Human Genetic and Reproductive Technologies:
A Muslim’s Understanding of the Secular Perspective

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Abstract
Physically and intellectually, man is not the same as he was a million years ago. These “improvements” in humans have come from within over a period of time by the process of adaptation, new learning, and out of a need. So, what is the need now for biomedical intervention? The fine line between what can be done technically and what should be done morally is the reason for the role of biomedical ethics in the area of human genetic technologies. What is the relationship between the individual and society? Whose interests and needs are we, the scientists and physicians, to serve? Where does the government fit in between the needs of the individual patient and duties of his or her physician? Are social justice, human dignity, and human rights to be considered in genetic modification? While it may be appropriate and desirable to seek treatment for a disease such as infertility, we have moved beyond treating infertility to the quest of making a super healthy super human. As a result, are we embarking on a path of ethnic cleansing of humans of lesser abilities? In this paper, such concerns and questions are discussed from a secular perspective.

Key words: Human genetics, assisted reproductive technologies, cloning, ethics.

For the past several years, I have written and spoken on medical ethics from a religious (Islamic) perspective.14 However, in this paper, I will be discussing human genetics and reproductive technology from a secular perspective. I have chosen to do so as I strongly feel that there is common ground in medical ethics between the religious and secular camps. My aim is not to promote secularism but for the religious group to understand the secular view. Both groups, in my opinion, support core principles of biomedical ethics, such as autonomy of the patient, beneficence, nonmalfeasance, and distributive justice.

The religious group, whether we like it or not, has taken it upon itself to speak and act on behalf of God. It sees itself as an extension of God’s healing powers. It has a self-appointed role of implementing God’s injunctions for the benefit of mankind.

The secular camp, on the other hand, also works toward the goal of protecting human values and human rights. It sees God as a creation of the human
mind. For this group, this life is the only life. It empowers man to the best of its potential. What is good for man is good for humanity. The ends justify the means.

However, in spite of some commonality, the two groups have very different opinions on the needs of the individual versus the needs of society in the areas of human dignity, human rights, and the role of physicians (scientists). The religious group believes that physicians and scientists are subservient to God, while the secular group believes that they are subservient only to the individual.

Thus, in the pursuit of scientific knowledge and its effects on the future of the human race, we are sailing in uncharted seas and have created areas of concern that are still being debated.

In reviewing the current literature on assisted reproductive technologies (ARTs) and biogenetics, some controversies are obvious. Commenting on the relationship between science and morality, Surbone argues that “the role of genetic knowledge is overestimated and may either enhance the control that individuals have on their lives or finalize the decision process of the individual who may feel predisposed to a serious disease.” On the other hand, Cohen feels that “the opposing camps in bioethics about reproductive human cloning are not wholly opposed to each other. In fact, they hold certain beliefs and values which are common concerns and they have reconciled their world views on several issues in human reproductive cloning.” While discussing the respect for the human embryo, Gomez-Lobo feels that “since they have potential to become adult persons, they are already persons deserving the same rights as adult persons.” Reviewing and commenting on creation and sacrificing embryos for stem cells, Devolder feels that “creation and destruction of embryos is at the same plane, i.e. one cannot accept the creation and sacrifice of embryos for infertility but condemn the same for the benefit of injured people.”

The controversy about the use of discarded embryos for human research revolves around determining when an embryo becomes a moral person. According to Ken Hilma, “this happens when brain activity starts. So, it is postulated, that a human being is a human person by nature and a human embryo is a human person by nature and should be treated as such.”

On the ethics of human stem cell research, Outka from Yale and Heineman have written noteworthy articles. Mahowald argues that “cloning is necessary to preserve bodily integrity or life of an individual.” She suggests that scientists and clinicians may respect the negative right to moral integrity with whom they disagree. On the other hand, Lee suggests that “choice of reproductive means is a human right.” He recommends that “a balanced approach be adopted to benefit human society while protecting human dignity.” He is of the opinion that “a temporary ban on human cloning is appropriate but the ban on relevant scientific research and animal experimentation is inappropriate as it denies the spirit of freedom of scientific inquiry and hinders making the benefits of scientific advancement available to human society as whole.”

Paul Lauritzen writes: “If stem cell research led to therapies that changed the contour of human life, it would unsettle our ethical commitments, including the very notion of a human right, and encourage us to see the entire natural world, the human body along with it as having the status only of material to be manipulated.” He quotes C.S. Lewis “... the final stage is come when man by eugenics, by prenatal conditioning and by education and propaganda based on perfect applied psychology, has obtained full control over himself. Human nature will be the last part of nature to surrender to man.” He goes on to quote Jonathan Glover: “Human responses are the core of humanity which contrasts with inhumanity.” Lauritzen concludes that “morality must be rooted in human needs and values which are rooted in ‘human nature’ and grounded in human aspirations.”

Professional scientific societies have stated their positions on stem cell research. The Endocrine Society is of the opinion that stem cell research holds promise for 128 million Americans suffering from diseases such as diabetes mellitus, Alzheimer’s disease, Parkinson’s disease, spinal cord injury, stroke, muscular dystrophy, Lou Gehrig’s disease, heart diseases, lung diseases, kidney diseases, acquired immune deficiency syndrome (AIDS), liver disease, arthritis, anemia, and leukemia. While the ongoing research on adult stem cell is promising, it does not have the same potential for pluripotency as embryonic stem cells. It is for this reason the society
supports funding for further stem cell research. Its members have witnessed transplantation of human tissues such as kidney, heart, and bone marrow cells and the improved quality of life it has given to many patients. The society supports the collection of stem cells through voluntary donation only, without monetary incentives, and after thorough informed consent. Furthermore, the society agrees with National Academy of Science report, which recommends that biomedical research using nuclear transplantation to produce stem cells be permitted and a ban on reproductive cloning be imposed.\textsuperscript{15}

Another controversial topic between religious and secular forces is the current status of nearly 400,000 surplus or unused frozen embryos in the United States.\textsuperscript{16} On one hand, the Republican administration, which is collectively against abortion, is in favor of promoting embryo adoption, while other groups are in favor of donating them for stem cell research. This has opened a “Pandora’s box” of ethical and legal concerns. The difference between what can be done and what should be done is the reason for ethics.

Thus, we see that much has been written already and published in this area by many organizations, including the Islamic Organization of Medical Sciences (IOMS)\textsuperscript{17} and the American Society for Reproductive Medicine\textsuperscript{18-20}, as well as from the Islamic perspective.\textsuperscript{21}

Below are my responses to the questions the IOMS posed to a panel at the International Seminar on Human Genetic and Reproductive Technologies in Cairo, Egypt, on February 8, 2006.

**Social Impacts of Genetic and Reproductive Technology: The Secular Perspective**

**Question 1:** What in the secular tradition is the vision of good society and the relationship between individuals and society? How does it differ from the Western secular liberal vision of a society composed of rational, self-interested and autonomous individuals, which emphasizes the importance of individual freedom? To what extent, are questions of social justice, who benefits and who loses, relevant in clinical consideration in secular society?

**Answer:** The secular vision of a good society is a society that is based on human rights and human freedom, caring for everyone who lives in that society, irrespective of color, gender, social status, political, or religious affiliation. It emphasizes the importance of individual freedom and choices in the interest of the individual. All programs in this society are geared toward empowering individuals and the community. It sees the practice of religion as a private and personal matter. Religion in a secular society is allowed, but coercion of others on the basis of religion is not. Social justice is distributive justice and ideally, everyone is an equal loser or beneficiary. Ethics is not morality but a sum of values.

**Question 2:** How are the genetic and reproductive technologies affecting the relationship between individuals and society? Is it fair to say that they tend to encourage greater emphasis on individuals’ inherent characteristics and competition and therefore greater inequality and less social solidarity?

**Answer:** It is true that in a secular society there is more emphasis on individuals rather than on the society at large. Because society is directed by secular individuals, the society will tend not to implement policies detrimental to the individual. There is a possibility of some inequality, but that is related to availability of resources more than the intent. On the other hand, in a religious or ethnic society, the majority is more beneficiary of the available benefits, while secularists and minorities are treated as second-class citizens in terms of ethical rights.

**Question 3:** If it is true that selection and design of babies undermines human dignity, does that potentially also undermine human rights?

**Answer:** Yes, it is true to some extent that designing a baby undermines human dignity. However, it is a matter of choice. If individuals have a right to make the choice, they must live with that choice. While it may be appropriate for a certain couple to want all healthy babies with a specific appearance, it may not be appropriate to want all babies to be of the same sex for social reasons. Human rights will be infringed upon if society declares that all children be born with the same genotype.

**Question 4:** Is there a philosophical basis within a secular tradition for concerns about social discrimination on the basis of genes, for example, in insurance and employment?

**Answer:** Social discrimination in employment and health care is prevalent in all societies, secular or not. Women and African Americans receive lower
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Ques
tion 5: To what extent can arguments about the
appropriate use of limited resources be made within the
secular tradition?

Answer: In a true secular society, theoretically, because there is no discrimination based on religion
or social class, the use of resources will be appropriate
and only limited by availability. If a heart or kidney
transplant, for example, is needed, it will be on a
first come, first serve basis, not on the basis of reli-

Question 6: Are genetic and reproductive technologies
leading to a new form of eugenics in which disabled people
and others who have less of the abilities that society values
are gradually eliminated from society? If so, what is the
argument against this?

Answer: This is a very touchy subject. Yes, it is
possible to some degree that there will always be
survival of the fittest. However, because the secular
society, or as a matter of fact, in a true religious soci-
ety, all individuals will have equal rights, it will not
happen. There always will be forces that will advo-
cate for the rights of the disabled. This will include
not only the disabled individual but also the unborn.
Thus, total elimination or discrimination or ethnic
cleansing of the weak and disabled will never happen
no matter how oppressive or how fair the establish-
ment is, secular or religious.

In conclusion, I believe the controversy between
the religious and secular groups will continue, but I
ask both groups to continue to interact and commu-
nicate with the each other. They need each other’s
input and suggestions. I ask that religious scholars
keep up with the changing scientific knowledge and

technologies. They should not accuse scientists of
playing God, as we all try to do the same at times.

We really do not know what the future of stem

cloning research hold for humanity. Thus, it
will be premature to foretell. As Ted Peters, the prin-
cipal investigator of the Center for Theology and the
Natural Sciences research project funded by the
United States National Institutes of Health (NIH) to
study the Human Genome Initiative’s ethical and
theological implications, pointed out:

If a primitive man had said now I have discov-
ered fire that we can use for cooking and

keeping ourselves warm, the holy men would
have objected saying that this fire will burn
our huts and trees, thus it is bad for humani-
ty. Well, such objections did not prevent the
progress of science.22

I end by quoting a friend of mine, Dr. Gary
Wright, anesthesiologist and chair of medical ethics
at the Catholic hospital where I have practiced
endocrinology for the last 30 years:

Given a choice, one may prefer to live in a
religious society where the religion is prac-
ticed in its purest form and the citizens of
nonruling religions and secularists are treat-
ed with equal human rights and human digni-
ty. However, in the absence of such utopian
society at this age, one may accept to live in a
secular society holding on to the above the
values to the maximum.

Dr. Wright wrote to me:

The Late Pope John Paul has taught me much
about human dignity. Commodifying new
biotechnology will be both wonderful as we
discover cures for chronic illness and human
enhancement and at the same time worrisome.
Social hierarchies are the greatest bar-
er to compassion as they intertwine atti-
dudes of superiority and entitlement. Social
hierarchies define access to advantageous
biotechnologies. Genetic biotechnologies will
provide more opportunities for the privi-
leged to ensure that the advantages they buy
will become a permanent part of their bodies
and their heirs. Equitable access and true use-
fulness should be litmus test for new biotech-
nologies. Compassion too easily gives way to
personal profit, unfortunately, a stable part
of human nature.23
On this point both secularists and religious ethicists may agree.

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