Government Report

Increasing public concern over the broader implications of health care and health delivery is reflected in recent actions in the Congress, the executive branch and the courts. In 1974 the National Commission on the Protection of Human Subjects in Biomedical and Behavioral Research was abolished by Congress; task forces on such bioethical problems as compensation of injured research subjects have also been established. Bills are pending before the House and Senate on issues such as life support centers and the use of prisoners in medical research. Cases are being fought in the courts over the right of pregnant women to work and over the right of women to receive benefits for disabilities incurred in pregnancy. The Quinlan case in New Jersey is bringing to the fore the questions of when and how extraordinary means should be used to sustain life.

For research to be effective, its findings must be brought to the public's attention. As an integral part of the Institute's research function, Kennedy Institute scholars are increasingly called upon to serve on or consult with task forces and commissions, to present testimony before congressional committees and to act as expert witnesses in court cases.

Of the ten position papers on fetal research commissioned by the national commission, three were written by members of the Institute—LeRoy Walters, Ph.D., Director of the Center for Bioethics, Leon Kass, M.D., Ph.D., and Richard McCormick, S.J.—and a fourth by Paul Ramsey, Ph.D., a former visiting scholar at the Institute. Their role was to define and examine the ethical issues involved in fetal research and make individual recommendations.
For research to be effective, its findings must be brought to the public's attention.

to the commission on a public policy concerning fetal research.

The President's Panel on Biomedical Research called upon Andre E. Hellegers, M.D., Director of the Institute, and Dr. Jeanne Clare Ridley of the Institute's Center for Population Research, to present testimony on biological and sociological aspects of human reproduction. Dr. Hellegers emphasized not only the need for further reproductive biology research, but also the importance of sociological studies of reproduction. Taken together, they would provide a first step towards solving problems of family planning, population, perinatal and infant mortality, mental retardation and congenital defects.

A case in point: Dr. Hellegers has served, and continues to serve, as an expert witness in a series of court cases relating to the right of pregnant women to continue working. Based on his testimony on demographic data gathered and analyzed by the Center for Population Research and on fetal physiological data provided by the Laboratories for Reproductive Biology, Dr. Hellegers has found that loss of income has more harmful effects on mother and fetus than does the performance of routine job-related chores.

In another related court case in which Dr. Hellegers is also acting as expert witness, the issue has been whether women are entitled to receive benefits for disabilities incurred through pregnancy. The question is whether denial of such benefits constitutes discrimination under Title VII of the Civil Rights Act. The Supreme Court has agreed to hear arguments in the case in its next session.

Roy Branson, Ph.D., and Dr. Hellegers submitted written testimony before the House Subcommittee on Courts, Civil Liberties and the Administration of Justice on a bill to prohibit medical experimentation on prisoners. Dr. Hellegers suggested that while medical research is important, "the importance of the ends does not confer blanket tolerance of the use of any and all means." He recommended that studies be carried out to determine whether or not prisoners are able to give free consent to medical research, and that certain changes be made in the compensation schemes of clinical trials in prisons.

Dr. Branson presented testimony opposing the use of prisoners in medical research on the grounds that "there is serious and reasonable doubt that, in fact, a prisoner in the American prison system can give a sufficiently free and informed consent to an invitation to participate in medical experiments."

Another issue in the area of medical experimentation involves the compensation of research subjects. Dr. Walters and James Childress, Ph.D., were asked to present testimony before the Task Force on Compensation of Injured Research Subjects. Dr. Childress dealt with the theoretical aspects of the debate. He contended that subjects injured in research through no one’s fault should also be able to present a claim for compensation based on justice and not merely beneficence or humanitarianism, predicated on the belief that a subject assumes risks for the benefit of society but does not, by consenting to the research, renounce his claims of compensatory justice.

Dr. Walters defined the types of activity involved in medical research, primarily focusing on the intent of the investigator or physician, or the design of the activity. He suggested that criteria for compensation could be the determinacy (or indeterminacy) of risk, the freedom of the subject and the detectability of injury. Walters also outlined what the basic goals of any compensation plan should be, in addition to the compensation of research-related injuries. These include the providing of incentives for injury prevention, the sharing of research costs as equitably as possible, the identification of institutions and researchers with a higher than average rate of injuries, and the identification of gross negligence on the part of individual researchers or of fraud on the part of individual research subjects.

The Quinlan case, now being appealed to the New Jersey State Supreme Court, has highlighted the issue of extraordinary means and their use and the related issue of the individual’s right to die. Father John Connery, S.J., was asked by the Quinlan family to provide expert testimony in the case. Drs. Leon Kass and Andre Hellegers were consulted by the New Jersey District Attorney’s office on medi
c and ethical definitions of death.

The questions raised by the Quinlan...
Karen Ann Quinlan was the subject of public television's EVENING EDITION on November 7. On behalf of the Quinlan family, Father Connery was called as expert witness in the Morris County, New Jersey trial. His close involvement with the case prompted numerous requests for radio and television appearances.

Case are being raised in legislatures across the nation. At least eleven states are considering legislation that would support the individual's right to die. Can and ought we establish legal guidelines for the treatment of the dying? What impact would such legislation have on the heretofore intimate relationship between doctor and patient? Would legal acceptance of euthanasia in limited cases lead ultimately to a policy of terminating all feeble forms of life?

Warren T. Reich, S.T.D., outlined the ethical, legal and social implications of impending legislation on the individual's right to die before a statewide conference of legislators sponsored by the Consortium of Continuing Higher Education in Northern Virginia. "The discussion of death with dignity," he noted, "is the first attempt on the part of the population to say 'no' to modern science."

Conrad Taeuber, Ph.D., Director of the Center for Population Research, testified before the Foreign Operations Subcommittee on House Appropriations on population trends in relation to foreign aid legislation. Dr. Taeuber warned of the difficulties in predicting population growth with any degree of success and also cautioned against overoptimism about the immediate effectiveness of foreign aid.

At present, members of the Institute are working on papers on basic philosophical and ethical questions in ethical research to be presented before the National Commission for the Protection of Human Subjects. Consulting on court cases, particularly the cases relating to work in pregnancy and pregnancy disability benefits, continues; and papers and testimony are being prepared for several upcoming congressional hearings.

Bioethics Seminars Convened at National Institutes of Health

This fall the National Institutes of Health launched its first series of seminars on biomedical ethics. The program was developed and planned by a committee of four, including Dr. LeRoy Walters, Director of the Center for Bioethics.

Although NIH sponsors many education programs for its research staff, it is unusual for it to invite outside participation. In addition to NIH scientists and policy makers, participants included members of the planning offices of the Department of Health, Education and Welfare, six members of the research faculty at the Center for Bioethics, and other D.C.-area professionals. The size of the group—about twenty-five—remained constant, with the make-up shifting slightly depending on the issue under discussion.

To establish the program's direction, Dr. James Childress of the Kennedy Institute was invited to present an introductory seminar prior to the first meeting on October 1. He reviewed the various structures of ethical arguments and outlined some issues relevant to research on human subjects.

The seminars were then held twice a month through December. Each two-hour session was devoted to one ethical issue encountered in the conduct of biomedical research. Each began with a formal presentation of one or two papers.
Childbearing Behavior of "Grandmothers" Under Study

Contrary to traditional belief that large families used to be the norm, today's grandmothers actually produced the smallest families to date in United States' history. Of those women now in their late 60s and 70s, approximately 23% were childless and 21% had only one child. The average number of births per woman was 2.3.

The first national fertility study, conducted in 1955, excluded women past their childbearing years as did subsequent studies in 1960, 1965, 1970 and 1973. Thus, women born in or before 1910 have not been studied. Because these women are now in their late 60s and 70s, the opinions and attitudes they held will soon be lost.

Dr. Jeanne Clare Ridley of the Kennedy Institute's Center for Population Research has received a contract from the National Institutes of Health to record the experiences of women born between 1900 and 1910, most of whom married and had—or chose not to have—children in the 1920s and 1930s.

Dr. Ridley and her research associates Deborah A. Dawson and Christine A. Bachrach are pursuing answers to many questions concerning the fertility behavior of these women. Among the more important are:

1) At a time when contraceptive devices were considered inconvenient at best, what were the prevailing contraceptive practices? What factors influenced the choice of method?

2) How common were subfecundity and sterility? How frequently were sterilizing operations performed on either the husband or wife?

3) How widespread were abortion practices? Because of the relaxing of attitudes toward abortion today, Dr. Ridley expects the women to respond more freely than in previous studies seeking such information.

4) To what extent did desire for and ability to achieve upward social mobility reduce fertility? How did the great amount of rural to urban migration contribute to the low fertility of these women?

5) How did real or perceived economic changes affect the fertility rate? How did the woman's belief that she was better or worse off than her parents influence family size?

Once past their childbearing years, today's young women are expected to have recorded the lowest fertility rate ever. They are marrying at older ages, delaying parenthood or choosing to remain childless, and showing preferences for smaller families. By comparing the similar behavior of grandmother and granddaughter, Dr. Ridley hopes to identify the extent to which certain social and economic changes affect fertility rates.
Rather than flipping a coin to determine which question will be answered, the respondent tilts this small, flat box so that a colored marble appears in the window. Without revealing its color to the interviewer, the respondent answers the written question that corresponds to the marble's color. The statistician has calculated how many times the safe questions will probably be answered and can subtract that figure from the total number of responses.

A nationwide survey will begin in July 1976 of 1500 white, non-institutionalized women between 66 and 76 years old. They must have moved to the United States before the age of 30 if foreign born, and have been married at least once.

An eighty-five page questionnaire probes attitudes toward family size, contraceptive techniques, abortion, working wives and life in general. The respondent will also be questioned on the effects of the Depression on herself and her husband to explore the impact of sudden economic hardship on fertility.

Preparation of the survey questionnaire has been a two-year process. First Ridley, Dawson and Bachrach reviewed previous questionnaires used in fertility studies. Questions were gleaned from those and tested informally on a group of eight women in their late 60s and early 70s. Of great importance was using terminology appropriate to that age group; from medical reports, informal conversations, and pretesting, the Ridley team adapted the language of the interview schedule to its subjects.

By the time the questionnaire is set in final form, it will have gone through eleven revisions, each one being refined after a pretest on nine women.

Pretesting is conducted to insure that the questionnaire does not contain questions that are either awkward from the interviewer's point of view or intelligible to the respondent. In addition, it pinpoints those questions that the respondent finds overly sensitive, i.e., "Have you ever had an induced abortion?" Because the Ridley team has found that many respondents are too embarrassed to answer, they are employing the randomized response technique, a fascinating method that assures the respondent of complete confidentiality.

The technique allows the respondent to give an answer without the interviewer knowing what has been answered. For example, the respondent flips a coin and keeps the outcome hidden. She is instructed to answer the "sensitive" question if it lands on heads; if it lands on tails she answers a "safe" question, e.g., "Were you born in April?" The interviewer just records the answer. She has no idea how the coin landed.

Once all the interviews are completed, the statistician takes over. Laws of probability (chance) determined both the number of times the "safe" question would be answered and how it would be answered. The statistician subtracts that number from the total, yielding a reliable estimate of the proportion of women who had induced abortions.

In the Ridley study, a more complex method is being used, but the concept is the same. (See diagram.)

Thus far, interviewers in the pretests have reported great enthusiasm from the respondents. Most of the initial interviewing has been conducted in urban areas where the majority of the subjects live alone; they are grateful to have someone to talk to and enjoy discussing their lives.

The sample of 1500 is being selected at random: Interviewers go to every household in randomly selected blocks to find out if there is an eligible respondent within. All in all, 25,000 households must be screened to complete the interviewing of the 1500 women. The entire process will be carried out by fifty interviewers around the country and will take four to six weeks to complete.

(l-r) Christine Bachrach, Deborah Dawson and Jeanne Ridley
Bernard Häring

Genetics and Responsible Parenthood

Since the future of humanity depends above all on responsible spouses and parents, society has a fundamental interest in educating people for the responsible choosing of mates, for good preparation for marriage and for the responsible transmission of life. In the transmission of life and the education of children we need to consider many dimensions and relationships. But decisions rely, above all, on a holistic vision and discernment.

The rapid progress in genetics calls for a proportionate attention to the genetic aspect of parenthood and for a wise use of the new knowledge. To marry and to beget children is one of the most fundamental rights of the human person. But just as with other rights, these, too, must be seen within the total context of human dignity, freedom and responsibility. They are not unlimited rights. However, when we speak about limiting rights, our first concern should not be about control and enforcement, but about sharpening the conscience of persons so that they may recognize and exercise personal responsibilities.

There is a genetic responsibility in view of the good of the individual person and of the family. Distinct but not separate is a eugenic responsibility: that is, the responsibility for the gene pool that is a part of the common good of mankind.

Genetic Responsibility in View of the Family and of Each Person

There is a distinction between family planning and population control. Family planning refers to the responsible transmission of life in view of the good of the family, while population control focuses, above all, on the good of the society. We can make an analogous distinction between genetic responsibility and eugenic responsibility. The former has in view the individual persons and how a genetically defective child might affect their marriage and family. The latter, eugenic responsibility, has as its concern the gene pool bequeathed to future societies.

Most people throughout the world today accept the principle of responsible parenthood within the family dimension. They do not accept children "as they come" but transmit life in view of the total good of the family. A great part of today's world either does not accept "population control" as it is commonly understood, or it rejects sharply against a certain way in which population control is proposed. These people, before they transmit life, ponder as the main aspects of planning: the good of the spouses, of each of them individually and of both as couple; of the children they have and of those they might beget; their capacity to educate them as persons; and their children's prospects for the future, e.g., the possibility of training them for a profession and of their finding a job. If parents display discernment in this respect they also contribute to the common good.

Population control stresses instead the aspect of control exercised by the various social agents. Its primary concern is not that of the individual family, but that of the society or of certain groups of the society. If population control becomes the main thrust, there is great danger of rupture, tension and manipulation. Population control can function in the truly human way only if people are first educated for the right kind of family planning.

The same thing is true for the relationship between eugenic control and genetic responsibility. Unfortunately eugenic control was historically the first initiative. Laws were passed for eugenic (involuntary) sterilization for the sake of the race or the gene pool. This start was bad not only because of the underlying racism, of the misleading criteria, and the lack of sufficient eugenic knowledge, but also because the eugenic concern was overriding the genetic concern for the persons and families involved. The approach was unorganic and damaging to the liberty of people.

Today we are much more knowledgeable in genetics than were past generations who started superficial and oppressive programs of eugenics. Mankind has hopefully learned that our new knowledge comes to bear on the common good only if we start with educating people to assume freely their genetic responsibility, first to the family and then to the society and future generations. Education can be the only successful path, not only because it recognizes psychological trends but...
Mankind has hopefully learned that our new knowledge comes to bear on the common good only if we start with educating people to assume freely their genetic responsibility, first to the family, and then to the society and future generations.

above all because it preserves the freedom and the growth of persons as persons. Consciousness-raising must start with its view to the most basic human relationships from person to person and within the family, without leaving out the broader responsibility for society.

One of the most important moral aspects of genetic responsibility is this: Responsible spouses do not want children just for their own convenience and utility; they want sharers of their own love, happiness and maturity. They look above all for the good of the children they have or they want to beget. As they have to discern their capacities to educate the children well for this life and for the life to come, so they also have to take into account their own genetic endowment with its possible risks and handicaps. The genetic aspect alone does not determine a certain decision, except in the gravest cases. Parents who know that they transmit some genetic defect might well come to a prudent judgment that the general health they transmit and their capacity to share love and maturity can outweigh certain genetic defects. A free society is interested in spouses making their own decisions with societal agents providing the information which the parents may use to make an informed, and thus truly free, decision.

People should know the genetic risks involved in their choice of mate. In some population groups more than four percent are carriers of extremely dangerous genetic disorders, i.e., Tay-Sachs in the case of East and Central European Jews, sickle-cell anemia in black populations of African origin and cystic fibrosis in the case of European populations.

In order to better understand the risk and the possibility to avoid or to diminish it, we have to see the sharp distinction between X-linked genetic disorders (which upset just the X in the chromosome that determines the sex) on the one hand, and on the other, faulty genes which affect one of the other forty-five chromosomes. A well-known example of the X-linked disorder is hemophilia, where the female is carrier without suffering, while the male is affected. In this case the inherited gene will affect fifty percent of the male children and make carriers of fifty percent of the female children.

Different is the mode of transmission of autosomal disorders (which are not sex-linked). Here everything depends on the choice of the mate: If two persons are mating who have the same dominant genetic disorder, all their children will be equally affected. If a person affected by a dominant inheritance marries a person who is neither affected nor a carrier, it must be expected that half of the children will be fully affected by the disease. If a carrier of the recessive inheritance marries a person who is neither affected nor a carrier, seventy-five percent of the children will be normal while twenty-five percent will be carriers (heterozygotes). However, if two carriers beget children, twenty-five percent of the children will be affected
One of the basic services society can offer . . . is good genetic counseling units that are accessible to all parts of society, not just to the rich.

by the disease, fifty percent will be carriers, while only twenty-five percent will be thoroughly free from the trait. A person affected by a faulty gene that causes severe damage should normally renounce begetting children, while the carrier of an equally serious trait, from the viewpoint of genetic family responsibility, need not renounce having progeny, but he should not marry a carrier of the same faulty gene. It is evident that a responsible choice of mate does not only avoid genetic diseases but also drastically reduces the number of carriers, as long as new mutations do not occur.

People should also know as much as possible about how the timing of intercourse can affect the offspring. An ancient rabbinic law forbade spouses from having intercourse during and twelve days after the beginning of menstruation, alerting spouses that they may otherwise have defective children. The latest studies about the rhythm method prove that this warning was well founded: Fertilization with overaged spermatozoa or fertilization of an overripe ovule implies hazards not only of waste of zygotes or of spontaneous abortion, but also of mentally and/or physically defective children. Pregnant women must know that drugs can have a dangerous, teratogenic effect, as in the case of thalidomide.

Eugenic Responsibility of the Society and of the Spouses

Mature people extend their consciousness and responsible consideration beyond the immediate impact of their decisions on their family. Responsible parenthood also requires, therefore, an awareness that the neglect of the genetic responsibility affects the common good—the society of today and future generations. However, this does not call for hasty legislation and legal restrictions or coercion; it is above all a matter of education, consciousness-raising and of moral sensibilities. Society has not only an obligation to promote information and education and, in cases of urgency, to promote laws; it has above all the duty to protect the future generations by fostering a healthy environment and eliminating all the known and probable causes of new mutations, e.g., radiation, air pollution and the use of possibly mutagenic or teratogenic drugs.

There are still many uncertainties surrounding the eugenic development in today’s humanity. But more and more knowledge is accumulating. Each educated person and above all those who have special knowledge and influence or authority in society have to give proportionate attention to the eugenic dimension of individual and social decisions. We do not only need a technology assessment in view of economic consequences, but a global assessment of all major decisions in view of their foreseeable effects on the gene pool. This, of course, must not be confused with racist concerns; it is a matter of the health of this and the future generations.

There should be no dreams of guaranteeing a bright eugenic future by genetic engineering, artificial reproduction or enforced sterilization and similar measures. Selective abortion on the basis of the results from amniocentesis (the extracting of amniotic fluid from the pregnant female to check for genetic abnormalities) will have no positive impact on the gene pool, possibly even a negative one. Eugenic responsibility includes knowledge about the profound interplay between heredity and environment and the exercise of liberty. As in so many other questions about human health, the practice of eugenics requires a holistic vision. Perhaps there is concern about wrong genes; the use of genetic engineering is tolerable with respect to animals, but not with human beings.

Information, Consciousness-raising and Law

I am convinced that, from a moral point of view, the right of people to beget children is a very fundamental, but also a limited, right. Children are not to be desired for the convenience of their parents. The first task of society is to respect and protect the right of spouses to have children and to educate them under favorable conditions. But society has an interest in discussing the limits of this right and in bringing the results of the shared reflection home to all citizens, not, in the first place, by law, but by information and education. It is one of the most dangerous short circuits to call immediate for legal enforcement of certain obligations and limitations of rights. Mani-
The new knowledge about genetics and the increasing inundation by laws can be best avoided if all societal agents, such as churches, cultural associations, educators and journalists, are well informed in these important matters and help people to discern and to act responsibly.

Law may be required at a certain point. But if the first thrust is to “resolve” problems by imposing and enforcing laws, people’s sense of responsibility will be weakened and the law will not properly function. The new knowledge about genetics and the increasing technical possibilities of all kinds of genetic engineering require shared reflection and broad participation in decision making. One main interest must always be the respect for the conscience of people and the avoidance of a degrading manipulation of people and people’s minds.

One of the basic services society can offer in this respect is good genetic counseling units that are accessible to all parts of the society, not just to the rich. For the present moment this means promoting the professional training of genetic counselors and setting ethical standards for their role and activity. Doctors at large, social workers and educators should receive a solid training in this field and learn how to cooperate with the genetic counselors.

Genetic counselors must not manipulate the minds and consciences of the counselees. They should present facts, insights and possible alternatives in a respectful way. Manipulation can occur not only by telling people what conclusions they should draw from the information, but also by presenting various alternatives, for instance selective abortion, as if each would be the most normal thing to do without any possible ethical dimension.

Some carriers of extremely grave genetic disorders may freely decide not to marry because they do not want to pass on to the future generations this heavy load. But they should not be manipulated or prohibited from marrying. People can find happiness in marriage even if they renounce having their own progeny. Once people have married and have found out that begetting children means transmitting a disproportionate risk for the family and the children, they should be properly informed about the effective means to avoid such an undesirable pregnancy. In a society that refers now so easily to “selective abortion” as the solution, the matter of genetically indicated sterilization should be given proper attention by the ethicists and the churches.

It seems to me important to stress the enormous difference between involuntary and voluntary, between morally motivated and arbitrary sterilization. It is one thing to be voluntarily sterilized when the free decision is based upon clear information and serious reflection on the risk of begetting a gravely handicapped child. It is quite a different thing to be pressured, manipulated or coerced by arbitrary laws and controls to renounce the exercise of one of the most fundamental of human rights.

The bicentennial is a good occasion to ask ourselves how highly we value genuine freedom and respect for every person’s conscience and dignity. Whenever a society is not willing to pay the price for fostering these fundamental values, all technical and scientific progress will have dubious effects. But it is equally true that a lack of personal responsibility in a great part of society may increase the temptation to “resolve” the problems by law and law enforcement.

4. It seems to me that the book of Harry Harris, Prenatal Diagnosis and Selective Abortion, (London: The Nuffield Provincial Hospitals Trust, 1974), exemplifies a manipulative trend. Not only does the author speak all too easily on “possible candidates for selective abortion,” he also is inclined to accept the opinion of those who think “that the family, even if they are not inclined to the idea, should be pressed to take advantage of the opportunity of abortion for the social good,” p.71.
5. Compare A.E.H. Emery, “Genetic Counseling,” British Medical Journal, 26 July 1975, p. 220: “Sterilization may be considered the best answer in some cases, but a little caution is required because increasing numbers of disorders can now be diagnosed in utero in early pregnancy, and if the fetus is found to be affected the parents can be offered selective abortion.”
Notes on People and Projects

**Studies in Progress**

The following is a listing of the research faculty and their current individual areas of concentration.

Andre Hellegers, Director of the Kennedy Institute, has been writing and testifying (See Government Report, p. 1) on women’s legal rights in pregnancy.

Center for Bioethics:

Roy Branson is studying and writing about the use of prisoners in medical research (see Government Report, p. 1) and on the role of the physician in society.

Kenneth Casebeer is involved in a major project on the rights of children and proxy consent. He has also been writing on the Karen Quinlan case and on the relationship between law and technology.

James Childress, Joseph P. Kennedy, Sr., Professor of Christian Ethics, is focusing on two areas: compensatory justice for subjects injured in medical research projects and distinguishing ethical arguments from legal, political, technical and theological ones.

John Connery is studying the development of theological opinion and Church teaching regarding abortion.

Bernard Häring is engaged in writings on genetically indicated sterilization.

Leon Kass is exploring various understandings of nature and human nature with a view to their implications for ethics and human affairs.

Robert Licht is researching the political implications and language surrounding the concept of “rights.”

Richard McCormick, Rose Kennedy Professor of Christian Ethics, is currently writing about social and medical interventions into procreation and is at work on a book with Paul Ramsey of Princeton University on the notions of the terms “direct” and “indirect” in biomedical issues.

Seymour Perlin is studying and outlining the ethical issues in suicide intervention.

Warren Reich, Editor-in-Chief of the *Encyclopedia of Bioethics*, is focusing on four areas: (1) quality and value of life of the defective newborn; (2) extraordinary means of preserving life; (3) euthanasia; and (4) death with dignity legislation (see Government Report, p. 1).

LeRoy Walters, Director of the Center for Bioethics, is involved in the development of a bioethics anthology.

Center for Population Research:

Murray Gendell is studying the color differences in illegitimacy in the United States, and the role of parents in resolving premarital pregnancy in the United States.

Jeanne Clare Ridley is gathering and evaluating data on causes for low fertility among certain age groups (see “Grandmother” Study, p. 4).

The International Advisory Board held its third annual meeting on October 3-5. Here to review the work of the Institute were board members Sidney Callahan of the Hastings Center; Rev. Bernard Häring; Senator Edward Kennedy; Msgr. James T. McHugh, *Family Life*; Marshall Nirenberg of the National Institutes of Health; Prof. Paul Ramsey of Princeton University; and Member of Parliament Norman St. John Stevans.

Bioethics Library Gains New Staff and Space

Anne Fox Kiger has been appointed Assistant Librarian and Cataloguer at the Center for Bioethics Library. Ms. Kiger received her Master of Library Science degree from the University of Maryland, College of Library and Information Services, in May 1975, and is a member of Beta Phi Mu, the International Library Science Honor Society. She comes to the Center from Children’s Hospital National Medical Center where she served as cataloguer in the medical library. Ms. Kiger will assist Librarian Doris Goldstein in library operations, will supervise cataloguing of documents,
For those persons interested in keeping up on the literature, the library continues to offer its service, NEW TITLES IN BIOETHICS. For $6 per year, subscribers receive monthly listings of books, government documents, pamphlets, audiovisual materials and serial titles. All materials cited are available for use at the Kennedy Institute.

Library Journal has cited the first annual Bibliography of Bioethics, a project of the Center for Bioethics, as a "timely and excellent work ... indispensable for all academic and medical libraries." Library Journal reaches 40,000 subscribers.

and will do original classification, indexing and description of documents.

In an effort to encompass current interests and trends in the field of bioethics, to define subjects more precisely and to make it easier for users to retrieve documents relevant to their searches, the library's classification system has been revised. The scope of the collection has not been altered; rather it is now possible to make a more precise retrieval of documents.

Because of the expansion of staff, services and a collection which now includes more than 3,000 books and 7,000 articles, the library has moved to larger quarters. Its hours are 9-5, Monday through Friday and it is open for use by the public.

Two articles in the forthcoming 1.25 million-word Encyclopedia of Bioethics discuss the relationship between poverty and health care and society's obligations to the poor. The Encyclopedia, scheduled for 1977 release by the Macmillan Publishing Company, will include more than 300 articles covering a multitude of issues in ethics and the life sciences.

John H. Bryant, M.D., Director of the School of Public Health at Columbia University, examines the challenges faced by the less-developed countries in providing adequate health care. Today's blatant injustices result, Bryant suggests, from a complex combination of political decisions, systems structures and social values. The result is an overemphasis on urban rather than rural populations; on personal, individual medical care rather than preventive and population-wide care; on service to the elite rather than on primary care; on serving the interests of the medical profession rather than the needs of the people; and on centralized and professionalized policy making rather than on community-based decision making.

Bryant adapts some of Harvard Professor John Rawls' concepts of justice to the health care field, and states as his own basic principle, "Whatever health care resources are available should be equally available to all. Departures from this equality of distribution are permissible only if those worst off are made better off." By means of a series of secondary principles, Bryant spells out in greater detail how a health care policy in less-developed countries might more justly distribute medical resources.

In the second article, Carter L. Marshall, M.D., Associate Professor of Community Medicine at Mt. Sinai School of Medicine, and Carol P. Marshall, M.P.H., Coordinator for Program Planning of the Central Flushing-Upper Queens Medical Group, discuss the state of health and health care in the United States. Their article touches on many facets of the issue: the relationship between poverty and health; the problem of the accessibility and availability of health services; and education as the social element that exerts the greatest influence on one's health.

In discussing the extent to which the medical profession needs to be involved in eradicating poverty, the Marshalls make a fundamental and helpful distinction between health care and medical care. The latter is disease-oriented and dependent upon techniques and technology broadly defined as medical in nature. The former is concerned with identifying and eradicating all factors, social and personal, that contribute to ill health. While both medical care and health care must be concerned with poverty in differing degrees of involvement, the poverty problem itself poses a far greater challenge than either medical care or health care can solve, singly or combined. The authors are clearly unwilling to have the medical profession abandon its healing mission to engage in the work of social reform. Society as a whole, the Marshalls assert, must confront and attempt to break the circle of poverty.
Murray Gendell, Ph.D., is Director of the Masters in Demography program at the Kennedy Institute's Center for Population Research.

Are There Limits to Growth?

At least since the time of Adam Smith and of Malthus, there has been strong disagreement about the feasibility and desirability of economic and population growth.1 So the current debate between the optimists and the pessimists is not new.2 But its scope, encompassing the whole planet, is unprecedented, as is the complexity of the issues. It is no longer simply a question of whether economic productivity can keep up with, if not outpace, human reproductivity.

In considering the interrelations between economic and demographic expansion, we now also wonder whether the supply of resources and the pollution-processing capability of the environment is soon to be exhausted.3 Moreover, we are concerned as to whether social and political institutions can cope with the consequences of growing international interdependence, scientific and technological development, and ideological and economic competition.4

In this context, the first report of the Club of Rome, The Limits to Growth, has received great attention.5 The MIT group that did the study argues that continued growth in a world in which the supply of life-sustaining necessities (food, mineral and energy resources, clean air and water, etc.) is limited portends catastrophe. But the problem is consumption, not growth. Even if consumption were declining, as long as it were to continue, the supply of limited stocks would eventually be depleted.6

The issue, then, is how much time is left until the supply is exhausted. This depends on the size of the stock and the rate of consumption. The MIT group contends that the supply is so limited and the growth of consumption so rapid (because of the combined effect of the exponential growth of both population and levels of living) that the limits of the carrying capacity of the earth will be exceeded, if present trends continue, within the next century or two.

Much of the MIT analysis has received severe criticism.7 Yet, a point that has not drawn much attention is that the MIT's conception of resources and their estimate of the available supply is such that even in their stabilized world models I and II, the supply would not last more than a few centuries. Is this correct? Obviously, it depends on what is meant by a "resource" and how we know how much of it there is.

The critics at Sussex University (see Footnote 7) contend that there is evidence of a much greater supply of resources than MIT estimated. More importantly, the concept of resources is more elastic than that implied in the MIT analysis. It is determined by a complex interaction among cultural preferences, prices and science and technology, as well as what is in the environment. To the Hindu, for example, beef is not part of the food supply. Low-grade ores which are now too expensive to mine with existing technology are not usually included in estimates of reserves. And what is unknown today may be a major resource of tomorrow, as the history of fossil fuels and uranium illustrates. For this and other reasons, the Sussex group puts "greater emphasis on the political and social limits to growth than on the purely physical limits."8

Another conceptual question concerns the meaning of physical "limit." It appears to be something regarded as self evident. The earth, it is contended, is finite; we cannot expect to always find more in the cupboard no matter how little we take out of it. But how do we know this? Even if we grant that it is a reasonable assumption, it is not a helpful conception, since a stock that would last, say, a million years would be well short of infinite and eternal and yet satisfactory for all practical purposes. At bottom is an ethical question. In how far does each generation have a moral responsibility for future generations and, if it has one, then for how many generations?

Another possible meaning is that implied in the image of the "spaceship earth": Presumably it is a closed system. But a moment's reflection indi-
what is unknown today may be a major resource of tomorrow, as the history of fossil fuels and uranium illustrates.

cates that it is not. How long, for example, would the earth last without the sun's energy streaming into its atmosphere every day? (On the other hand, how long could it last if we made more effective use of that energy than we do now?) Furthermore, have we not already entered an era of extraterrestrial exploration?

Given the breakthrough in the space transportation of men and machines, and related advances in science and technology (e.g., the analysis of lunar shuttle and the development of the space shuttle, a reusable vehicle), a major obstacle to space colonization (as well as exploration) has been overcome. Further scientific and technological advances in space transport and the other aspects of space exploration would probably increase the technical and economic feasibility of not only exploration but colonization of outer space.

One by no means novel idea is to build artificial satellites. These could facilitate space travel and exploration. They could also provide habitats and places for performing tasks more effectively or efficiently than on earth. For example, intensive agriculture is possible taking advantage of 24 hours of sunlight. Also, outer space provides conditions for making pure vaccines and better crystals. Another possibility receiving increasing attention is the generation of abundant, cheap, clean electricity utilizing the 24 hours intense sunlight available in outer space. It has been estimated that, once in operation, production costs would be much less than now prevails on earth. The power could be economically transmitted to the earth by microwave, which is technically feasible.

But the fact that there are no impending physical limits to growth does not mean that there are no grounds for concern about further population and economic expansion. There are. But these, it is contended here, are because of their social, economic, ethical and political implications, not because the earth is irretrievably arriving at some physical limits. It would be regrettable for the issue of growth to become too strongly dependent on the question of physical limits. For that would tend to obscure the fact that the problems of resource scarcities, pollution, and overpopulation require social, economic, ethical and political changes for their resolution.

Continued on next page

John Connery Traces the History of Church Teachings on Abortion

Father John Connery has returned to the Kennedy Institute's Center for Bioethics for the academic year 1975-76. His first appointment was in 1972-73, shortly after the Institute was formed. In his first term he was doing the research for the manuscript that he is now readying for publication. In all, he has spent much of his time during the past eight years writing this book, which is a thorough study of the historical and theological aspects of abortion.

Father Connery is a moral theologian by talent, taste and training. He entered the Society of Jesus in 1932, was ordained in 1944 and earned his doctorate in sacred theology at the Pontifical Gregorian University in Rome in 1948. He spent the next twelve years as Professor of Moral Theology at the Bellarmine School of Theology in Chicago.

He was appointed Provincial of the Chicago Province of the Society of Jesus in 1960. The demands of this administrative position made it necessary for Father Connery to interrupt his scholarly career. The years of his service as provincial, from 1960 to 1967, were years of great change in the Catholic Church, including as they did the years of the “opening the window” encouraged by Pope John XXIII and the intense activity of the Second Vatican Council.

At about the same time, the development of the birth control pill focused attention on the morality of contraception. The subject was of great immediacy to the lay church, which was responding to the trend away from legalism and toward greater individual freedom. The papal encyclical Humanae Vitae, setting forth the official Catholic position, encountered resistance and generated controversy heretofore unheard of in the American Catholic Church.

Father Connery followed the debate with interest. His last published article before becoming provincial, “You, Marriage and the Pill” for The Sign, and his first after resuming his academic career, “Pastoral Practice and Humanae Vitae,” for the American Ecclesiastical Review, were contributions to the subject. Having observed the conflict and the strong feelings that were aroused over this issue, he correctly surmised that the subject of abortion would generate similar reactions, and that a thoroughly researched, factually impeccable historical study would be a valuable instrument in dealing with the problem. It therefore seemed to be an appropriate project to undertake when he relinquished his post as provincial to return to Bellarmine in 1967. It has engaged much of his attention ever since.
Father Connery 'read history backwards' to the beginning of the Christian era.

His original intention was to trace the development of thought on abortion in the Catholic Church from the time when moral theology emerged as a distinct subject, about the fifteenth century. However, works of this period mentioned still earlier references, so Father Connery “read history backwards” to the beginning of the Christian era. His book also describes the Roman culture in which Christianity took root, and the Jewish tradition from which it sprang.

Although Father Connery’s research covered a long time span, he did not discover a great abundance of material. Abortion was too perilous a procedure to be widespread, and too private to be discussed, so that early works refer to the subject only tangentially. (The New Testament contains no specific reference to abortion.) Father Connery had therefore to infer the prevailing attitude toward abortion from treatment of related subjects by contemporary writers. For example, an early Christian apologist, writing in the second century, attempting to counteract rumors that Christians sacrificed infants as part of their religious ritual, cited the concern that Christians had for life even in the womb. He contrasted that with the Roman custom of assigning to the Roman paterfamilias the right to reject newborns who were weak or deformed, or sometimes only female, and to dispose of them by drowning, strangulation, or, those of more delicate sensibilities, abandoning them to the elements or the wild animals.

Two reference tools that Father Connery found invaluable in researching the attitude toward abortion in the early Church were the Patrologia Latina, the over 200-volume collection of the writings of the Church Fathers in Latin, and the Patrologia Graeca, a similar work in Greek. In these collections, Father Connery was able to find pertinent material in the writings of the Fathers of the Church regarding Christian belief and practice; in penitential books, which were guides used by priests in reconciling the sinners with the Church and therefore indicated current moral norms; and in statements made by diocesan councils or synods convened to clarify the Church’s teaching on disputed subjects.

From about the fifteenth century on, as moral theology assumed the status of a distinct discipline, the Church’s teaching on abortion was easier to trace. Debate occurred on such questions as whether or not abortion was homicide, whether it was ever justified, as for instance to save the life of the mother, and whether the act was morally more objectionable if the fetus was “formed” rather than “unformed”. Theological opinions sometimes depended on false embryological findings. Thus an eighteenth century “discovery” of a miniature man in the semen of the male inspired a new interest in traducianism, the opinion that the human soul as well as the body was transmitted by the parents. Such “discoveries,” however, eventually gave way to facts. But whatever the prevailing theories about the origin and time of infusion of the human soul may have been, the Church always defended the sanctity and inviolability of prenatal life at all stages of development.

Father Connery traces the history and the tradition; he does not make judgments about abortion in the context of the present day. His intention is to provide the perspective from which the abortion issue can be considered. If the subject can be removed a little distance from the absolute present, he hopes that calmer and more reasoned voices will take up the discussion.
A Note from the Director

The last time I wrote this column I had occasion to rejoice in some work made possible by the establishment of the Institute in the field of bioethics. This time around it is a development in the Center for Population Research which will, I think, make a crucial difference in the Institute's capabilities.

For several years the Center for Population Research, which has enormous strength in the field of social demography, has been aware of the need to add to its staff a first rate demographer with expertise in developmental economics. An incidental letter on this subject to a European foundation official, led, quite unexpectedly one morning at 6 a.m., to a transatlantic telephone call that the foundation was willing to provide $175,000 to ensure that such a scholar could join the Institute.

The result is that in September the Institute will be joined by Dr. Thomas Merrick of the University of Pennsylvania. Dr. Merrick has had wide experience in the field of the relationship between demography and economic development, both with the Agency for International Development and the Ford Foundation. While stationed in Washington, he taught courses at Georgetown University. His field work has been largely in northeast Brazil, where he became fluent in Portuguese. Georgetown's extensive interest in Latin America will be enormously served by his expertise in demography, in economics and in foreign service.

The World Population Conference in Bucharest in 1974 has sometimes been presented as a victory for those who believe in economic development versus those who believe in family planning as a solution to population growth in the developing world. I think that is a simplistic analysis. The proposed "World Plan of Action" on family planning emerged from Bucharest intact, exactly as it had been prepared before the conference. What happened was that there was added (not substituted) a heavy emphasis on economic development to make family planning acceptable. The advent of Dr. Merrick in the Institute adds a dimension subject to a European foundation official led, quite unexpectedly one morning at 6 a.m., to a transatlantic telephone call that the foundation was willing to provide $175,000 to ensure that such a scholar could join the Institute.

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