

BIOETHICS

Introduction

Recent years have brought many advances in several fields that have created ethical problems that we must face. Medical science has been working in areas that have brought radical changes with regard to treatment of newborns with defects and the prolongation of life through sophisticated equipment that was unknown a few years ago. Improvement in diet and preventive health care have extended life expectancy in many parts of the world, so that new problems have been created. With these developments have come ethical issues which have to do with the beginning of life, problems which people face in the course of life, and especially with the termination of life. We shall look at some of these issues in this chapter.

A list of issues related to bioethics would include: the proper utilization of available resources; whether or not to continue a prolonged and expensive treatment of patients with incurable illnesses; a consideration of the quality of life along with quantity, or number of years, of life; the transplantation of organs of living donors, as well as those of people who have died; the use of organs from animals in human bodies; experimentation on humans; the use of placebos; artificial insemination; test-tube babies; abortion; genetic manipulation; and cloning. The list may be extended to include psychosurgery and other forms of treatment for mental illnesses.

Ethical issues with different focal points would be involved in each of these specific topics. The fundamental question from the ethical perspective has to do with the basis of authority as a point of departure. Basically there are two possible approaches: to proceed upon biblical and theological principles that serve as norms to guide us, or to follow utilitarian guidelines which have their roots in human reason and which focus mainly upon the circumstances and the effects of specific decisions upon the greatest number of people. A consideration of the spiritual dimensions based upon biblical principles is the chief distinctive between the Christian and the exclusively humanistic approaches to bioethical issues. We recognize that the majority of medical personnel adhere to the humanistic rather than the Christian point of view.

Modern technologies frighten us because they impose heavy responsibilities upon us. With the identification of the genes which cause some of the more serious illnesses and deformities, such as Tay-Sachs disease, cystic fibrosis, Down's syndrome, and sickle cell anaemia, we have the potential to identify these maladies in the foetus in the early weeks of pregnancy. In some cases the genes can be corrected. Also the fetus can be aborted. We can also prevent conception in cases where genetic studies of the potential parents show that there is a strong possibility of abnormalities in the newborn. But the question is whether or not we should take these steps, and if so, in which cases?

FILL IN THE BLANKS.

A list of bioethical issues includes: u _____ of a _____ r _____, e _____ t _____ of patients with i _____ i _____, q _____ of l _____, o _____ t _____, e _____ on h _____, use of p _____, a _____ i _____, t _____ t _____ b _____, a _____, g _____ m _____, c _____, and p _____.

(Compare your answers with the text.)

The basic question from an ethical standpoint is that of a _____. One can proceed from b _____ and t _____ principles or follow u _____ guidelines rooted in h _____ r _____.

(authority, biblical, theological, utilitarian, human reason)

The chief distinction between the Christian and the humanistic approaches is a consideration of the s _____ dimensions of life.

(spiritual)

Some diseases for which the genes have been identified are: T -S _____ disease, D _____ syndrome, c _____ f _____, and s _____ c _____ a _____.

(Compare your answers with the text.)

We affirm the principle of the sanctity of life because we believe that each human being is a creation of God and has his image. At the same time we sympathize with procedures which offer the possibility of discerning severe retardation and other illnesses which would make for a great deal of suffering for the person as well as family members. The goal in medical science as well as the Christian faith is to enrich the quality of life for each human being and to alleviate suffering, but the task is not that of determining who lives and who should die. Many humanists would affirm these ideals but for different reasons. They may feel that quality of life can best be preserved by an abortion or by practicing euthanasia, because the consequences of these procedures would relieve much suffering.

Biblical and Theological Bases

Christians will not find Bible verses which give directives to follow in the complicated cases dealing with the beginning and ending of life. Scholars who have dedicated time to study in these areas emphasize the importance of basic biblical and theological foundations which orient us in the specific circumstances of each case. We shall look at the perspectives of three broad religious groups.

The Protestant or Evangelical point of view

Paul Ramsey is a Protestant who has worked in this field and has written from a perspective which emphasizes the need to follow one's illuminated conscience and practise 'agapic' love for our fellow-man. His books reflect that he has struggled with the biblical principles relating to the sanctity of life and the many problems in bioethics. His book *Ethics at the Edges of Life* reflects his sense of reverence for life and his sympathy for persons who have to make decisions related to the beginning, continuation, and termination of life. In his book *The Patient as Person* he focuses upon the need to consider the rights and desires of the patient in each step of treatment. He emphasizes the importance of the 'faithful covenants' between patients and physicians, patients and family members, and physicians and family members.

Another person who has worked intensively in the field of medical ethics is Joseph Fletcher. He emphasizes the importance of the special situation in each case and rejects the rigidity of legalism's imposition of commandments and prohibitions. He advocates the consideration of what love would do in each specific case. This leads him to defend abortion, when the woman desires it, and active voluntary euthanasia. Two of his books, *Humanhood: Essays in Biomedical Ethics* and *The Ethics of Genetic Control*, clearly advocate a liberal point of view toward most of the issues in bioethics. He insists that disinterested love would dictate the termination of treatment of one who is in an irreversible coma and who has signed a living will requesting that no miraculous means be utilized to keep him or her alive. But many physicians will not honor these living wills, because they insist that the Hippocratic oath that they take and the laws of the state impel them to continue treatment. They also fear lawsuits from family members. Advances in treatment and new discoveries daily make the principle of being 'without hope' irrelevant.

Protestants are divided on the issue of abortion. Many

FILL IN THE BLANKS.

The principle of the sanctity of life is based on the belief that God created man in His image.

(sanctity, life, image)

TRUE OR FALSE?

Specific Bible verses can be found to give directives in all cases dealing with the beginning and ending of life.

(False)

Paul Ramsey has emphasized the need to follow conscience and practise 'agapic' love in decisions having to do with the beginning, continuation, and termination of life.

(True)

Joseph Fletcher has emphasized that taking specific situations into consideration is not important.

(False)

FILL IN THE BLANKS.

Fletcher defends a liberal point of view and a liberal point of view on the grounds of disinterested love.

(Compare your answers with the text.)

sympathize with the 1973 Roe vs. Wade decision of the Supreme Court of the United States, which gave women the right to determine what is to be done to their bodies. This legalized abortion. It is estimated that since that decision some 15 million abortions have been performed in the United States. But there is a growing number of people who are opposed to abortion and who are becoming more and more vocal. They argue that the principle of sanctity of life requires that the woman permit the baby to be born, even in cases of rape, incest, and deformed fetuses. Other Protestants would permit abortion in these extreme cases, plus those in which the physicians state that the physical and emotional health of the mother is threatened if the pregnancy is not terminated.

It is impossible to state that Protestants have a definite position on any of the problems related to bioethics. There are people in the Protestant community who have extreme views, both pro and con, on the expensive neonatal care of the premature infant born with serious deformities, as well as those with extreme views on euthanasia.

The Roman Catholic point of view

The religious group that has most resisted many aspects of bioethics is the Roman Catholic Church. Traditionally the principle of *natural law* has been the compass which has guided Roman Catholic theologians in matters related to conception and to termination of treatment of the ill. When the issue of genetics was raised in 1952, Pope Pious XII declared in his *Acta Apostolice Sedis 44*: 'The use of force on only one person is not justified, even if millions of lives can be saved, because it might create immoral consequences, and the moral history of humanity is of greater importance than scientific investigation.' In 1971 *Humana Vitae* treated themes related to bioethics and adhered to the traditional view of the Church. The Roman Catholic Church has repeatedly opposed the interruption of natural biological rhythms as they relate to conception control and abortion. Technological intervention is permissible, however, when the natural process can thereby be facilitated.

Without doubt there is room for the consideration of the natural process of healing, while at the same time technological intervention should be encouraged when the natural process is thereby enhanced. Many physicians are reticent to use medications and other procedures until it is evident that the natural process, involving the body's own capacity to resist infection and heal itself, will not succeed.

In the more recent (1993) encyclical *Veritatis Splendor*, Pope John Paul II emphasizes the importance of preserving the principle of natural law and not yielding to the pressures of relativism, utilitarianism, consequentialism, situationism, or proportionalism in the field of bioethics.¹

The point of view of Judaism

Judaism teaches that humans are the creation of God, and that God gives divine energy as a part of the divine image that each human being possesses. This divine image informs and orients mankind in the process of life. Each person has a divinely established purpose to perform before death comes.

¹Richard P. McBrien, 'Teaching the Truth', *Christian Century* (October 20, 1993), pp. 1004-5.

FILL IN THE BLANKS.

Protestants as a group cannot be said to have a definite position on any problem related to with b _____.

(bioethics)

The Roman Catholic position in relation to conception and euthanasia is based on n _____ l _____. That interpretation leads to the forbidding of interruption of natural biological rhythms to control c _____ and of a _____.

(Compare your answers with the text.)

The Pope has the authority to determine the Roman Catholic position. In *Veritatis Splendor* the importance of Roman Catholics not yielding to the pressures of r _____, u _____, c _____, s _____, or p _____ in bioethics is stressed by Pope John Paul II.

(Compare your answers with the text.)

FINISH READING THIS PARAGRAPH ON THE NEXT PAGE AND DO THE EXERCISE THERE.

They believe that bioethics can be helpful in each person's achieving those goals which are a part of one's destiny.² They accept the procedures which are a part of modern medicine in order to enrich the quality of life. The principle of the sanctity of life is reflected in their opposition to violence, bloodshed, mutilation, and practices related to the corpse and its burial.³ For this reason, many families resist requests by physicians for autopsies and the use of organs for transplants.

A synthesis

Certainly there is some validity in each of the points of view that we have considered. The pre-eminence of 'agapic' love as a guiding principle in each decision has its value and truth. A consideration of the particular circumstances in each situation will soften the cold detachment of legalistic decisions in these areas that are so sensitive. Patience to let the natural healing process take its course of action instead of the attempt to use miraculous and costly procedures can resolve many controversial issues which call into question the use of technology as over against natural law. A reverence for life as a gift from God which is lived out in accordance with His providential plan will also make room for medical intervention to prolong and enhance life.

We have to trust in the special illumination of the Holy Spirit in each case, taking into account the principles of the sanctity and quality of life and all their implications, the wise counsel and treatment of physicians and others in the medical field, and the needs of the patients and their family members in the process of making medical decisions. At times we have to exercise boldness when we deal with decisions regarding the beginning and ending of human life. We need all the scientific information possible, as well as the illumination of the biblical truths and the presence of the Holy Spirit, as we consider the specific circumstances in each case and thereby make the wisest decisions possible. The cases that follow will seek to reflect this process.

Issues Related to When Life Begins

At the moment of fertilization

Many people believe that human life begins when the sperm and the egg are united and the resulting cells begin to multiply as they make their way through the fallopian tube to become implanted in the uterus. However, it is a proven fact that many times the fertilized egg does not implant into the uterus, but is expelled without the woman's being aware of the potential pregnancy. One estimate says that in as many as 25% of conceptions this takes place. Another opinion is that human life begins when the fertilized egg is implanted in the uterus and begins its development there through its dependence upon the mother.

At the time of the viability of the fetus

Another opinion considers the beginning of human life to be when the foetus has the potential of living independently outside the womb. Dramatic moments are lived every day in

²Kenneth Vaux, *Biomedical Ethics* (New York: Harper and Row Publishers, 1974), pp. 11-2.

³Solomon B. Freehof, 'Death and Burial in the Jewish Tradition', *Judaism and Ethics* (New York: KTAV Publishing House, 1970), pp. 201 ff.

FILL IN THE BLANKS.

Judaism teaches that the image of God in each human i_____ and o_____ one in the process of life. The principle of the s_____ of l_____ is reflected by their opposition to v_____, b_____, and m_____.

(informs, orients, sanctity, life, violence, bloodshed, mutilation)

The author believes that a r_____ for l_____ as a gift from G_____ which is lived out in a _____ with His p_____ plan will make room for m_____ i_____ to p_____ and e_____ life.

(Compare your answers with the text.)

AS YOU READ ISSUES RELATED TO WHEN LIFE BEGINS, LIST THE OPINIONS DISCUSSED.

1. _____

2. _____

(Compare your answers with the text.)

hospital neonatal centers. A foetus which weighs less than two pounds can be put into an incubator and treated, with expenditures exceeding a million dollars over a period of weeks. Only a small percentage of these infants leave the hospital alive; and of those who do so, half of them will not be normal.⁴ In the majority of these cases the parents are young and with very limited resources, and so the taxpayers will pay the major percentage of such expenses.

Some other cases in point:

(1) An infant is born with *spina bifida* (a condition in which the major part of the spinal vertebrae are cleft, with the spinal cord and its coverings exposed). Even with surgery and special treatments, the chances that the infant will survive childhood and be normal are minimal. The question is whether or not such an infant should be treated, or simply be cared for with tenderness until death comes, which usually happens in two or three days.

(2) A couple discovers through genetic counseling that there is a strong possibility that their children will have cystic fibrosis, but they want to have children. Should they resort to adoption? Should they conceive and then have *amniocentesis* (an analysis of the amniotic fluid which surrounds the foetus during pregnancy and can show if the fetus is severely deformed) in which case the physicians would recommend an abortion? Or should the mother give birth to a child that they know will be abnormal and accept the challenges that this involves? There may be other options. Perhaps they could consider artificial insemination, if the problem resides in only one of the two potential parents. Many people would be opposed to this procedure, but a growing number find it less objectionable as it becomes more widespread.

(3) An unmarried young woman leaves the shopping center and heads for her apartment in her automobile. As she unlocks the door to her apartment, she is attacked, beaten, and raped. Three weeks later she discovers that she is pregnant. What should she do? To have a baby under these circumstances will involve radical changes in her future plans. Although she has been taught that abortion is wrong, she feels that in this case it is the best solution to her problem. Can we condemn her?

These and other similar cases happen every day in hospitals throughout the world. At times the scarcity of financial resources will be determinative. Many hospitals may lack the equipment and staff to be involved in the complicated and expensive procedures that are possible in other areas. There is a growing conviction that we must be wise in the use of those resources which are available.

When the infant is born and breathes

A third point of view would establish the beginning of life as that time when the infant is born and begins to breathe on its own accord. These people identify the breathing of the breath of life, as mentioned in Genesis 2:7, with the beginning of human life. Some see this as the infusion of the soul into the body. For this reason, these people would see nothing wrong with abortion up until the time of birth, since they do not consider the foetus a human being.

⁴David Van Biema, 'Out in the Cold', *Time* (October 4, 1993), p. 36.

FILL IN THE BLANKS.

Some concerns associated with the viability of the foetus as a determinant of the beginning of life are: very p _____ i _____ weighing less than two pounds, infants born with a birth defect such as s _____ b _____ who may be expected to live a very short time, couples who have a strong possibility of conceiving children with genetic abnormalities which produce diseases such as c _____ f _____, and women who have become pregnant through r _____.

(Compare your answers with the text.)

CONTINUE LISTING OPINIONS AS TO WHEN LIFE BEGINS.

3. _____

(Compare your answer with the text.)

The uncertainty as to the time of the beginning of life naturally creates potential controversy about the issue of abortion. Those who believe that human life begins at the time of conception would consider abortion a sin. Others who insist that human life begins at birth would not consider it sinful to terminate a pregnancy through abortion.

The Debate About the Quality of Life

There are several issues which affect the quality of life of people today. The majority of these issues have to do with the treatment of the patient by his or her physicians.

Informed consent

Informed consent involves the patient's right to know what his or her condition is, the nature of the recommended treatment, and its potential effects on the patient. Problems have arisen in the past because many times the patient was not fully informed concerning the nature of the illness or the treatment. Several years ago in a prison in Tuskegee, Alabama there were patients with tertiary syphilis who were intentionally not treated in order to study the progress of the illness and its effects upon its victims. Severe criticism has been leveled at the physicians and prison officials for this decision.⁵

Informed consent involves three major areas: (1) whether or not the patient has the understanding and the capacity to make a decision regarding his or her illness and treatment; (2) whether or not the person has the mental and emotional capacity to make the decision regarding specific treatment procedures recommended; and (3) whether or not the patient can make the decision without pressure from others. For instance, the decision to submit to surgery should be made only after having received a clear explanation from the physician or surgeon as to the reasons for the need for the surgery and the probabilities of surviving the surgery and returning to normalcy again afterward. If the patient is elderly, family members should be included in the explanation, in order to avoid possible misunderstandings in the future.

Revealing the truth to the patient

In the past, hospital employees did not have permission to tell the patients what their temperature or blood pressure was. But agitation in the areas of human rights and rights to privacy have changed these conditions.

At times in the past physicians insisted that, if the patient knew the seriousness of his or her condition, this would have a negative effect upon the healing process. In cases where there was no hope for the survival of the patient, it was feared that to know this truth would cause the patient to give up and thereby hasten death. But in recent times there is more inclination on the part of patients and family members to expect and receive the truth from the physician regarding one's physical condition.

When should the physician tell the patient that there is no hope? The majority of the doctors would say, 'Never. With daily advances in the treatment of illnesses, we should never give up hope.' Each patient is different and responds differ-

⁵Henry Beecher, 'Ethics and Clinical Research', *New England Journal of Medicine*, Vol. 274 (1966), pp. 1354-60).

AS YOU READ THE DEBATE ABOUT THE QUALITY OF LIFE, LIST SOME OF THE ISSUES INVOLVED.

1. _____

(Compare your answer with the text.)

LIST THE AREAS OF CONCERN INVOLVED IN THE QUESTION OF INFORMED CONSENT.

1. _____

2. _____

3. _____

(Compare your answers with the text.)

CONTINUE LISTING ISSUES RELATED TO THE DEBATE ABOUT THE QUALITY OF LIFE.

2. _____

(Compare your answer with the text.)

ently to treatment, depending upon one's physical constitution as well as one's mental, emotional and spiritual condition. One's degree of motivation to live is always a factor in the length of time of survival. Studies show that when a patient loses the will to live, death usually ensues within a short time.

The use of humans in experimental procedures

When the news concerning the use by Nazi war criminals of prisoners in concentration camps for experimentation to discover the effects of certain drugs and procedures upon human beings was released during the Nuremberg trials, there was a general outcry of opposition and repudiation of such procedures throughout the world. In addition to the repugnance for such procedures, there was general repudiation of the fact that the truth had been concealed.

A few years ago the writer was a chaplain in a hospital where a woman patient of some 25 years of age was being treated for cancer. She had already been treated for two years, but the treatment was unsuccessful in arresting the spread of the cancer. The doctors had explained to her that there was no further hope for her cure, but that they had medications which were experimental and which might prove to be helpful for the survival of future patients. They needed to study the effects of the medication and thereby perfect the procedures for its use in the future. The patient consented to receiving the medication, and talked about her satisfaction in knowing that this treatment might prove beneficial to others. She died within a few weeks.

The difference between the two previous illustrations resides in the fact that the subjects were not informed nor had consented in the first case; but the patient was informed and had consented to the experimental treatment in the second. Controversies have arisen through the years regarding the use of persons (whether soldiers, prisoners, or private citizens) who are recruited and given information regarding the nature of an experimental procedure and the potential benefit that will be derived from it for humanity. Some say that the use of human beings for experimental purposes is immoral. Some are even opposed to the use of animals for such purposes.

This opposition has caused norms to be established for such experimentation: (1) There should be strong moral and medical reasons that justify such procedures. Here the ethical question of whether or not the end justifies the means enters into play. (2) There must be a reasonable assurance that the experiments will give the results which are sought in the procedure. This requires that, before human beings are involved in the experiment, sufficient evidence from the use of animals indicates a positive result in its use in humans. (3) The use of humans in the experiment is the last resort and requires this step to reach the desired goals. (4) The experiment must be justified from a proportional perspective; that is, the possible results of the study are so significant that they justify the risks involved. (5) The subject must give voluntary permission for the experiment, after having been informed concerning the nature of the experiment and the possible after effects, both temporary and permanent. (6) The results of the experiment are distributed in such way that all may benefit from such experimentation.⁶

⁶James F. Childress, *Priorities in Biomedical Ethics* (Philadelphia: Westminster Press, 1981), pp. 55-7.

CONTINUE LISTING ISSUES RELATED TO THE DEBATE ABOUT THE QUALITY OF LIFE.

3. _____

(Compare your answer with the text.)

FILL IN THE BLANKS.

The use of humans as experimental subjects is not only an issue in itself, it also involves the issues of i _____ c _____ and of r _____ the t _____ to the persons involved.

(informed consent, revealing, truth)

LIST THE NORMS APPLIED IN EXPERIMENTAL PROGRAMMES INVOLVING HUMAN SUBJECTS.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

(Compare your answers with the text.)

The previous criteria have more to do with those in charge of programs of experimentation. There is also concern for the people who volunteer for such programs, which has resulted in the establishment of the following guidelines directed mainly to the subjects: (1) A thorough and clear explanation of the procedures involved in the experiment. (2) An explanation of the degree of pain and risk involved in the experiment. (3) A description of the potential benefits that can be derived from the experiment. (4) A report on the possible alternatives which might benefit the subject from the experiment. (5) An offer to answer any question that arises in the process of the experiment. (6) An explanation that the person is free to cancel his or her participation in the experiment at any time in the process.⁷ Another issue is the possible compensation which the subject is to receive for his or her participation in the experiment.

The utilization of limited resources

Every country suffers from the effects of innumerable medical needs and limited resources among its people. In 1963 the people of Seattle, Washington were faced with the problem that more people needed renal dialysis than there were machines available to treat them. The Seattle Committee was formed to decide who should receive treatment, and consequently, who should be condemned to die because they would not have access to the machines. The committee was composed of a member of the medical staff, various lay people from the community, and a minister from one of the congregations. They met and, after considerable deliberations, established the following criteria for deciding who should have dialysis: (1) The relative age and health of the patients. (2) Their relative contributions to society. (3) Their obligations to children and others. (4) Their potential contributions to society. When they began to talk about specific patients, they found a variety of differences: a prisoner condemned to lifetime incarceration, a scientist working on a potential cure for leukaemia, a mother with minor children, young people with high hopes for the future, and senior citizens in nursing homes. Who dared decide which of these should receive dialysis? What criteria could justify letting some die while others are given treatment? Publicity regarding the committee was widespread, and the end result was that legislation was passed and funds were made available to give treatment to all who needed it. Since then provision has been made for anyone needing dialysis. In 1990 the cost to the government was 7.3 million dollars for 200,000 patients and it is anticipated that 300,000 will need the treatment within a short time.⁸

This practice raises several questions. No one can be opposed to a medical treatment which can save lives, but we question how we can justify providing treatment for some and not for others. What about the thousands who die annually of AIDS, when the problem, in part, is the lack of financial resources to do the research needed to discover treatments and preventive measures? There are many other diseases among children and adults which require similar funding.

No nation has all the funds that are needed for research and for the equipment and medication needed to provide adequate

LIST THE CRITERIA HAVING TO DO WITH VOLUNTEERS IN AN EXPERIMENTAL PROGRAMME.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

(Compare your answers with the text.)

CONTINUE LISTING ISSUES RELATED TO THE DEBATE ABOUT THE QUALITY OF LIFE.

4. _____

(Compare your answer with the text.)

LIST THE CRITERIA PROPOSED IN THE CASE OF THE USE OF DIALYSIS MACHINES IN SEATTLE.

1. _____
2. _____
3. _____
4. _____

(Compare your answer with the text.)

TRUE OR FALSE?

1. The above criteria have become the norms used throughout the country. _____
2. Only a few patients received dialysis in this case. _____

(1. False, 2. False)

FINISH READING THIS TOPIC ON THE NEXT PAGE AND THEN FILL IN THE BLANKS.

The question arising from lack of financial resources is not whether to give medical treatment to save _____, but how we justify providing treatment for _____ and not for _____. Also, funding is needed for _____ to discover _____ and preventative _____ for many diseases. This is the reason that it is necessary to develop means for deciding _____ will receive treatment and under what _____

(Compare your answers with the text.)

⁷Childress, *Priorities in Biomedical Ethics*, p. 59.

⁸CNN news release (November 4, 1993).

medical attention to all its citizens. For this reason it is necessary to develop a means for deciding who is to receive medical attention and under what conditions.

Organ Transplantation

Clinical cases

In 1967 Dr. Christian Barnard of Capetown, South Africa announced to the world that he had transplanted a heart to a patient who lived a few days following the surgery. This event was important news and elicited various reactions from many different people and groups. Some were opposed to the procedure, and quoted Bible verses, including Matthew 15:18, 19, 'But those things which proceed out of the mouth come forth from out of the heart; and they defile the man. For out of the heart proceed evil thoughts, murders, adulteries, fornications, thefts, false witness, blasphemies'. A majority of people recognize that the Bible refers to the heart in a figurative manner as the location of one's spiritual and moral nature and reason. They question that the exchange of the heart of an atheist for that of a devout Christian, or vice versa, would result in a change of that person's nature.

In the following weeks other transplants were performed with a longer period of survival for the recipients. Now mechanical hearts are being developed and gradual improvements make the patient more comfortable and mobile.

In 1985 doctors in a hospital in Loma Linda, California transplanted the heart of a baboon into the chest of an infant, given the pseudonym of 'Baby Fae', who lived for a few days after the transplant. Again outcries of opposition, as well as congratulatory messages from many different sources, were heard. Previous experimentation had involved the transplantation of hearts and kidneys from swine with a degree of success.⁹ The fact that 'Baby Fae' was alive fifteen days after the transplant was historic news. Dr. Roy Walters, director of the center for bioethical research at the University of Georgetown, spoke favorably of the procedure. However, for some time previously, groups such as the Society for the Protection of Cruelty to Animals opposed the sacrifice of animals for such purposes.¹⁰

Since those early days much progress has been made in the transplantation of organs, and now it is common to transplant hearts, livers, kidneys, corneas, and skin tissue. Also, new medications have been developed to reduce the level of rejection of these organs. Today few question the morality of such procedures, because most people consider both the principle of 'the quality of life' and humanitarianism toward those who have the possibility of living longer as valid standards. The few questions that come have more to do with the circumstances under which organs are donated. One of the principal problems today is that of educating the public of the need for organ donors, and encouraging people to sign living wills which would permit the use of their organs upon death and thereby extend the life of someone else.

⁹Joseph Fletcher, *Humanhood: Essays in Biomedical Ethics* (Buffalo, New York: Prometheus Press, 1979), p. 75.

¹⁰*Newsweek* (November 12, 1984), pp. 40-3.

FILL IN THE BLANKS.

The first heart transplant to a patient who survived for several days took place in _____.

(1967)

Some people were opposed to heart transplantation on the grounds of scripture found in _____. However, it is generally understood that this scripture refers to the heart as the site of one's _____ and _____ nature, and not to the physical heart.

(Matthew 15:18, 19, spiritual, moral)

It is now becoming more common to use a _____ to replace the diseased organ.

(mechanical heart)

There have been instances when the hearts of animals such as a _____ or _____ have been used as transplants.

(baboon, swine)

It has become common to transplants such organs as the h_____, l_____, k_____, c_____, or s_____
t_____.

(Compare your answers with the text.)

Ethical principles

The following ethical issues are involved in organ transplantation:

- (1) The validity of prolonging the life of those who can not survive without an organ transplant. We consider that it is correct to use organs donated from those who die in order to offer a higher quality of life to those who can live.
- (2) The validity of the highest quality of life possible for each person. If by receiving a transplant one who would otherwise die soon or be an invalid can become productive and experience an enriched life, then we should cooperate to make this possible.
- (3) The validity of the principle of enhancing the life of the one who can potentially benefit from the transplant as over against the death of two people.
- (4) The validity of good stewardship of our bodies, even after death. If we believe that one should make provisions so that his material goods can be used wisely after his or her death, then this same principle applies also to the body.

Attitudes of religious groups

Some religious groups oppose organ transplantation. Judaism has rules, based upon rules regarding mutilation, prohibiting or making difficult the practice of autopsies and/or the transplantation of organs and tissues from a cadaver. One law in the Talmud requires that a corpse be buried the same day of the death. Neither the religious leader nor family members may be within four meters of the corpse. However, rabbis have permitted organ transplants when it has been possible to save lives, but they oppose organ banks.¹¹

Thomas Aquinas promulgated the concept that the totality of a person or thing is worth more than the separate parts, and this reasoning has been used to justify the transplantation of organs.¹² But in 1956 Pope Pious XII refused to permit the transplantation of organs from one living person to another, and prohibited the mutilation of one's body except to save the life of another. Pressure in recent years has obligated the leaders of the Roman Catholic Church to be more reserved in their declarations in this area.

Experts in the field of theological ethics will talk about the deontological and circumstantial aspects of such practices. Those who favor the prolongation and enrichment of life here will talk about humanitarian and philanthropical attitudes toward others, and will quote Bible verses to reinforce their positions. Others may oppose such practices as an attempt to thwart God's sovereignty and will. Others consider it immoral to sacrifice animals for purposes of scientific investigations. But most of us would have a hierarchical system of values which places human life above that of animals.¹³

The principle of utilitarianism seeks the greatest good for the highest number of people. This principle is valid in the question of organ transplants. The use of an organ from a cadaver can give life to a mother who has several children, and thereby enhance the lives of several.

¹¹Fletcher, *Humanhood*, p. 69.

¹²Ibid., p. 70.

¹³Norman L. Geisler, *Ethics, Alternatives and Issues* (Grand Rapids: Zondervan Press, 1971), pp. 114-21.

LIST THE ETHICAL ISSUES INVOLVED IN ORGAN TRANSPLANTATION.

1. _____
2. _____
3. _____
4. _____

(Compare your answers with the text.)

FILL IN THE BLANKS.

Organ transplantation is difficult from the standpoint of Judaism due to rules regarding _____ and _____.

(Compare your answers with the text.)

Roman Catholic opposition to organ transplantation in the past was based on the concept that the t _____ of a p _____ is worth more than the s _____ p _____, a teaching of T _____ A _____.

(totality, person, separate parts, Thomas Aquinas)

TRUE OR FALSE?

1. A hierarchical system of values is based on God's sovereignty and will. _____
2. Theological ethicists discuss the deontological and circumstantial aspects of a problem. _____
3. The humanitarian and philosophical aspects interest those who consider sacrificing animals in scientific investigations to be immoral. _____
4. Utilitarianism seeks the prolongation and enrichment of life here regardless of the greatest good for the highest number of people. _____

(1. False; 2. True; 3. False; 4. False)

The author's opinion is that we can certainly be in favour of measures which medical science has developed which can extend and enrich the quality of life for mankind. It is commendable for a family member, or another who has a good match of tissues, to donate a kidney to one who would die without a transplant. We should also sign the documents necessary to permit the use of any usable organs in case we should die suddenly or be killed. In this way we can help to enrich the lives of others, even after our own life here has ended. There is nothing in the Bible to prohibit such acts of altruism.

Euthanasia

Definitions

Few topics are as controversial as that of euthanasia. The word signifies 'good death' and comes from the greek words *eu* (which means *good*) and *thanatos* (which means *death*), and refers to something which is desirable and pleasurable. While it is certain that all of us desire a 'good death', surely we differ in our explanation of what that would be. The critical question in the field of ethics is whether or not we are permitted to accelerate death and thereby shorten and reduce the amount of suffering which one might endure before death.

Dramatic cases have brought the issue to the world's attention. In 1976 Karen Quinlan was at a party and some friends gave her a drug without her realizing what was happening. Within a short time she was unconscious, and was placed on a respirator in the hospital. A series of encephalograms showed that there was no brain activity. After a time the parents requested that she be removed from the machines. But the physicians refused, stating that the law required them to continue treatment. A long legal battle ensued and, after years, permission was given to disconnect her from the respirator. She continued to breathe on her own accord for several months. She was placed in a clinic where she was fed artificially and kept comfortable. Finally, in 1989, she died.

At the time of this writing, Dr. Jack Kevorkian is in custody accused of having assisted three patients to commit suicide, which is prohibited in Michigan where he is a resident. He admits to having helped a total of 18 people to commit suicide, and has developed a special machine which facilitates that action. In most or all these cases the patients have been persons who are terminally ill, have suffered a great deal, and want to shorten the pain for themselves and their family members.

Euthanasia has been studied extensively and divided into several classifications. The simplest classification is that of active and passive euthanasia. Active euthanasia involves taking measures to hasten death. Passive euthanasia takes no action to prolong life, but simply waits for death to take place.

Another facet of the matter has to do with the permission of the patient. Voluntary euthanasia is when the patient is active in making the decision to take his or her life. Involuntary euthanasia is when this decision is made by others, either because the patient is too young to be consulted, incompetent mentally, or unconscious. These conditions have led ethicists to talk about five different categories of euthanasia:

FILL IN THE BLANKS.

In the opinion of the author, we can favour measures which e and e the q of l for mankind. He thinks there is nothing in the Bible to prevent this a.

(Compare your answers with the text.)

The critical ethical question in the controversy about euthanasia is whether or not we can a d in order to shorten and reduce s.

(accelerate death, suffering)

A e involves taking measures to hasten d. P e does not take action to p l, but simply waits for death to occur.

(Compare your answers with the text.)

The p of the patient is another facet involved in the question of euthanasia. If the patient is a in taking his own life, the death is called v e. If the patient is not involved in the decision, it is i euthanasia.

(permission, active, voluntary euthanasia, involuntary)

- (1) Active, voluntary, and direct euthanasia in which the patient acts directly through some means to end his or her life. Perhaps it is done by an overdose or some other means available to the patient.
- (2) Passive, voluntary, and direct euthanasia in the case of a person expressing the desire that, if unconsciousness should occur due to an accident or some illness, resulting in a lack of cognitive ability, then nothing should be done to resuscitate him or her and he or she should be permitted to die as soon as possible.
- (3) Passive, voluntary, and indirect euthanasia is very similar to the previous case, but other persons make the decision to discontinue treatment because of the previously expressed desire of the patient. The 'living will' is a document that one can sign while healthy which gives others this authority. In some states and countries the 'living will' is not yet recognized as legal.
- (4) Passive, involuntary, and direct euthanasia in which some other person makes the decision to hasten death of the suffering loved one because they can no longer tolerate to see them suffering. An example is the elderly man who shot his wife because she was terminally ill and said that he did it out of love for her.
- (5) Passive, involuntary, and indirect euthanasia in which the patient is kept comfortable and in as little pain as possible, but no efforts are made to heal or to prolong life. There is a 'no code' on this patient in the hospital, and medical staff will do nothing to resuscitate if breathing stops.

Biblical and theological perspective

The commandment 'Thou shalt not kill' (Ex. 20:13) is fundamental as we look at euthanasia. The Old Testament was severe in punishment of persons who had murdered another, except in cases of accidental death (Num. 35:9-15). For this reason most people still insist that euthanasia is a violation of the sanctity of life principle. They insist that only God has the right to terminate life or hasten death, because only God knows when one's purpose in life is completed. This idea is expressed by Dietrich Bonhoeffer in his book *Ethics*.¹⁴

This is the point of view of the Roman Catholic Church. In 1980 Pope John Paul II declared that euthanasia was wrong but that the patient had the right to discontinue treatment when it was extremely painful and when positive results were not forthcoming.¹⁵ *Veritatis de Splendor*, the most recent encyclical of the Roman Catholic Church, adheres to this traditional opposition to euthanasia.

Some argue against euthanasia on the grounds that the New Testament teaches that there is potential purpose in suffering, and that the Christian is encouraged to endure suffering as a good soldier of Jesus Christ (James 1:2-4; 1 Peter 1:7). Surely the Christian is encouraged to do so, but the writers were not referring to prolonged suffering brought on by extended treatment in sophisticated medical centers with equipment to prolong life even though there is little possibility of recuperation.

¹⁴As cited by John F. Dedek, *Contemporary Medical Ethics* (New York: Sheed and Ward, Inc., 1975), pp. 24, 27.

¹⁵Margaret A. Stienfels, 'Vatican Reaffirms Traditional Teaching on the Care of the Dying', *The Hastings Center Report* (August, 1980), p. 2.

LIST THE FIVE CATEGORIES OF EUTHANASIA AS DISCUSSED BY ETHICISTS.

1. _____
2. _____
3. _____
4. _____
5. _____

(Compare your answers with the text.)

FILL IN THE BLANKS.

Most people insist that e_____ is a violation of the principle of the s_____ of l_____.

(euthanasia, sanctity, life)

Veritatis Splendor adheres to the principle that euthanasia is _____ but that the patient can have treatment ended when extremely _____ or without _____.

(wrong, painful, positive results)

One basis given by some for opposing euthanasia is that the New Testament teaches that there is potential _____ in _____.

(purpose, suffering)

Christians also value mercy, and some would argue that to hasten death to people who have endured prolonged suffering is an act of mercy. One physician reported that his patient pleaded with a loved one, 'If you don't let me die, I will not let you live.'

We conclude that to let the patient who is terminally ill die is not murder. To keep someone alive simply because there is the equipment to do so and the person has the finances to pay the bill does not justify such action. But we could not condone or permit any action on the part of the physician or family member that would bring death more quickly. One must let life be lived and death take its normal course according to God's divine plan.

Criteria for considering ending treatment

With the scientific advances now available, physicians are able to keep one alive for a long period of time, whereas previously such a person would have died quickly. The question is whether or not the physicians should perform what they have the capacity and equipment to do. Because of so much controversy in this area in recent years, criteria were developed to guide patients, physicians, and family members regarding this difficult situation. They are: (1) the capacity of the patient to make rational decisions; (2) the attitude of the person who makes the decision (the patient); (3) the age of the patient; (4) the nature of the illness; (5) the attitude and values of the physician who attends the patient; (6) the clinical environment.¹⁶

The chief value of these criteria is that they underscore the rights of the patient in determining if treatment is continued or not. As patients become more aggressive in refusing medical treatment and requesting to be permitted to die with dignity, and as the number of religious leaders who agree with the patient grows, the medical profession is also yielding to the desires of the patient.

In many cases the economic factor will be determinative, because the family will be limited in their ability to pay astronomical medical bills and there is a limit to what private and government hospitals can do to absorb these bills. A doctor in Barranquilla, Colombia explained what actually happens in most cases. When a patient is first hospitalized, family members tell the doctor to do everything in his power to save the life of the loved one. As the bills mount, these family members sell or pawn their valuables and appliances to meet obligations. But if there is no improvement after a few days one of them will ask the doctor, 'Is the patient going to improve?'. If the answer is not a clear affirmative, then they begin to suggest that perhaps the doctor should disconnect the artificial life support systems. After a few more days all the family accepts the fact that the patient is going to die. What they would not have considered a few days earlier becomes the logical alternative.

Related to the theological and medical aspects of euthanasia is the legal aspect. In the majority of the countries of the world active direct euthanasia is considered murder; and therefore, physicians, hospital personnel, and family members do not seriously consider such a practice. Even in cases where someone may favor euthanasia, the physicians usually insist that the

FILL IN THE BLANKS.

Some would argue that hastening death for people who have endured prolonged suffering is a Christian act of _____.
(mercy)

The author concludes that to _____ a _____ patient die is not murder. But he cannot condone any _____ on the part of _____ or _____ which would bring death more quickly. This would be contrary to _____ divine plan.

(let, terminally ill, action, physician, family, God's)

LIST SOME CRITERIA TO BE USED TO GUIDE IN ANY DECISION TO END TREATMENT.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

(Compare your answers with the text.)

TRUE OR FALSE?

1. Financial considerations never influence a decision about continuing treatment. _____
2. Patient improvement influences those decisions. _____
3. A combination of both patient improvement and the lack of financial resources often influences decisions. _____

(1. False; 2. True; 3. True)

FILL IN THE BLANKS.

As well as the t _____ and m _____ aspects of euthanasia, there is also the l _____ aspect.

(theological, medical, legal)

¹⁶Mark Siegler, 'The Critical Illness: The Limits of Autonomy', *The Hastings Center Report* (October 1977), pp. 12-5).

laws of the country will not permit it. Such was the case of Karen Quinlan.

Historical summary of euthanasia

The Graeco-Roman world approved the practice of euthanasia and there are cases recorded by Cicero and Plato of the use of the hemlock to hasten death. Some religions of the eastern countries, such as Confucianism, Buddhism, Hinduism, and Shintoism accept euthanasia.¹⁷ Generally most Christians have opposed active euthanasia, although others would approve passive euthanasia. The situation is more difficult now than before because of the new techniques to treat terminally ill patients and keep them alive for several months. In some cases this process has been a blessing, but in other cases it has prolonged the process of dying and has supplanted the practice of dying with dignity.

When does death occur?

A critical question that is relevant is, 'When does death occur?'. Previously, when a majority of the people died at home, death came when the person stopped breathing and the heart stopped beating. But now, with increasing numbers of people having training in techniques of resuscitation and paramedical teams which can respond to emergencies within minutes, many who would have previously died are now taken to hospitals and placed on respirators and other life saving devices for days.

Medical personnel talk of *clinical death*, which takes place when there is no brain wave activity, although respirators may be able to keep the heart beating and pump oxygen into the lungs indefinitely. This sometimes happens while legal permission is acquired from the next of kin to use organs which can be transplanted and thereby save the recipients of these organs. There was the case of a pregnant woman in California who died, but family members wanted to keep her on a respirator until the baby could be delivered with higher chances of survival after birth. The foetus died in spite of their efforts.

Extreme costs of medical care

Other factors which have impact upon the question of euthanasia are the extremely high costs of hospitalization and medical care and the remote possibilities of cure for the patient. For example, the costs for hospitalization and treatment for a premature infant weighing less than a kilogram can run beyond a million dollars within a few weeks and the possibilities of leaving the hospital alive and being normal are minimal. The cost for bypass surgery for a person over 80 years of age is double what it costs for a younger person, because of the need for more extensive care while in the hospital and upon being dismissed. The question arises whether or not that money would be more wisely invested in programmes which offer a greater possibility of helping a greater number of persons.¹⁸

The cost of a bone marrow transplant for cancer patients can run \$100,000 dollars annually. This represents a high percentage of the money available annually for public health in many nations. If the family pays the bill, this depletes their resources

TRUE OR FALSE?

1. The Graeco-Roman world approved the of euthanasia. _____
2. Buddhism, Hinduism, and Shintoism do not accept euthanasia. _____
3. Christians are agreed on the subject of euthanasia. _____

(1. True, 2. False, 3. False)

FILL IN THE BLANKS.

One critically relevant question is 'When does _____ ?'

(death occur)

'Clinical death', according to medical personnel, occurs when there is no _____.

(brain wave activity)

TRUE OR FALSE?

1. There is never a question as to how money for medical treatment should be spent. _____
2. Government payment of medical treatment has no effect on taxpayers. _____
3. People never question the expenses involved in treatment for those who have little chance of survival. _____

(1. False; 2. False; 3. False)

¹⁷Fletcher, *Humanhood*, p. 150.

¹⁸*Time* (October 4, 1993), p. 36.

rapidly. If the government pays, then this means that all taxpayers are participating. Sooner or later people come to question whether or not that kind of expense should be incurred for the elderly who are extremely ill or for premature infants who offer so little chance of survival.

The Best Use of Available Resources in Medicine

A big problem in biomedicine has to do with controversies related to the best use of available financial resources.

Treatment of the sick vs. scientific investigation

There is constant tension between curative and preventive medicine. All countries struggle over the question of whether or not they should use their resources to treat AIDS patients or to investigate possible cures and preventive measures. Specialists in each area of medicine compete to receive funds necessary for research in their areas of specialization (neonatology, pediatrics, oncology, fertility, genetic diseases, cardiology, and all the other specialties). There is never sufficient money to cover all the needs. Many times decisions are made based upon pressure from influential people in the various areas, or emotional outcries which are dramatized by the media, and not upon an objective study of all the needs and the resources available.

Urban medical facilities vs. rural

Since the majority of the population is now urban, it is difficult to find physicians who will go to the small towns and minister to the needs of rural populations. Some countries cope with this problem by requiring a year of rural practice for medical students upon graduating from medical schools. This meets the basic needs of the rural community, but does not take care of more critical cases which require more experience on the part of the doctor and additional equipment which most centers do not have.

Some countries are encouraging a greater number of medical students to plan to practice general medicine instead of specializing. Approximately 90% of medical students in the United States express hopes of becoming specialists. The proposals for health care for all citizens which are being considered at the present time in the United States call for up to 50% of the doctors to be involved in the practice of general medicine.¹⁹

Care by medical or paramedical personnel

There are health centers which can give first aid and basic treatment of minor ailments at a cost that is lower than the emergency centers of hospitals. In the United States many people can become affiliated with such programs through their employers and can pay a modest sum, which would amount to perhaps an eighth of the cost of treatment in the emergency area of a general hospital, for a visit to one of these centers.

Preventive and curative medicine

Investments in programmes of immunizations and education in diet and preventive health care, (such as the prevention of diseases such as AIDS and the use of narcotics, liquor, and

AS YOU READ THE BEST USE OF AVAILABLE RESOURCES IN MEDICINE, LIST THE AREAS OF CONTROVERSY.

1. _____

2. _____

3. _____

4. _____

(Compare your answers with the text.)

¹⁹George J. Church, 'Please Help Us', *Time* (November 8, 1993), p. 37.

tobacco), are investments which ultimately save millions of dollars. Prevention of disease is much less costly than treatment.

It has frequently been stated that it is wiser to put a sign on the highway announcing imminent danger than to maintain an ambulance at the bottom of the abyss to minister to victims of accidents. Education on a world wide scale regarding good nutrition, the dangers of infections, and the importance of immunization and preventive measures, could foment maximum health with a minimum of cost for the future.

Some countries have health plans which cover the entire population and there is a movement to provide means to guarantee this to all people in the world. This is a phenomenal undertaking and involves insurance companies, professionals in the medical field, hospitals, and employers, as well as the general population. It is a great need and many would say that it is a human right. Ethical issues enter into the picture in the processes to provide this medical care.

The Autonomy of the Patient

The right to have adequate information

We reiterate the right of the patient to receive all information pertinent to his or her condition, the prescribed treatment and its effects, and the degree of probability of the effectiveness of the treatment. Since most patients will not understand technical medical jargon, the physician or surgeon should seek to give explanations in laymen's language and with sufficient detail to satisfy the patient and family members. The patient should be asked to consent to medical procedures before such procedures are initiated. In some countries laws will protect the patient, but this may not be true in all countries.

It is important for physicians to explain the lasting effects of procedures. The author knows of cases where patients insist that the physician did not clearly explain the consequences of electro-shock therapy.

The use of placebos

A *placebo* is a substance with no specific therapeutic activity for the condition of the patient under treatment, and which is given when the physician suspects that the patient's symptoms are more psychosomatic than organic. If the patient improves, in spite of the fact that the placebo has no medicinal value, this helps the physician to determine the course of treatment which should be followed.

Some would say that ancient witchcraft was a use of placebos, because many times patients improved even though the medicines could not have helped. In many cases the act of seeing a physician is therapeutic, even though he gives no medication.

Experiments in which one group of patients receive medication and another group receive placebos have been performed. In some experiments even the physicians do not know the distinction until the results have been examined and recorded. It is surprising to discover that some patients who had received placebos improved on a scale equal to those who had received the medication.

The moral question arises as to whether it is ethical to give placebos or not. If the physician suspects that the problem is functional rather than organic, then such a procedure may be justified in order to determine this fact. However, the wide-

FILL IN THE BLANKS.

The author states that the patient has a right to receive _____ p_____ to his or her c_____, the p_____ t_____ and its e_____, and the d_____ of p_____ of the e_____ of the t_____. This is part of the principle of the a_____ of the p_____.

(Compare your answers with the text.)

TRUE OR FALSE?

A placebo has no specific therapeutic activity for the condition of the patient. _____

(True)

Witchcraft could be considered as a use of placebos. _____

(True)

Patients who receive placebos never improve on a scale equal to those who receive medication. _____

(False)

There is no moral question involved in the use of placebos. _____

(False)

spread uses of placebos has created suspicion on the part of patients, who wonder if they are receiving placebos. This undermines their confidence in the physician. Patients in the hospital will frequently say, 'I think they are just giving me sugar coated pills, because the doctor doesn't think I am really sick.' Legislation in the United States now requires that pharmacists inform the patient of the contents of their prescribed medications as well as possible reactions and contra-indications to each medication.

In countries where medical attention is a luxury for the few who are privileged, the use of placebos will not be a serious problem. There the major problem will be helping people who need medical attention to it get before it is too late.

The Manipulation of Genes

The role of genes

Genetics is the branch of biology which has to do with what one inherits from one's ancestors. It is related to the part played by man's 46 chromosomes (which contain some 300,000 genes) in determining certain congenital characteristics and tendencies toward diseases. From the days of Gregory Mendel (1822-1884), a monk and botanist in Austria who dedicated himself to the growing of sweet peas in order to study the various characteristics which were transmitted from one generation to another, there has been great progress made in our understanding of hereditary characteristics among plants, animals, and human beings.

The possibility of altering genes

A few years ago scientists succeeded in identifying the deoxyribonucleic acid (DNA) molecules in human beings, and this discovery has made it possible to identify the genetic codes which determine physical characteristics and the genes which cause certain diseases in human beings. Once these genes are identified, they can be altered. It is estimated that every human being carries from five to ten defective genes which could cause critical illnesses in one's offspring if the wrong combination takes place. Many foetuses are spontaneously aborted in the early stages of pregnancy due to the presence of abnormalities. Even so, it is estimated that five of every 100 infants have defective genes. 'Gene therapy, in distinction to genetic design therapy, is the process of implanting normal cells (healthy genes and chromosomes in their proper proportions) into developing embryos; it also includes the production of synthetic viruses which could carry necessary enzymes in a process called transduction. In this way, it is possible to treat foetuses which carry defective genes which would otherwise result in Tay-Sachs disease, sickle cell anaemia, Down's syndrome, or cystic fibrosis.'²⁰

Only after extensive testing with animals and plants in controlled environments has taken place, are any steps taken in this field with human beings. Scientists have had success in reproducing animals with desired characteristics (such as cows which can produce an excessive quantity of milk) and plants which can produce vegetables greater than normal in size and quantity and which can be preserved for a longer period of

²⁰Translated from: Joseph Fletcher, *La Etica del Control Genético* (Buenos Aires: Editorial La Aurora, 1978), p. 90.

FILL IN THE BLANKS.

The branch of biology which deals with what one inherits from one's ancestors is called _____. It relates to the part played by _____ in determining congenital _____ and _____ toward diseases.

(genetics, chromosomes, characteristics, tendencies)

TRUE OR FALSE?

It is impossible to determine the genetic reason for any disease. _____

(False)

Gene therapy involve the implantation of normal cells into developing embryos. _____

(True)

It is impossible to treat any genetic disease by gene manipulation. _____

(False)

time. There are numerous other possibilities in this field. The future is uncertain, but full of potential surprises that may enhance life for all of us.

Conclusion

The field of medical ethics is in constant transition, due to continuing research and the resulting discoveries and developments that each day's news brings. It is now possible to do procedures which only a few years ago were not even considered to be within the realm of possibility.

Treatments for leukaemia and other forms of cancer are giving victims longer periods of survival and, in some cases, cures. The growing understanding of genetics is opening up possibilities for treatment of potential defects in both the pre-natal and post-natal stages. Studies in fertility offer possibilities for couples who previously had to face both a childless future and all the disturbing emotions that such a condition engendered.

Further norms will be formulated as progress is made in the field of medical ethics. It is important to maintain a correct biblical and theological perspective as well as to consider the contributions of medical and behavioural scientists. Inevitably the ethical norms will be dynamic, but they must always reflect a firm belief in God's revelation to humanity as the ultimate source of authority.

FILL IN THE BLANKS.

The author considers that one must maintain a correct _____ and _____ perspective as well as considering contributions by _____ and _____ scientists to the field of medical ethics. He states that the norms must always reflect a firm _____ in _____ to humanity as the _____ source of _____.

(Compare your answers with the text.)

Home Study Exercise

Basic assignment (Levels 1, 2, and 3). Do the following exercise.

1. *Bioethics* deals with the areas of personhood and the definition of living human beings. What is the fundamental question which deals with the principle to be used in these areas? What are two possible approaches?

2. What is the principle the author affirms as basic in the area of bioethics?

3. What consensus regarding the beginning and ending of life is found in each of the following three religious groups?

Protestantism: _____

Roman Catholicism: _____

Judaism: _____

4. What synthesis of these points of view does the author suggest?

5. What are three opinions as to when life begins and what effect does each view have on possible actions? (Continue to answer on the next page.)

1. _____

2. _____

3. _____

6. What issues are involved in the debate about the quality of life?

7. What are some criteria which have been suggested for deciding who should receive treatment in conditions when availability of treatment is limited for some reason?

8. What major ethical problem has arisen when such criteria were considered for use?

9. What are some principles which are considered valid standards regarding the morality of organ transplantation?

10. What ethical issues are involved in organ transplantation?

11. Though no one attitude can be determined for Protestants or Evangelicals, give the attitudes of the following towards organ transplantation:

Judaism: _____

Roman Catholicism: _____

The author: _____

12. Give five categories of euthanasia and their definitions: (Continue to answer on the next page.)

1. _____

2. _____

3. _____

4. _____

5. _____

13. Discuss the implications of the following Scriptural references as regards euthanasia.

Exodus 20:13— _____

Numbers 35:9-15— _____

James 1:2-4— _____

14. What is the author's conclusion regarding euthanasia?

15. What criteria are suggested for ending treatment?

16. What critical question is relevant to the ending of treatment?

17. What are some of the points of discussion in the area of the use of available medical resources?

18. Two areas of discussion concerning the patient's autonomy are:

19. *Genetics* deals with what area of human life?

20. What is *gene therapy*?

Supplementary assignment (*Levels 2 and 3*). Read pages 227-48 'Issues of Life and Death' by Daniel B. McGee in *Understanding Christian Ethics*, William M. Tillman, ed., and do the following exercise.

1. What four questions does McGee consider basic to the problems faced in life or death problems?
2. To what four areas of concern does McGee give attention?
3. What aspects of the human being does McGee use to define human life?
4. What two attitudes does McGee find prevalent in contemporary 'American' culture concerning death? How do these attitudes compare to the attitudes found in your culture?

Advanced assignment (*Level 3*). Do the following additional exercise based on the above reading assignment.

1. What two views does McGee discuss when referring to the question, 'Shall we play God?'
2. How does McGee treat the question, 'Who should decide?'
3. What four changes does McGee suggest have come about as a result of the concept of *making* babies rather than of *having* babies?
4. What two value traditions does McGee discuss regarding decisions of choice between death or life?
5. What three issues does McGee consider in the problem of abortion?

Seminar Discussion

1. Discuss each of the four basic questions concerning life and death in light of the ideas prevalent in your culture, keeping in mind the basic Christian understanding as discussed by Dr. McGee.
2. Discuss the four areas of concern in light of your culture and of Christian ethics as understood by both Dr. McGee and by Dr. Giles, the author of this text, *Biblical Ethics and Contemporary Issues*.

CONCLUSION

Eric Fromm, in his book *Man for Himself*, divides ethics into two classes—**authoritarian*** and **humanistic**. He states that in **authoritarian** ethics there is an **authority outside of man** which declares what is good for man and lays down the laws of conduct. This authority includes the prohibition of that which is forbidden and the approval of what is good. On the other hand, in **humanistic** ethics **man himself** is both the norm giver and the object of the norms. He is the determiner of that which is good and evil and becomes the actor and the regulative agent at the same time.¹

Fromm contends that authoritarian ethics denies man's capacity to know what is good or bad. Establishing this judgement is of greater concern to authority than to man. This attitude makes authoritarian ethics exploitative because it seeks to pressure man into being good for reasons other than his own benefit. The unforgivable sin in authoritarian ethics is rebellion against authority. When one rebels, then the whole system crumbles.

Humanistic ethics, according to Fromm, states that man and only man can determine the criteria for virtue and sin. No authority transcending man has a right to state for him what is good and what is bad. Man's welfare is the sole criterion for making these judgements. In humanistic ethics, the good is the affirmation of life, the unfolding of man's powers. Virtue is accepting and discharging one's responsibility towards one's own existence. Evil is the crippling of man's powers; vice is man's irresponsibility towards himself.

Man's conscience is defined differently by the two schools. The authoritarian insists that conscience is the voice of internalized external authority; while the humanist insists that conscience is the voice of our loving care for ourselves. The authoritarian approach seems to establish norms that are unquestionably and eternally true and do not permit revision while the humanistic approach is free to revise norms and rewrite the rules according to new values and appreciations.

An extensive résumé of Fromm's ideas is given because he focuses upon the critical area of decision in the matter of ethical authority. **The problem of authority is the central problem in ethics today.** If the source and extent of authority can be determined, then as a matter of course we can determine how we ought to behave.

This study has followed the presupposition that the world is theocentric and not anthropocentric. This viewpoint means that God is all knowing and all powerful in the world today. Man recognizes His position and authority and finds his proper place in submission to God's supreme will. God has given the Bible as one medium of His revelation to man. In the Bible, man finds the principles which, when interpreted rightly through his capacity to reason and through the mediating power of the Holy Spirit, give him guidance concerning his moral conduct. In a sense, Christian ethics is authoritarian because it accepts God's authority as supreme.

However, **the writer would also insist that Christian ethics can have the humanistic quality which requires that man use his intelligence to interpret God's revelation correctly** and thereby determine the norms of behaviour which are best for him to follow. Humanistic ethics finds norms within man which are the results of man's study of philosophy, history, science, and other disciplines. Man's intellectual capacity is not formed in a vacuum. His ability to establish values, goals, and virtues is a result of exposure to various stimuli. Thus, why cannot he use biblical revelation, his own conscience, and knowledge gained from history as bases for establishing his norms of conduct?

The writer would like to propose a **synthesis** in a kind of ethics that looks to God and His revelation as a source of authority and is combined with the use of man's reason in studying, interpreting, and appropriating that revelation for his life. There is a valid place for natural human reason as a way of establishing norms for conduct. Thus, man has a very important role in establishing the norms which form a part of Christian ethics. **Faith** is important, **knowledge** has its place, and **biblical revelation** is the tangible source of divine guidance. All these media give man the bases which he needs in making ethical decisions.

The theologians have not adequately explained the relationship of God's sovereignty to man's freedom. This area challenges each of us. Those who place a greater emphasis upon the sovereignty of God insist that God's ultimate will is brought to bear upon man in spite of his freedom and the choices which he makes in life. Others emphasize the place

¹Eric Fromm, *Man for Himself* (New York: Holt, Rinehart, and Winston, 1947), p. 9.

*(Bold face type has been used here and elsewhere by the editor for clarity or emphasis.)

of man's freedom and leave God's presence, power, and actions out of the picture completely. They insist that man has to use his reason, his will, and his own experience to guide himself in making decisions. Although it appears that man does have freedom to choose alternatives in behaviour, ultimately God brings His power and will to bear. God's ultimate control seems to be the basis for belief that God is just and that justice is ultimately rendered in the life of every person. The writer of Proverbs expressed this idea graphically, 'The horse is prepared against the day of battle; but safety is of the LORD' (Prov. 21:31). Man uses all his resources in any given situation, but God is behind the scenes working out His perfect will among men.

The rejection by man of moral restrictions will not produce a world in which the deeper values of life will be appreciated. This attitude will carry us to licentiousness and to a moral vacuum that will result in complete decay. Many have already tried that pathway for a time and have come to experience the emptiness of such living.

Neither is legalism the solution. A legalistic interpretation of the ethical teachings of the Bible is not an adequate stance. This point of view has resulted in a rejection of the Christian way of life by many people who otherwise might have been committed to it. Many people testify to the fact that rigidity on the part of their parents, religious instructors, and other authoritative figures has caused them to completely reject the ethical norms that are a part of Christianity.

In summary, **one must correctly interpret the ethical teachings of the Bible as the first step towards finding and establishing acceptable standards for human behaviour.** When these teachings are rightly interpreted, one must determine their degree of relevance to contemporary problems. In cases where there is no clear statement of God's expectations, man must take into account the spirit of the totality of God's ideals for man and then make the best decision possible.

We recognize that at times the complexity of life does not give man the alternative of choosing between that which is completely good and that which is completely bad. Many times he must choose the lesser of two evils. On these occasions, he should follow Luther's advice and 'sin boldly', recognizing that God is merciful to every sinner.

Each person must develop his own set of personal convictions based upon his understanding of God's will as revealed in the Bible, his own human experience, and trends in the course of history. **Basic principles do not change,** although the local applications in any given place might vary because of cultural differences.

In addition to the search for the highest moral conduct that one can achieve, one must also be ready to consider the counsel which comes from the social and descriptive sciences and which may help man in his pilgrimage in living the good life. Biblical revelation rightly interpreted will not conflict with scientific truth. Conflicts come with partial truths or unproven theories from science and incorrect interpretation and application of biblical teachings. We need to promote a greater spirit of mutual trust between religion and science. There is no conflict between religious truth and scientific truth.

It is necessary to discern between that which is eternal and applicable to life today and that which was temporal and superseded by subsequent revelation. The teachings of Jesus, Paul, and other writers of the New Testament take precedence over those of Old Testament writers. The moral ideal always points man towards a goal that is above him and relevant for his efforts towards moral living.

The person who is truly moral will have a constant concern for his relationship with God and his neighbour. These two dimensions in relationships will be the object of his thought and effort as he lives daily. Achieving a sensitivity in these relationships will enrich life for him and also for others.