserve the lineage or *naṣab* of the people and thus it is *ḥarām* to marry a woman during her *ciddah* or to have an intercourse with a woman who is carrying another person's pregnancy, the Muslim jurists have allowed the use of in vitro fertilization only between legally married couples during their marriage. Thus, in vitro fertilization is permissible as long as the semen and ovum are from the couple who are legally married and the fertilization takes place during their marriage, not after divorce or the death of the husband."¹³

According to an Organization of the Islamic Conference (OIC) Resolution, the following methods, in case of necessity, are permissible, provided all required precautions are taken: (1) In vitro fertilization of a woman's ovum by her husband's semen and implantation of the fertilized ovum in the womb of this same woman. (2) External insemination, by taking the semen of a husband and injecting it in the appropriate place in the womb or uterus of his wife, for *in vivo* fertilization.¹⁴

In order to use the husband's sperm, sperm and fertilized ovum are frozen and preserved in a sperm bank. This raises three questions:

- 1. Is a man allowed to preserve his sperm in this frozen state?
- 2. Are married couples allowed to preserve their fertilized ova for future use?
- 3. Is it permissible to sell the sperm of the fertilized ovum?

In answer to the first two questions, one can argue that there is nothing wrong in freezing and preserving sperm and fertilized ova provided that a) serious steps are taken to ensure that no mixing of the donor's sperm with those of other donors can occur, and b) the sperm is only used to impregnate the donor's own wife. Also, this can only be undertaken after the free and informed consent of the spouse is obtained. The excess pre-embryos produced can be frozen and stored in liquid nitrogen, a technique called cryopreservation. But cryopreservation should only be allowed in specially designated sperm and pre-embryo banks or ART centers accredited by the relevant health authorities. An exact and complete proof system of documentation must be in place to guard against mixing of lineages and commercialism. Confidentiality of information must not be breached and tight security procedures should prevent unauthorized access to records.¹⁵ In addition, we take note of the Fatwa issued by the European Council for Fatwa and Research which states: "It is permissible for the wife to use the sperm of her husband for fertilization unless she is divorced or the husband dies. In case the wife is separated from her husband (i.e. by divorce or death), it's permissible for her then to get rid of the frozen sperm or its remnants."16

Ikhlas Abbas, a 32-year-old from the West Bank city of Tulkarm, is the first Palestinian woman to have launched in 2003 freezing of a husband's sperm for IVF treatment. She states:

When my husband (leader of the Ezzudin al-Qassam Brigades in the West Bank) knew that he was wanted by Israel, he decided to put a specimen of his sperm in a medical center, so that I can use it in case he was sentenced to life imprisonment. After being arrested by Israeli troops on May 8, he raised the idea among prison inmates, who were very enthusiastic, particularly as being detained in prison they could not have children, Mrs. Abbas added.¹⁷

Mrs. Abbas' first attempt at IVF was unsuccessful. She underwent further IVF treatment and awaited the results. According to Mrs. Abbas she worked on circulating the idea among the wives of Palestinian prisoners, and encouraged four wives to go through the experience. Even though the act is not forbidden, Sheikh Ekremeh stresses that the couples involved should be extremely cautious relying on trustworthy medical centers and lawyers. He further adds that the IVF should also be made public via newspapers to stave off rumors, with couples obtaining a credited certificate from the medical center in the presence of two witnesses from the husband's next of kin.¹⁸

IVF & THE PRESERVATION OF PROGENY IN THE LIGHT OF THE NECESSITY OF PRESERVATION OF LINEAGE (Hifz al-Nasab)

IVF treatment using donated sperm is absolutely forbidden in Islam because as discussed in the last chapter no third party can be involved in a marriage. While commenting on this issue, Sheikh Ahmad Kutty, senior lecturer and Islamic scholar at the Islamic Institute of Toronto, Ontario, Canada, states: "Since it is undoubtedly reprehensible and utterly sinful, no Muslim should ever entertain such a possibility for conceiving a child. A Muslim should accept what Allah has chosen for him or her. To accept Allah as a Sovereign Lord and Creator means to believe in His will and ultimate wisdom."¹⁹

The Qur'an states:

And God has given you mates of your own kinds and has given you, through your mates, children and children's children, and has provided for you sustenance out of the good things of life. Will men, then, [continue to] believe in things false and vain, and thus blaspheme against God's blessings? (16:72)

This implies that children can only be conceived through the union of husband and wife. So, IVF is Islamically acceptable and commendable strictly under the following conditions:

- 1. It must solely involve the husband and wife with treatment performed during the span of their marriage only.
- 2. The union of sperm and ovum must not take place after the husband dies or after divorce.
- 3. The fusion of sperm and ovum should take place only within the marriage contract.
- 4. Any donation of alien semen is forbidden.
- 5. A divorced woman is not permitted to receive the fertilized ovum (embryo) of her ex-husband.
- 6. A widow is not allowed to take sperm after the death of her husband.
- 7. A woman can use the frozen sperm of her husband only when both of them are alive.
- 8. Using frozen sperm before marriage is not permitted.

The family bond is a very significant and strong phenomenon in Islamic bioethics and it tries to protect it. Islamic ethics allows divorce, but does not encourage it. Once the woman becomes a widow or is divorced, the marriage contract is considered dissolved and at an end. Any stored semen of her husband automatically becomes alien to her. Bear in mind that if a widow or divorcee conceives through the frozen sperm of her dead or former husband, questions may arise as to her character.

IVF and Protection of Life (Hifz al-Nafs)

The IVF procedure may lead to some sperm, ova and zygotes remaining surplus and unused. Ethical issues related to spare embryos involve the following questions:

- 1. The most important ethical issue in this process seems to be whether an embryo formed after fertilization in a test-tube and not yet in the womb of the mother should be considered a human being with all the rights of a human being?
- 2. Is it correct to produce embryos only for research purposes?
- 3. Is it right to destroy spare embryos?
- 4. Can these embryos be used for research purposes?

Regarding the first question, we should have a clear understanding of what exactly the soul or ' $r\bar{u}h$ ' is according to the Qur'an. This idea is referred to in different verses of the Qur'an and several meanings have been given by commentators. Yusuf Ali and Mohammad Asad considered the ' $r\bar{u}h$ ' to be 'divine inspiration.' According to Abū Hāmid al-Ghazālī, in *Ihyā*' '*Ulūm al-Dīn*, the stage at which the soul ($r\bar{u}h$) is breathed into the forming body within the womb, occurs after it has passed through the stages of *Nutfah*, '*Alaqah*, *Mudgah*, bone formation and flesh formation that covers the bone. We are currently capable of understanding the issues of early life in the embryo, with a fair amount of knowledge about the Shari'ah concept of embryo ensoulment and its timing and significance for the Muslim medical practitioner and for the Muslim Jurist.²⁰ Qur'anic verses indicate seven stages of fetal development.²¹The Qur'an states:

Now, Indeed, We create man out of the essence of clay, and then We cause him to remain as a drop of sperm in [the womb's] firm keeping. (23:12-13)

1. *The first stage*: This points to the creation of Adam from clay – that is soil and water. In other words, sperm and ovum come from human bodies which are built from nutrients that originate from clay. The Qur'an states:

Who makes most excellent everything that He creates. Thus, He begins the creation of man out of clay; then He causes him to be begotten out of the essence of a humble fluid. (32:7-8)

O mankind! If you have a doubt about the Resurrection, [consider] that We created you out of dust, then out of a [fertilized egg], then out of a leech-like stage, then out of a [chewed like] flesh, partly formed and partly unformed, in order that We might manifest [Our Power] to you; and We cause whom We will to rest in the wombs for an appointed term, then do We bring you out as babies, then [foster you] that you may reach your age of full strength; and some of you are called to die, and some are sent back to the feeblest old age, so that they know nothing after having known [much], and [further], you see the earth barren and lifeless, but when We pour down rain on it, it is stirred [to life], it swells, and it puts forth every kind of beautiful growth [in pairs]. (Qur'an 22:5)

2. *The second stage*: The outcome of sperm-ovum unification is the formation of the 'zygote.' This is explained scientifically by stating that half the number of chromosomes is derived from each parent and then added together to form the fertilized ovum.

3. *The third stage*: This is the stage of the hanging clot which forms around the seventh day from fertilization. The picture of this early fetus looks like an object hanging to the endometrium by fine villi which will develop further in stages. Many scholars identify this stage as the first and very early form of life in human development.

4. *The fourth stage*: The fetus in this stage of development looks like a partially chewed piece of meat (the Arabic word *'mudgahah'* is used to refer to this flesh mass or mass of somites). This stage begins at the end of the third week or the beginning of the fourth week.

5. *The fifth stage*: This is the stage of bone development. The embryo is nothing but a boneless lump. Its cartilage tissue is transformed into bones in due time as described in the Qur'an which is followed by their being clothed by muscular flesh (the Arabic word *'laḥm'* stands for the muscular flesh). The Qur'an says:

and then We create out of the drop of sperm a germ-cell, and then We create out of the germ-cell an embryonic lump, and then We create within the embryonic lump bones, and then We clothe the bones with flesh – and then We bring [all] this into being as a new creation: hallowed, therefore, is God, the best of artisans! (23: 14)

6. *The sixth stage*: Several days after bone development, early muscles start around the vertebrae at the 6^{th} week and muscles around the extremities at the 7^{th} week.

7. *The seventh stage*: This is the stage in which a new creation is formed. According to some contemporary scholars, fetuses vary slightly in acquiring the ' $r\bar{u}h$ '. The minimum time is 40 days and the maximum is 45 days. Some still hold the view that the ' $r\bar{u}h$ ' starts after 120 days of fertilization.²²

Based on this process of human development outlined in the Qur'an, we can conclude quite easily that there is nothing wrong with the idea that embryos created in a test-tube have no soul. They do not

acquire consideration as human fetuses unless restored to the uterus of the mother. These embryos are alive and viable.²³

In answering the question as to whether it is correct to produce embryos only for research purposes, we can say that it is true that compared to stem cells derived from early embryos, the potential of tissues from the umbilicus, fetuses (mature embryos) and adult tissues are more limited. Nevertheless, embryos must not be created for the purpose of research only, since to create a life in order to end it rivals the actions that belong only to God. Experimentation in human pre-embryos would be allowed only if it is for the good of the individual pre-embryos or if the mother's life is in danger. Following the research the pre-embryos can be transferred only to the owner of the ova, and only during validity of a marriage contract.²⁴ Therefore, producing embryos for research concerns should be prohibited.

We should remember that Islam is a holistic religion which should be measured in its totality, not partially. Man was created to live in harmony with nature. As such, the social aspect of Islamic ethics is very strong and dynamic, always forbidding any kind of social disorder and disharmony. Nowadays, it is assumed that ends justify the means, that is isolating the stem cells of embryos for research purposes is fine because ultimately this benefits humanity and society as a whole without violating the rights of anybody. Anything that disrupts life and brings about chaos in the natural order is prohibited in Islamic ethics. So creating human embryos for research purposes alone does not satisfy our consensus.

In answering the third question, regarding whether or not it is right to destroy spare embryos, in order to avoid risk, we should say that in most cases of AIH, three ova are removed from the wife's ovaries. All are then fertilized by the husband's sperm, but only one is used for re-implantation into the wife's womb. In case of failure of the first attempt, other fertilized ova are used. Significant moral questions are raised by ethicists about the extra and unwanted fertilized ovum:

- a) What should be done with the surplus fertilized ovum?
- b) Should it be used or destroyed?

Islamic ethics finds no problem in destroying surplus fertilized ovum. Some may doubt whether this is a form of abortion or not, but the answer is no it is not, because firstly abortion only takes place after the implantation of the fertilized ovum in the womb and secondly abortion takes place in a woman's body not in a laboratory dish or testtube.

Regarding the use of surplus fertilized ova, the OIC Resolution stipulates that only the number of ova required each time for insemination must be fertilized in order to avoid the existence of surplus fertilized ova. If an extra fertilized ovum exists in any way, it should be left without medical care until its life ends naturally.²⁵

In answering the fourth question, whether or not embryos can be used for research purposes, it could be argued yes, because research using surplus fertilized embryos could benefit humanity. In this case certain stipulations would come into force: the cryopreserved preembryos would only be used for research purposes with the free and informed consent of the couple and the research limited to therapeutic research. The treated pre-embryos must be transferred to the uterus of the wife only, who is the owner of the ova, and only during the marriage span. Research aimed at changing the inherited characteristics of pre-embryos including sex selection is not allowed. Nontherapeutic research is permissible on excess pre-embryos to improve the treatment of infertility, contraception, reproductive medicine, genetics, cancer, and embryology. However, the free informed consent of the couple is required.²⁶

Among the fundamental principles of ijtihad is *maşlaḥah mur-salah* (considerations of public interest). In dealing with the issue of spare embryo research, it is important to keep all of these principles and the basic legal framework in mind. When a Muslim scholar reaches a conclusion about stem cell research, he should evaluate such a conclusion in the light of public interest. If the well-being of the community is being threatened for some reason, then scholars must consider that fact, which is subsumed under principle three above, in reaching their final decisions. This is one reason why laws change with changes in time and place. Thousands of embryos that would otherwise be discarded in fertility clinics could potentially be used for

research. This is not contradictory to the spirit of Islamic principles. It can even be said to be a societal obligation to perform research on these extra embryos instead of discarding them because people would surely benefit from such research. But there should be strict guidelines and proper procedures to ensure there is no potential abuse.

IVF and Protection of the Mind (Hifz al- Aql)

IVF must fulfill the requirement of mental satisfaction. Although IVF treatment seems simple, it is in fact not so, involving a series of steps, with a couple having to i.e. undergo medical treatment and different kinds of diagnoses month after month, and year after year even, and the woman having to take a fertility drug for stimulation of the ovum etc. Emotional and mental factors can take their toll. Still, some couples prefer this trial and error method to remaining childless. So, if IVF leads to their mental satisfaction, why should couples not attempt it? And if the procedure is unsuccessful and couples become tired and exhausted after several attempts then what would their consolation be? They can take solace from the following Qur'anic verse:

God's alone is the dominion over the heavens and the earth. He creates whatever He wills: He bestows the gift of female offspring on whomever He wills, and the gift of male offspring on whomever He wills; or He gives both male and female [to whomever He wills], and causes to be barren whomever He wills: for, verily, He is All-Knowing, infinite in His power. (42:49-50)

IVF and Protection of Wealth (Hifz al-Māl)

Islamic legal principles not only try to ensure protection of peoples' faith, progeny, life, and mind, but also aim to preserve their wealth so that mankind does not become helpless in adverse situations. IVF is a highly expensive procedure. A couple wanting IVF treatment should take stock of their finances so that they are not left to face any adverse situations in the future. They need to have sufficient balance for the future. If they are likely to face future difficulties then they should refrain from resorting to IVF. An Islamic society should give priority

to physical health and famine over IVF. If placing emphasis on IVF means less emphasis is given to other sectors of priority in medicine such as physical health and famine, then it is not encouraged (it would then be *makrūh* to allow IVF in an Islamic society).

IVF and Protection of Faith (Hifz al-Dīn)

IVF does not have any conflict with protection of faith (Hifz al- $D\bar{i}n$), if performed within a legal marriage and within the marriage span. Indeed, if successful in overcoming infertility, it may help a couple to undertake all the responsibilities of *`ibādāt*.

IVF: Western Secular versus Islamic Bioethics Perspectives

IVF employs such procedures as sperm collection through masturbation and later fertilization of ovum by sperm in a petri dish. Subsequently, maturation of the conceptus in a culture medium takes place in the laboratory. For this reason, like AI, a common objection raised against IVF in Western secular bioethics is that it separates sex from reproduction and is little more than a laboratory exercise. There is a cold, mechanical functionality about it, with a laboratory being substituted for the natural environment. A new life should come through the loving embrace of a couple. This is the natural order or natural law. By violating this natural order, IVF becomes an unnatural act. However, there is no inherent problem in IVF and embryo transfer in cases where conception by the usual method is impossible.²⁷

Critics sometimes treat all assisted reproductive interventions as dehumanizing. Those who reject human intervention in the process of human fertilization actually do so on the basis that what nature has decreed cannot take place and should not occur at any rate. The implication of this dictum for an infertile couple is that as they are unable to reproduce through sexual intercourse, they must accept their fate as a childless couple. They cannot have one 'created' outside the uterus. For this reason, American Protestant theologian Paul Ramsey condemns all reproductive interventions as dehumanizing. He, along with other critics of IVF, argues that human life is a gift, which is bestowed by God. So, why should man seek to create it artificially?²⁸ A biologist and a renowned critic of IVF, Leon Kass, identifies IVF with a form of dehumanization and strengthens his argument by adding: "My point is simply this: there are more and less human ways of bringing a child into the world. I am arguing that the laboratory production of human beings is no longer human procreation, that making babies in laboratories – even "perfect" babies – means a degradation of parenthood."²⁹

The more crucial objection is that depersonalizing human procreation is an offence to our humanity. This objection can be responded to by arguing that the procedure is depersonalized to the extent that it involves the participation of a medical technologist. But his role here is confined to achieve for the couple what they are unable to. He is not sundering human reproduction from human love to make hatcheries for a Brave New World. It is no denial of the human link between love and procreation, but rather an effort to seek a child that their love seeks.³⁰

The approach of Islamic bioethics differs in this regard. It does not consider IVF as 'dehumanizing.' According to Islamic bioethics, if IVF is treated as inhuman, unnatural or dehumanizing because of the application of a technical innovation, then there are of course forceful arguments to refute it. Human beings should always cope with the ever newer innovations of science and technology. Man cannot maintain an anti-science/technology stance and deny the whole medical enterprise. Granted there may be some difficulties associated with children born in a test-tube with donor insemination, but Islamic bioethics sees no fundamental difficulty associated with IVF if it is performed between legally married couples.

Karl Rahner remarks that today man is changing himself consciously and deliberately, which indicates that man is capable of self creation.³¹ In biomedicine, this 'changing' may be equated with the power to intervene to accomplish that which was previously impossible. More specifically, changing here is associated with the accomplishment of conception and the bringing to term of an infant which is remarkable for the extra-uterine manner of the conception. So finally, the techniques employed here will not affect the status of the child.³² The opposite view suggests that man is a maker, selector and designer. The more rationally contrived and deliberate anything is, the more human it is. Founded on this basis, laboratory reproduction is radically human compared to conception by ordinary human sexual intercourse. It is willed, chosen, purposed and controlled. Certainly these are amongst the traits that distinguish homo sapiens from others in the animal genus.³³ Islamic bioethics holds an intermediary position in respect to the two aforementioned views. It does not consider the practice of IVF as radically human compared to conception by ordinary human sexual intercourse. Again it does not want to condemn it as an unnatural way to produce children. In this way, we can rule out the objection of dehumanization of the infant through IVF. To argue otherwise is in the author's opinion, criticism for the sake of criticism - meaning that sometimes critics attack any notion or concept just for the sake of argument and to play devil's advocate. Making matters complicated is what they are used to doing. If assisting one's immune system by introducing antibiotics or assisting one's heart by replacing a valve are valid options then why not IVF?

William J. Daniel examines some of the aspects of sexual ethics that are associated with IVF. Some treat masturbation as a wrong act because it directs sexuality inwards to oneself rather than outwards to another person. However, Daniel believes that this is not a very fruitful criticism when the whole point of the act is to procreate. The greater concern is about the effect that separating love and procreation will have on marriage. Maybe it is a threat of a devaluation of sexual intimacy and ultimately a grave assault on marriage and the family. Nevertheless, where the couple cannot have a child through the normal way, IVF will not be untrue to their relationship.³⁴ Islamic ethics also condemns masturbation but when done for artificial procreation, it is not prohibited.

The most forceful argument for using IVF is given by bioethicist Helga Kuhse. According to Kuhse, IVF completes the separation between sex and reproduction that began when effective contraceptives became available. Now it is possible to have sex without having children and vice versa. Why then should critics raise questions of sexual ethics in connection with a technique which consists precisely in avoiding the sexual element of more commonplace reproduction?³⁵ In fact, Islamic bioethics will agree with Helga Kuhse's argument. Islamic bioethics is highly concerned with the reproduction of man and the maintenance of the human race on earth. Human beings are entrusted with the guardianship of the entire earth and are granted divine wisdom to serve as God's vicegerents on earth. Even Islamic bioethics encourages increasing the number of children. The following Qur'anic verses indicate this fact:

And God has given you mates of your own kinds and has given you, through your mates, children and children's children, and has provided for you sustenance out of the good things of life. Will men, then, [continue to] believe in things false and vain, and thus blaspheme against God's blessings? (16:72)

Allah says:

Hence, do not kill your children for fear of poverty: it is We who shall provide sustenance for them as well as for you. Verily, killing them is a great sin. (17: 31)

So in contrast to the views of some Western secular bioethicists, Islamic ethics shows a very positive attitude toward the application of the IVF procedure provided it is undertaken between legally married couples and within their marriage span.

Opponents of IVF express concern about how it might alter our conception of the family. What would be the status of the child who becomes part of a family by means of IVF? The question may arise whether or not IVF offspring are disturbed by the knowledge of the special circumstances of their origin. But Islamic bioethics finds no difficulty regarding their identity if proper precautions are taken that sperm is collected from the father and ovum is from the mother and not otherwise. Herein lies the difference between the two approaches.

Difficulties undoubtedly will multiply if an IVF child is born out of marriage, with the aid of a male sperm donor or an egg donor. George J. Annas comments:

Dependable birth control made sex without reproduction possible.....Now medicine is closing the circle...by offering methods of reproduction without

sex, including artificial insemination by donor (AID), in vitro fertilization (IVF), and surrogate embryo transfer (SET). As with birth control, artificial reproduction is defended as life-affirming and loving by its proponents, and denounced as unnatural by its detractors.³⁶

In May 1988, Linda Kirkman gave birth to her niece, Alice, who was conceived from her sister's egg, fertilised by sperm from a donor. This was one of the world's first cases of IVF surrogacy. Linda Kirkman was the gestational mother. She would say: "I always considered myself her aunt." Carol Chan donated eggs so that her sister Susie could bear a child and give birth. Carol Chan's view: "I could never regard the twins as anything but my nephews."³⁷

These cases illustrate clearly how IVF technology using donated eggs dilutes the notion of parenthood by making peculiar relationships possible. Who is the mother here? The way American society has been answering that typical question depends on which woman is married to the baby's father. Some birth certificates issued in the U.S. mention the name of the woman who is the ovum donor but do not mention the name of the woman carrying the pregnancy to full term, and giving birth to the baby. Similarly, some birth certificates list as the mother the woman who carried the baby but not the ovum donor. Legal motherhood is fixed by the relationship of the woman to the father.³⁸

Therefore, we see a serious and complicated situation developing with regards to determining the status of the mother of a child using donor ovum. In this case we may raise the question as to whether IVF is good or bad for family relationships. Similarly, consider the case of IVF using donor sperm. Could the donor base his claim to the child on society's traditional respect for biological ties? Here, there is similarity between this approach and that of Islamic ethics because the latter seriously condemns IVF using donor sperm. An important question is also whether a wife can be artificially inseminated with sperm taken from her husband before their marriage. Even regarding using frozen sperm before marriage, Islamic ethics gives a negative answer. For instance, a man may keep his sperm in a frozen state before undergoing treatment for testicular cancer, and after being married, the sperm may be thawed and then injected into his wife's ovum. In this way, using IVF technique, they could enjoy a child of their own. The principles of Islam say that the sperm and the egg must be both extracted and united while the couple are lawfully married. Because in this case, the sperm was extracted when the man was still not married to the woman, the whole procedure would be considered unlawful, a) extraction was not done during the marriage span and also b) when the man was not lawful for the woman. As a result this act is not permitted in Islam.³⁹

We think in this respect that the Islamic bioethics' spectrum of argument is wider than that of Western secular bioethics, because Islamic bioethics is concerned not only with the identity of the child, but also with the chastity of the woman concerned. Chastity is of paramount importance in Islam. In order to ensure a good society, morals are protected in Islam and sources of mischief and corruption carefully plugged. This prevents people from going astray. This prevention is most effective in the preservation of modesty and chastity and encourages purification of hearts. Although in AID no formal adultery is committed, nevertheless it is still considered a threat to the chastity of the woman carrying the sperm of a donor to whom she is not married. She is not even allowed to use the sperm of a deceased husband. In this respect, Islamic bioethics gives women a deeply honorable and protective position in society.

Some try to argue that children born through IVF will not suffer any adverse family status, on the contrary, being the children their parents craved, they may in fact have better prospects than normal children.⁴⁰ This is really futile logic for Islamic bioethics and in fact Islam does not want to argue along this line.

The feminist ethics standpoint, although sympathizing with the predicament of infertile couples and accepting their need to try and conceive through IVF, nevertheless points out that these desires themselves emerge from social arrangements and cultural values that are deeply oppressive to women.⁴¹

Reproduction is a natural process and should be under the full control of the woman. However IVF, it is felt, sometimes circumvents this, viewed as an impersonal act especially when women's bodies are treated as laboratories to advance a doctor's medical career. At the time of Louise Brown's birth, England for instance had no law requiring informed consent for experimental procedures. Dr. Steptoe claimed that he had explained everything to the Browns. But did Lesley Brown truly understand why Steptoe had performed a cesarean section rather than allowing her a normal vaginal delivery? Did she realize that the cesarean section he had performed was neither beneficial to her or the baby but was rather undertaken as proof for Steptoe's colleagues?⁴² Medicine is a male-dominated world and as such IVF sometimes makes women even more dependent on men. The history of the relationship between a male-dominated medical profession and women's reproductive functions is sometimes seen as one of mistreatment, manipulation and mutilation.43 Few feminists actually object to the technology itself because it can help infertile women to conceive, their prime point of contention being the exploitation of women as a byproduct of IVF. Feminists support IVF if they are certain that women have a rational choice regarding it. Some feminists blame societal mores which put pressure on women to conceive at any cost because their lives are devaluated without children. The emphasis on motherhood is incredibly high. On the social front, one must apply social pressure to alter the status of women and children which unfortunately oscillates between that of breeder and something possessed. We should develop a vision of society as a community where all are valued members irrespective of age or gender.44

Although women are exploited in society, this is not sufficient reason to ignore advances in medical reproductive technology. Philosopher Christine Sistare dislikes the implication that women who choose IVF have been manipulated. This argument is itself sexist because it implies that these women are unable to make free, rational choices.⁴⁵

So arguments pointing to the manipulation of women in the decision-making process, do not work well. In fact, the problem is associated with our own preconceived notions of the husband-wife relationship and the status of women in general. This should be based on mutual understanding and cooperation and not become a tug of war. There is a natural and functional distribution of roles and activities for men and women, regarded as essential for the proper functioning of the different institutions of society and for its moral and social health and well-being. However, this does not entail differentiation of men and women's status and dignity in society. Both are equal as human beings.⁴⁶ Women are capable of decision-making on their own, and men have no right to manipulate them in this. This is the spirit of both Islamic ethics and bioethics.

Infertility is a major problem in the U.S. Almost one in six couples fails to conceive after trying to conceive for one year. Yet, IVF is still a very expensive medical option. The average cost per successful IVF delivery ranges from \$66,667 to \$114,286⁴⁷ and the success rate is still low. So couples may have to pay twice or three times more depending on when and if they manage to conceive and carry a pregnancy to term. The question naturally arises as to whether IVF is cost effective or not? In fact, firstly, it might be more appropriate to query who should pay for the treatment, the individual or society? Suppose we consider the choice of a couple to have IVF an irrational one. In this case, they cannot seek help from anybody or obtain any insurance coverage, because it is their 'rational free' choice. Still, the question remains open, because here the term 'irrational' is quite ambiguous. People's demand for children is very rational.

In fact, people have a 'right' to procreate and in cases of infertility, this right can be achieved through IVF. Society has no power to stop it. This indirectly implies that society must help infertile couples to meet the costs. Secondly, a broad definition of health does not simply mean the absence of disease, but maximal functioning. In this sense, infertility is a type of dysfunction and is no more cosmetic than using physical therapy for limbs impaired by stroke. Moreover, insurers often cover very costly microsurgery to repair damaged fallopian tubes – surgery which works in only a small percentage of cases. Therefore, whatever makes such surgery eligible for coverage should also make IVF eligible. Thirdly, if having one's own child is a fundamental good, then it must be widely available. John Rawl's theory of justice⁴⁸ explores the idea that a just society will minimize the "natural inequalities of fate" and will help redress them by using public funds to assist the unfortunate.⁴⁹

Having said this, IVF does not seem to be cost effective if viewed from another angle. Millions can be treated through IVF if insurance companies or governments fund the treatment because legal restrictions on IVF are not easily defensible. The idea of limiting IVF to married couples and therefore to heterosexuals, for example, seems to be based on an assumption that heterosexual couples must be legally married or they are, in general, better parents than homosexuals (the latter is a hugely controversial issue in-itself). Furthermore, although infertility may be a personal tragedy, it is not a public misfortune. For instance, in the U.S., where more than 39 million Americans lacked coverage for basic care as of 1994, requiring insurers to pay for IVF may seem like a luxury.⁵⁰

It is perhaps better to take a moderate stance meaning that we can minimize the difficulty if we place the issue on a personal level rather than a policy level. People yearn to have children, this much is clear. And this emotional instinct based on human nature is far above material resources and the worldly happiness they can bring. If a couple feel contented by investing money in assisted reproduction, even if the process fails, they will always be mentally satisfied that they tried their best. The benefits of course outweigh the cost. No doubt IVF is a major scientific breakthrough for childless couples. But the costs are high, aside from the financial. In other words the process involves significant mental stress and frustration. Just to be refused treatment is disappointing enough, but how much more bitter and heartbreaking must this be when the treatment is unsuccessful. Having said this, we can rule it out as criticism by arguing that every decision in life has some risk, some ifs and buts. There is a gamble in everything. For instance, if we travel abroad, we might have to go by plane, in which case, are we ever going to reason that faced with the possibility of a plane crash, it would be wiser to stay at home? We are willing to take the risks. The same applies to IVF. It might work, it might not. Our expectations have to be realistic. In this context, Islamic bioethics seems to offer a moderate position regarding the use of this technique. It is fact that IVF is extremely expensive and imposes a big financial burden on poor families and communities. Therefore, it would be considered offensive, makrūh, to undertake it in a situation where there exist more demanding priorities such as physical health and famine.⁵¹ Therefore, Islamic bioethics does not make any clear-cut 'yes' or 'no' statements regarding the use of this technique, rather, it offers a hypothetical judgment considering other ifs and buts.

The utility of spare embryos not used in IVF techniques raises a significant ethical debate. As we have already mentioned, there are four possible options as regards the fate of these surplus embryos:

- 1. Thawing and destroying them.
- 2. Storing them indefinitely.
- 3. Donating them to another couple for implantation.
- 4. Donating them for research.

Unfortunately all four alternatives give way to separate typical moral dilemmas. Some would deny accepting the first option as compassionate because it treats the embryos in a very harsh way. Those who consider the embryo to be a full human being from the moment of conception will never be satisfied with this 'solution.'

Dispositional control over these embryos is another important problem. Who has the right to choose which among the available options to employ? Disposition of embryos is a question which bears significant weight: gamete providers, couples, transferees, physicians or embryologists who directly create the embryos, the IVF program or embryo storage bank which has actual possession etc. are all possible candidates for decisional authority over embryos. Yet the persons providing the eggs and sperm have the strongest claim to ownership of the embryo. The most interesting question is whether and how they have exercised this authority, and whether advance instruction for disposition will be binding if their preferences or circumstances change. While legislation has not yet explicitly recognized the gamete providers' joint ownership of spare embryos, it is reasonable to assume that the courts would favor this when confronted with disputes raising this issue. It naturally follows then that the IVF program must have the consent of both partners before thawing, transferring, implanting, discarding or donating embryos. In this case, it is also likely that a right of survivorship in embryos would be recognized as well. The Uniform Anatomical Gift Act and other precedents regarding disposition of body parts support this view, even though they do not address it specifically. Most IVF programs and storage banks are likely to honor the couple's ownership. So the issue would only arise if a program or bank refused to follow the couple's dispositional instructions. Problems also may arise if the program intentionally or negligently destroyed embryos.⁵²

One option is to keep embryos in the laboratory for an indefinite period of time. Freezing embryos through cryopreservation in developed countries is a very common occurrence today. However, those opposed to discarding embryos may still not be satisfied with this on the grounds that the freeze-thaw process harms or destroys embryos by damaging particular blastomeres or cells that render the embryo unable to divide further. In fact, frozen-thawed embryos divide and start pregnancies at a lesser rate than fresh embryos, and freezing damages some blastomeres. It is however unclear whether the damaged embryos are viable and would thus have been successfully implanted if freezing had not occurred. Again, the reduction of the number of embryos created will not solve the problem, because one cannot always guarantee that fertilizing three or four eggs will yield three or four viable embryos (the maximum number of embryos to transfer). So freezing embryos is a better option than discarding them. But what of the length of storage? Technically there is no outer limit on the length of time that embryos could be frozen before they are thawed and implanted in a uterus. It is sometimes proposed that the time limit should be five to ten years to the reproductive life of the mother donating the egg. This would help prevent children from being born to women who are much older. But IVF programs should evaluate the underlying reason for imposing a time limit more carefully, and should refrain from imposing them unless clearly necessary. Even if they have to interfere in this matter, they should inform the couple at the beginning and permit them to remove frozen embryos to other facilities when the period elapses.53

Posthumous implantation is a natural consequence of embryo freezing. It may happen when the husband dies but the wife wishes to implant the frozen embryo in her womb, or when the husband of the deceased wife intends to have the frozen embryo placed in the womb of another woman and to be the father of a child. Countries that want to honor the procreative liberty of the spouse cannot prevent this kind of act. But what would be done with the frozen embryos if both the husband and wife died while the embryos were frozen? Robertson suggests that if a state law requires the frozen embryos to be implanted, then it would probably not violate the reproductive freedom of the dead couple.

Laboratory embryo freezing is associated with several drawbacks which are not easy to resolve. Questions are automatically raised as to what to do with embryos if couples divorce, die, become unavailable, are unable to agree or get into arrears with regards to paying storage charges. Robertson suggests that the best way to handle all these issues is to enter into dispositional agreements signed at the time of creation or cryopreservation of embryos. Such agreements should be binding on the parties concerned and enforceable irrespective of the changes in their circumstances or desires.⁵⁴ Hence, we can defend the process of embryo freezing so long as it is carried out under strict control of both the clinic and the couple, and there exists an explicit written agreement between the two regarding the fate of the extra embrhifzyos. Islamic bioethics allows embryo freezing provided that the placement of the embryo will be in the uterus of the egg provider and within the marriage bond and marriage span of the couple who are the genetic owners of the embryo.

The Islamic Fiqh Council belonging to the Organization of the Islamic Conference has issued the following statement:

- 1. In the light of what has happened of the possibility of keeping unfertilized eggs to be used later on, when fertilizing eggs it must be limited to the required number for implantation each time, to avoid an excess of fertilized eggs.
- 2. If there are any extra fertilized eggs for any reason they should be left without medical care until they die naturally.
- 3. It is *ḥarām* to use fertilized eggs in another woman, and sufficient precautions must be taken to prevent using fertilized eggs for an illegitimate pregnancy.⁵⁵

Embryo donation refers to the donation of spare embryos to a barren couple. This alternative also causes complicated questions to arise such as: who will adopt and how will the future parents be screened? Who will provide the womb for gestation? Will she accept payment? etc.

Reaching a final decision with regards to the fate of the extra embryos is therefore extremely difficult and complicated. Especially when it comes to the Western secular perspective, for here a wide variety of opinions exist but no consensus of opinion. Some condemn it totally. But is it right to completely oppose something because there are some difficulties associated with it? Surely not. At least one common point binds everyone together with regard to the fate of frozen embryos and that is that every ethicist is conscious of the dignity of human beings and does not want to violate it. This brings us to the issue (and viability) of how frozen embryos can be used for research and derivation of embryonic stem cells without violating their dignity as human beings.

Proponents of human embryonic stem cell (HESC) research hold the view that an embryo may have the potential for human life but cannot be considered equivalent to a human being until it has at least been successfully implanted in a woman's uterus. Therefore, this view sees nothing wrong in using surplus embryos, which would otherwise be discarded, for potentially life-saving biomedical research. The philosophical theory employed is both deontology and consequentialism. The theory of deontology is applied by showing respect to the moral status of the embryo and not using it as a means towards an end. The purpose of consequentialism is also served because ultimately stem cell research carries good potential to cure different diseases. Beneficence is the demand not only of philosophy but also of science because both science and philosophy wish for the welfare of mankind, although in different ways. Islam's view is consistent with this view because it gives importance to societal obligations.

But the views of the opponents of HESC research are similarly significant and carry sufficient weight. They contend that a human embryo is a human being. Any research that involves the destruction of a human embryo, regardless of the life-saving potential of the treatments derived from these cells, is morally wrong. Stem cell research is not ethical because it kills the human embryo. So, their objection stands on the principle of non-maleficence (do no harm). Secondly, there is the 'slippery slope' argument, the format of which is: "if you allow exceptions to a rule, it creates a slope away from the absoluteness of the rule, down which people will slide further and further until they will not obey the rule at all," and "if you give people an inch, they will take a yard." The application of this argument in stem cell research reasons that if we allow embryonic stem cell research, which sacrifices early-stage embryos, the next thing will be that infanticide and euthanasia of the terminally ill will also be permitted so that we can use their body parts for research or cures.⁵⁶

Those taking a pro-life stance generally believe that an embryo is a human being with a soul. Thus, the act of extracting stem cells from an embryo is seen as murder because the embryo dies in the process of extraction.⁵⁷

The most widely held view regarding embryo status takes an intermediate position. In its view the embryo deserves respect greater than that attributed to other human tissue because of its potential to become a person and the symbolic meaning it carries for many. Nevertheless, it should not be treated as a person because it has not yet developed the features of personhood, is not yet established as a developmental individual and may never realize its biological potential. The term 'symbolic meaning' needs some clarification. Here it refers to the fact that respect must be shown to fetuses because of their symbolic value. Although not persons or entities which themselves have rights, embryos are potent symbols of human life and subject to some degree of respect on that basis alone.⁵⁸ Thus, pre-embryos are not merely the property of an owner and at least deserve "respect."

To conclude although embryos are not full humans, they must be handled with dignity, and their rights must be respected as long as they do not conflict with major maternal, social or other moral interests.⁵⁹ Applying this principle to an in vitro embryo, we could maintain that the embryo should be respected from the very beginning of its formation. However, from the Western secular point of view, this is not so clear-cut. For a start the embryo is not recognized as a legal subject. Accepting it as such would remove certain crucial objections that are raised against stem cell research. The principle of non-maleficence (do no harm) can be imposed upon the embryo even whilst simultaneously denying it personhood. This will not satisfy pro-life proponents however. So in the West opinions remain divided.

A very strong argument in favor of stem cell research reasons that equating the embryo with a person would rule out not only stem-cell research, but all fertility treatments that involve the creation and discarding of excess embryos. Remember, to increase pregnancy rates and to spare women the ordeal of repeated attempts, most IVF clinics create more fertilized eggs than are ultimately implanted. These extra embryos are typically frozen indefinitely or discarded (a small number are donated for stem-cell research). Now, if it is immoral to sacrifice embryos for the sake of curing or treating devastating diseases, it is also immoral to destroy them for the great purpose of treating infertility.⁶⁰

Islamic bioethics does not disagree with Sandel in the sense that if we do not need to implant the embryos in the uterus, then why not use them for research which will ultimately lead to the greater benefit of humanity? If even a little hope of medical potential exists, then is it ethical to shun human stem cell research? What is the morality of refusing to use these tissues to perform research that may cure a man suffering from a debilitating disease or injury? Hence, Islamic ethics also appears to support the use of early embryos for stem cell research and seems to have little problem in endorsing ethically regulated research on stem cells that promises potential therapeutic value. At the same time, we must be extremely careful and wary of 'slippery slope' concerns. For instance, the Nashes, a Colorado couple had a daughter, Molly, who desperately needed a bone marrow transplant, preferably from a genetically matched sibling. As she was the only child of the Nashes, using presently available in vitro fertilization techniques, they set out intentionally to create a "genetically matched" brother or sister for Molly, with the specific motive to use the newborn's stem cells (derived from the umbilical-cord blood shortly after birth) to treat Molly's condition. Using IVF in early October 2000, researchers working at the Fairview University Hospital in Minneapolis,

Minnesota, successfully transferred the stem cells from the newborn's umbilical cord to Molly. The practice is catching on and already 300 babies in the U.S. have taken birth after the same genetic-screening procedure the Nashes used.⁶¹ This begs the question, where are we going and where do we stop? What is ethics all about here?

In this respect the approach of Islamic bioethics is different in the sense that it relates ethics with law. Bypassing Western ethical debates regarding stem-cell research and therapeutic cloning using cells taken from either miscarried or aborted fetuses or cloned embryos, Saudi Arabia is set to open a stem-cell research center that operates under Muslim religious law. Unlike religious Christian opposition in the U.S. that seeks to ban all human embryonic stem cell research, some Islamic scholars have ruled that embryos terminated for medical reasons within 120 days of conception can indeed be used for research into life-saving treatments. Dr. Hamad al-Omar, a haematologist at the King Faisal Specialist Hospital and Research Center in Jeddah, Saudi Arabia, suggests that Saudi Arabia's Fiqh Council on Ethics will eventually approve the use of therapeutic cloning as a life-saving treatment. But pending laws in both Canada and the United States forbid this act.⁶²

IVF has a significant purpose, and that is to overcome infertility. The procedure requires the creation of extra embryos to enhance the possibility of pregnancy, and does not involve killing embryos. Today, however, women are being paid to donate eggs for ultimately creation of embryos for stem cell research through fertilization with donor sperm. In 2001, the Jones Institute for Reproductive Medicine at the Eastern Virginia Medical School became the first to create human embryos for the specific purpose of harvesting their stem cells.⁶³ It is argued that research embryos may have more research benefits compared to spare embryos. This is because the eggs and sperm used to create the embryos can be young and viable, as opposed to embryos from fertility centers, which tend to originate from older, infertile couples.⁶⁴ Certain aspects of this research may also require the use of research embryos as a practical demand, for example, some studies in cell maturation processes require the deliberate fertilization of eggs as part of the experimentation.⁶⁵ Is this practice ethical despite the

informed consent of the genetic owner? Is it not in fact the open creation of human life in order to destroy it?

Therefore, IVF paves the way for dangerous consequences. The idea of creating embryos specifically for research has surely provoked some of the most heated debates and strongest opposition of all the sources of embryonic stem cell research. It could be argued that given the sufficient supply of extra embryos in infertility clinics, is it right to create "better scientific quality" embryos in a laboratory? To clinically use something human as a means to an end? Wherein lies the respect? Given the many moral and ethical implications should we not in fact refrain from doing so? This after all is a potential life. In this respect Islamic bioethics is highly conservative; it will never allow the creation of embryos for the purpose of any type of research for this violates the principle of *hifz al-nafs* (protection of life). Thus creating a life to kill it is considered an unacceptable practice and the act cannot be supported.

Opponents of stem cell research have attempted to link it to the eugenics movement, not in terms of creation of a master race as such, but rather pointing to the disturbing similarities between the two in terms of seeking to improve the human species. So, for instance, instead of having children of their own, would-be parents might be inclined to seek out sperm and ovum from people harboring admirable physical and intellectual characteristics. Total reproductive freedom and control allows us, should we have enough wealth, to buy whatever we choose. Going shopping for top quality embryos shouldn't be one of them. This reinforces the status of embryos and fetuses as non-persons. For instance, we may think little of aborting female offspring (very much the undesirable sex in many parts of the world), if we come to think of fetuses as merely some special entity, not fully human. Our conscience is hardly going to be pricked. The motive of creating life in order to destroy it even upsets some of those who otherwise support stem-cell research. Charles Krauthammer expresses his fear in this way: "People are horrified when a virgin hill is strip-mined for coal; how can they be unmoved when a human embryo is created solely to be strip-mined for its parts? What next? Today a blastocyst is created for harvesting. Tomorrow, researchers may find that a five-month-old fetus with a discernible human appearance, suspended in an artificial placenta, may be the source of even more promising body parts. At what point do we draw the line?... [We] owe posterity a moral universe not trampled and corrupted by arrogant, brilliant science."⁶⁶ Islamic bioethics would agree with him.

As conscientious human beings we should think that although an embryo is not a human being, it still deserves respect. If created in order to be destroyed, is any respect honestly being shown to it? Scientists may talk endlessly of the great benefit medical research on embryos may bring to mankind, but that does not do away with clearly troubling aspects. It is detraction from the spirit of deontology because here a potential human being is used as a means. If we employ IVF's spare embryos which would otherwise be discarded however, the problem is resolved. Clearly, embryos must not be created for research purposes, as is happening in the U.K., California and New Jersey. Moreover, protections must be put in place, the research must be approved by a local Research Ethics Committee and the passage of stem cells must go through an international tissue bank. Aristotle's concept of the "Golden Mean" is of service here, meaning that stem cell research for the greatest benefit of mankind can be supported but without following an extreme path, that is, creating an embryo to destroy it. So here without denying the truth of Deontology, we advocate the spirit of Consequentialism which justifies any act on the basis of the consequences it produces (in this case human welfare through research on stem cells).

The 'slippery slope' argument is a powerful weapon in science, philosophy and religion. But although the slippery slope is part and parcel of our lives, we cannot simply limit our good deeds for fear of hidden/potential dangers that may arise. In fact, the slippery slope is a 'pseudo concept' if interpreted narrowly. Furthermore, it is doubtful whether it has played any significant role in the history of human civilization, science and progress. Slippery slopes are everywhere in life, but as bioethicists we have to find ways of preventing and overcoming the potential dangers. Even critics of HESC research must comprehend the fuller implications of the problem and take steps accordingly.

HESC research is not only a social or religious issue but also a political commitment in the U.S. Bioethics can help with formulating public policy and bioethicists can evaluate the present policy status of the country. So they possess a dual role of great importance, and much is dependent upon their opinion. In fact moral judgment may be a far cry from legal judgment. A morally permissible act may not be consistent with a state's legal policy. Nevertheless, laws rightly back away from attempting to legislate against everything that is morally wrong.

Finally, in order to successfully deal with biomedical issues, morality should be concomitant with law and public policy. Otherwise, a great potential project may collapse. HESC research issues are not like the philosophical issues of justice, goodness or truth. They are a joint venture of politics, macro and micro-economics, religion, medicine and bio-ethics, and based on a pluralistic and multidisciplinary approach drawing its sources from philosophy, medicine, biology, law, theology, social and behavioral sciences, history, and so on. In this respect, Islamic bioethics is in a better position because it correlates law with ethics. Bioethicists bear the prime responsibility of giving value-oriented suggestions but others also bear a responsibility to deal with issues such as these with respect and to ensure proper monitoring. Without a balancing of political power no decision of bioethicists can be implemented. This is clear from an NBAC (National Bioethics Advisory Commission) report which recognized the 14 day milestone (that the human embryo undergoes a fundamental change in status around day 14) and defended the rationale to support federal funding of stem cell research with spare frozen embryos which fall within the 14 day window.

Today, the scientific world is in a flux of transition where moral judgments are increasingly overridden by competition to discover new techniques and applications to patent and market. It is true that the future potential of stem cell research is brilliant, but ethical reflections lag behind medical technology in this area. We must proceed carefully along the intricate pathways created by the power of science to maintain respect for human life. This must be done under restrictions and societal supervision. Strict and stringent regulations are

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necessary in order to fulfill and redeem the great biomedical promise of our time.

Table 6.1 summarizes the comparison between Islamic and Western perspectives on IVF:

lssue	Western Secular Bioethics	Islamic Bioethics
IVF using sperm and ovum of a married couple	Yes	Yes
IVF using sperm and ovum after divorce	Controversial	No
IVF using sperm or ovum of the legally married couple after the death of one of them	Controversial	No
IVF using the sperm of an imprisoned husband	Norestriction	Yes with strict caution so that no mixing of sperm is present
IVF using sperm of the would be husband before marriage	Controversial	No
IVF using the fertilized ovum preserved in a laboratory after divorce or the death of any of the partners	Controversial	No
IVF using donor sperm	Norestriction	Strictly forbidden
Spare embryos before implantation: moral status	Controversial	Not a full person
Create embryos for research purposes	Relative	No
Embryonic stem cell research	Controversial	Allowed with spare embryos

Table 6.1: Comparison between Western Secular and Islamic Bioethics in Relation to IVF

In Vitro Fertilization

Conclusion

In this chapter I have illustrated that while Western secular bioethics debates whether to validate the use of donor sperm and eggs in IVF, Islamic bioethics is primarily concerned with the problem of lineage. Some of the areas are highly controversial. While Western secular bioethics intends to allow lesbians the right to assisted reproductive medicine, Islamic bioethics condemns the practice itself. Thus, the approach of Western secular bioethics is broad in one sense. However, that of Islamic bioethics seems wider in comparison for its concern is the welfare of society as a whole, and it strictly protects the identity of the child and keeps inheritance laws intact. The issue is not one of equal rights, which is often used as justification to allow single women and lesbians access to IVF, but one of child, family and societal welfare. Islamic bioethics is thus far deeper in scope and more profound and thought provoking in this sense. It prohibits the use of donor sperm and donor eggs in order to maximize the greatest welfare and stability for society and human relations, and in every which way possible, including sociologically and psychologically. Its developmental perspectives on family relationships, and child welfare as a whole are highly relevant to today's discourse on IVF, and it offers much needed clarity where there is often ethical confusion. A very coherent and logical form of social justice is reflected here. Where Islamic bioethics' focus is both on the temporary and ultimate good, Western secular bioethics' emphasis is on apparent good. AID from the Islamic standpoint presupposes that goodness is not a narrow concept; rather the ontology of good bears an all-inclusive character. Islamic bioethical ideas about IVF are dynamic and focused, they give great value to human life, maintain marital integrity, and prove that long-term good should always prevail over the temporary satisfaction of desires for the welfare and stability of society and its members. The ends in sum do not justify the means.

Surrogacy: Western Secular and Islamic Bioethics Perspectives

Background

In the mid 1980's William Stern and his wife Elizabeth entered into a surrogacy contract with a Mary Beth Whitehead through an advertisement placed by an Infertility Centre in the U.S. In return for \$10,000 (and other medical expenses) Mary Beth agreed to act as both the genetic and surrogate mother of the baby she agreed to carry for the couple. William Stern's sperm was used to artificially impregnate Mary Beth Whitehead. Several days after the birth of the child in 1986, Mary Beth requested to take the baby to her home for a week and the Sterns permitted this. The following day she took the baby to her mother's home and shortly thereafter expressed her intention to keep it. A custody battle ensued. After numerous press conferences, suits and counter-suits, the court finally awarded custody of the child to the Sterns. Mrs. Whitehead was given visiting rights. Now, what is interesting is that the courts dismissed the surrogacy contract as invalid, recognized Mary Beth as the legal mother, but awarded custody to the Sterns using the 'best interests of the child' analysis to reach a final decision.1

Baby M was born on March 27, 1986 at Monmouth Medical Center in Long Branch, New Jersey. The Whiteheads did not conceal the fact of the surrogacy from the hospital and on the birth certificate listed Richard Whitehead as the father and named the child Sara Elizabeth

Whitehead. So when William Stern visited the hospital, the nurses would not let him hold the baby.² Surrogacy is nothing new, and prior to Baby M, many hundreds of babies have been born through a surrogacy arrangement with only four cases involving some dispute, all ultimately settled out of court. Indeed, with regards to this, the director of one particular surrogate agency notes, "The Whitehead case is a real aberration. She's one of half a dozen who have changed their mind, out of 800 to 1,000 surrogates who have given birth."³ Before the Baby M decision in 1988, no state Supreme Court had ruled on a surrogacy arrangement.⁴

Surrogacy: Definition, Reasons and Classification

The word surrogate is from the latin *surrogatus* and literally means "substitute." In terms of reproduction it simply refers to a woman bearing a child for another woman. The practice is not new and in fact one of the most low-tech forms of treatment available to overcome infertility. However, with advances in modern medicine it has taken on a new force, and a whole new meaning. The concept of surrogacy is actually a by-product of Artificial Insemination (AI) and In-Vitro Fertilization (IVF). In a surrogacy arrangement, a woman carries a baby in her womb through pregnancy and after delivery hands the child over to another person at which point she is freed from all responsibilities to the child or its family.

So a woman may offer to carry a child to term and give birth to it to help a couple who are unable to do so on their own.⁵ Married couples look to surrogacy when the wife is physically unable to conceive a child or unable to carry a baby inside her. She may also have a genetic disease that she is unwilling to pass along to the offspring. It may even be that the woman may not want to become pregnant due to her career or a busy work schedule. Whatever the reason the couple may choose surrogacy as an option in the hope that the child will be at least halfrelated to them. Occasionally, unmarried couples also opt for surrogacy although the practice is not very common. Similarly, this practice is open to single men willing to be fathers.⁶

Surrogacy is of two types, genetic and gestational surrogacy. In genetic surrogacy, the egg of the surrogate is artificially inseminated

by the donor's sperm (the father of the child). In contrast, in gestational surrogacy, the ovum of a woman is fertilized by the sperm of a male in vitro and is implanted in the uterus of another woman whose uterus is ready to bear the fetus up to birth. The ovum donor may not have a uterus or it may have been removed due to some disease.

Similarly, when a woman is incapable of producing ova as a result of disease, injury or normal aging, a donor ovum may be fertilized in vitro and implanted in her uterus and she then gestates the baby to term. Thus, this technique opens the way for post-menopausal women or many women once considered hopelessly barren to become pregnant and give birth to a child even though they have no genetic link to the child.⁷ From another standpoint, surrogacy can be either commercial or altruistic. In the former case, the surrogate is paid for donating the egg, gestating the fetus or both. In altruistic surrogacy, no financial reward is received and the surrogacy is regarded as a gift.⁸

Surrogacy: Islamic Bioethics Perspective

Hiring a 'womb' for procreation is a very recent phenomenon which contemporary jurists have to handle. Islamic bioethics cannot be positive towards this practice because surrogacy is a clear form of using a foreign element – donor sperm – in the womb of a woman. According to Mufti Sheikh Ahmad Kutty, an Islamic scholar, since surrogacy involves entrance of male sperm into the uterus of a woman to whom the man is not married, it definitely falls under the specific category of transgressing the bounds of Allah.⁹

In view of the term 'transgressing the bounds of Allah' he mentions the following verse of the Qur'an:

...and who are mindful of their chastity, [not giving way to their desires] with any but their spouses – that is, those whom they rightfully possess [through wedlock]: for then, behold, they are free of all blame, whereas such as seek to go beyond that [limit] are truly transgressors. (23:5-7)

Again, a very basic purpose of the Shari^cah (*maqāṣid al-sharī*^cah) is to protect lineage (*ḥifẓ al-nasl*) or progeny. Consider a case of gestational surrogacy. If the woman is married, the resultant child would legally

be that of her husband although the sperm was donated by another man. The case of genetic surrogacy is more critical and troublesome because here the woman is not only carrying the fetus but also donating her egg. So here she is the actual mother of the child but unfortunately not given the status of one. In fact, surrogacy creates a dilemma regarding the identity of the offspring. That is to say, the status of any baby born under a surrogacy contract would be illegitimate because the contracting man has not entered into a matrimonial contract with the surrogate.

Even if a husband gave written consent that his wife could act as a surrogate, there is a religious problem that would prohibit this. Islam prohibits the semen of one man to touch a fetus that is a product of another man's semen. Will we issue a law prohibiting husbands from exercising their legal right [to sexual relations] with their wives when they are pregnant with another man's baby? And were such a law passed, will we put these husbands under 24-hour surveillance to make sure they do not have sexual contact with their wives – which are their right, in accordance with their marriage contracts? Or shall we create a special prison for such men, who rent out the wombs of their wives?¹⁰

According to Serour:

The basic concept of Islam is to avoid mixing genes, as Islam enjoins the purity of genes and heredity. It deems that each child should relate to a known father and mother. Since marriage is a contract between the wife and the husband during the span of their marriage, no third party intrudes into the marital functions of sex and procreation. A third party is not acceptable, whether providing an egg, a sperm, or a uterus. Therefore, sperm donation, egg donation, and surrogacy are not allowed in Islam.¹¹

Essentially surrogacy can lead to a struggle between two mothers: who is the real mother, the egg provider or the womb provider? That is, whose claim is stronger over the child?

It is a noteworthy point that the Qur'an declares the womb as ' $Rah\bar{i}m$ ' – one of the 99 attributes of Allah. $Rah\bar{i}m$ means compassionate. The reasoning behind this comparison may be that just as Allah is the Most Compassionate to His creatures, the mother is also compassionate to the child. The Qur'an states that, "...none are their mothers save those who gave them birth..." (58:2). So, a surrogate mother who bears the egg of another woman in her womb may claim to be the real mother. But how could she be considered the real mother if she is leasing her womb, has no legal marital bond with the father of the child, or a genetic link with it? Similarly, how can an ovum donor have full claim over a child when she does not bear it as mentioned in the Qur'an?

In this situation, we can try to compare the surrogate mother with a foster mother (in the case of gestational surrogacy) to arrive at an understanding. In this case, the sperm and ovum of a legally married couple are fertilized in vitro in a laboratory and then replaced in the womb of a surrogate mother either voluntarily or on a commercial basis. Here the woman providing the ovum might be regarded as the real mother because of her genetic link to the child, and the woman carrying the fetus in her womb and giving birth to it as the foster mother. However, reason demands that we cannot accept this analogy. It fails at the preliminary stage even, because of a clear existing difference between what is a wet nurse and a surrogate mother. A wet nurse has no relationship with the father of the child she is wet-nursing. However, under a surrogacy contract, either the woman is artificially impregnated with the sperm of the father of the child or the embryo is placed in her womb to carry to term and then deliver.

It is true that Muslims can transfer their child to a wet nurse to be breastfed. When this occurs there are social implications in Islam known as milk kinship. Just as a woman becomes a milk-mother to a child by virtue of suckling, her daughters become his milk-sisters, her sisters his aunts etc. Therefore, the foster-sisters, foster-aunts and foster-nieces are all *muḥarramāt* and marriage to them is permanently forbidden.¹²

Forbidden to you are your mothers, and your daughters, and your sisters, and your aunts paternal and maternal, and a brother's daughters, and a sister's daughters; and your milk-mothers, and your milk-sisters; and the mothers of your wives; and your step-daughters – who are your foster children – born of

your wives with whom you have consummated your marriage; but if you have not consummated your marriage, you will incur no sin [by marrying their daughters]; and [forbidden to you are] the spouses of the sons who have sprung from your loins; and [you are forbidden] to have two sisters [as your wives] at one and the same time – but what is past is past: for, behold, God is indeed Much-Forgiving, a Dispenser of grace. (4:23)

Any attempt to find similarity between a wet nurse and a surrogate mother is not appropriate or justified because the wet nurse feeds the child up to a certain period but does not have any biological relationship with it. Whereas the surrogate mother carries a fetus in which there is a clear participation of donor sperm other than her husband's. So, it is extremely foolish and an illogical endeavor to place surrogate mothers and wet nurses on a common platform.¹³

Ethics of Surrogacy: A Comparative Study of Western Secular and Islamic Bioethics

A comparative study of Islamic and Western secular philosophical perspectives has thus far revealed some similarities and dissimilarities, as outlined in previous chapters. Generally, both approaches are concerned with the well-being of the mother and child, and place the good of society as a primary objective. Nevertheless there is a clear difference, aims may be agreed upon but how aims are defined is another matter. Thus, Islamic ethics' perception of what constitutes "the good of society" differs at times sharply to a Western secular philosophical understanding. For example, Robertson provides a very straightforward utilitarian interpretation to justify the practice of surrogacy, reasoning that although surrogacy is a deviation from our cultural norms of reproduction it is nevertheless good for the parties involved. His argument being that if surrogacy can fulfill the desire of a barren couple to possibly have children, why should we deprive them of the opportunity? Furthermore, it also allows women who may need the funds to benefit financially, allows those women who enjoy pregnancy and the respect and attention it draws to benefit from the experience itself, and finally becomes a blessing for the child who otherwise would not be born.14 The approach of Islamic ethics is very different on this point. Islamic ethics first determines the intrinsic value of a woman's womb and then justifies the moral worth of renting it on an extrinsic basis. The 'intrinsic value' of something is supposed to be the value that the thing concerned has for its own sake or in itself. A thing which is intrinsically good is non-derivatively good. Extrinsic good, on the other hand, is something which is not good in itself but derivatively good, i.e. it is good not for its own sake, but for the sake of something else that is good and to which it is somehow related. Islam designates to 'motherhood' a very special status, which it seeks to protect and not undermine, and it bestows on the womb an immensely superior and pure status. And it has profound reasons for doing so. Hence, even if everything in this world can be rented, the womb cannot. In Arabic, the verb 'walada' means to give birth to. And note from the verb are derived the nouns of parents (walidan or walidayn, the dual form) and the names, father (*wālid*) and mother (*wālidah*) meaning the person(s) who gave birth to the child. The Qur'an states:

"And [God says:] 'We have enjoined upon man goodness towards his parents: his mother bore him by bearing strain upon strain, and his utter dependence on her lasted two years: [hence, O man,] be grateful towards Me and towards thy parents, [and remember that] with Me is all journeys' end."" (31:14)

The womb has powerful respect in Islam, and is regarded as immensely precious, pure, and honorable. It possesses intrinsic value. And because wombs are so deeply honored, so is motherhood. Therefore, humanity is obliged to protect the womb and its honor, meaning that no foreign element, with the exception of the husband's sperm, is allowed to enter it.

Certain philosophers delight in the concept of intrinsic value, feeling it critical in the formulation of a great variety of moral judgments. A fundamental form of consequentialism determines the right or wrong of an action exclusively on the basis of whether its consequences are intrinsically better than those of any other action one can perform under the circumstances. Another form of consequentialism holds the view that the moral worth of an action would at least in part be derived from the intrinsic value of the consequences of the actions

people can choose. The third form links intrinsic value to judgments on moral justice in so far as it is good for justice to prevail and injustice to be avoided. The fourth formulation supposes that moral judgments of virtue and vice are also a concern for intrinsic value in as much as virtues are good and vices are bad in ways that appear intimately linked to such values. Although while determining the moral worth of any action, Islamic ethics does not ignore the after effects produced by that action, it seems that with regards to rental of a woman's womb, its position is closer to deontology than consequentialism. Islamic ethics does presuppose the negative effects of surrogacy on future generations, society, and the stability of the family; nevertheless it starts in a deductive way.

Some philosophers do not consider as satisfactory the identification of intrinsic negativity with surrogacy. What is 'intrinsic goodness' and how is it to be assessed as accurate? How does one guarantee that the thing ascribed with intrinsic goodness does in fact contain it? This is an epistemological question outside the scope of our discussion on axiology. Nevertheless, we still have to face the conceptual philosophical question, which is what does something need in order for it to have intrinsic value? Although we cannot prove that surrogacy is *intrinsically* bad, there is no doubt as to its *extrinsic* negativity.

Islamic ethics views surrogacy negatively because it fails to protect progeny, is open to exploitation, and thereby risks many harmful practices entering society. Even in the case of polygamy where the husband is married to two wives, if an ovum is taken from one wife and fertilized with the husband's sperm, and carried to term in the womb of the second wife, the pregnancy would still be considered unlawful for the second wife would be considered as carrying an alien seed, which is outside the marriage contract binding the husband and his second wife. Besides, the child will belong to the woman who carried it and gave birth to it.¹⁵

Herein lies the main difference between the Western secular philosophical and the Islamic ethical perspective. Western secular philosophers criticize surrogacy on different grounds. The argument is frequently put forward that instead of leading to better family ties, the procedure threatens it. They even worry about the effects on the family of the surrogate mother. For example, Krimmel believes that through a surrogacy arrangement, the family of the surrogate (aside from the surrogate herself) would also be impacted. Remember when the baby is eventually handed over to the adoptive parents, it is removed from both the surrogate mother and her family and there may be difficult consequences. For instance, wouldn't the siblings of the baby be interested in their newborn brother/sister and not understand its having been given away? There may be future social implications; the adoptive couple may eventually divorce in which case the adoptive mother would have no biological link to the baby but the father would. In a divorce situation the father is likely to remind his wife, "Well, he's my son, not yours," but in court should the matter be treated as a normal child custody dispute or not?¹⁶ Islamic ethics looks at the issue very differently. According to Mohammad Hashim Kamali:

The laws of the Shari^cah are for the most part distinguishable in regards to their objectives (*maqāsid*) and the means which procure or obstruct those objectives. If the means violates the basic purpose of the Shari^cah, then it must be blocked. The means are generally viewed in light of the ends they are expected to obtain and it is logically the latter which prevail over the former in that the means follow their ends, not vice versa.¹⁷

So, according to Islamic ethics, if the means violates the basic purpose of the Shari^cah, then it must be blocked. Surrogacy arrangements give rise to illegitimate babies, pave the way for exploitation of women and ultimately harm the human spirit and damage society. As such, there is no place for surrogate motherhood within the Islamic system, for the evils that would accrue from the procedure far outweigh any good. Surrogacy encourages unmarried women to "lease" their wombs for monetary gain, in effect undermining the institution of marriage and family life. And given the temptations of a financial transaction could coercion, especially in the developing world, lead to the dehumanization and exploitation of women? Great social complexities and costs are involved which cannot be ignored.

Krimmel compares surrogate motherhood with second marriages, stating that there is some affinity where the children of one party by a prior marriage are adopted by the new spouse. As asymmetry in second marriage situations causes chaos in a family, surrogacy is also no exception.¹⁸ Analysis of this argument in relation to Islamic ethics reveals dissimilarities between them. Both condemn surrogacy, but the arguments are different. Islamic ethics does not disallow second marriages because this does not create any problem in the lineage of the offspring. But it vehemently prohibits surrogacy because it fails to preserve the principle of progeny. Discussing Artificial Insemination, the Council of the Islamic Figh Academy declared in October 1986 at its third session in Amman, Jordan, that absolutely Islamically forbidden and prohibited is the method (meaning surrogacy) by which fertilization takes place in-vitro between the sperm and eggs taken from the spouses, with the then fertilized ovum being implanted into the womb of a volunteer woman, due to the consequences manifested in employing them of the lineage being confused and loss of motherhood.19

Due to its monetary nature, some refer to surrogate motherhood as commercial motherhood (CM) or the arrangement as a 'baby contract' because reproduction becomes a commercialized affair, commodifying the mother and child and turning them into objects for sale.²⁰ In Kant's moral philosophy there is something called the 'categorical imperative,' the second formulation of which is that "Act in such a way that you treat humanity, whether in your own person or in any other person, always at the same time as an end, never merely as a means." According to this principle selling people is wrong because it treats them as means and not ends, as objects rather than persons. The selling of babies is analogous to slavery. For this reason, some would identify surrogate motherhood as a danger to the child. Couples having a child through surrogacy may be more reluctant than traditional parents to accept babies with defects. In surrogacy, deliberately, only one of the parents will assume responsibility for the child. Though this may seem very natural to the parents, it is not so for the child. Furthermore, that arrangement may not satisfy the psychological demands of the baby. There is the psychological danger to the child that he/she may not be ready to learn of his/her birth through surrogacy. There is some evidence regarding this matter.²¹

In fact, instead of seeing the baby as a means to achieve some other goal (i.e. monetary), the procreator (surrogate mother) should desire the child for its own sake. If surrogacy arrangements are approved by society, there is a great danger that we will come to view children as commodities. Surrogate arrangements are designed to separate (in the surrogate mother's mind) the decision to create a child from the decision to raise it. In other words, a baby is conceived not because it is wanted by its biological mother, but for monetary gain. It is carried in the womb of the mother in order to be given away. There are valid social implications that must not be ignored. Instead of viewing babies as unique individual personalities to be desired in their own right, we may widely come to view them (as is in fact happening) as items manufactured to serve some utility. Where is the respect for human life? These are not 'things' to be traded tawdry fashion according to demand and supply economics, without a second thought as to their dignity and future development. The business of an agency that matches surrogate mothers with infertile couples is described by one newspaper as follows:

Its first product is due for delivery today. Twelve others are on the way and an additional 20 have been ordered. The "company" is Surrogate Mothering Ltd and the "products" are "babies." There are various situations in which a surrogacy contract may take place, such as a single woman or a single man using AID. In both cases, they would want a child but not be willing to be burdened with a spouse. Or perhaps they were unable to find the kind of spouse they wanted. This practice intentionally deprives the child of a mother or a father and is fundamentally unfair to the baby.²²

The involvement of means and end is very common in every walk of life. For instant, lets assume I wish to go to Canada using Air Canada to fly there. When I reach my destination, Canada, I will be at the end, having got there through means of a specific airline. My end is the destination. However, the dialectic of 'ends and means' occupies a different and significant position in moral philosophy. The method or activity employed to achieve a certain outcome constitutes the means. This outcome is the end. There is some tension between ends and means. Means stands for the conditions applied to have a goal; end is

to what the means aims at. It is something which 'ought to be.' The tension between them, to use the German philosopher Hegel's idea, 'passes over into the dialectic of life and cognition.' In moral philosophy, the concern is whether this end justifies the means or not. If it has the strength to justify the end, the moral worth of the action is unquestionable. But if the end is unable to justify the means, then it is morally wrong to pursue the act. In surrogacy, the child is definitely used as a commodity for the higher aim of parental desire and satisfaction. After the child is born he will eventually question who he is and where he came from. This may cause him to experience psychological and other problems associated with the nature of his birth and identity. Here, the intended parents are using two persons, the surrogate (her womb) along with the coming child, as a means to achieve a selfish end.

Supporters of commercial surrogacy however refute the objection that surrogacy involves the selling of babies arguing that it is impossible to sell to someone what they already own, meaning the child is already the father's natural property. The surrogate is not paid for the child but for her services in carrying it to term.²³ Purdy notes that women are selling their services, not babies because we never consider babies as property. Therefore, as we cannot sell what we do not own, we cannot sell babies. The comparison of surrogacy to slavery is also weak. Any decent moral theory would view slavery as wrong because the institution allows people to be treated badly. Their desires and interests, the satisfaction of which is considered to be essential for a good life, are held in contempt. Specifically, egregious is the callous disregard of emotional ties to family and self-determination generally. Surrogacy, however, deprives babies of neither.²⁴

Islamic ethics lies poles apart from this view. It rather has an affinity with Kantian ethics. According to Kantian ethics, a rational act must set before itself not only a principle, but also an end. A person is not merely a means to some other ends, but rather, always an end in his or her self. A person has a perfect duty not to use him/herself or others merely as a means but always as an end. In Islamic Law, the validity of a sale contract is determined on the basis of whether such transactions are allowed in Islam. The Prophet approved and confirmed different types of transactions which did not conflict with the principles of the Shari^cah and disapproved and prohibited those business practices which were against the purposes and aims of the Shari^cah.²⁵ For example, buying or selling wine is $har\bar{a}m$ in Islamic law. Similarly, since in Islamic ethics surrogacy fails to protect lineage, this type of transaction is not valid. Moreover, in Islamic ethics, surrogacy amounts to dehumanizing the process of assisted reproductive technology by reducing the womb to the level of a commodity that can be rented for service. It is a clear violation of the dignity and honor that Allah has bestowed upon human beings. Here, the womb is used as a means to achieve an end. It seems that Islamic ethics is wider in evaluating the morality of surrogacy as compared to its Western secular counterpart. It not only sees the interest of the child and whether he or she is being used as a commodity but also protects the dignity and honor of women's wombs.

Some Western secular bioethicists do argue along the line of Islamic ethics however. For example, Anderson's argument is consistent with the spirit of Islamic ethics. He argues that the surrogate industry makes way for adoptive couples to specify the height, I.Q., race and other attributes of the surrogate mother, in the expectation that these traits will be passed on to the child. Degradation occurs when something is treated in accordance with a lower mode of valuation than is appropriate to it. Since children are valued as mere objects of use by the mother and the surrogate agency when they are sold to others, and by the adoptive parents when they seek to conform the child's genetic makeup to their own wishes, commercial surrogacy degrades the status of children as a commodity.²⁶

Human nature is such that when one pays money, one expects value. It is very disappointing for parents when a child is born with some genetic or congenital birth defect. The surrogate mother might blame the biological father for providing defective sperm, and similarly, the adoptive parents might accuse the surrogate for a defective ovum or for improper care of the fetus during pregnancy. So, the potential outcome is that neither the adoptive parents nor the surrogate mother may prefer to keep the child. Like squashed fruit in the produce bin of a supermarket, this child would become a reject.²⁷

Would this not be exactly equivalent to treating the child as a commodity? Krimmel's criticism is the same as that of Islamic ethics.

The early feminist movement was born in a male dominated world in which women were treated as inferior second-class citizens, in effect the property of men, without power and without many rights. They suffered great exploitation and subjugation. After long and hard struggle, though not without facing significant resistance, women finally succeeded in achieving the right to own property, vote, divorce etc. Eventually, the movement began to take a more radical form, opposing any social roles based on gender, and focusing attention to realizing a complete equality between men and women. As a result, feminists have become increasingly vocal in calling for an elimination of gender role differentiation pursuing a move towards a unisex society to achieve equal rights for women. By 'unisex society' is meant a society in which an absolute and unqualified equality of men and women is to exist notwithstanding gender differences. The 1960s were to witness a major development in the feminist agenda. Calls for sexual equality and reproductive freedom aided by the birth control pill ushered in a sexual revolution, allowing women, as the movement had demanded, to be active and not passive in sexual intercourse. In the name of 'equality' all manner of issues, some truly counter productive, are being raised: why should the husband be the chief wage earner, why should he have a career or do other external work? Is the husband not acting in an authoritarian way when he sees himself as the head of a family? Why must women bear the burden of carrying and rearing children? Freed from this burden and responsibility they will have the time to develop their careers. So women should have the option of using a surrogate to bear their child, and so on. In fact, feminists demand that all women have complete control over their reproductive lives.

Islamic bioethics does not agree with feminist views in this regard, vigorously condemning this line of feminist reasoning as inaccurate, biased and unnatural. It also questions the underlying aims and assumptions of this abnormal mode of philosophical thought. The question I would stress is not one of equality, for Islam champions women's rights, but one of actual agenda versus purported agenda. Are feminists who argue along these lines really concerned with women's rights? Islamic ethics considers the different roles of men and women as equally necessary and praiseworthy. Men and women can never be the same because they are biologically and emotionally different. While feminist philosophers want to strip women of their feminine natures to achieve equality with men, Islam regards this as a restraining and confining of women, forcing them to fit a mold that is entirely unnatural to their make up. According to Islam, men and women each perform certain duties and responsibilities according to their nature and constitution. Certainly, it does not unequivocally violate the equity between them. The Qur'an itself does not differentiate a man from a woman in relation to Allah:

Verily, for all men and women who have surrendered themselves unto God, and all believing men and believing women, and all truly devout men and truly devout women, and all men and women who are true to their word, and all men and women who are patient in adversity, and all men and women who humble themselves [before God], and all men and women who give in charity, and all self-denying men and self-denying women, and all men and women who are mindful of their chastity, and all men and women who remember God unceasingly: for [all of] them has God readied forgiveness of sins and a mighty reward. (33:35)

In another verse Allah says:

As for anyone – be it man or woman – who does righteous deeds, and is a believer withal – him shall We most certainly cause to live a good life and most certainly shall We grant unto such as these their reward in accordance with the best that they ever did. (16:97)

Feminist philosophers approach ethical issues regarding surrogacy from various different angles. In fact, feminism itself has different dimensions of thought. For example, radical feminism, Marxist feminism, and liberal feminism all have definite views regarding surrogacy. Liberal feminists argue that women and men are basically the same, that women have the right to do whatever they want with nobody having the right to interfere with them in any way with regard

to their actions. So, they can do anything with their bodies whatever they please because their bodies are their property. If a woman wishes to be a surrogate then nobody can prevent her, and if she wishes to hire a surrogate then nobody has the right to prevent her. Liberal feminists believe that, in this way, women can enjoy rights equal to men. They view surrogacy as a manifestation of women's liberation. Christine Sistare views surrogacy as not a bad thing, going on to say that banning it would violate the rights of all women to be depositors of their own reproductive capacities. She argues that the right to have control over one's own body justifies a woman's right to profit from letting others hire her body to produce children. Referring to all the paid surrogates who have given up their children (not reneging on their contracts) she enquires, "Are all such women monsters?"²⁸

Feminists further argue that the right to enter surrogacy arrangements is a part or natural extension of the right to personal autonomy. To invalidate such contracts would be to violate women's right to selfdetermination and reinforce the negative stereotype of women as incapable of full rational agency. Hugh McLachlan believes that to make commercial surrogacy illegal would be to prohibit mothers from making other particular interpretations of their pregnancies which they might want to make. Lori Andrews argues that one of the hallmarks of feminism is the idea that there is a difference between biology and destiny.²⁹ Although a woman has the right to bodily integrity and as such to abortion, as a surrogate she would have no right to determine the destiny of the fetus. Through entering the contract, she has given the fetus the right to inhabit her body, which she cannot withdraw without the permission of the couple.

Today, feminists struggle with the idea of subordination to a man within the home, arguing that housework minimizes the status of women, and maintains gender imbalance. They want to fight for a society where a woman can freely choose whether to reproduce or not, and whether to become a typical housewife or not. Islamic ethics rejects all types of male-female polarity and male-female stereotypes. It points out that to make women like men, as the feminist agenda demands, is to force women to alter their true nature. The most important difference between men and women is that men are physically stronger than women. Men have a much larger muscle mass than women. Men and women differ in their hormonal chemistry, which not only affects personality traits, but is also capable of altering emotions and cognitive functions of the brain. Overall, the differences between men and women are remarkable and attempts to deny these will have dangerous effects on both.

Men and women are identical in value as human beings. But equality does not signify sameness as both the sexes have different physical and emotional traits.

O Mankind! Be conscious of your Sustainer, who has created you out of one living entity, and out of it created its mate, and out of the two spread abroad a multitude of men and women. And remain conscious of God, in whose name you demand [your rights] from one another, and of these ties of kinship. Verily, God is ever watchful over you! (4:1)

Islam makes a distinction between 'equality' and 'identity'. Although division of work exists between men and women, this does not go against their equal status. Men and women are a team, complementary to each other in a multi-functional organization, not competitive entities in a uni-functional organization. There is a fair arrangement in things, a harmonius functioning, which cannot be ignored.

Therefore, both Western secular and Islamic bioethical approaches endeavor to respect and to protect the rights of women. But they differ in their methods. Their goal is one, but the approaches are different. Islamic ethics delineates a picture of women's ideal liberation in quite a different way compared to Western secular philosophical perspectives. Islamic ethics rigidly asserts the equality of the two genders, but it profoundly steers mankind away from recognizing that men and women are the same. The striking and most remarkable difference between the two approaches is that Islamic ethics respects the differences between men and women, therefore treating each individually. Thus, due to the obvious differences between men and women, Islam exhorts the man to be the protector of the woman. Allah says in the Qur'an:

Men shall take full care of women with the bounties which God has bestowed more abundantly on the former than on the latter, and with what they may spend out of their possessions. (4:34)

Pregnancy is very much preferred in Islam. Islam does not consider pregnancy to be a burden but a blessing. If a mother dies during pregnancy or childbirth she is given the status of a martyr. A Muslim woman is not encouraged to delay pregnancy for a better career. In contrast some feminists agree on a career oriented woman hiring a surrogate to bear a child for another woman too busy with her career to carry it for 9 months. Shulamith Firestone labels pregnancy as 'barbaric' and looks forward to a time when technology will free women from the oppression of biological reproduction. According to Firestone, nature oppresses women by leaving them holding the reproductive load, while men are free of this 'burden.' She further holds the view that so long as this biological inequality exists, women will never be liberated.³⁰ So, if a woman can by pass this by a surrogacy arrangement why should she not welcome it?

According to Marxist Feminism, capitalist societies use women as commodities. A woman opts for surrogacy to support herself financially from the payment received from the contracting party. So, as a surrogate she sells her body for money, and is nothing more than an incubator or baby-making machine.

Respect and consideration are distinct modes of valuation whose norms are violated by the practices of surrogacy. The application of economic norms to the realm of women's labor violates women's claims to respect and consideration in different ways. For instance according to Anderson, "by requiring the surrogate mother to repress whatever parental love she feels for the child," these norms "convert women's labor into a form of alienated labor." Again, by manipulating and negating legitimacy to the surrogate mother's evolving perspective on her own pregnancy, the norms of the market degrade her honor. In addition, by taking advantage of the surrogate mother's non-commercial motivations without offering anything but what the norms of commerce demand in turn, these norms leave her open to exploitation. The fact that these difficulties arise in the attempt to commercialize the labor of bearing children implies that women's labor is not properly considered as a commodity. Respecting a person means to treat her in accordance with principles she rationally accepts, that is principles consistent with her protection of her autonomy and her rational interests. To treat a person with consideration is to respond with sensitivity to her and to her emotional relations with others. This can be done by refraining from manipulating or denigrating these for one's own interest. The failure of consideration on the part of contracting parties to the surrogacy contract implies that the contract is not simply disrespectful of the surrogate mother, but callous as well.³¹ Islamic ethics cannot but support this line of criticism of surrogacy.

Surrogacy is attacked by some feminists on the grounds that it actually satisfies a male impulse and women are not free to choose it. Some feminists argue that men are like patriarchs who abuse female slaves to produce heirs. As most men prefer to have a genetic child in any way, they ignore the freedom of the wife to make a rational decision and hire a surrogate to bear the fetus for them. Barbara Katz Rothman is one of these feminists. She believes that American family law has its roots in patriarchy and in men's view of family relationships. In her view our contemporary societal thinking about procreation still reflects the historical origin of our society as a patriarchal system. Although the genetic parenthood of women is now recognized as equivalent to the genetic parenthood of men, the noble contribution of gestation as constitutive of motherhood still goes unrecognized. Men not only control their offspring but also the mother of the offspring. Women's motherhood is under the control of the husband to maintain patriarchy. The newly available reproductive technology allows a woman to carry to term a fetus not conceived of her ovum. For example, modern assisted reproductive techniques allow one woman's egg to be put in the womb of another. Say 'Susan's' egg is put into 'Mary's' womb. Who would get the status of mother here? "Is Mary substituting for Susan's body, growing Susan's baby for Susan? Or is Susan's egg substituting for Mary's, growing into Mary's baby in Mary's body?" The way American society has been answering that question depends on which woman is married to the child's

father. In the U.S. there are birth certificates that list the mother as the ovum donor and the name of the surrogate who carried the baby is absent. Similarly, there exist birth certificates that list the mother as the woman who carried the baby and not the name of the woman who donated the egg. Legal motherhood is determined by the relationship of the woman to the father. It is in this context in which genetic parenthood is acknowledged and pregnancy ignored and finally the practice of commercial surrogacy developed. Rothman concludes:

What is needed is to move beyond the principles of patriarchy and beyond its modifications, to an explicit recognition of motherhood. Women are not, and must not be thought of as, incubators, bearing the children of others – not the children of men, and not the children of other women. Every woman is the mother of the child she bears, regardless of the source of the sperm, and regardless of the source of the egg. The law must come to such an explicit recognition of the maternity relationship.³²

Some feminists believe that a surrogate mother enjoys no personal choice with regard to surrogacy, and does so under some form of social pressure. In other words she is the handmaiden of others and is typically brainwashed into becoming a contractual mother. This objection though somewhat far fetched may be true of realities in the developing world where poverty may lead to exploitation.

Radical feminists are in agreement with the ideas of Marxist feminists. But in addition, they argue that women are not only being forced to sell their reproductive capacity for financial gain, but become surrogate mothers because they want to fit the idea of what a woman is supposed to be. Social norms demand that women will think of others before thinking of themselves. A good woman is looked upon as loving, giving and self-sacrificing – so she will live up to this ideal. Does a "good woman" benefit herself and society? For radical feminists a more realistic assessment is that she benefits man, and not woman. In order to satisfy the desire of others, a surrogate mother hurts herself. Society also approves of her. Radical feminists feel that a woman should not hurt herself to satisfy society.³³ So, radical feminists ultimately denounce surrogacy because it fails to protect the honor of women. Islamic ethics also protects the dignity and honor of women but in another way.

Islamic ethics strictly advises formulation of families on the basis of biological ties, and because preservation of lineage is a primary principle Islam condemns the practice of surrogacy. Issues such as confusion over motherhood, and the possibility of half-siblings (unaware of their relationship) inadvertently marrying one another, are instances of the possible harm that could accrue. In contrast, Western secular bioethicists argue that family ties have never been about biology only, i.e. a husband and wife, to take an obvious example, are not biological relatives. It is also claimed that if the family is a 'good thing,' then surely conceiving more children, through whatever means possible including non-biological, to develop it would also be a worthwhile endeavor.³⁴

One thing is clear and as mentioned earlier, paid surrogacy can sometimes become a means of exploitation with poor women leasing their wombs to carry a fetus for money. Evidence shows that sometimes they are paid very little for this service and sometimes none at all. However, this objection against surrogacy is vehemently rejected by certain philosophers. Michael Kinsley for instance argues that if women are forbidden to enter into surrogacy contracts, why not then ban them from other kinds of service agreements? He poses the question: if we do not wish to go beyond women's traditional role as mothers, then why not forbid them from working as maids or nannies, and indeed forbid them from working at all? He also argues that if the product in question were i.e. food or telephones rather than children, a shortage would be seen as a failure of the system. For instance, when the Soviet Union forbade market contracts, shortages occurred, similarly if the U.S. banned procreative contracts, shortages would occur.³⁵ Besides, there is at least some evidence to suggest that the opportunity of being paid for one's services in bearing a child has not been exploitative of poor women. Statistics show that the "average surrogate mother is white, attended two years of college, married young, and has all the children she and her husband want."36

Furthermore, some women actually enjoy the opportunity to exercise this, in their view, form of altruism. If we truly seek to protect

women forced into surrogacy by economic necessity, then there are ways of doing so. We could place restrictions on who can enter into contracted child-bearing arrangements, but need not prohibit the practice entirely. Some may object that such restrictions would be unjust because they would prohibit poor women from doing something that other women are permitted to do. But that would imply that the restrictions would be denying poverty stricken women a good, rather than protecting them from a harm, which in turn would imply that the initial assumptions themselves concerning exploitation are misguided.³⁷ Islamic ethics cannot support this type of reasoning to validate surrogacy because it fails to fulfill the five purposes of the Shari'ah.

Western secular bioethics also argues along the lines that it is not surrogate motherhood itself which is inherently bad, but its commercialization, because children have intrinsic moral value or worth and such entities should never be bought, sold or owned for the consequences to them are harmful. Is it good for children to flourish in a culture where they are manufactured under the same rules that govern the manufacture of i.e. cars or computers? The principal flaw in market analyses of the family is the faulty set of presuppositions on which it is based coupled with a shrunken conception of what a flourishing family is. These presuppositions are the notion that people are best understood as rational, isolated individuals in selfish pursuit of their own satisfaction, and that values of choice and control are preeminent. However, is this a true estimation of human beings and their drives? The focus on rationality underestimates the importance of emotion in human life. The emphasis on isolated individuality discounts the great importance of relationships for flourishing psychological development. Besides, the celebration of control and choice plays a very limited role in family life, and a disproportionate emphasis on either even destroys the institution of the family. Thus, surrogacy is unethical for the practice of paying men for providing their sperm and paying women for providing their ova.38 We observe here a deontological type of explanation regarding the rejection of surrogate motherhood. This line of thought has no conflict with Islamic ethics.

Therefore, in Western secular bioethics surrogacy is morally justified if it is not performed on a commercial basis. But without a financial transaction would it ever really take place for altruistic reasons only, and in which case wouldn't it be limited to a few women helping their sisters or daughters etc.? Even non-commercial surrogacy is not totally free from dangers and should be carefully regulated, as demonstrated by the Baby M case and that of other surrogate mothers seeking to get their babies back and keep them. The recommendation of the Ethics Committee of the American Fertility Society is that surrogacy should be practiced exclusively as a clinical experiment and that clinics involved in this practice should publish data about the process and outcomes. The benefit of this is that it provides a scientific basis on which they can be evaluated for the purpose of fashioning public policy. But even though it is believed that there is nothing intrinsically wrong with surrogacy, if it becomes evident that surrogacy arrangements result in more overall harm than benefits, then we should conclude that surrogacy transactions are ethically flawed and should be prohibited.³⁹ So, we find a utilitarian explanation for the rejection of surrogacy.

In actual fact, statistical data will never be able to express surrogacy's benefit or harm to society. It is rather the intrinsic, unnatural, nature of surrogacy itself which should speak volumes as to its potential harm. Strip away everything and you are left with a naked internal struggle between two women regarding a beloved child. The mind of the adoptive mother will never really be satisfied. And even the term "adoptive mother" contains some flaws – when a woman hires the womb of another woman for a fixed period of time, then why is she referred to as the adoptive mother? She is neither the real mother nor the adoptive mother. Motherhood is an enormously sensitive, definitive and significant relationship, and it is pointless to even attempt to place it on an equal footing with surrogacy. Its nature must be absolute and should not be given any scope to be shared. The love of motherhood cannot be shared. This is another reason why Islamic ethics does not permit surrogacy.

Conclusion

There is no fixed and uniform view regarding surrogacy in the Western philosophical system, largely due to different philosophical perspectives and relative liberal views of morality. What is clear is that surrogacy is growing in popularity, particularly in the West, whether on a commercial or other basis, and as demand grows and laws are relaxed, desperate couples are increasingly turning to it as a viable alternative to IVF.

Furthermore, due to rising costs, and possible legal restrictions, developing countries such as India, become ever more attractive as sources for intended parents. In the U.S. there is no law banning surrogacy, so people are likely to choose it on a commercial basis. Having said this, it is unlikely that many women will voluntarily choose to become surrogates, financial gain not withstanding, because when all is said and done, there is a very human price to pay. Pregnancy is a deeply powerful experience, and the unique mystery of the motherbaby bond cannot be studied, quantified or felt by anyone except the mother giving birth. Its all very well to neutralize realities by medical terminology and detached expressions such as 'hiring' a womb but this solves nothing for the creation of life can never be equated to the hiring of anything, as if we can go shopping for a human life as we do for a car.

Ultimately, surrogacy is a flawed solution to the problem of infertility from both the consequential and deontological points of view. The need for children can be so great in infertile couples that it can overpower everything, even moral principles, affecting the ability to distinguish right from wrong with regards to the options available. But it is one thing to have a child and quite another to love and care for it. Intended parents need to think of the long-term consequences of their actions, rather than the short-term euphoria of having a baby in their arms. It may roughly satisfy some demands of consequentialism in the sense that it opens the way for desperate infertile couples to become parents. However, in helping to fulfill their need, we are ultimately causing harm to the child, and to society as a whole through destabilization and break up of its most fundamental unit, the family.

We should also consider the moral inner dimensions of surrogacy, that is, whether it is intrinsically right to apply it as a solution to infertility. Having analyzed in detail the different ethical positions regarding the validity of surrogacy arrangements, it would seem that the practice does more harm than good to both the child and intended parents. Although impossible to quantify exactly it would seem that commercial surrogacy is bad practice and makes the concept of motherhood a loose one, despite attempts to regulate it, for this is not really the heart of the matter. A highly sophisticated understanding of what motherhood is, of what life is, of what the mother-baby pregnancy bond is, of what lineage is, and of what human dignity and self-respect are, in an ethical context, is required. The issue is one of morals and ethics. Bioethicists can only argue in terms of the validity of this practice. But the fact is that there is no law to prohibit the practice of surrogacy in the West and it has become common, and even after a fashion a very natural form of infertility treatment there. Personal freedom is at the root of this.

Whilst Western secular bioethics puts forward various arguments and counter arguments to judge the moral worth of this practice (mainly along the lines of human dignity, effects on the child, effects on the surrogate, the financial motives of surrogates, the motives of self-indulgent couples who choose this over adoption etc.) Islamic bioethics denounces the practice according to the five purposes of the Shari^cah. The main issues are concerned with adultery, family inheritance, possibility of incest with unwitting half-siblings marrying one another etc.

Clearly, the debate over surrogacy is likely to continue long into the future and unlikely to ever reach a unanimous conclusion. The issue is fraught with emotional sensitivities, and no matter how one argues it, and no matter what the evidence, ultimately it boils down to a question of opinion. The debate often challenges definitions of ethics and morality with regard to surrogate motherhood leaving us to draw our own conclusions. Overall analysis illustrates that surrogacy's harm outweighs its benefits. It is bad both from the deontological and consequential points of view. Had it been good from a consequential point of view, then we should have re-evaluated its deontological

position and tried to justify its relevance to society. The question remains, if surrogacy cannot fully satisfy the deontologist, the consequentialist, the feminist, or society, why should we support it?

Human Cloning: Western Secular and Islamic Bioethics Perspectives

Introduction

Cloning is a hugely controversial issue which has taken the world by storm and everyone off guard. The moral and human implications of what many perceive as an almost Frankenstein science are not only astonishing, but bizarre. They also speak volumes of where developments in advanced medicine, if left unfettered, could lead humanity to, and why bioethics has such a critical role to play in this regard. Little wonder therefore that faced with the very possibility of human carbon copying this area of advanced medicine is facing opposition from all sectors of society including the political, religious and the general public. Whilst now almost a familiar topic in scientific seminars it is still a chilling prospect for many with very real fears as to how far scientists are prepared to go to play God. The technology is gaining ground day-by-day with human cloning in particular at the apex of all that is considered ethically wrong with advanced biomedicine. No doubt the accelerating pace of medical innovation is disturbing for those who question the direction in which the human race is heading but there are also those who sense the benefits it could possibly bequeath. There has to be a balanced understanding of merits and problems to carefully assess, in context, what this new technology entails. What is clear is that the medical, religious, and juristic dimensions of cloning as well as the ethical challenges it faces are still in their infancy and unanimous consensus is unlikely.

Human Cloning

Defining Cloning

Cloning is derived from the Greek word 'klwn' meaning 'twig' and there is good reason for this.¹ For instance, when we successfully cultivate a cutting from a parent plant, we are in fact cloning, meaning that we are deliberately propagating a copy of the parent, and producing a multitude of plants (clones) all genetically identical to the parent. In agriculture many fruits and vegetables are cloned, genetically identical (although the exact degree is also a subject for scientific debate) to plants with desirable qualities. However, it is with Dolly the Sheep successfully cloned in 1996 that global interest and widespread rejection skyrocketed. The implications are obvious, and not just to scientists. If plants and animals can be cloned, why not humans?

Simply speaking, cloning is the process of producing an animal or human child that has almost the same genetic makeup as its parents. The technique of somatic cell nuclear transfer (SCNT) is the basis of cloning. In SCNT the nucleus of a somatic cell is transferred into an enucleated egg cell (one which has had its own nucleas removed), under specific circumstances. The somatic nucleus is then reprogrammed by egg cytoplasmic factors to become a fertilized egg (zygote nuleus). Reproductive cloning occurs when an SCNT-drived blastocyst is implanted into a uterus where the embryo develops into a fetus: how in fact Dolly the sheep was cloned.

The Technique Behind the Birth of Dolly the Sheep

Embryologist Sir Ian Wilmut (leader of the research group that cloned Dolly) used the mammary (breast) gland of a six year old pregnant Finnish Dorset lamb and a mature egg from a Scottish Blackface ewe to produce Dolly, the first cloned mammal in history. Although the nucleus of the mammary gland contained all the genetic information needed to create a sheep, only the genes needed for the formation and function of the mammary gland were activated. The cell was starved of nutrients to deactivate all genes. Then the nucleus of the egg which was preserved in a laboratory dish was removed. The cell nucleus was then inserted into the egg by fusing the adult cell with the enucleated egg. The reconstructed egg was now stimulated with the help of a slight electric shock with the result that the egg cell fused like a fertilized egg into dividing and becoming an embryo. The nucleus of the embryo came from the mammary cell, and most of its cytoplasm (non-nuclear cell contents) came from the egg cell. This embryo was then cultured and at an appropriate stage transferred into the uterus of a surrogate mother. After a definite period, the fetus was born. It looked and acted just like any other baby born of its species. Thus, in this way Dolly the sheep, spectacular and revolutionary fashion, entred the world.² The important point to note with regard to Dolly's birth is that the reproduction was asexual, not sexual, in nature because only the ovum was used and not sperm, a type of asexual reproduction which is induced artificially. This goes a step further than IVF in the sense that IVF, although also not involving sexual intercourse, still uses both egg and sperm. Cloning on the other hand is possible only with an egg and any cell from any part of the male or female body. Until Dolly no mammal had been born through an asexual reproductive technique. And it is for this reason that Dolly has been given such special attention throughout the world.

The Birth of Dolly and Human Cloning

Although scientists are thinking seriously about human cloning, it is still a hypothesis. Dolly's creation was by no means easy. Out of 277 attempts by Dr. Ian Wilmut and his team at the Roslin Institute in Scotland, only 13 pregnancies resulted, and out of these only one culminated in a live birth.³

Medical Benefits of Human Cloning

Human cloning could benefit mankind in several perceived ways. It is suggested that it could cure various endemic diseases such as cancer, alzheimer's, diabetes etc., manufacture bone, fat, cartilage tissue that matches the patient's, particularly for plastic surgery, generate healthy heart cells for heart attack patients, and the most obvious, cure male and female infertility. As a kind of assisted reproductive technology, human cloning can offer tantalizing prospects to sufferers from intractable infertility.

Current techniques of assisted reproductive medicine do not have high success rates and couples desperate to have children but failing through conventional means can theoretically turn to cloning. For instance, human cloning can solve the problem of male infertility: if a husband's sperm is not viable, he may exhibit total germ cell failure, in which case the wife could only conceive a child genetically related to a father by marrying another man. Through application of the cloning technique however a husband could provide DNA taken from a cell from any part of his body with the nucleus of the cell containing the DNA being fused with the ovum of his wife. The resulting embryo could then be implanted into the uterus of the wife to the point of delivery. The wife can contribute important constituents that are her mitochondrial genes, intrauterine influences and subsequent nurture. Under cloning male infertility would no longer be a problem as the need for sperm is eliminated. Moreover, the spouse in this case, would not have to rely on anonymous donor sperm. In fact, the child would be 100 percent genetic. The allure is obvious, a fully genetic child is far preferable to a child born of donor sperm.

Cloning would also solve female infertility. This can be of two types: a problem with the ovum or a problem with the uterus. A wife may not be able to produce effective ovum or may not have a uterus, the uterus may be affected with cancer or any other disease, or she may not be willing to use the uterus etc. In the case of the absence of ovum, she can use the ovum of another woman to fuse it with the DNA of the husband. The resulting embryo can be gestated by the wife up to term and she can give birth to the child. Similarly, the wife can donate an egg and after the egg is enucleated with the DNA of the husband, a surrogate can gestate it up to a fixed time and after delivery hand the baby over to the contracting couple through a surrogacy arrangement. As this is also possible through a surrogacy arrangement or IVF, what one may ask is the point of cloning? Actually, the astonishing thing is that there is no need for sperm. This is the main advantage of the cloning technique. Still, we cannot deny the necessity of ovum and gestation. But even if we require an egg we do not need a viable egg. So, hypothetically speaking in the reproductive process, we are now in a position to procreate through the female form only. It is indeed a

brave new world in which men are superfluous to the reproductive process and women are allowed the freedom to reproduce amongst themselves: technically all that is required being the fusion of the woman's DNA from a somatic cell with her ovum, bearing the fetus in the uterus and giving birth to it. The child would be exclusively hers without any male participation. Even with no uterus, she could hire another woman to gestate and use her DNA to fuse her ovum.

Human cloning would avoid the risk of children being born with genetically induced diseases. For instance, a spouse having a genetic disposition toward a serious disease such as Tay-Sachs disease, Spina Bifida, Down's Syndrome etc. would have the option through cloning of correcting disorders and avoiding giving birth to a genetically affected child. Any one of the couple may in fact carry a serious genetic disease potentially affecting future offspring. Their current options are to remain childless, undergo a prenatal or pre-implantation diagnosis and abort or discard defective embryos, obtain a donated embryo, or adopt. Cloning however gives them a unique new option, to have a genetic child of their own, to maintain the family kinship. For instance, if the husband has any kinds of unwanted genes, then it is possible to clone the wife who would give birth to her identical twin, who would have the same genetic makeup as her. If they have a healthy child, they can clone him/her.

Cloning would solve the problem of finding a transplant donor. For example a sick child may need a bone marrow transplant and instead of parents reproducing an embryo with the correct tissue type, doctors could clone his embryo and get an acceptable match reducing considerably if not eliminating the risk of rejection.

Going deeper into the realms of the extraordinary and bizarre, a person on their death bed could feasibly be cloned, in which case loved ones would have an exact replica of the person just lost. Even more strange is the possibility of in effect replicating famous personalities and past geniuses such as Einstein, Max Plank, Mother Teresa! If their genome can be collected, why not explore the possibility of cloning them to produce their identical twin?

Perhaps the suffering of losing children can be preempted: embryonic clones of children could be frozen to produce their genetic twin

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from the frozen sperm should any of them die. In this case, one of the cell nuclei of the child would have to be transplanted into one of the mother's enucleated ova and kept frozen. Freezing an embryonic clone would also be beneficial if as mentioned earlier a bone marrow, kidney or liver transplant is required. The clone in this case would be implanted in a gestational surrogate and developed.

Obviously all these scenarios and possibilities are as yet hypothetical, but nevertheless they cannot be ignored, we have to think seriously about possibilities if we are to have a scientific and progressive mind. As illustrated cloning impacts many areas of disease and medicine and the medical use of the technology goes beyond that of human reproduction.

Islamic Bioethics and Human Cloning

The Islamic bioethical view of cloning must be expressed with necessary caution bearing in mind that human cloning is still as yet a hypothesis and not fact. But even though our ethical analysis of human cloning and judgment as to its moral acceptability from an Islamic point of view, is based on theoretical possibilities only, this does not mean that we should not take it seriously. Muslim scholars are not sitting idle because (a) Pandora's Box has been opened, (b) the repercussions are tremendous and (c) the whole thing could just be a matter of time. In fact scholars are in constant discussion as to the various dimensions of the issue, and there exist variations in their opinions regarding this sensitive issue. There are many verses in the Qur'an which discuss human creation. Allah says:

And He it is who creates [all life] in the first instance, and then brings it forth anew: and most easy is this for Him, since His is the essence of all that is most sublime in the heavens and on earth, and He alone is Almighty, truly Wise. (30:27)

The Qur'an makes it crystal clear that Allah is the Creator of this world and whatever is in it. When discussing the act of creating we must keep in mind two causal principles: (a) creation out of something and (b) creation out of nothing. Man is able to create something from something i.e. a building from bricks and mortar using raw materials existing in this world. Man cannot however create something from nothing. This power belongs to God alone. When debating human cloning therefore let us be clear, Man is not creating life, he is not transcending space, matter and time to produce a second Adam. So, human cloning is not creation of a life out of nothing but a manipulation of elements created by God to imitate a creation. It is not therefore equivalent to God's act of Creation because scientists are not creating something out of nothing. Islam is not against scientific progress whatsoever, its own legacy is testament to this, but in the scheme of things science and scientists must know their place. Lets explore the issue further.

Allah has created mankind from a male and female. He says:

O Mankind! Be conscious of your Sustainer, Who has created you out of one living entity, and out of it created its mate, and out of the two spread abroad a multitude of men and women. And remain conscious of God, in whose name you demand [your rights] from one another, and of these ties of kinship. Verily, God is ever watchful over you! (4:1)

He again states:

It is He who has created you [all] out of one living entity, and out of it brought into being its mate, so that man might incline [with love] towards woman. And so, when he has embraced her, she conceives [what at first is] a light burden, and continues to bear it. Then, when she grows heavy [with child], they both call unto God, their Sustainer, "If Thou indeed grant us a sound [child], we shall most certainly be among the grateful!" (7:189)

Hence, the appropriate way of producing offspring is through the proper union of sperm and ovum of a legally married couple; here the child carries the genes of both father and mother and is ensured a balanced personality. Human cloning in contrast allows for single cell production.

Examining the issue from a different perspective we again reach a similar conclusion. Here the issue becomes one of quality of life and more importantly whether the genetic duplicate has a soul. The

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cloned product will not be the same as Man because human beings are a combination of matter and spirit. "During the first trimester of intrauterine development the soul $(r\bar{u}h)$ is inserted into the body [of the fetus] by God. There is one $r\bar{u}h$ for each being [fetus]." Thus, the cloned product will have all the biological properties of the ordinary human being, but not the soul. In other words, it will be devoid of the spiritual qualities. Hence, "the life of the cloned product will be of little or no quality."⁴

There is an opinion among Muslim scholars that cloning testifies resurrection, meaning that cloning is evidence of the fifth point of the Muslim creed, belief in life after death. In other words theological claims of the dead coming back to life on a supposed Day of Resurrection do not look so irrational after all. Hence, some scholars seek to relate the phenomena of resurrection with human cloning.⁵ Many verses of the Qur'an declare that resurrection is rationally possible. For example, consider the following verse:

O Men! If you are in doubt as to the [truth of] resurrection, [remember that,] verily, We have created [every one of] you out of dust, then out of a drop of sperm, then out of a germ-cell, then out of an embryonic lump complete [in itself] and yet incomplete so that We might make [your origin] clear unto you. And whatever We will [to be born] We cause to rest in the [mothers'] wombs for a term set [by Us], and then We bring you forth as infants and [allow you to live] so that [some of] you might attain to maturity: for among you are such as are caused to die [in childhood], just as many a one of you is reduced in old age to a most abject state, ceasing to know anything of what he once knew so well. And [if, O man, thou art still in doubt as to resurrection, consider this:] thou canst see the earth dry and lifeless – and [suddenly,] when We send down waters upon it, it stirs and swells and puts forth every kind oflovely plant! (22:5)

This is a proof of resurrection, life can be revived once ended. With regards to people who argue that the body of man disintegrates as a result of chemical and microbial actions within the soil and that it cannot be restored to life, the Qur'an states:

But nay – they deem it strange that a warner should have come unto them from their own midst; and so these deniers of the truth are saying, "A strange

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thing is this! Why – [how could we be resurrected] after we have died and become mere dust? Such a return seems far-fetched indeed!" Well do We know how the earth consumes their bodies, for with Us is a record unfailing. (50:2-4)

The Qur'an invites people to contemplate resurrection using their intellect:

Say: "He who brought them into being in the first instance will give them life [once again], seeing that He has full knowledge of every act of creation: He who produces for you fire out of the green tree, so that, lo! you kindle [your fires] therewith." Is, then, He who has created the heavens and the earth not able to create [anew] the like of those [who have died]? Yea, indeed – for He alone is the All-Knowing Creator. (36:79-81)

Ibrahim B. Syed is in favor of cloning stating that employing ijtihad we can infer cloning to be a process which indicates the reality of resurrection. It is a glimpse at any rate of a method that possibly allows us to comprehend *qiyāmah* (resurrection) and prove it scientifically. Moreover, as long as human cloning does not violate the commands of Allah and as long as it stands to benefit humans, Muslims should welcome it. Syed goes on to refute the arguments of scholars opposed to cloning who argue that as science cannot clone a soul, a human being cannot be cloned pointing out that if an identical twin has a soul, then so will a cloned human being. As a clone is grown in the womb of a surrogate mother, she will provide all the nutrients required for the cloned cell to develop into an embryo. The only difference between a normal child and a cloned child would be in the genes. While a normal child has 23 chromosomes from the mother and 23 chromosomes from the father or 23 pairs in every cell of the body except the germ cells or gametes (sperm or ova), the cloned child will have 23 pairs of chromosomes of one parent.6

The majority of Islamic scholars, however, view human cloning as *harām* (prohibited) for the following reasons:

a) It corrupts the basic concept of reproduction as approved by the Shari^cah which is the union of sperm and ovum in a legally valid

marriage. Under human cloning this natural process of marriage and reproduction, of sperm meeting ovum, of the husband-wife sexual relationship is polluted and debased.

- b) It leads to negative effects, mainly disturbance and impurity of lineage, family relations, social structure, and disruption of many Shari^cah principles dependent on lineage. A serious problem arises when trying to classify the "cloned" person, is it a son/ daughter or identical twin of the person from whom the somatic nucleus was derived?
- c) There is no guarantee that cloned humans will be normal, either shortly after birth, or later in life.⁷

Although reproductive cloning is not allowed in Islam, there should be no restriction upon the therapeutic use of cloning. A scientific-jurisprudence seminar in Jordan permitted the use of cloning technology to introduce human genetic material into bacteria, or animals ova, where the aim is the production of medical materials necessary to treat or prevent human diseases.⁸

Human Cloning: Western Secular and Islamic Bioethical Perspectives

Western secular bioethics is highly critical of human cloning mirroring negative public sentiment. But there are also bioethicists who talk in favor of human cloning.

So for instance critics argue that human cloning would create great confusion in the family unit. Even if the cell is taken from the husband and wife what would the cloned child's relation be to them both? The disparity between a child's genetic and social identity is not good for the stability of a family and questions such as these are valid because the legal and social status of the child becomes obscure once cloning technology is introduced. An intrinsic difference between cloning and other reproductive technologies is the existence of genetic "doubles" moved to a new location in the family where the clone's genetic twin would be older. This new kinship of genetic twinning intersects with the chance of 'objectification' or means-to-end control of the child.⁹ Although some critics are worried about the complicated relationships entailed by cloning technology, others are not persuaded by such criticisms. They argue that children born through other assisted reproductive techniques also face peculiar relationships to genetic, gestational and rearing parents, so what is wrong with cloning? They also add that there is no evidence that confusion over family roles has harmed children born through assisted reproductive technologies although the subject has not been carefully studied.¹⁰ This argument is in favor of cloning and refutes the objection that cloning is a threat to good family relationships and family harmony.

Islamic bioethics takes a negative stance regarding this. With reference to the procedures of *masālik al-ʿillah* it can be argued that the right *ʿillah* or way of producing offspring is the use of sperm rather than any other way. The procedure initially identifies an original ruling. Then it follows a series of procedures, i.e., *takhrīj al-ʿillah* (extraction of possible *ʿilal*), *tanqīḥ al-ʿillah* (purification of the *ʿilal*) and lastly *taḥqīq al-ʿillah*, where the application of the old ruling can be applied to the new case by way of applying the appropriate *ʿillah*.¹¹ As sperm is not a prerequisite in human cloning, Islamic ethics cannot allow it.¹² Furthermore, children born through cloning would be "his" or "hers," not "theirs." Finally, human cloning is unable to apply different rules and regulations of the Shariʿah, such as rules of marriage, inheritance, custody, *maḥārim*, forbidden degrees of consanguinity.

Because cloning involves an exact replication of the donor DNA bizarre relations are an inevitable consequence, i.e. the resulting baby might be the later biological twin of the donor DNA, for if the donor is the husband, he cannot be considered the father of the child but the much earlier twin. The wife in contrast would still be regarded as the mother having provided ovum and gestated the baby. Situations such as these would cause upheaval to the very formation of family relations.¹³

It is asserted in Western secular bioethics that human psychology cannot support human cloning. Meaning that every human being is naturally concerned with his origins and past history: who am I and where have I come from? Cloning would disrupt the flow of this narrative and cause severe psychological harm to the person cloned.

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Knowing that he is the identical twin of his ancestor and that his birth was manipulated would lead to a severe inferiority complex on the part of the clone, threatening his/her personality and hampering his/her sense of uniqueness. How would a cloned being define himself? Simply put, human cloning would produce great distress and harm to the later twin.¹⁴

Conversely, some compare cloning to the current state of identical twins, maintaining that just as children who are identical twins face no risk of psychological harm, likewise human cloning should not be criticized for the dangers of violating individual uniqueness. This is all very well but we are talking about two entirely different things, twinning is the product of natural reproduction and not manipulated reproduction, the distinction has huge implications. It could be argued of course that the later twin might experience psychological benefit, that is having been deliberately cloned with particular genes might make the later twin feel especially wanted for the kind of person he/she is. But this is speculation. If experience with human cloning were to confirm serious and unavoidable psychological harm typically occurring to the later twin, it would be serious moral grounds to avoid the practice.¹⁵

There is also the damage limitation argument which suggests limiting the number of people cloned to avoid psychological harm to them. For example, Dan W. Brock emphasizes that cloning by means of embryo splitting, as carried out and reported by Hall and colleagues at Georgetown University in 1993, has limits on the number of genetically identical twins that can be cloned. But, he continues, cloning has no limit to the number of genetically identical individuals who might be cloned. Intuitively, many of the psychological burdens and harms noted above seem more likely and serious for a clone who is only one of many identical later twins from one original source, so that the clone might run into another identical twin around every street corner. This prospect, maintains Brock, could be a good reason to place sharp limits on the number of twins that could be cloned from any one source.¹⁶

Jonas regards cloning as always a crime against the clone. The crime here is the crime of depriving the clone of his or her "existential

right to ignorance" of facts about his or her origin that are likely to be "paralyzing for the spontaneity of becoming himself" or herself. This advance knowledge of what another person has or has not accomplished with the clone's genome destroys the clone's "condition for authentic growth" in seeking to answer the perennial question of, "Who am I?" Jonas continues, "The ethical command here entering the enlarged stage of our powers is: never to violate the right to that ignorance which is a condition of authentic action; or: to respect the right of each human life to find its own way and be a surprise to itself." Jonas's argument here is correct. It is not the right approach to say that a cloning technique that limits the liberty and choices of the resulting child can be justified on the grounds that cloning expands the liberty and choices of would-be-cloners.¹⁷

Kass criticizes somatic cell nuclear transfer (SCNT) on the grounds that a child originated by SCNT will have a "troubled psychic identity" because he or she will be utterly confused about his/her social, genetic and kinship ties. He even mentions the possibility that this child would be like a child of incest and may, if originated as a male from the father, have the same sexual feelings towards the wife as the father. Besides, Kass believes that an older male might in turn have strong sexual feelings toward a young female with his wife's genome.¹⁸

In response to Kass's objection that children born out of cloning would have "a troubled psychic identity," G.E. Pence argues that if this were so, any husband of any married twin might have an equally troubled psychic identity because he might have the same sexual feelings toward the twin as his wife. Besides, those in relationships with twins claim that the individuals are very different.¹⁹

It is also argued that even if we were to be convinced that clones are likely to suffer particular burdens, this would not be a sufficient reason to reject this technology. The child of a poor family also has to face specific hardships and burdens. But we do not resist their birth despite the financial hardships. In fact, no one's life is totally free of hardships and burdens.²⁰

John Robertson believes that adults have a right to procreate in any way they can. Besides, the interests of the children are no matter here because they would not exist at all without cloning. But this argument

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amounts to tautology, argues G.J. Annas. His view is that it applies equally to every existing person, because noone would exist had it not been for the precise and unpredictable time when the father's sperm and the mother's egg met. This biologic fact does not justify that our parents have no obligations to us as their future offspring. If it did, it would be equally acceptable from the child's side to be gestated in a great ape, or even a cow or to be composed of a mixture of ape genes and human genes.²¹

Pence protests against the objection that human cloning harms the psychology of the offspring. He maintains the view that SCNT is associated with bad motives in science fiction, but until we have evidence that it will be used this way, why assume the worst about people? Of course, if somebody intentionally brought a child into the world with the aim of causing harm to him, that would be immoral. But SCNT is not linked to bad motives. "Through the cloning technique, a person is devoid of an open future because when we know how his previous twin lived, we will know how the new child will live. It is true here the fact that the adults are choosing this genotype rather than another one must mean that there are some expectations. But as we know, no person originated by SCNT will be identical to his ancestor because of mitochondrial DNA, because of his different gestation, because of his different parents, because of his different time in history and perhaps because of his different country and culture. So to assume that a SCNT child's future is not open is to assume genetic reductionism. Besides, insofar as parents have specific expectations about children created by SCNT, such expectations are likely to be no better or worse than the normal expectations of parents of children created sexually."22 So, there is nothing wrong in cloning.

Several possible bad outcomes of reproductive human cloning have already been delineated both from Western secular and Islamic bioethics perspectives. But a more important concern is whether this achievement is possible or merely speculation. Human cloning is still a dream and not proven scientifically. Islamic scholars are inclined not to deal with this issue as it is not a proved fact. Islamic law and ethics discourages speculative thinking about hypothetical events. Issues are discussed from the legal and ethical aspects after they have taken place. Detailed discussion of cloning should not take place until it has occurred and we see its implications in practice.²³ Besides, *maşlaḥah* should be general and should not be in conflict with any provision of the Qur'an and Sunnah or ijma^c. But as a hypothesis or just speculation, it does not fulfill this condition.

Some critics claim that somatic cell nucleus transfer dehumanizes people by considering them as objects instead of persons. "Personhood" is an inborn human right, but human cloning treats people as objects rather than people. There are significant differences between a person and an object. An object does not possess any self-esteem, personality, integrity and so on. A person however has all these qualities. A person is a moral agent capable of decision-making but an object is not. So a person is a direct contrast to an object. An object is an expression of the manipulated desires of a person, such as when we make a table according to our choice of type of wood, color and so on. Similarly, human cloning amounts to 'making' rather than 'begetting' children. Legal scholar Margaret Radin compares object and person in this way: "The person is a subject, a moral agent, autonomous and self-governing. An object is a nonperson, not treated as a self-governing moral agent.... [By] "objectification of persons," we mean, roughly, "what Kant would not want us to do.""24

To put it differently, through human cloning, a person's worth or value becomes diminished because in this case, a human being can be manufactured or handmade. This objection is more appropriate in therapeutic cloning than reproductive cloning. Sometimes it is used for organ transplantation, that is, it is planned only to supply a good organ.

However, some critics in Western secular bioethics differ in this respect. Their view is that it is a mistake to think that a human being created by human cloning is of less value or is less worthy of respect than one created by sexual reproduction. The worthiness of a being depends on the nature of a being, and not on how it is reproduced. We value a person on the basis of his nature.²⁵

The approach of Islamic bioethics is quite different on this issue. It labels human cloning as a move away from the natural way of creation. Man was ordained to live in harmony with nature. Human cloning is

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inconsistent with the pattern of creating things in pairs as is mentioned in the Qur'an:

And in everything have We created opposites, so that you might bear in mind [that God alone is One. (51:49)

and that it is He who creates the two kinds – the male and the female – out of a [mere] drop of sperm as it is poured forth. (53:45-46)

Was he not once a [mere] drop of sperm that had been spilt, and thereafter became a germ-cell – whereupon He created and formed [it] in accordance with what [it] was meant to be, and fashioned out of it the two sexes, the male and the female? (75:37-39)

It is argued in Islamic ethics that cloning is a threat to human personality, dignity and honor.²⁶ Islam views the human being as a manifestation of the body through a spirit, that is mind. In endeavoring to create a genetic replica of human beings is not human cloning in fact dehumanizing humanity? It certainly lowers the status of human beings – man is after all not a machine, he has the characteristics of thinking, feeling and cognitive capacity.

This problem is expressed beautifully in the writings of Munawar A. Anees:

By negating inviolability of the human body, cloning is an intrusion into the primum mobile of the genetic ecosystem. Even in the primordial experiment, not much was accomplished without introducing synthetic elements. The vigor of this invasive procedure will only be enhanced by an awesome command of parallel computing power augmented by genetic cartography. There are little barriers to an explosive mix of computers and biology in the service of cloning. Is our body only a bundle of genes, tissues and, organs? What is a person? A body? What is the essence of owning a body? What is that quintessence that gives us an intensely personal experience of bodily pleasures? In this Cartesian duality of body vs. person, how far one can go in denying existential identity vis-a-vis its proximity with the organic composition?²⁷

Human cloning also has the potential for physical harm. 'Do no harm' is an important principle of Western bioethics. Critics are suspicious whether human cloning can satisfy this principle. Dolly's success only resulted after 276 failed attempts, which indicates that the procedure is not easy and not so feasible. The same trial and error with a human being would risk hormonal manipulation of the egg donor, multiple miscarriages and possible severe developmental disorders in the resulting child. The use of a medical drug or device on a human being on the basis of such a preliminary study and without much additional medical research would not be permitted according to the standard practice in biomedical science and clinical care. Furthermore, risks are normally justified in medical treatment when it comes to innovative therapy, on the basis of treating or curing an illness. With human cloning we are not faced with any illness as such so how could a patient's risk be justified? Thus no conscientious physician or Institutional Review Board should approve attempts to use cloning technology to create a child at this moment.²⁸ At the same time it is also true that the actual risks of physical harm to a child born through human cloning cannot be known with certainty unless and until research is conducted on human beings. In fact, if we insisted on absolute guarantees of there being no risk before allowing any new medical intervention to be attempted in humans, this would severely hamper if not halt completely the introduction of new therapeutic interventions including assisted reproductive technologies. Therefore, to stop human cloning on the plea that it is experimentation for the child's benefit is not persuasive.²⁹

Brock also believes that it is too soon to say whether unavoidable risks to the clone would make human cloning unethical. At the minimum level, further research on cloning animals, as well as research to better define the potential risks to humans is essential. Anticipating possible bad outcomes, we should not set aside risks to the clone on the grounds that the clone would not be harmed by them since its only alternative is not to exist at all. It would be a bad argument. Nevertheless, we should not insist on a standard that requires risks to be lower than those we accept in sexual reproduction, or in other forms of assisted reproduction.³⁰

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All-in-all Western secular bioethics is still examining and debating the different ifs and buts of human cloning technology before issuing any conclusive judgment regarding its ethical permissibility. On the other hand, although the permissibility of this technique in Islamic bioethics is disputed, a majority of scholars still express a negative judgment regarding it.

There also exists the ethical question of whether human cloning is incompetent with social values. Critics of somatic cell nuclear transfer cloning ask us to imagine a world in which human cloning via somatic cell nuclear transfer is permitted and widely practiced. What type of people, parents and children would we become in such a world? Creating children through cloning may disrupt the interconnected web of social values, practices and institutions that support the healthy growth of children. This technique might encourage the undesirable attitude that children are to be valued according to how closely they meet parental expectations, rather than loved for their own sake. Opponents claim that a world in which such cloning is widely practiced would give implicit approval to vanity, narcissism and avarice, hence changes that encourage these should be avoided if possible. At a minimum, such undesirable changes should not be fostered by public policies.³¹

In any case, the child thus created would be valued not for its intrinsic value, that is humanness, but for instrumental value, that is expectation of a particular genome's phenotype. Consider the hypothetical example of a distraught couple who have lost their six-yearold child: it could be suggested to them to clone him so that an exact replica of him enters the world. But would the clone ultimately satisfy their desire fully? Naturally, they would never value the cloned child to the same degree or level as the one who had passed away.

Islamic ethics is also against cloning for the greater interest of society. An important legal principle of Islamic jurisprudence is *maş-laḥah* (public interest). Permitting cloning as a form of reproduction between legally married spouses to benefit public interest may seem a plausible line of argument to take but the concept of *maşlaḥah* needs to be analyzed within its hierarchy. In order to be a *maşlaḥah ḍarūrah* (necessity), one's livelihood has to depend on it. Having children

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cannot, however, be declared a *darūrah*, as it would not cause any harm to the couple. In fact, it is a *maṣlaḥah ḥājiyyah* and not a *darūrah*. As human cloning would disrupt family relations and cause confusion in lineage, it may not even be viewed as a *maṣlaḥah ḥājiyyah*, but rather fall under the status of *mafsadah* (causing evil or corruption).³²

It has also been suggested that human cloning would be a threat to the traditional social value system if widely used. Bioethicist Leon Kass notes:

Almost no one sees any compelling reason for human cloning. Almost everyone anticipates its possible misuses and abuses. Many feel oppressed by the sense that there is nothing we can do to prevent it from happening and this makes the prospect seem all the more revolting. Revulsion is surely not an argument....But...in crucial cases repugnance is often the emotional bearer of deep wisdom beyond reason's power fully to articulate it.³³

In opposition to Kass, Pence questions the so-called damage human cloning is predicted to cause, seeing this as widely exaggerated and stemming from irrational fears of the unknown. These predictions are often based on the armchair psychological speculation of amateurs. He further argues that once studies prove SCNT to be as safe as normal sexual reproduction in non-human mammals, the objection will disappear. In fact, he states that the argument that SCNT would harm children is a weak one which needs to be weighed against its many potential uses.³⁴

Human cloning is also seen as inconsistent with social values because it would pave the way for commercial gain, meaning that in a capitalist profit-driven society, laboratories are likely to act competitively offering "consumers" a catalogue of different embryos cloned from people with a variety of IQs, appearances, or other desirable qualities. We cannot ignore this possibility even though human cloning would first have to be successfully realized.

Human cloning may also pave the way for another controversial, some would say frightening, possibility and this is selective breeding. Favoring certain human traits and characteristics above others is an enterprise that is linked to racist ideology and premises of human

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superiority. In fact, it is a path that humanity has treaded before, to genocidal levels. Therefore, it is a path to whose return the science of cloning should never be allowed to give even the slightest support.³⁵

In this context, the views of Islamic bioethics are more or less similar. Human cloning raises tremendous ethical issues and perhaps there has never been so much at stake for humanity. A world where everyone is the same would be a very boring place, for the beauty of humanity lies in diversity, in the differences we see in each other. Human cloning would remove surprise and predict expectancy. It would also pave the way for genetic determinism pushing ever into the margins the idea that a creature is composed of a body and a spirit. Human cloning threatens selective breeding with focus on producing geniuses or offspring with special characteristics leading to confusion over what constitutes kinship being lost, diluted or mixed. Ominously a genetically identical humanity would expose the entire race to great risk from a single pathogen signalling a great viral disaster. Another negative effect would be inbreeding. Cloning would give humanity a big head start to absolute catastrophe because if it is relied upon for reproduction and we lose the ability to clone, everyone will have the same genotype. Besides, to keep reproducing within ourselves would lead us to our own extinction.36

Conclusion

In sum when it comes to human cloning Islamic bioethics is concerned with what type of life is worth living. A major problem with human cloning is that instead of increasing the quality of life, it creates confusion over the family unit and indiscriminate understanding of its makeup, what constitutes motherhood, fatherhood etc. Cloning also calls into question how a cloned individual will relate to the communal connections and interconnections which Islam aspires to establish. Human relationships are the center of complete religiosity in Islamic law. Freedom in Islamic ethics is very much integrated to accountability of how to exercise that freedom, and hence a kind of relational ethics which concentrates both on rights and obligations. Therefore, in taking decisions concerning future generations, we are accountable in recognizing their rights and how they would look at their ancestors as well as their legacy for these children.³⁷ It is not that Western secular bioethics is reluctant over the collective aspect of ethics and only concentrates on the individual aspects, rather it is very eager to balance the autonomy of the parents to be and that of the cloned child. It shows how to reconcile the autonomy of both so that freedom of both the parents and the child is safeguarded and remains in force.³⁸ The only difference between these two approaches is that while in Western secular bioethics this dichotomy exists between two parties, namely parents and children, in Islamic bioethics, this dichotomy exists between God and the human being as a whole.

Western Secular and Islamic Bioethics in Relation to Assisted Reproductive Technology (ART): An Overall Comparison

Having analyzed the principles of bioethics in previous chapters from the Islamic and secular perspectives respectively, this chapter sets out a comparative study of ART from the Western secular and Islamic ethical viewpoints, concentrating on their philosophical variation. The concept of ethical commensurability or incommensurability is important in this regard involving a comparison of both approaches in terms of their conceptions of the real and their modes of enquiry and justification.

Bioethics whether Islamic or Western is essentially about ethics, and as such both perspectives agree on following some ethical guidelines in resolving life and death issues. The fundamental difference between them lies in their epistemological foundation as well as their metaphysical level. Epistemologically who can claim authority for knowing moral content? In answer, Western secular bioethics appeals to the individual as the standard of morality. Islamic bioethics on the other hand, points to the Divine: God. Islamic bioethics is based on the supreme guidance of the Divine and is faith oriented. Western secular bioethics is devoid of this element and does not relate to a supernatural being. Here, moral judgment is relative and has its basis in the moral consensus of ethicists. As a consequence, on the same moral issue, it offers various moral judgments and lacks objective standards of judgment. Sometimes, these judgments are suspicious and disoriented. Islamic bioethics considers the human body not only as a machine but also more critically a combination of matter and spirit. Western secular bioethics in contrast regards man as little more than a machine. The approach of Islamic bioethics is therefore more comprehensive than Western secular bioethics.

A comparison of the two approaches can be illustrated in the following way: beneficence is not only a tool of Western secular bioethics but also of Islamic bioethics. It is even a clear way to social righteousness. This principle has been mentioned in a large number of verses in the Qur'an as well as also in the Hadith. The Qur'an lays great stress on doing good. Allah says:

and that there might grow out of you a community [of people] who invite unto all that is good, and enjoin the doing of what is right and forbid the doing of what is wrong: and it is they, they who shall attain to a happy state! (3:104)

Allah promises in the Qur'an:

And so, he who shall have done an atom's weight of good, shall behold it; and he who shall have done an atom's weight of evil, shall behold it. (99:7-8)

The implication of beneficence in a medical context is very clear in Islamic bioethics. Doctors are encouraged to see the good of the patient irrespective of any circumstance. The Hippocratic Oath also maintains the spirit of beneficence along the same lines. But there is a striking difference between Western secular bioethics and Islamic bioethics in interpreting the term 'good.' The common good is defined by Utilitarianism as "the greatest good for the greatest number of people," but Islamic ethics renounces the common good as good which all human beings have in common, such as food, water, clothing, housing, companionship etc. This point can also be compared with reference to the following sayings of Irving:

The end of society is the good of the community, of the social body. But if the good of the social body is not understood to be a common good of *human persons*, just as the social body itself is a whole of human person, this conception also would lead to other errors of a totalitarian type. The common good

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of the city is neither the mere collection of private goods, nor the proper good of a whole which ... relates the parts to itself alone and sacrifices them to itself. It is the good *human* life of the multitude, of a multitude of persons; it is their communion in good living. It is, therefore, common to both *the whole and the parts* into which it flows back and which, in turn, must benefit from it. ... It presupposes the persons and flows back upon them, and, in this sense, is achieved in them. ... It is a fundamental thesis of Thomism that the person as such is a whole. The concept of part is opposed to that of person. To say, then, that society is a whole composed of persons is to say that society is a whole composed of wholes. ... [If] the person of itself requires "to be part of" society, or "to be a member of society," this in no wise means that it must be in society in the way in which a part is in a whole and treated in society as a part in a whole. On the contrary, the person, as person, requires to be treated as a whole in society.¹

Another important question in bioethics is who decides? Whilst Islamic bioethics respects individual freedom and autonomy there is a difference between how it and Western secular bioethics perceives this, in the sense that the Islamic concept of freedom is relative while the Western secular concept of freedom is absolute. Islam states that the individual's awareness is based on his recognition of the Creator, Allah. Belief in Allah is the prime source for human understanding. Every human being is free and not under anyone's control but is ultimately guided by Allah. Divine principles make people comprehend the fuller implications of their existence in the world and their position in it. A proper and thorough knowledge of the total scheme of the universe makes a person truly understand that although he is free it is not absolute freedom. Human conscience is free from servitude to any one except Allah, the Almighty. There is no supreme authority except that of Allah. Nobody is the granter of life and death except Him. He is the only possessor of power and all are subject to Him without ownership either of themselves or of others. Allah says:

Say: "He is the One God: God the Eternal, the Uncaused Cause of All Being. He begets not, and neither is He begotten; and there is nothing that could be compared with Him." (112:1-4) He commands man to proclaim openly his true position in this way:

Say: "I invoke my Sustainer alone, for I do not ascribe divinity to anyone beside Him." Say: "Verily, it is not in my power to cause you harm or to endow you with consciousness of what is right." Say: "Verily, no one could ever protect me from God, nor could I ever find a place to hide from Him if I should fail to convey [to the world whatever illumination comes to me] from God and His messages." (72:20-23)

Divine principles reveal the fact that man was created out of nothing by Allah and so he is a created being. Tariq Ramadan expresses it beautifully:

God alone decides the path, the direction and the ends, and within the general and global rulings He revealed to them, Muslims have to develop their knowledge and understanding of both sources as also the social reality so that they can implement these teachings in a faithful way. God has decided the way to worship Him, to pray and also what is lawful and what is not: human beings cannot modify this, yet at the same time they cannot merely rely on the general rulings of the Shari^cah to solve their problems in a world which becomes more complex every day.²

So, although man enjoys freedom, it is not absolute.

God's will reigns supreme. Once we appreciate it this we can take a more closer look at the autonomy granted to Man and see that what it really stands for is emancipation from human desires and instincts, to turn in obedience to Allah and His worship alone. Of course Man is also free to disobey, but is warned of the consequences of doing so. So in Islam autonomy is nothing but a basic human right with humanity autonomous within the boundaries of Allah's instructions. After creating him in the best of moulds, Allah allows Man to enjoy all the blessings of this world according to His command: meaning that Man is to live life in obedience to Allah's commands operating self-control and discipline to purify his soul and grow spiritually.

Allah has honored Man not only with freedom of will, and creating him in the best of forms out of nothing and breathing into him of His

spirit, but also with the gift of the mind. Many verses of the Qur'an highlight the significance of the human mind. The Qur'an states:

Verily, in the creation of the heavens and of the earth, and the succession of night and day: and in the ships that speed through the sea with what is useful to man: and in the waters which God sends down from the sky, giving life thereby to the earth after it had been lifeless, and causing all manner of living creatures to multiply thereon: and in the change of the winds, and the clouds that run their appointed courses between sky and earth: [in all this] there are messages indeed for people who use their reason. (2:164)

By pointing to the grand narrative of nature, the magnificence of the world around him, the verse impels Man to think, to reflect and use his mind, to consider and examine everything on earth. It implies no determinism but advises people to exercise their autonomy by determining their hypotheses and gathering data to support their views. Islam encourages freedom of choice in every sphere of human life and dealings. It encompasses all social, economic, political and religious sectors. It encourages Muslim scholars to apply reasoning in solving every personal and social issue. Definitely by scholars is meant here those with a thorough command of the Shari^cah so that they cannot bypass Islamic jurisprudence in the name of free thinking, but abide by the basic rules and principles of the Shari^cah, which is the epitome of Islamic ethics. Scholars cannot follow personal whims to solve any issue. In fact, autonomy of thought is essential for the growth and advancement of our ideas, standards of living and civilization, operating of course within the framework of Revelation. If our conscience cannot operate freely, social progress will be hampered, and human personality will lose its ability to function properly. Islamic ethics states that restriction of freedom of thought ultimately leads to backwardness and ignorance of society as a whole.

Thus, there exists a major difference between Islamic bioethics and Western secular bioethics. For example, Robertson has robustly and vehemently advocated for a comprehensive framework of procreative liberty for every couple. Perhaps Robertson is the strongest proponent of reproductive freedom in the field of Western secular bioethics. He discusses extensively the ethical issues of artificial insemination, IVF, surrogacy, human cloning, abortion, the status of the human embryo and so on. Robertson identifies reproductive liberty as "first and foremost an individual interest."³ By reproductive liberty he indicates the "decision to have or not to have children"⁴ and "an individual or couple's choice to use technology to achieve reproductive goals."⁵ A biological tie to the children produced is immaterial for the exercise of reproductive liberty. He supports different kinds of collaborative arrangements including donor insemination and surrogate motherhood and comments that while this "is not reproduction in the strict sense, it still is part of reproductive freedom because of the importance of parenting to persons who cannot themselves reproduce."⁶

Islamic ethics however, as pointed out in previous chapters, is highly conservative when it comes to issues of surrogate motherhood and artificial insemination donors. It cannot in any way neglect the five purposes of the Shari^cah outlined earlier in judging the validity of these assisted reproductive systems. Robertson tries to convince us of "the centrality of reproduction to personal identity, meaning and dignity"7 and asserts that centrally involved in the dignity of persons is their "wish to replicate themselves."8 The necessary corollary of Robertson's argument is that man is free to procreate in any way he so chooses. It is of no consequence whether the procreating couple is legally married or not, and all parties are free from constraint, whether in selecting the spouse, or in raising the resulting child. In other words, parenthood here is conferred upon those who deliberately separate its constituent parts and look forward to experience only some of them. A spouse or a single man or woman's requirement for dignity and identity as well as need to achieve self-definition through procreation is given high if not serious significance, justifying use of whatever means available to realize this, but his/her obligation to rear the offspring not seen as a requisite. Thus the couple may not feel any responsibility and obligation to the new born child. In contrast, freedom and responsibility go hand in hand in Islamic ethics, according to which absolute freedom does no good to mankind unless it is restricted with responsibility and obligations. Without bounds or limits, freedom of will loses its significance. Islam emphasizes personal

commitments within society. As mentioned earlier, freedom in Islam is a basic human right, which demands that others must have respect towards this right. The right to privacy or wealth should not go against the rights of others in society. This is very natural because man cannot live alone and the unit of society is an individual being. A human being is composed of different dimensions compiled into one individual entity. This personal entity fails to operate accurately if it does not fulfill all the requirements of these dimensions. As social beings, humans cannot overlook the interests of others around them. For the harmonious co-existence of people, Islam provides regulations that organize personal and social relationships. These are social etiquette, traditions, customs, habits etc. Freedom in Islam is designed to ensure a safe and sound society for all.

According to Kant every person has the ability to understand notions of right and wrong and to act accordingly. He believed that all rational beings have the capacity to act in a consistent moral manner and should be allowed to do so. This points to and safeguards the right of every person to make his or her decisions and to have those decisions respected by others. The implication of this concept in medical matters is that the patient himself is the primary decision-maker with respect to his own health and medical care. The corollary of this principle is the concept of 'informed consent.' An individual's decision must be respected because he has the right to decide whether to accept treatment or to refuse to continue with treatment. Islamic ethics holds a different understanding of this autonomy. It depicts the family as the center of all good, and tries its best to build a strong and harmonious family bond. As family is the smallest unit of society, it plays an important role in decision-making, whether in the medical or other sector. Autonomy in this respect is not an entirely personal affair but requires consultation with other members, a vital element. Thus, autonomy can only be spoken of as a collective right rather than a personal choice. A community starts not with the individual but the family unit, which becomes the base of a macro-vision for a harmonious universe. In fact, in Islamic ethics, the center of an individual's life is not the individual himself but the family. A man is a member of the social fabric. For example, when a couple is diagnosed as infertile, they should consult with each other as to the next step, whether ART or not, and this decision should be a joint one, not individually taken. Further, the decision must be compatible with the rules of the Shari^cah, because the individual is part of the larger self rather than the individual smaller self. Autonomy is an essential element in health care, and all patients must have the freedom to exercise decision-making and choice as long as they are competent enough to do so. For example, a child cannot give informed consent to carry out surgery in which case his guardian becomes the decision-maker. Autonomy includes the concept of rights and obligations. This idea of rights includes the right to die, the right to infertility treatment, the right to donate or receive an organ and so on. Organ transplantation from the dead body of one person into the living body of another person is allowed in Islam provided the deceased's permission has been obtained before his death (see resolution of The Islamic Figh Council conference in Jeddah, Saudi Arabia 6-11 February, 1988). But the concept of rights also involves the idea of obligations, because where there are rights, there are obligations. These obligations may be the obligations of the spouse, the parents, relatives, children, and in a broader spectrum, the society and the state. For man "freedom is not a conceptual framework without application. Also, ... freedom is not an end in itself; it is a means by which to fulfill the purpose of his mission in this worldly life. The function of freedom is to help us become better human beings, to reach the pinnacle of our abilities, and complete our ascent to freedom."9 Afzalur Rahman aptly states:

Islam allows neither unrestricted freedom to damage the interest of the community or the individual, nor does it recommend totalitarian regimentation so as to destroy the personality of the individual, which is the central figure and source of strength of its system.¹⁰

Muslim physicians should realize that respect for Western secular ethical theories and principles is one thing but their application quite another. Today as perhaps never before Muslim physicians must consider deeply their intellectual and legal heritage as a source of ethical principles in medicine. Deeper reflection will reveal Islamic ethics to be robust offering coherent guidelines for ethical quandaries in medicine. Although Islamic bioethics does not totally reject the spirit of the four principles of Western secular bioethics nevertheless it cannot develop its principles of bioethics on the basis of them. Whilst analyzing the concept of human autonomy in the light of Islamic and Western secular bioethics, we have seen the gross difference between the two perspectives. Every human being, irrespective of color, gender, religion, country, status and dignity, is equal in his/her responsibility to Allah and therefore in his/her dignity and human rights. While Western secular bioethics gives man absolute freedom, Islamic bioethics renders all subjects to the highest sovereignty of Allah. Islamic bioethics is not as individualistically oriented as Western secular bioethics in its demands for self-actualization. Family and community carry a similar weight to the individual in Islamic ethics. In short, although both of these traditions respect human autonomy, there are differences in their emphases and interpretations. A Muslim will have to follow the five purposes of the Shari ah (*maqāsid al-sharī* ah), that is preservation of Dīn (Religion), Nafs (Life), 'Aql (Mind), Nasl (Progeny), and Māl (Property). He cannot bypass all these purposes to exercise his own freedom. When these five purposes conflict with each other, Islamic bioethics has its own solution. A Muslim can then look into the following principles of Law ($qaw\bar{a}^{c}id al-shar\bar{i}^{c}ah$): Intention, Do no harm, the doctrine of legal presumption of continuance, Hardship, Custom etc. The second principle of Western bioethics, that is beneficence, also has limited use in Islamic bioethics, because what is good in the light of Islam is not always good in Western secular bioethics. A similar observation is evident in the matter of non-maleficence and justice.

Today, controversial medical issues such as artificial insemination, in vitro fertilization, surrogate motherhood, and cloning are part and parcel of daily life. We cannot ignore them even if we want to. More importantly, we have to make decisions regarding them. The Muslim mode of thinking will differ from Western secular principles of bioethics. This study has focused on two types of bioethics, Western secular and Islamic, and compared their conclusions over what is right or wrong and detected where they have already led us. In fact, different ethics lead to different decisions regarding ethical judgments. An immediate comparison of the different conclusions reached by Western secular and Islamic bioethics will make the point sufficiently clear.

For instance Islamic bioethics maintains a strong restrictive attitude toward AID, and condemns it for varying reasons, such as breaking down of family bonds, hampering the psychological stability of the newborn, creating problems in inheritance, etc. Western secular bioethics on the other hand may look upon the matter from another angle and give it validity. Instead of emphasizing the well-being of the child, it may stress personal autonomy. Western secular ethics reasons that a man is free to decide whether he will allow somebody to donate sperm in order to produce his child or whether he will act as a sperm donor himself for somebody else's child. Similarly, consider the problem of surrogacy. To preserve family ties, Islamic bioethics forbids surrogacy arrangements. But Western secular feminists would be surprised at this protesting loudly, "It's my body, I can do whatever I like with it, if I choose to rent it to someone to bear their child, that's my business and my affair, and no one else's concern." So no interference is allowed and any decision taken is considered absolutely that of the individual concerned. Why do these two ethical systems lead to such opposite and contradictory conclusions? The answer is that their conclusions are based on very different ethical premises.

In fact, the essence of Islamic bioethics is holistic harmony in contrast to Western secularism's inclination to dualistic individualism. We have observed that when studying and applying these principles to the ethics of health care in light of the Shari^cah, we are confronted with different dilemmas which cannot be solved easily. A close analysis has shown that though Islamic ethics appreciates the inner spirit of principlism, there still exist different inconsistencies and contradictions associated with implementing them to solve a particular case in the light of Islamic bioethics. It is the ideological epitome of Western secular and Islamic bioethics which makes the difference. Therefore, any attempt at outright adaptation of Western secular bioethics in Islamic bioethics will surely run into chaos. Consider the following analogy: a blood transfusion from a person with a blood group which does not match will face rejection; similarly, values of different ethical systems will never meet each other's needs. Western secular bioethics will not be very successful in meeting the challenges of Islamic bioethics. Consequently, Islamic bioethicists are obliged to construct bioethics in accordance with their own epistemological and metaphysical framework.

As bioethics was born in the West it reflects the moral principles and traditions of the West, meaning that these principles may be alien to the socio-cultural realities of the rest of the world and therefore should not be superimposed upon them. Just because the product is assumed to be Western this does not mean that we are to judge the rightness or wrongness of a medical matter according to the four Western principles (mentioned earlier) or refer to the deontology of Kant, and the utilitarianism of Mill, etc. Would we not be guilty of just cutting and pasting? Muslim physicians are easily able to construct their own bioethical principles, its simply a part of their jurisprudence, and have no need to imitate others. But they must reinforce their perspective and should have an independent outlook to carry out an Islamic bioethics of their own. Developing religiously relevant principles of bioethics has become a major task for Muslims in the new millennium. The words (paraphrased) of the philosopher St. Thomas are particularly germane: a small error in the beginning leads to a multitude of errors at the end.¹¹ In fact, a complete and comprehensive bioethics must have a foundational starting point.

In a multi-cultural society, cross-cultural encounters often lead to distinct and inter-personal tensions. There is very little that we can share. In fact, there is much disagreement within Western secular bioethics itself, due to different interpretations of its principles and theories.

Disagreements appear interminable in contemporary bioethics. If any discussion starts, it drags on without end. Bioethical premises are devoid of the characteristics marking empirical scientific debate, which appear to lead to the cognitive establishment of a particular account of reality. Different accounts of bioethical reality confront each other. Any attempt to invoke the principles of Beauchamp and Childress, for example, will lead one to find that across the disparate moral visions, they reveal points of disagreement rather than points of agreement. In short, bioethical discourse is not one of a community that shares a common paradigm of moral reality but rather one in which "competing secular and religious bioethical understandings of moral reality conflict, one with the other."12 The more frustrating view is reflected by Alasdair MacIntyre. MacIntyre believes that the root cause of irreconcilable moral disagreements in the present world is that we have lost a common vocabulary in which to communicate intelligently with one another. There is no common standard by which such moral disagreements can be comprehended and measured. Even if we use the same terms it is not necessarily that we use them in the same sense, or talk about the same thing. It used to be thought that human beings could, in principle, distance themselves from their personal and cultural backgrounds, traditions and commitments, and agree on the basis of an abstracted, uncommitted rationality to some absolutely certain ethical propositions. However, it is impossible to stand outside one's resolution of differing ethical outlooks. Thus, we are thrown into a kind of relativism which holds that ethical judgments are, minimally, a purely personal ethical stance (commonly called emotivism) or more strongly, are what one is prepared to act on oneself and recommend others to do the same (commonly called prescriptivism). So lacking, therefore, that any common root that prevails is at the mercy of the manager, the therapist, or the bureaucrat.13

Hence, we cannot deny that the world is plural and there are diverse and even contradictory moral views. Although we want to have a universal outlook towards bioethics, we cannot simply disregard the diversity of culture and religion throughout the various places of the world. This is simply fantasy. But why can't we speak the same or nearly the same language?

Moral relativism does not entail that there would be no discussion of conformity because morality itself is a universal and unique concept and we should co-exist in the world for our survival. We should know each other for better living. The following story depicted by Leonardo D. De Castro is noteworthy in this respect:

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When I was having a conversation with some Filipino friends about that dish called curry, somebody who came from the Bicolano religion remarked that Bicolano curry always contains a lot of coconut milk. Someone from another Filipino region immediately contested the claim and replied that you could tell whether a curry came from their region if it was lavished with coconut milk. During a subsequent conversation with Asian friends concerning the same subject, I heard a Malaysian and an Indian claiming that each country's curry contained more milk than that coming from the other's. The argument was not settled. Then one evening, I chanced upon a Sri Lankan program on cable television where curry was the subject of a cooking lesson. Towards the end, the host declared: "the real mark of Sri Lankan curry is that it contains a lot of coconut milk."

Each person in this anecdote appears to be making the same assertion with respect to the distinguishing features of an authentic curry, that it must contain more coconut milk than it usually does in other places. That sameness binds the characters and provides a point of contact that makes communication possible. However, underlying the commonality is a unique perspective provided by each person's own experiences within his or her own culinary culture. We can only appreciate the subtlety that I think pervades the discourse if we are able to achieve a harmonious balance between the attention that needs to be given to the commonalities and the attention that needs to be given to the differences. This is as true in the field of Bioethics as it is in the nobler pursuit of culinary excellence.¹⁴

Actually, diversity or differences in argument is evident in Western secular bioethics and Islamic bioethics. We cannot ignore the fact that diversity is part and parcel of our life. Even in music, a harmony results from sounding different notes in a rhythmic relationship. Western secular bioethics and Islamic bioethics call for humanness as a prime virtue and moral principle beyond and above all theological or philosophical teachings. According to the German philosopher Immanuel Kant, all human beings are born with an inherent respect for the law of morality. He created an epistemological distinction between a priori and a posteriori knowledge. A priori knowledge stands for what is evident to us without reference to prior empirical experience and a posteriori knowledge is what becomes evident only after different kinds of experiences. The concept of a priori knowledge, when applied in ethics, means that we can argue that man is born with some common moral urge irrespective of any social, cultural, religious or philosophical after effect. Universal moral principles in Kant's vision include respect for human dignity, compassion and respect for rules and principles that support respect for human dignity rather than ignoring or even fighting it.

It cannot be denied that the principles of bioethics in relation to Islamic bioethics and Western secular bioethics are different. Still, they cannot claim absolute differences in their interpretation of the ethics of ARTs. These modern technologies force them to re-invent the concept of family, person and other social phenomena. This kind of challenge cannot be met precisely by a standardization of principles and perspectives. To suggest a mechanism for decision-making that can cross comfortably from one culture to another would be a hard job. Nevertheless, the discovery of a universal perspective that does not go against the integrity of both the approaches would not be too complicated a task.

When a married couple unable to conceive seek the help of a physician, would the physician help them? Certainly! This is the common understanding of both Western secular philosophy and Islamic bioethics, that is to help the patient. Both approaches strongly advocate the treatment of infertility. However, when it comes to lesbian and gay couples, the Islamic approach would be against helping them, not because of their homosexuality but because Islam criticizes these practices on a deontological basis. Some Western secular philosophers also prohibit ART for these people although for different reasons, but the conclusion is the same in that they issue a negative judgment regarding this matter.

Islamic and Western secular bioethics fall under a common branch of knowledge, which is 'ethics.' Islamic bioethics has indeed expressed some moral concerns of Western secular bioethics regarding ART. Michael S. Yesley rightly remarks:

Societies may learn from each other, but there is no requirement to emulate each other. Thus, I believe bioethics is universal at the abstract level and ethos-centered at the application level. Also I believe the application level is more important than the abstract level, and so I am comfortable with the notion that different cultures will go in different directions from the same starting place. At the same time, I believe that there is a common starting place. Do we not all believe in fairness and "do no harm "and respect for the individual, though these broad principles may lead different people in different directions?¹⁵

One common portrait of the difference between these two perspectives posits a radical incommensurability on the very nature of philosophical inquiry. Western secular bioethics deals with systematic argumentation and theory but Islamic bioethics is revelational. At the same time it should also be pointed out that even in the case of difference, we are speaking more of a matter of degrees than absolute contrast. Whilst it is true that Western secular bioethics broadly speaking uses rigorous argumentation and explanatory powers as tools to establish its claims, it is not true that it has the sole preserve on this. Islamic bioethics is articulate and also exercises the faculty of reason in ethical decision-making. The clear cut antagonism which exists between these two approaches lies in the sense that while Islamic bioethics follows divine commands to solve any affairs of medicine, Western secular bioethics depends exclusively on human reasoning and arguments. But Muslims themselves need to think and ask themselves how they are understanding or interpreting the Qur'an. Is there anything written in the Qur'an regarding human cloning? The Qur'an only provides some inherent principles of life. Scholars have to exercise their intellectual faculties to reach a consensus to solve the problem of cloning. So, divine revelation can neither replace nor abrogate reasoning. It simply supplements it and keeps it on the rails, akin to a torch in the dark indicating the right way to follow. Further, it acts as a spur to reflective thought and query. Herein also lies the significant point of agreement between the two approaches in solving the vital problem of infertility. Both exercise the superior faculty of the mind or 'intellect' in handling these sensitive issues. The Islamic proviso of the couple being legally married is a matter of small dispute in Western secular philosophy but in Islamic ethics, the ethical objection is strong. So there are commonalities and differences but the two perspectives should not be separated on flimsy grounds. They should

come close to each other to explore the possibilities of both and to understand them better. Much like different cultures and civilizations mutual exclusion, competition and conflict can be overcome through mutual understanding.

Concluding Remarks

Bioethics has developed over the last few decades into a major field of inquiry, with advances in medicine, particularly in the field of reproduction, underscoring the need for a medical ethics to address many of the issues and challenges arising. When it comes to the application of AIH Western secular and Islamic bioethics are largely in agreement, with both possessing a positive attitude towards its use (except in the case of posthumous semen retrieval). They disagree however with regards to the acceptability of AID. In the opinion of Islamic bioethics were it to allow AID, then realistically speaking aside from some temporary satisfaction on the part of parents, the ultimate ramifications on the child, parents and wider society would be negative. This clearly reflects a spirit of deontology and consequentialism. Deontology as a theory of bioethics espouses that the basic rightness or wrongness of an act depends upon its intrinsic nature rather than upon the situation or the consequences. Islamic bioethics prohibits the involvement of donor sperm not only to prevent adultery and preserve lineage but also to maintain the purity of human sexual relations. The reason this is evidence of deontology is because the emphasis here is upon the correctness of an action irrespective of the possible benefits or harm it produces.

Consequentialism places moral emphasis on the consequences or outcomes of an act rather than the act itself. According to this view, any action is considered morally right provided its consequences are beneficial. Here, a crude form of consequentialism demands that Islamic bioethics should allow AID in order to satisfy the fraught desire of an infertile couple to have children. But Islamic bioethics takes a long-term view of consequences and its approach can be summed up as short-term gain, long-term pain. Meaning that rather than looking at the immediate benefits of AID (babies born), Islamic bioethics prefers to take a long-term view of what is good for the couple, with the wellbeing of all involved plus the wider society strongly advocated. Thus the practice is condemned for its potential negative psychological outcomes on children, parents and donors. No matter how much proponents may claim that relations and feelings would continue as normal. Islamic bioethics is routed in the Qur'an, Sunnah and Shari^cah so it also takes account of the stringent and divine laws of inheritance and property. Hence, the teaching of Islamic bioethics is consistent with consequentialism from a wide perspective.

Deontology and consequentialism are usually presented as two opposing ethical theories of bioethics. But Islamic bioethics demonstrates that it is possible to combine the ethos of both by showing that AID is directly a detraction from God's laws. This is because it makes crystal clear that the marital bond is pure and that the psychological risk to children, problems of inheritance, potential chaos to society and other complications, are dangers which far override the ultimate benefit of having a child. Western secular bioethics is also similarly concerned with the weakening of family ties and the psychological risk to children, would-be parents and even donors of sperm etc. So a definitely similarity exists between the two standpoints. Both apply consequentialism as a philosophical tool in determining the rightness or wrongness of an action. The only difference being that while Islam combines deontology and consequentialism, the Western secular bioethical view focuses only on consequentialism. Consequently, the approaches are not totally divergent.

In assessing the ethics of IVF, Islamic bioethics dissociates itself from the utilitarian model of thinking that judges the rightness and wrongness of an act on the basis of a larger benefit. Islamic bioethics refuses to be limited only to consideration of consequences. Instead of being closer to the consequentialist approach, it prefers to focus on the nature of the act, a marked feature of deontological ethics. It aims at fixing the rightness or wrongness of a course of action by reference to a standard involving specific rules or principles. It operates under the conviction that irrespective of consequences, man is obliged to abide by the principles of the Shari^cah and to act accordingly. However, this does not mean that Islamic ethics is adverse to the consequentialist line of thought.

In discussing the issue of human embryonic stem cell research, it seems that both Islamic and Western secular bioethics have an affinity for its benefits, that is both Western secular as well as Islamic ethicists advocate the research for its good to humanity. We find as such a common understanding between the two perspectives in terms of concern for human welfare.

The position that both perspectives take on surrogacy, as revealed through a comparative approach, illustrates the existence of both a commensurable and incommensurable relationship. Islamic bioethics is clear-cut and straightforward in prohibiting surrogacy both on an intrinsic and extrinsic basis. Its ethical stance focuses on 'intrinsic goodness' while excluding women's wombs from being rented out. It highlights 'extrinsic' or 'instrumental goodness' by highlighting mainly the problems of lineage, social chaos and anarchy. Western secular bioethics is relative. It supports surrogacy for some extrinsic goodness and also condemns it for some extrinsic badness, and it also makes the point that although other things are subject to rent, the woman's womb is not. So there are proponents and opponents for surrogacy within Western bioethics whereas the Islamic position is unanimous. Although both approaches are eager to highlight the welfare of the mother, child and society as a whole the perspectives are not always the same.

In human cloning respect for the human body has been brought to the fore as perhaps never before with enormous public concern igniting often heated debate as to ethical ramifications and the importance of ethical consideration and understanding. The need for bioethics has taken a critical leap forward. The Western secular bioethical view is both for and against cloning, a mire of arguments and counter arguments to validate or invalidate this new scientific

development. Much in this regard depends on the analysis and comments of bioethicists who assert a wide variety of ethical precepts based on various standards. Bioethicists have a lot to say on this! Over the last decade tremendous and heated debate has taken place between bioethicists on the ethical and legal permissibility of human cloning. Opponents of human cloning in the Western secular perspective claim that it would attack the traditional concept of the family, but proponents point to the peculiar and complex family relationships which already exist as a result of assisted reproductive technologies, meaning this is not a valid reason to ban cloning. The bioethics movement also debates whether cloning is a dehumanizing act or not. The importance of human identity comes into play. While opponents treat human cloning as a threat to human personality hampering the cloned person's sense of uniqueness, proponents protest against the objection that a cloned human being would have a troubled psychological identity.

Islamic bioethics is not stuck knee deep in the mud of contention and its position is largely clear as compared to the Western camp. Arguments against human cloning reason that as it is an unnatural method of reproduction, contrary to the way of Allah, it is prohibited. We have no right to interfere with Allah's plans. Further, human cloning aims at loss of kinship, poses a threat to individuality and diversity, and is a danger to human psyche, human dignity and honor. It reinforces genetic determinism. The mind-body duality is rejected in human cloning. The only argument for cloning is that it encourages research and investigation and testifies to the fact of resurrection.

Hence, neither of the two approaches gives any conclusive view on cloning. The Islamic view is occasionally in agreement with its Western counterpart i.e. when cloning is regarded as dehumanizing. But they have no affinity with regards to the issue of mind-body dualism, Islamic bioethics voices its opposition while Western secular bioethics is silent. It is in the body where the corporeal and spiritual worlds meet, and the question of necessity arises, how does human cloning impact this? This is an important issue. Is the human being just composed of genes, tissues and organs distinct from the person, or are they integrated? What of consciousness and intelligence? Although Western secular bioethics raises different ethical issues on human cloning, it is not as stated concerned with the question of mind-body dualism.

Compared to Western secular bioethics, the Islamic perspective has immense intrinsic strength because it is capable of abolishing hard ethical problems if only the meaning of what has been revealed to us can be correctly deciphered. In contrast, Western philosophical debate consists of contradiction and/or tension among bioethicists leading to irresolvable circumstances in decision-making.

Finally, considering the relation of Western secular bioethics to Islamic bioethics with regard to assisted reproductive medicine, to view them as simply 'commensurable' or 'incommensurable' is too one-sided an inference. Instead a better approach would be to focus on what aspect is being compared and to specify the relations of the kinds of thought being compared. Philosophies are either commensurable or incommensurable depending on the light in which one prefers to see them. Each way of seeing them involves a loss of a possibility that may be considered precise. To insist on the full incommensurability between them is to lose a great deal, which is not intellectually helpful.

Medical ethics informs medical practice and health care policy and it is vital that the various perspectives of bioethicists who, particularly with regard to developments in modern medicine can legitimize potentially harmful practices, are understood and debated. Essential because it is bioethics that is defining what constitutes human life and it is bioethics that is spearheading and influencing policy on controversial issues such as the right to die. The sanctity and value of life must be maintained at all costs.

The Islamic model provides a viable and clear alternative that goes beyond the dominance of the Western perspective and its secular utilitarian, as well as other bases, to give Revelation and spiritual understanding precedence.

Notes

Chapter 1

- 1. Simmons, 1983, p.157.
- 2. Teoh, 1987, pp.11-13.
- 3. Anonymous, 1999, pp.154-63.
- 4. Teoh, 1987, p.15.
- 5. Teoh, 1987, pp.15-16.
- 6. Kuhse, 1984, pp.22-35.
- 7. Dent et al 2002, pp.8-12.
- The Internet Encyclopedia of Philosophy, 2005 http://www.iep.utm.edu/comparat/.
- 9. The Internet Encyclopedia of Philosophy, 2005.
- 10. Al Fārūqī, 1989, pp.416-9.
- 11. Pellegrino & Thomasma, 1981, p.39.

Chapter 2

- For the nature of ethical reasoning, please see Ladd, 1978, pp.400-7 and for methods of ethical reasoning, please refer to Brody, 1976, pp.5-27.
- 2. Mappes & DeGrazia, 2001, pp.1-55.
- 3. Beauchamp, 1999, pp.1-32.
- 4. Reich, 1978, pp.xv-xxii.
- 5. Gorovitz, 1977, pp.3-15.
- 6. Gorovitz, 1977, pp.3-15.
- 7. Reich, 1978, p.xix.
- Mappes & DeGrazia, 2001, pp.1-55.

- 9. De Vries, 2004, pp.279-92.
- 10. Paton, 1964, p.108.
- 11. Frankena, 1973, p.47.
- 12. For an elaborate discussion on different theoretical dimensions of justice, for example Utilitarian Theories, Egalitarian Theories and Libertarian Theory, please see Edge & Groves, 1999, pp.124-131.
- Mill, 1957, p.10. For the salient characteristics of Utilitarianism see Beauchamp, 1999, pp.1-32.
- W. D. Ross and others criticize it on many grounds. For details, see Pojman, 2000, p.41.
- 15. Mappes & De Grazia, 2001, pp.1-55.
- For a critical discussion, please refer to Mappes & Degrazia, 2001, pp.16-17
- 17. For details, see Mappes & DeGrazia, 2001, pp.1-55.
- 18. Beck, 1959, p.47.
- For criticism, please see Mappes & DeGrazia, 2001, pp.1-55.
- 20. For details, see Rawls, 1971.
- 21. Beauchamp, 1999, pp.1-32.
- 22. For further study, please refer to Rachels, 1999, p.178.
- 23. Beauchamp & Childress 2001, pp.32-38.
- 24. For details, see Gardiner 2003, pp.297-302. For a detailed analysis

of the contemporary version of virtue ethics please see Hursthouse, 1991, pp.223-46 and Mac Intyre, 1984, p.191.

- 25. For details, see Johnson, 2003, pp.810-34.
- 26. Mappes & DeGrazia, 2001, pp.1-55
- 27. Mappes & DeGrazia, 2001, pp.1-55.
- 28. Arras, 1991, pp.29-51.
- 29. Bracci, 2002, pp.115-18.
- 30. For details, see Chambers, 1996, pp.25-33.
- 31. Steinbock et al, 2003, pp.1-41.
- 32. Callahan, 1994, pp.28-31. For a detailed exploration, see Glendon, 1991.
- For details, see Thomasma, 1997, pp.295-306.
- 34. Steinbock et al, 2003, pp.1-41.
- 35. Norris, 2004, pp.10-15.
- 36. Norris, 2004, pp.10-15.
- 37. Norris, 2004, pp.10-15.
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- 39. Hogan & Clague, 1999, pp.315-21.
- 40. Hogan & Clague, 1999, pp.315-21.
- 41. Hogan & Clague, 1999, pp.315-21.
- 42. Al-Attas, 1978, p.14.
- 43. Wilson, 1993, pp.159-65.
- 44. Duffner, 1998.
- 45. Khan, 1982, pp.2-3. For a detailed explanation of the basis of secularism, please consult Khan, 1982, pp.2-41.
- 46. Khan, 1982, p.40.
- 47. Al-Attas, 1978, pp.18-20.
- 48. Callahan, 1990, pp.2-4.
- 49. Engelhardt, 1992, pp.203-12.

- 50. Callahan, 1990, pp.2-4.
- 51. Jonsen, 1998, pp.17, 239-40.
- 52. Smith, 2000.
- 53. Engelhardt, 1992.
- 54. Evans, 2002, p.153.
- 55. Jonsen, 1998, p.20-21.
- 56. Beauchamp, 2004, pp.209-17.
- 57. Jonsen, 1998, p.346.
- 58. Kuczewski, 2003, pp.45-47.

Chapter 3

- 1. Maududi, 2006.
- 2. Schacht, 1971, p.1.
- 3. Syed, 2006.
- 4. Kasule, 2004.
- 5. Kamali, 1989, pp.310-11.
- 6. Kamali, 1989, p.313.
- 7. Kamali, 1989, p.315.
- 8. Kamali, 1989, p.380-85.
- 9. For details see Kamali, 1989, pp.385-89.
- 10. Kamali, 1989, pp.366-67.
- 11. Kamali, 1989, p.338.
- 12. Kamali, 1989, pp.346-48.
- 13. Kamali, 1989, pp.397-402.
- 14. Kasule, 2004.
- 15. Kasule, 2003, pp.95-108.
- 16. Nyazee, 1989, pp.202-11.
- 17. Nyazee, 1989, pp.202-11.
- 18. Yacoub, 2001, p.43.
- 19. Arafa, 2006.
- 20. Yacoub, 2001, p.43.
- 21. Yacoub, 2001, p.43.

Chapter 4

- 1. Sarkar, 2006, p.52.
- 2. Sarkar, 2006, p.49.
- 3. Morris, 1981, p.94.

- 4. Khan, 1999, pp.117-127.
- 5. Sarkar, 2006, p.53.
- 6. Mohamed, 1998, p.92.
- 7. Mohamed, 1998, pp.92-94.

- 1. Munson, 1996, pp.489-551.
- 2. Anonymous (a), 1999, pp.177-99.
- 3. Munson, 1996, pp.489-551.
- 4. Munson, 1996, pp.489-551.
- 5. Munson, 1996, pp.489-551.
- 6. Munson, 1996, pp.489-551.
- 7. Munson, 1996, pp.489-551.
- 8. Teoh, 1987, p.172.
- 9. Munson, 1996, pp.489-551.
- 10. Yacoub, 2001, p.81.
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LIST OF SEMINARS

- Spare Embryos and Human Embryonic Stem-cell Research: An Ethical Approach. Conference: 10th National Conference on Medical Sciences, 21-22 May, 2004, Health Campus, USM.
- Ethical Issues Related to In Vitro Fertilization: Western Philosophical Perspectives. Conference: 10th National Conference on Medical Sciences, 21-22 May, 2004, Health Campus, USM.
- Ethical Issues Related to In Vitro Fertilization: Western Philosophical Perspectives. Conference: 2nd Post Graduate Research Colloquium 2005, Health Campus, USM.
- Spare Embryos and Human Embryonic Stem Cell Research: An Ethical Approach. Conference: Seminar on Philosophy and Ethics of Reproductive Medicine: Western Versus Islamic Perspectives, 10 July, 2005, Health Campus, USM.
- Ethical Issues Related to In Vitro Fertilization: Western Philosophical Perspectives. Conference: Seminar on Philosophy and Ethics of Reproductive Medicine: Western Versus Islamic Perspectives, 10 July, 2005, Health Campus, USM.
- Ethics of Artificial Insemination: Islamic Perspective. Conference: Al-Quran and Contemporary Challenges in the Era of Globalization, 19-20 September, 2005. Islamic University College of Malaysia (KUIM), Kuala Lumpur, Malaysia.

BIOETHICS has developed over the last few decades into a major field of inquiry. With advances in medicine progressively transforming our understanding of what constitutes life, there is need for a medical ethics to address many of the issues and challenges arising, particularly in the fields of genetics and reproduction.

Of central significance are serious moral dilemmas confronting medical experts which require a theological perspective. Yet it is secular bioethics that is defining what constitutes human life and it is secular bioethics that is influencing policy on matters which concern us all and are likely to have grave societal impact. Is it right for a woman to act as surrogate for her sister? Or for a childless couple to resort to artificial insemination by donor? What does Islam have to say?

Ethics of Assisted Reproductive Medicine compares and contrasts Western and Islamic models of bioethics to make the case that the Islamic perspective (taken from the Qur'an and the Sunnah) provides a viable and clear alternative that goes beyond the dominance of the secular and its various philosophical bases, to give Revelation and spiritual understanding precedence. In doing so, keeping to principles, it charts the way out of a confused circle of opinion that is making it very hard to decide "what is best."







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