Ethics & Medicine

A Christian Perspective

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Rutherford House Medical Ethics Project

Aims: The aim of the Project is to develop a Christian mind on the complex and fundamental challenges posed to society by technological advance in medical science. Rutherford House is a research centre whose theological position is Protestant and conservative, but the Project is intended to draw together those with a common concern for a distinctively Christian approach to Medical Ethics.
The Project is currently engaged in publishing and in organising conferences, and hopes to be able to expand these and other areas as support allows.

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The Euthanasia Syndrome

This issue of *Ethics and Medicine* carries two important articles on euthanasia. One is by the U.S. Surgeon-General, Dr C. Everett Koop, a paper prepared for a recent Rutherford House conference. The other reprints a famous retrospective on the Nuremberg medical trials, and we are grateful to the *New England Journal of Medicine* for permission to make it more widely available. We could hardly have anticipated the timeliness of these contributions, but as we go to press it is reported that some 30% of the British medical profession are thought to favour the option of euthanasia for AIDS victims.

Ethics and Medicine will be returning to questions raised by AIDS in the near future, with a number of papers on different aspects of the issue. For the present, we would draw our readers' attention to this one. AIDS seems set to provide the euthanasia movement with a major fillip. It lays special responsibilities on those of us who regard euthanasia, 'active' or 'passive', properly defined, as a blunt denial of the Christian view of man - even as it is of the Hippocratic tradition.

Mr C's Baby and the Abortion Debate

Mr C's abortive attempt to use the courts to stop Miss S terminating her pregnancy, although something of a forlorn hope, has raised two questions central to this whole discussion. The House of Lords' endorsement of Mrs Justice Heilbron's reading of the law, far from ending the debate, has just begun it. The whole question now moves back onto the political agenda, and there it is going to stay. Abortion law reform has never been popular, although the House of Commons has consistently shown itself disposed to support those who have been brave enough to try. Our archaic parliamentary procedure ensures that a determined minority can always block the progress of private members' legislation unless it has some measure of Government support. And we have yet to find a Government prepared to bite this particular bullet.

So far as we can judge, the case turned largely on two matters: whether a father has any right to a say, and whether the fetus concerned was 'viable' and therefore to be protected. Both of these issues penetrate close to the heart of the matter, though in very different ways.

The question of fathers' rights has come up before. It tends to be set against some idea of women's rights 'over their bodies', and the ball is tossed to and fro. But the very raising of the issue rests upon a fallacy. Under our present law, abortion is *not* a matter of women's - or anybody else's - rights: it is a matter of medical judgement. Two medical practitioners, 'in good faith', have to be convinced *either* that the child is likely to be seriously handicapped, *or* that the physical or mental health of the woman or her existing children is under threat. The mother's 'rights' extend to her consenting to the operation, as she would to any other.

Of course, we all know what this tends to mean in practice. The mother's 'mental health' is held to be under threat by the pregnancy, which is another way of saying that she is distressed to find that she is pregnant, and wishes she were not. This concept of 'mental health' has developed extraordinary elasticity, since most of the abortions performed under its provisions are on women who could in no way be said to be heading for 'mental illness' and consequent psychiatric referral.

That is to say, in most cases the decision that two doctors are called upon to make 'in good faith' (another somewhat elastic concept!) is not a *medical* decision at all, except in that it is made by members of the medical profession. The condition for which it is a 'treatment' is distress, which may be acute - particularly in the heightened emotional state which is a characteristic of pregnancy. For purposes of law this is deemed to be an act of medical judgement. There are many doctors who resent this responsibility. In some countries the decision rests with a non-medical tribunal, a solution which candidly concedes that the typical abortion decision is not a clinical decision at all.

At the same time, and whatever the intentions of the Act of 1967, we now have *de facto* abortion on demand, since any well-informed woman is able to get one, whatever her physical, mental or social state - particularly if she is able to use the private sector, in which 'good faith' is particularly easy to come by. So what the Act portrays as a medical decision is in practice the acquiescence of the medical profession in the mother's choice for herself and her child. Many individual physicians take the idea of 'good faith' seriously and try to make an individual judgement, but the woman who is refused can always try somewhere else.

So the first issue which this case highlights is the pseudo-medical character of most abortion decisions. What the law portrays as a matter of medical decision-making is in fact an assertion of women's rights over their reproductive process - a drastic enterprise in post-coital contraception.

Secondly, and more important, we have the issue of 'viability', which is once more shown to be chimerical. It tells us nothing about the child *in utero*, and everything about the state of medical technology outside. The assumption of

the Infant Life (Preservation) Act, 1929, is that, *prima facie*, a 28 week fetus can be considered 'capable of being born alive'. In *C v S* it was argued by an eminent gynaecologist that a baby will be live-born at 18 weeks, even though it will die shortly afterwards. Independent authorities would generally agree on a figure of 22 or 24 weeks as the point at which there is now some reasonable expectation not only of live birth, but of survival.

What should be noted is that the point of viability is relative to the state of medical technology, and that as this continues to advance it would be most surprising if the figure of 22 or 24 weeks failed to continue to drop. The idea that there is some magic point at which a (disposable) pre-viable fetus becomes an (independent) unborn baby is simple nonsense.

Moreover, for almost a decade now it has been possible to sustain the very young unborn away from the maternal environment - in that early neo-natal incubator we have come to know as a test-tube! While the two technologies have some way to go before they meet up in the middle - enabling us to take a fertilised ovum all the way to term outside the womb - *there can be little doubt that one day they will*. As long ago as the 1950s research was underway into the technology required to sustain the pre-viable fetus, and the development of an artificial placenta is a long way short of science fiction. Will the courts then hold that every fetus is viable, because it can survive to term outside the womb? This is a very important question.

So 'viability' means very little, and yet it has had to do duty as that which distinguishes a fetus we may destroy from a fetus the law protects. It says nothing at all about the character of fetal life, but it serves as the yardstick by which we decide if it should be taken. Is this a legal abortion, to be rewarded with a professional fee? Or is this the offence of child destruction, punishable by life imprisonment?

Mr C and his unwitting and unfortunate ex-girlfriend Miss S have done us all a favour. The pressure for abortion law reform is growing. Perhaps these unnamed Oxford students and their whistle-stop tour of the English courts will prove the catalysts of far-reaching change.

Decisions at the End of Life

C. EVERETT KOOP, M.D., Sc.D.
Surgeon General of the Public Health Service,
United States of America

This is the text of an address Dr Koop gave at a recent conference convened by Rutherford House. Dr Koop makes reference to the famous paper by his friend Leo Alexander published in the New England Journal of Medicine *in 1949. In this issue of* Ethics and Medicine *we also reprint Dr Alexander's paper.*

The physician has the sacred obligation to provide for his patient the best possible health care. The physician in the United States today also has the obligation to use our resources prudently. But - to be asked to do both at the same time while caring for a patient is a conflict of interest. In 40 years the number of Americans over 65 will double; in 40 years the number of tax-paying wage earners will increase by only 30 percent. Today there are five tax-paying wage earners for every person over 65. In 40 years there will be only three, and that is with the optimistic prediction that the present birth rate will go from 1.8 to 2.3 births per woman.

Today those over 65 are caught in the crossfire of the cry for health and human services cost containment on the one hand and the rising chorus for euthanasia on the other. In 40 years the situation could be perilous for the elderly, indeed perhaps much earlier.

Life issues began to be seriously debated by large segments of society around the time of the abortion decision known as *Roe vs. Wade* in 1973. Then the issue of euthanasia was perhaps of more academic than practical interest. In that year, Joseph Fletcher, a prominent Episcopalian theologian, who favors active euthanasia, made this prediction:

> The day will come when people will be able to carry a card, notarized and legally executed, which explains that they do not want to be kept alive beyond the *humanum* point, and authorizing the ending of their biological processes by any of the methods of euthanasia which seems appropriate.

By *humanum* point, Fletcher meant that point at which the adult capacities for reason and communication have been lost.

In the Netherlands, Fletcher's vision of euthanasia on request has come to pass. Of all deaths that occur in Holland each year, accounting for all causes, fully one-sixth are attributable to euthanasia. The Dutch version of the 'living will' goes beyond that which has been enacted in 35 of our states, for patients can request by such a document that they be administered a lethal injection. Moreover, the practice of euthanasia has become an everyday part of Dutch medicine, fully sanctioned by that country's medical society.

The situation in the U.S. is not as grave. But for those who are concerned about euthanasia, it is not a time for

complacency: The Hemlock Society, a leading American advocate of legal euthanasia, is preparing legislation that it claims will be introduced this year in three states: Arizona, California and Florida. The legislation will permit euthanasia according to the 'Dutch Model': at the request of the terminally ill patient, and administered by a physician.

In the nation's courts there are an increasing number of cases, at least five active in the past year, where litigants are seeking to have feeding tubes withdrawn from incompetent members of their families. Such developments teach us that the public debate over death and dying - and the legal controversies which fuel that debate - have come a long way in the last decade.

No longer are we just concerned with permitting the terminally ill to 'Die Well Enough'. Now, the question has turned to what Daniel Callahan, of the Hastings Center, terms the 'Biologically Tenacious' - patients who simply do not die within an acceptable time frame, as determined by their families or by society. Thus, increasing support is seen for the legalization of decisions which are made with the direct intent of causing the death of the patient. This support is seen in the literature of medical ethics, and even more strongly in polls of public opinion. Over 75 percent of respondents supported active euthanasia in an Associated Press poll taken in early 1985. Even more important than these factors are the demographic and economic changes that confront the next two generations of American society, to some of which I have already alluded.

These changes have already impelled significant reform in our medical programs for those over 65. In the future hospitals will be reimbursed not according to their costs, but according to a fee schedule set by government and based on a new system. In response, hospitals are becoming increasingly cost-conscious and sophisticated in their business management. Dr Mark Siegler, a clinician and ethicist at the University of Chicago Medical Center, says that these factors have created a new factor in medical decision-making, which he calls 'bureaucratic parsimony'. He questions whether the medical tradition of serving the best interests of every patient can survive this era of bureaucratic parsimomy.

I would like to dedicate this address to the memory of a man who understood these issues as well as any person in this century. He was my friend and he died last year.

Dr Leo Alexander was a native of Austria who emigrated to the United States and became a professor of psychiatric medicine in Boston. He served as an expert at the Nuremberg trials of those physicians who had engineered the German euthanasia program, and, eventually, the infamous medical experiments and genocide carried out by the Nazi regime. He carried with him one special advantage in this work - as a native speaker of German, he was able to gain the confidence of the defendants during private interviews, thus opening up new stores of data regarding the origins of what history now calls the holocaust. He reported his findings for the medical profession in an essay published by the *New England Journal of Medicine* in 1948. The following excerpts from that essay reflect what the experience of this century should teach us about euthanasia.

> Whatever proportions these crimes finally assumed, it became evident to all who investigated them that they had started from small beginnings. The beginnings at first were merely a subtle shift in emphasis in the basic attitude of physicians.
>
> It started with the acceptance of the attitude, basic in the euthanasia movement, that there is such a thing as a life not worthy to be lived.
>
> This attitude in its early stages concerned itself merely with the severely and chronically sick. Gradually the sphere of those to be included in this category was enlarged to encompass the socially unproductive, the ideologically unwanted, and finally all non-Germans. But it is important to realize that the infinitely small wedged-in lever from which this entire trend of mind received its impetus was the attitude toward the nonrehabilitable sick.

Let's take a look at the last six words of this excerpt - the attitude toward the nonrehabilitable sick. Whatever side one takes in the current debate over euthanasia and the provision of medical treatment, or even if one cannot take a side, one cannot deny that our own attitude towards those who are sick, infirm and will not recover is under serious examination. The lesson of Leo Alexander's analysis is that we cannot tamper with our attitude toward such patients without being cognizant of the impact our tampering may have on the practice of euthanasia. Dr Alexander was aware of the vast differences between Nazi Germany and the United States, but he was also aware that, even forty years ago, a utilitarian ethic was very pervasive in American medicine. I quote again from his 1948 essay:

> The killing center is the *reductio ad absurdum* of all health planning based only on rational principles and economy and not on human compassion and divine law.
>
> To be sure, American physicians are still far from the point of thinking of killing centers, but they have arrived at a danger point in thinking, at which likelihood of full rehabilitation is considered a factor that should determine the amount of time, effort and cost to be devoted to a particular type of patient on the part of the social body upon which this decision rests.
>
> At this point, Americans should remember that the enormity of a euthanasia movement is present in their own midst.

I repeat, Alexander said this 40 years ago.

One of the difficulties in discussing the work of Dr Alexander today is the widespread confusion over what we mean when we speak of euthanasia. Like many other areas of legal

reform, euthanasia has undergone a change in our vocabulary that is in part inspired by the political aims of some of the participants in that debate. For example, *The Euthanasia Society of America*, founded in the 1930's, changed its name in the mid-1970's to *The Society for the Right to Die*. The Society acknowledged that the intent to avoid the controversy engendered by the term 'euthanasia' played a part in this decision. 'Right to die' has become a catch-word in this debate, but one that is not well understood. Does it simply mean the right of a competent person to refuse life-sustaining treatments when death is imminent? Or does it extend to incompetent patients as well? And does it encompass means of directly bringing death, whether by removal of medical treatment or active, lethal injections? Thus, to affirm that persons have a 'right to die' still leaves many unanswered questions.

A more precise use of terms would assist in clearing up much of the confusion in this debate. I use the term euthanasia to mean the willful and deliberate killing, whether by act or omission, of oneself or another out of motives of compassion, the desire to save another from suffering, or to promote the 'dignity' of the suffering person.

This audience will immediately recognize that this definition places focus upon the state of mind and intent of the decision-maker, not upon the means used. This is appropriate because apologists for euthanasia have consistently used the compassionate motive of those who have committed euthanasia as a ground for its legalization. In addition, we avoid by this definition a situation where certain actions - withdrawing a respirator, for example, are automatically exonerated, while other actions - removing a feeding tube, for example - are automatically suspect as euthanasia. The Vatican declaration on euthanasia, issued in 1980, states as follows: 'Euthanasia's terms of reference are to be found in the intention of the will ....'

The focus on the actor's intent also avoids the difficulties that arise when a distinction is made between passive and active euthanasia. Passive euthanasia is simply an omission of treatment with the intent of bringing about death. Deliberate starvation of a patient may be an example of this. Active euthanasia brings about death by more direct means, such as injection of a lethal drug.

If we were only to maintain a prohibition against active means of euthanasia, and accepted passive euthanasia, the toll of human life would still be substantial. There is a substantial population of persons, some elderly, some disabled, who are dependent upon some sort of life support. The practice of passive euthanasia could jeopardize the lives of all of these patients. And the resulting acceptance of death for such patients would create a climate of support for more active means of euthanasia.

Finally, our definition will provide a reliable basis for distinguishing between acts of passive euthanasia on the one hand, and legitimate decisions to withdraw medical treatment that is futile and burdensome to a patient. The effect of such a decision to withdraw treatment may be the death of the patient - - for this reason, the distinction between such decisions and euthanasia is one of the most difficult dilemmas facing medicine. The existence of a clear definition of euthanasia will not resolve that dilemma entirely, but it will help to ensure that the benefit of the doubt is given to continued life in close decisions.

Many confuse euthanasia with very reasonable and common choice at the end of life, namely, not prolonging the act of dying. *Allowing* a person who is terminally ill to die is not euthanasia. The law and sound medical practice have always allowed a doctor to let the patient die when the time comes. There is a great difference between letting illness run its course - so to speak - and causing a patient to die, by whatever means. To say it another way - mercy dying is a far cry from mercy killing.

In the pro euthanasia movement the theme is 'freedom of choice'. The Hemlock Society and Concern for Dying make no mention of forced euthanasia. Their efforts are concentrated on suicide and assisted suicide - or as they refer to it, 'self-deliverance'.

In spite of being assured that freedom of choice is the issue, legalized euthanasia would never stop at allowing people to choose their own death.The acceptance of suicide is the first step on the slippery slope. Personhood is central to the arguments over abortion and infanticide. Is an unborn child a person? Is a child born less than perfect to be considered a person?

In a few years when certain qualities of my life are gone, will my personhood also be gone? The Hemlock Society would say I should be given a lethal dose of pills because I would *want* to die if I could not take care of myself. Once you understand the utilitarian philosophy of those who fight for euthanasia, you realize 'choice' is not the issue at all. The bottom line is: death is the best choice for me whether I make that decision or you make it for me. How long would voluntary euthanasia remain voluntary?

Decisions for the imminently dying are usually impossible for them to make themselves. They are decisions usually arrived at beforehand by the patient or they are made by the physician in the realm of trust between patient and physician.

For comatose patients no decision-making ability exists. Just recently the AMA announced a new policy concerning the provision of nutrition and fluids to permanently comatose individuals. Since, in their view, nutrition and fluids constitute treatment and treatment may be withdrawn when it is deemed not beneficial, so may nutrition and fluid be withdrawn. It is reasonable to say that we are *not* being told to let the terminal patient whose death is imminent go quickly. We are starving him to death.

That AMA decision was not based on a referendum of the membership or a vote of the House of Delegates - it was a decision of their Judicial Council and whether it represents 30 percent or 70 percent of the members' opinion, I do not know.

In reference to decisions at the end of life, I think the times we live in create some of our problems for us not only because of the technology available to us which by common consent produces many of our dilemmas but also because we practice medicine in an era of informed consent, of therapeutic conferences, of ward rounds, of ethical committees, of student seminars, or self examination; and perhaps there is too much writing on the subject by those with little first hand experience.

I am sure that the elderly, white-haired, irrascible, but nevertheless extraordinarily competent general practitioner who delivered me at home and who treated his pernicious anemia patients with freshly ground liver that he packed into sausages and delivered personally each day to his patients, had a comfortable system worked out in his mind for the care of the hopelessly ill. But he did not enjoy the aforementioned advantages of collegial activity, he had the relative advantage of being accountable only to his patient, his patient's family, to God and to himself.

I think each of us accommodates his own development of a *modus operandi* with the hopelessly ill within the constraints that the system imposes upon us. I'll discuss my own with you in just a moment.

Another consideration that provides a barrier to lack of understanding is the semantics of the subject. We do not all agree with the definition of hopelessly, extraordinary, ordinary, heroic, and certainly have no common ground on an understanding of what is the definition of an acceptable quality of life. Another factor that I am sure adds confusion to our decision-making process is the difference between not starting something that you presume will be futile in the way of therapy, as opposed to stopping something that you previously started and decide now is futile in the way of therapy. This situation is aided and abetted by your commendable system of medical education where the new, the young, and the inexperienced learn on the front lines of the intensive care unit, and sometimes inevitably by trial and error.

Another area for possible misunderstanding and even abuse has to do with the manner in which we practice hospital medicine, where the doctor is the captain of the ship and gives the orders which sometimes are not in agreement with the ethics of those who must carry them out. There is also the tendency today of some physicians to medicalize social problems, and the expectation of society that they will.

I went into medicine because I considered it to be a vocation rather than an occupation and the thing I felt that I was called to do after I understood what it was all about was to save lives and alleviate suffering. I never altered my point of view about that up until the last day of my practice. In the early years it seemed simple to make decisions about my patient because I was expected to make those decisions only about my patient. Now there are those that think my decision about my patient should take into account all sorts of things including impending divorce in the family, the presence or absence of cantankerous grandparents, inadequate housing, lack of community resources, temporary or permanent poverty of the family, and so forth. Under these circumstances, 'hopelessly ill' becomes a relative term. What could be a fighting chance if I were thinking of my patient alone becomes a hopeless situation when I have to take all the ancillary factors into account.

Let me now turn to a personal account of the way I've tried to run my decision-making process over the years. I have one principle and three rules. The principle is that it is my intent to give my patient all the life to which I think he or she is entitle, but not to prolong his act of dying. I recognize that much of that may be subjective, but on the other hand there is no doubt in my mind that the process becomes easier after the experience of forty years in practice.

My three rules are these: I will always come down on the side of continuation of treatment unless I feel secure in my knowledge of three aspects of the situation: first, that I know a sufficient amount about the disease process I am treating. Second, that I know my patient well. Third, that I know very well the interaction of my patient with the disease process in question.

Let me give an example of the functioning of the three rules. Most of you do not know that I've had a life-long interest in neuroblastoma, the most common tumor of childhood. The theories I promulgated twenty years ago have since been proven to be factual, and I don't know of anyone who has yet beaten my overall survival rate. That should establish that I know a sufficient amount about neuroblastoma.

Now let us say that you brought me your two year old girl two years ago with a diagnosis of neuroblastoma, and after excising the tumor, giving radiation therapy, and putting her on chemotherapy, we have watched her progress. At first she did so well you even doubted the diagnosis, but now in the recent three month period, I'm quite sure that you can see as well as I that she is slipping. I might very well call you into my office and tell you over a period of an hour very gently and kindly what I'm now going to say in about two minutes. 'I'm sure you can see that your little girl is not responding as well to her medication as she has in days gone by. You know that I understand her reaction to this tumor very well now that I've watched her for two years. You also know that I cannot operate any further, you know that radiation will do her no further good, and I'm now going to suggest that we stop chemotherapy. Here are my reasons for suggesting that: if we continue chemotherapy I think your little girl will live about three months, and during the last half of that time she will have severe pain that will be difficult for us to control, and although we can, she will be out of it most of the time. But worse than that on the basis of everything I know, I think she will also be blind and deaf. If we do not treat her any further she will slip quietly out of this life in about half that time, but she will do it with very little pain and she will not be blind and she will not be deaf.'

I think that is good treatment of the hopelessly ill. I think it is appropriate for the practice of medicine, for the child, and for the family. I've given the child all the life to which I

think she was entitled, I have not prolonged her act of dying, and I have obeyed my three rules.

I sincerely hope that it comes through in this discussion that as a Christian I believe:

1. Life is precious to God

2. You and I hold our lives in stewardship from God

3. As a physician I hold the patient's life, entrusted to me, in stewardship; I am answerable for the manner in which I carry out that trust to the patient, to his family, and to God.

Medical Science under Dictatorship

LEO ALEXANDER, M.D.

We are grateful to the New England Journal of Medicine *for permission to reprint this paper, first published by them in 241:2, pp 39-47 (July 1949). Dr Alexander was a psychiatrist who worked with the Office of the Chief of Counsel for War Crimes at Nuremberg between 1946 and 1947.*

Science under dictatorship becomes subordinated to the guiding philosophy of the dictatorship. Irrespective of other ideologic trappings, the guiding philosophic principle of recent dictatorships, including that of the Nazis, has been Hegelian in that what has been considered 'rational utility' and corresponding doctrine and planning has replaced moral, ethical and religious values. Nazi propaganda was highly effective in perverting public opinion and public conscience, in a remarkably short time. In the medical profession this expressed itself in a rapid decline in standards of professional ethics. Medical science in Nazi Germany collaborated with this Hegelian trend particularly in the following enterprises: the mass extermination of the chronically sick in the interest of saving 'useless' expenses to the community as a whole; the mass extermination of those considered socially disturbing or racially and ideologically unwanted; the individual, inconspicuous extermination of those considered disloyal within the ruling group; and the ruthless use of 'human experimental material' for medico-military research.

This paper discusses the origins of these activities, as well as their consequences upon the body social, and the motivation of those participating in them.

Preparatory Propaganda

Even before the Nazis took open charge in Germany, a propaganda barrage was directed against the traditional compassionate nineteenth-century attitudes toward the chronically ill, and for the adoption of a utilitarian, Hegelian point of view. Sterilization and euthanasia of persons with chronic mental illnesses was discussed at a meeting of Bavarian psychiatrists in 1931.[1] By 1936 extermination of the physically or socially unfit was so openly accepted that its practice was mentioned incidentally in an article published in an official German medical journal.[2]

Lay opinion was not neglected in this campaign. Adults were propagandized by motion pictures, one of which, entitled 'I Accuse', deals entirely with euthanasia. This film depicts the life history of a woman suffering from multiple sclerosis; in it her husband, a doctor, finally kills her to the accompaniment of soft piano music rendered by a sympathetic colleague in an adjoining room. Acceptance of this ideology was implanted even in the children. A widely used high-school mathematics text, 'Mathematics in the Service of National Political Education'[3], includes problems stated in distorted terms of the cost of caring for and re-habilitating the chronically sick and crippled. One of the problems asked, for instance, how many new housing units could be built and how many marriage-allowance loans could be given to newly wedded couples for the amount of money it cost the state to care for 'the crippled, the criminal and the insane'.

Euthanasia

The first direct order for euthanasia was issued by Hitler on September 1, 1939, and an organization was set up to execute the program. Dr Karl Brandt headed the medical section, and Phillip Bouhler the administrative section. All state institutions were required to report on patients who had been ill five years or more and who were unable to work, by filling out questionnaires giving name, race, marital status, nationality, next of kin, whether regularly visited and by whom, who bore financial responsibility and so forth. The decision regarding which patients should be killed was made entirely on the basis of this brief information by expert consultants, most of whom were professors of psychiatry in the key universities. These consultants never saw the patients themselves. The thoroughness of their scrutiny can be

appraised by the work of one expert, who between November 14 and December 1, 1940, evalued 2109 questionnaires.

These questionnaires were collected by a 'Realm's Work Committee of Institutions for Cure and Care'.[4] A parallel organization devoted exclusively to the killing of children was known by the similarly euphemistic name of 'Realm's Committee for Scientific Approach to Severe Illness Due to Heredity and Constitution'. The 'Charitable Transport Company for the Sick' transported patients to the killing centers, and the 'Charitable Foundation for Institutional Care' was in charge of collecting the cost of the killings from the relatives, without, however, informing them what the charges were for; in the death certificates the cause of death was falsified.

What these activities meant to the population at large was well expressed by a few hardy souls who dared to protest. A member of the court of appeals at Frankfurt-am-Main wrote in December 1939:

There is constant discussion of the question of the destruction of socially unfit life - in the places where there are mental institutions, in neighbouring towns, sometimes over a large area, throughout the Rhineland, for example. The people have come to recognize the vehicles in which the patients are taken from their original institution to the intermediate institution and from there to the liquidation institution. I am told that when they see these buses even the children call out: 'They're taking some more people to be gassed.' From Limburg it is reported that every day from one to three buses with shades drawn pass through on the way from Weilmunster to Hadamar, delivering inmates to the liquidation institution there. According to the stories the arrivals are immediately stripped to the skin, dressed in paper shirts, and forthwith taken to a gas chamber, where they are liquidated with hydrocyanic acid gas and an added anesthetic. The bodies are reported to be moved to a combustion chamber by means of a conveyor belt, six bodies to a furnace. The resulting ashes are then distributed into six urns which are shipped to the families. The heavy smoke from the crematory building is said to be visible over Hadamar every day. There is talk, furthermore, that in some cases heads and other portions of the body are removed for anatomical examination. The people working at this liquidation job in the institutions are said to be assigned from other areas and are shunned completely by the populace. This personnel is described as frequenting the bars at night and drinking heavily. Quite apart from these overt incidents that exercise the imagination of the people, they are disquieted by the question of whether old folk who have worked hard all their lives and may merely have come into their dotage are also being liquidated. There is talk that the homes for the aged are to be cleaned out too. The people are said to be waiting for legislative regulation providing some orderly method that will insure especially that the aged feeble-minded are not included in the program.

Here one sees what 'euthanasia' means in actual practice. According to the records, 275,000 people were put to death in these killing centers. Ghastly as this seems, it should be realized that this was merely the entering wedge for exterminations of far greater scope in the political program for genocide of conquered nations and the racially unwanted. The methods used and personnel trained in the killing centers for the chronically sick became the nucleus of the much larger centers in the East, where the plan was to kill all Jews and Poles and to cut down the Russian population by 30,000,000.

The original program developed by Nazi hotheads included also the genocide of the English, with the provision that the English males were to be used as laborers in the vacated territories in the East, there to be worked to death, whereas the English females were to be brought into Germany to improve the qualities of the German race. (This was indeed a peculiar admission on the part of the German eugenists.)

In Germany the exterminations included the mentally defective, psychotics (particularly schizophrenics), epileptics and patients suffering from infirmities of old age and from various organic neurological disorders such as infantile paralysis, Parkinsonism, multiple sclerosis and brain tumors. The technical arrangements, methods and training of the killer personnel were under the direction of a committee of physicians and other experts headed by Dr Karl Brandt. The mass killings were first carried out with carbon monoxide gas, but later cyanide gas ('cyclon B') was found to be more effective. The idea of camouflaging the gas chambers as shower baths was developed by Brack, who testified before Judge Sebring that the patients walked in calmly, deposited their towels and stood with their little pieces of soap under the shower outlets, waiting for the water to start running. This statement was ample rebuttal of his claim that only the most severely regressed patients among the mentally sick and only the moribund ones among the physically sick were exterminated. In truth, all those unable to work and considered nonrehabilitable were killed.

All but their squeal was utilized. However, the program grew so big that even scientists who hoped to benefit from the treasure of material supplied by this totalitarian method were disappointed. A neuropathologist, Dr Hallervorden, who had obtained 500 brains from the killing centers for the insane, gave me a vivid first-hand account.[5] The Charitable Transport Company for the Sick brought the brains in batches of 150 to 250 at a time. Hallervorden stated:

There was wonderful material among those brains, beautiful mental defectives, malformations and early infantile diseases. I accepted those brains of course. Where they came from and how they came to me was really none of my business.

In addition to the material he wanted, all kinds of other cases were mixed in, such as patients suffering from various types of Parkinsonism, simple depressions, involutional depressions and brain tumors, and all kinds of other illnesses, including psychopathy that had been difficult to handle:

These were selected from the various wards of the institutions according to an excessively simple and quick method. Most institutions did not have enough physicians, and what physicians there were were either too busy or did not care, and

they delegated the selection to the nurses and attendants. Whoever looked sick or was otherwise a problem was put on a list and was transported to the killing center. The worst thing about this business was that it produced a certain brutalization of the nursing personnel. They got to simply picking out those whom they did not like, and the doctors had so many patients that they did not even know them, and put their names on the list.

Of the patients thus killed, only the brains were sent to Dr Hallervorden; they were killed in such large numbers that autopsies of the bodies were not feasible. That, in Dr Hallervorden's opinion, greatly reduced the scientific value of the material. The brains, however, were always well fixed and suspended in formaline, exactly according to his instructions. He thinks that the cause of psychiatry was permanently injured by these activities, and that psychiatrists have lost the respect of the German people forever. Dr Hallervorden concluded: 'Still, there were interesting cases in this material.'

In general only previously hospitalized patients were exterminated for reasons of illness. An exception is a program carried out in a northwestern district of Poland, the 'Warthegau', where a health survey of the entire population was made by an 'SS X-Ray Battalion' headed by Professor Hohlfelder, radiologist of the University of Frankfurt-am-Main. Persons found to be infected with tuberculosis were carted off to special extermination centers.

It is rather significant that the German people were considered by their Nazi leaders more ready to accept the exterminations of the sick than those for political reasons. It was for that reason that the first exterminations of the latter group were carried out under the guise of sickness. So-called 'psychiatric experts' were dispatched to survey the inmates of camps with the specific order to pick out members of racial minorities and political offenders from occupied territories and to dispatch them to killing centers with specially made diagnoses such as that of 'inveterate German hater' applied to a number of prisoners who had been active in the Czech underground.

Certain classes of patients with mental diseases who were capable of performing labor, particularly members of the armed forces suffering from psychopathy or neurosis, were sent to concentration camps to be worked to death, or to be reassigned to punishment battalions and to be exterminated in the process of removal of mine fields.[6]

A large number of those marked for death for political or racial reasons were made available for 'medical' experiments involving the use of involuntary human subjects. From 1942 on, such experiments carried out in concentration camps were openly presented at medical meetings. This program included 'terminal human experiments', a term introduced by Dr Rascher to denote an experiment so designed that its successful conclusion depended upon the test person's being put to death.

The Science of Annihilation

A large part of this research was devoted to the science of destroying and preventing life, for which I have proposed the term 'ktenology', the science of killing.[7-9] In the course of the ktenologic research, methods of mass killing and mass sterilization were investigated and developed for use against non-German peoples or Germans who were considered useless.

Sterilization methods were widely investigated, but proved impractical in experiments conducted in concentration camps. A rapid method developed for sterilization of females, which could be accomplished in the course of a regular health examination, was the intra-uterine injection of various chemicals. Numerous mixtures were tried, some with iodopine and others containing barium; another was most likely silver nitrate with iodized oil, because the result could be ascertained by x-ray examination. The injections were extremely painful, and a number of women died in the course of the experiments. Professor Karl Clauberg reported that he had developed a method at the Auschwitz concentration camp by which he could sterilize 1000 women in one day.

Another method of sterilization, or rather castration, was proposed by Viktor Brack especially for conquered populations. His idea was that X-ray machinery could be built into desks at which the people would have to sit, ostensibly to fill out a questionnaire requiring five minutes; they would be sterilized without being aware of it. This method failed because experiments carried out on 100 male prisoners brought out the fact that severe x-ray burns were produced on all subjects. In the course of this research, which was carried out by Dr Horst Schuman, the testicles of the victims were removed for histologic examination two weeks later. I myself examined 4 castrated survivors of this ghastly experiment. Three had extensive necrosis of the skin near the genitalia, and the other an extensive necrosis of the urethra. Other experiments in sterilization used an extract of the plant *Caladium seguinum*, which had been shown in animal studies by Madaus and his co-workers[10,11] to cause selective necrosis of the germinal cells of the testicles as well as the ovary.

The development of methods for rapid and inconspicuous individual execution was the objective of another large part of the ktenologic research. These methods were to be applied to members of the ruling group, including the SS itself, who were suspected of disloyalty. This, of course, is an essential requirement in a dictatorship, in which 'cut-throat competition' becomes a grim reality, and any hint of faintheartedness or lack of enthusiasm for the methods of totalitarian rule is considered a threat to the entire group.

Poisons were the subject of many of these experiments. A research team at the Buchenwald concentration camp, consisting of Drs Joachim Mrugowsky, Erwin Ding-Schuler and Waldemar Hoven, developed the most widely used means of individual execution under the guise of medical treatment - namely, the intravenous injection of phenol or gasoline. Several alkaloids were also investigated, among them aconitine, which was used by Dr Hoven to kill several imprisoned former fellow SS men who were potential witnesses against the camp commander, Koch, then under investigation by the SS. At the Dachau concentration camp Dr Rascher developed the standard cyanide capsules, which

could be easily bitten through, either deliberately or accidentally, if mixed with certain foods, and which, ironically enough, later became the means with which Himmler and Goering killed themselves. In connection with these poison experiments there is an interesting incident of characteristic sociologic significance. When Dr Hoven was under trial by the SS the investigating SS judge, Dr Morgen, proved Dr Hoven's guilt by feeding the poison found in Dr Hoven's possession to a number of Russian prisoners of war; these men died with the same symptoms as the SS men murdered by Dr Hoven. This worthy judge was rather proud of this efficient method of proving Dr Hoven's guilt and appeared entirely unaware of the fact that in the process he had committed murder himself.

Poisons, however, proved too obvious or detectable to be used for the elimination of high-ranking Nazi party personnel who had come into disfavor, or of prominent prisoners whose deaths should appear to stem from natural causes. Phenol or gasoline, for instance, left a telltale odor with the corpse. For this reason a number of more subtle methods were devised. One of these was artificial production of septicemia. An intramuscular injection of 1 cc. of pus, containing numerous chains of streptococci, was the first step. The site of injection was usually the inside of the thigh, close to the adductor canal. When an abscess formed it was tapped and 3 cc. of the creamy pus removed was injected intravenously into the patient's opposite arm. If the patient then died from septicemia, the autopsy proved that death was caused by the same organism that had caused the abscess. These experiments were carried out in many concentration camps. At the Dachau camp the subjects were almost exclusively Polish Catholic priests. However, since this method did not always cause death, sometimes resulting merely in a local abscess, it was considered inefficient, and research was continued with other means but along the same lines.

The final triumph of the part of ktenologic research aimed at finding a method of inconspicuous execution that would produce autopsy findings indicative of death from natural causes was the development of repeated intravenous injections of suspensions of live tubercle bacilli, which brought on acute miliary tuberculosis within a few weeks. This method was produced by Professor Dr Heissmeyer, who was one of Dr Gebhardt's associates at the SS hospital of Hohenlychen. As a means of further camouflage, so that the SS at large would not suspect the purpose of these experiments, the preliminary tests for the efficacy of this method were performed exclusively on children imprisoned in the Neuengamme concentration camp.

For use in 'medical' executions of prisoners and of members of the SS and other branches of the German armed forces the use of simple lethal injections, particularly phenol injections, remained the instrument of choice. Whatever methods he used, the physician gradually became the unofficial executioner, for the sake of convenience, informality and relative secrecy. Even on German submarines it was the physician's duty to execute the troublemakers among the crew by lethal injections.

Medical science has for some time been an instrument of military power in that it preserved the health and fighting efficiency of troops. This essentially defensive purpose is not inconsistent with the ethical principles of medicine. In World War I the German empire had enlisted medical science as an instrument of aggressive military power by putting it to use in the development of gas warfare. It was left to the Nazi dictatorship to make medical science into an instrument of political power - a formidable, essential tool in the complete and effective manipulation of totalitarian control. This should be a warning to all civilized nations, and particularly to individuals who are blinded by the 'efficiency' of a totalitarian rule, under whatever name.

This entire body of research as reported so far served the master crime to which the Nazi dictatorship was committed - namely, the genocide of non-German peoples and the elimination by killing, in groups or singly, of Germans who were considered useless or disloyal. In effecting the two parts of this program, Himmler demanded and received the co-operation of physicians and of German medical science. The result was a significant advance in the science of killing, or ktenology.

Medicomilitary Research

Another chapter in Nazi scientific research was that aimed to aid the military forces. Many of these ideas originated with Himmler, who fancied himself a scientist.

When Himmler learned that the cause of death of most SS men on the battlefield was hemorrhage, he instructed Dr Sigmund Rascher to search for a blood coagulant that might be given before the men went into action. Rascher tested this coagulant when it was developed by clocking the number of drops emanating from freshly cut amputation stumps of living and conscious prisoners at the crematorium of Dachau concentration camp and by shooting Russian prisoners of war through the spleen.

Live dissections were a feature of another experimental study designed to show the effects of explosive decompression.[12-14] A mobile decompression chamber was used. It was found that when subjects were made to descend from altitudes of 40,000 to 60,000 feet without oxygen, severe symptoms of cerebral dysfunction occurred - at first convulsions, then unconsciousness in which the body was hanging limp and later, after wakening, temporary blindness, paralysis or severe confusional twilight states. Rascher, who wanted to find out whether these symptoms were due to anoxic changes or to other causes, did what appeared to him the most simple thing: he placed the subjects of the experiment under water and dissected them while the heart was still beating, demonstrating air embolism in the blood vessels of the heart, liver, chest wall and brain.

Another part of Dr Rascher's research, carried out in collaboration with Holzloehner and Finke, concerned shock from exposure to cold.[15] It was known that military personnel generally did not survive immersion in the North Sea for more than sixty to a hundred minutes. Rascher

therefore attempted to duplicate these conditions at Dachau concentration camp and used about 300 prisoners in experiments on shock from exposure to cold; of these 80 to 90 were killed. (The figures do not include persons killed during mass experiments on exposure to cold outdoors.) In one report on this work Rascher asked permission to shift these experiments from Dachau to Auschwitz, a larger camp where they might cause less disturbance because the subjects shrieked from pain when their extremities froze white. The results, like so many of those obtained in the Nazi research program, are not dependable. In his report Rascher stated that it took from fifty-three to a hundred minutes to kill a human being by immersion in ice water - a time closely in agreement with the known survival period in the North Sea. Inspection of his own experimental records and statements made to me by his close associates showed that it actually took from eighty minutes to five or six hours to kill an undressed person in such a manner, whereas a man in full aviator's dress took six or seven hours to kill. Obviously, Rascher dressed up his findings to forestall criticism, although any scientific man should have known that during actual exposure many other factors, including greater convection of heat due to the motion of water, would affect the time of survival.

Another series of experiments gave results that might have been an important medical contribution if an important lead had not been ignored. The efficacy of various vaccines and drugs against typhus was tested at the Buchenwald and Natzweiler concentration camps. Prevaccinated persons and non-vaccinated controls were injected with live typhus rickettsias, and the death rates of the two series compared. After a certain number of passages, the Matelska strain of typhus rickettsia proved to become avirulent for men. Instead of seizing upon this as a possibility to develop a live vaccine, the experimenters, including the chief consultant, Professor Gerhard Rose, who should have known better, were merely annoyed at the fact that the controls did not die either, discarded this strain and continued testing their relatively ineffective dead vaccines against a new virulent strain. This incident shows that the basic unconscious motivation and attitude has a great influence in determining the scientist's awareness of the phenomena that pass through his vision.

Sometimes human subjects were used for tests that were totally unnecessary, or whose results could have been predicted by simple chemical experiments. For example, 90 gypsies were given unaltered sea water and sea water whose taste was camouflaged as their sole source of fluid, apparently to test the well known fact that such hypertonic saline solutions given as the only source of supply of fluid will cause severe physical disturbance or death within six to twelve days. These persons were subjected to the tortures of the damned, with death resulting in at least 2 cases.

Heteroplastic transplantation experiments were carried out by Professor Dr Karl Gebhardt at Himmler's suggestion. Whole limbs - shoulder, arm or leg - were amputated from live prisoners at Ravensbrueck concentration camp, wrapped in sterile moist dressings and sent by automobile to the SS hospital at Hohenlychen, where Professor Gebhardt busied himself with a futile attempt at heteroplastic transplantation. In the meantime the prisoners deprived of a limb were usually killed by lethal injection.

One would not be dealing with German science if one did not run into manifestations of the collector's spirit. By February 1942, it was assumed in German scientific circles that the Jewish race was about to be completely exterminated, and alarm was expressed over the fact that only very few specimens of skulls and skeletons of Jews were at the disposal of science. It was therefore proposed that a collection of 150 body casts and skeletons of Jews be preserved for perusal by future students of anthropology. Dr August Hirt, professor of anatomy at the University of Strassburg, declared himself interested in establishing such a collection at his anatomic institute. He suggested that captured Jewish officers of the Russian armed forces be included, as well as females from Auschwitz concentration camp; that they be brought alive to Natzweiler concentration camp near Strassburg; and that after 'their subsequently induced death - care should be taken that the heads not be damaged [sic]' the bodies be turned over to him at the anatomic institute of the University of Strassburg. This was done. The entire collection of bodies and the correspondence pertaining to it fell into the hands of the United States Army.

One of the most revolting experiments was the testing of sulfonamides against gas gangrene by Professor Gebhardt and his collaborators, for which young women captured from the Polish Resistance Movement served as subjects. Necrosis was produced in a muscle of the leg by ligation and the wound was infected with various types of gas-gangrene bacilli; frequently, dirt, pieces of wood and glass splinters were added to the wound. Some of these victims died, and others sustained severe mutilating deformities of the leg.

Motivation

An important feature of the experiments performed in concentration camps is the fact that they not only represented a ruthless and callous pursuit of legitimate scientific goals but also were motivated by rather sinister practical ulterior political and personal purposes, arising out of the requirements and problems of the administration of totalitarian rule.

Why did men like Professor Gebhardt lend themselves to such experiments? The reasons are fairly simple and practical, no surprise to anyone familiar with the evidence of fear, hostility, suspicion, rivalry and intrigue, the fratricidal struggle euphemistically termed the 'self-selection of leaders', that went on within the ranks of the ruling Nazi party and the SS. The answer was fairly simple and logical. Dr Gebhardt performed these experiments to clear himself of the suspicion that he had been contributing to the death of SS General Reinhard ('The Hangman') Heydrich, either negligently or deliberately, by failing to treat his wound infection with sulfonamides. After Heydric died from gas gangrene, Himmler himself told Dr Gebhardt that the only way in which he could prove that Heydrich's death was 'fate determined' was by carrying out a 'large-scale experiment' in prisoners, which

would prove or disprove that people died from gas gangrene irrespective of whether they were treated with sulfonamides or not.

Dr Sigmund Rascher did not become the notorious vivisectionist of Dachau concentration camp and the willing tool of Himmler's research interests until he had been forbidden to use the facilities of the Pathological Institute of the University of Munich because he was suspected of having Communist sympathies. Then he was ready to go all out and do anything merely to regain acceptance by the Nazi party and the SS.

These cases illustrate a method consciously and methodically used in the SS, an age-old method used by criminal gangs everywhere: that of making suspects of disloyalty clear themselves by participation in a crime that would definitely and irrevocably tie them to the organization. In the SS this process of reinforcement of group cohesion was called 'Blutkitt' (blood-cement), a term that Hitler himself is said to have obtained from a book on Genghis Khan in which this technic was emphasized.

The important lesson here is that this motivation with which one is familiar in ordinary crimes, applies also to war crimes and to ideologically conditioned crimes against humanity - namely, that fear and cowardice, especially fear of punishment or of ostracism by the group, are often more important motives than simple ferocity or aggressiveness.

The Early Change in Medical Attitudes

Whatever proportions these crimes finally assumed, it became evident to all who investigated them that they had started from small beginnings. The beginnings at first were merely a subtle shift in emphasis in the basic attitude of the physicians. It started with the acceptance of the attitude, basic in the euthanasia movement, that there is such a thing as life not worthy to be lived. This attitude in its early stages concerned itself merely with the severely and chronically sick. Gradually the sphere of those to be included in this category was enlarged to encompass the socially unproductive, the ideologically unwanted, the racially unwanted and finally all non-Germans. But it is important to realize that the infinitely small wedged-in lever from which this entire trend of mind received its impetus was the attitude toward the nonrehabilitable sick.

It is, therefore, this subtle shift in emphasis of the physician's attitude that one must thoroughly investigate. It is a recent significant trend in medicine, including psychiatry, to regard prevention as more important than cure. Observation and recognition of early signs and symptoms have become the basis for prevention of further advance of disease.[8]

In looking for these early signs one may well retrace the early steps of propaganda on the part of the Nazis in Germany as well as in the countries that they overran and in which they attempted to gain supporters by means of indoctrination, seduction and propaganda.

The Example of Successful Resistance by the Physicians of the Netherlands

There is no doubt that in Germany itself the first and most effective step of propaganda within the medical profession was the propaganda barrage against the useless, incurably sick described above. Similar, even more subtle efforts were made in some of the occupied countries. It is to the everlasting honor of the medical profession of Holland that they recognized the earliest and most subtle phases of this attempt and rejected it. When Seiss-Inquart, Reich Commissar for the Occupied Netherlands Territories, wanted to draw the Dutch physicians into the orbit of the activities of the German medical profession, he did not tell them 'You must send your chronic patients to death factories' or 'You must give lethal injections at Government request in your offices', but he couched his order in most careful and superficially acceptable terms. One of the paragraphs in the order of the Reich Commissar of the Netherlands Territories concerning the Netherlands doctors of 19 December 1941 reads as follows: 'It is the duty of the doctor, through advice and effort, conscientiously and to his best ability, to assist as helper the person entrusted to his care in the maintenance, improvement and re-establishment of his vitality, physical efficiency and health. The accomplishment of this duty is a public task.'[16] The physicians of Holland rejected this order unanimously because they saw what it actually meant - namely, the concentration of their efforts on mere rehabilitation of the sick for useful labor, and abolition of medical secrecy. Although on the surface the new order appeared not too grossly unacceptable, the Dutch physicians decided that it is the first, although slight, step away from principle that is the most important one. The Dutch physicians declared that they would not obey this order. When Seiss-Inquart threatened them with revocation of their licenses, they returned their licenses, removed their shingles and, while seeing their own patients secretly, no longer wrote death or birth certificates. Seiss-Inquart retraced his steps and tried to cajole them - still to no effect. Then he arrested 100 Dutch physicians and sent them to concentration camps. The medical profession remained adamant and quietly took care of their widows and orphans, but would not give in. Thus it came about that not a single euthanasia or non-therapeutic sterilization was recommended or participated in by any Dutch physician. They had the foresight to resist before the first step was taken, and they acted unanimously and won out in the end. It is obvious that if the medical profession of a small nation under the conqueror's heel could resist so effectively the German medical profession could likewise have resisted had they not taken the fatal first step. It is the first seemingly innocent step away from principle that frequently decides a career of crime. Corrosion begins in microscopic proportions.

The Situation in the United States

The question that this fact prompts is whether there are any danger signs that American physicians have also been infected with Hegelian, cold-blooded, utilitarian philosophy and whether early traces of it can be detected in their medical thinking that may make them vulnerable to departures of the type that occurred in Germany. Basic attitudes must be

examined dispassionately. The original concept of medicine and nursing was not based on any rational or feasible likelihood that they could actually cure and restore but rather on an essentially maternal or religious idea. The Good Samaritan had no thought of nor did he actually care whether he could restore working capacity. He was merely motivated by the compassion in alleviating suffering. Bernal[17] states that prior to the advent of scientific medicine, the physician's main function was to give hope to the patient and to relieve his relatives of responsibility. Gradually, in all civilized countries, medicine has moved away from this position, strangely enough in direct proportion to man's actual ability to perform feats that would have been plain miracles in days of old. However, with this increased efficiency based on scientific development went a subtle change in attitude. Physicians have become dangerously close to being mere technicians of rehabilitation. This essentially Hegelian rational attitude has led them to make certain distinctions in the handling of acute and chronic diseases. The patient with the latter carries an obvious stigma as the one less likely to be fully rehabilitable for social usefulness. In an increasingly utilitarian society these patients are being looked down upon with increasing definiteness as unwanted ballast. A certain amount of rather open contempt for the people who cannot be rehabilitated with present knowledge has developed. This is probably due to a good deal of unconscious hostility, because these people for whom there seem to be no effective remedies have become a threat to newly acquired delusions of omnipotence.

Hospitals like to limit themselves to the care of patients who can be fully rehabilitated, and the patient whose full rehabilitation is unlikely finds himself, at least in the best and most advanced centers of healing, as a second-class patient faced with a reluctance on the part of both the visiting and the house staff to suggest and apply therapeutic procedures that are not likely to bring about immediately striking results in terms of recovery. I wish to emphasize that this point of view did not arise primarily within the medical profession, which has always been outstanding in a highly competitive economic society for giving freely and unstintingly of its time and efforts, but was imposed by the shortage of funds available, both private and public. From the attitude of easing patients with chronic diseases away from the doors of the best types of treatment facilities available to the actual dispatching of such patients to killing centers is a long but nevertheless logical step. Resources for the so-called incurable patient have recently become practically unavailable.

There has never in history been a shortage of money for the development and manufacture of weapons of war; there is and should be none now. The disproportion of monetary support for war and that available for healing and care is an anachronism in an era that has been described as the 'enlightened age of the common man' by some observers. The comparable cost of jet planes and hospital beds is too obvious for any excuse to be found for a shortage of the latter. I trust that these remarks will not be misunderstood. I believe that armament, including jet planes, is vital for the security of the republic, but adequate maintenance of standards of health and alleviation of suffering are equally vital, both from a practical point of view and from that of morale. All who took part in induction-board examinations during the war realize that the maintenance and development of national health is of as vital importance as the maintenance and development of armament.

The trend of development in the facilities available for the chronically ill outlined above will not necessarily be altered by public or state medicine. With provision of public funds in any setting of public activity the question is bound to come up, 'Is it worth while to spend a certain amount of effort to restore a certain type of patient?' This rationalistic point of view has insidiously crept into the motivation of medical effort, supplanting the old Hippocratic point of view. In emergency situations, military or otherwise, such grading of effort may be pardonable. But doctors must beware lest such attitudes creep into the civilian public administration of medicine entirely outside emergency situations, because once such considerations are at all admitted, the more often and the more definitely the question is going to be asked, 'Is it worth while to do this or that for this type of patient?' Evidence of the existence of such an attitude stared at me from a report on the activities of a leading public hospital unit, which stated rather proudly that certain treatments were given only when they appeared promising: 'Our facilities are such that a case load of 20 patients is regularly carried . . . in selecting cases for treatment careful consideration is given to the prognostic criteria, and in no instance have we instituted treatment merely to satisfy relatives or our own consciences.' If only those whose treatment is worth while in terms of prognosis are to be treated, what about the other ones whose recovery appears unlikely, but frequently if treated energetically, they surprise the best prognosticators. And what shall be done during that long time lag after the disease has been called incurable and the time of death and autopsy? It is that period during which it is most difficult to find hospitals and other therapeutic organizations for the welfare and alleviation of suffering of the patient.

Under all forms of dictatorship the dictating bodies or individuals claim that all that is done is being done for the best of the people as a whole, and for that reason they look at health merely in terms of utility, efficiency and productivity. It is natural in such a setting that eventually Hegel's principle that 'what is useful is good' wins out completely. The killing center is the *reductio ad absurdum* of all health planning based only on rational principles and economy and not on humane compassion and divine law. To be sure, American physicians are still far from the point of thinking of killing centers, but they have arrived at a danger point in thinking, at which likelihood of full rehabilitation is considered a factor that should determine the amount of time, effort and cost to be devoted to a particular type of patient on the part of the social body upon which this decision rests. At this point Americans should remember that the enormity of a euthanasia movement is present in their own minds. To the psychiatrist it is obvious that this represents the eruption of unconscious aggression on the part of certain administrators alluded to above, as well as on the part of relatives who have been understandably frustrated by the tragedy of illness in its close interaction upon their own lives. The hostility of a father erupting against his feebleminded son is understandable and

should be considered from the psychiatric point of view, but it certainly should not influence social thinking. The development of effective analgesics and pain-relieving operations has taken even the last rationalization away from the supporters of euthanasia.

The case, therefore, that I should like to make is that American medicine must realize where it stands in its fundamental premises. There can be no doubt that in a subtle way the Hegelian premise of 'what is useful is right' has infected society, including the medical portion. Physicians must return to the older premises, which were the emotional foundation and driving force of an amazingly successful quest to increase powers of healing and which are bound to carry them still farther if they are not held down to earth by the pernicious attitudes of an overdone practical realism.

What occurred in Germany may have been the inexorable historic progression that the Greek historians have described as the law of the fall of civilizations and that Toynbee[18] has convincingly confirmed - namely, that there is a logical sequence from Koros to Hybris to Ate, which means from surfeit to disdainful arrogance to disaster, the surfeit being increased scientific and practical accomplishments, which, however, brought about an inclination to throw away the old motivations and values by disdainful arrogant pride in practical efficiency. Moral and physical disaster is the inevitable consequence.

Fortunately, there are developments in this democratic society that counteract these trends. Notable among them are the societies of patients afflicted with various chronic diseases that have sprung up and are dedicating themselves to guidance and information for their fellow sufferers and for the support and stimulation of medical research. Among the earliest was the mental-hygiene movement, founded by a former patient with mental disease. Then came the National Foundation for Infantile Paralysis, the tuberculosis societies, the American Epilepsy League, the National Association to Control Epilepsy, the American Cancer Society, The American Heart Association, 'Alcoholics Anonymous' and, most recently, the National Multiple Sclerosis Society. All these societies, which are co-ordinated with special medical societies and which received inspiration and guidance from outstanding physicians, are having an extremely wholesome effect in introducing fresh motivating power into the ivory towers of academic medicine. It is indeed interesting and an assertion of democratic vitality that these societies are activated by and for people suffering from illnesses who, under certain dictatorships, would have been slated for euthanasia.

It is thus that these new societies have taken over one of the ancient functions of medicine - namely, to give hope to the patient and to relieve his relatives. These societies need the whole-hearted support of the medical profession. Unfortunately, this support is by no means yet unanimous. A distinguished physician, investigator and teacher at an outstanding university recently told me that he was opposed to these special societies and clinics because they had nothing to offer to the patient. It would be better to wait until someone made a discovery accidentally and then start clinics. It is my opinion, however, that one cannot wait for that. The stimulus supplied by these societies is necessary to give stimulus both to public demand and to academic medicine, which at times grows stale and unproductive even in its most outstanding centers, and whose existence did nothing to prevent the executioner from having logic on his side in Germany.

Another element of this free democratic society and enterprise that has been a stimulus to new developments is the pharmaceutical industry, which, with great vision, has invested considerable effort in the sponsorship of new research.

Dictatorships can be indeed defined as systems in which there is a prevalence of thinking in destructive rather than in ameliorative terms in dealing with social problems. The ease with which destruction of life is advocated for those considered either socially useless or socially disturbing instead of educational or ameliorative measures may be the first danger sign of loss of creative liberty in thinking, which is the hallmark of democratic society. All destructiveness ultimately leads to self-destruction; the fate of the SS and of Nazi Germany is an eloquent example. The destructive principle, once unleashed, is bound to engulf the whole personality and to occupy all its relationships. Destructive urges and destructive concepts arising therefrom cannot remain limited or focused upon one subject or several subjects alone, but must inevitably spread and be directed against one's entire surrounding world, including one's own group and ultimately the self. The ameliorative point of view maintained in relation to all others is the only real means of self-preservation.

A most important need in this country is for the development of active and alert hospital centers for the treatment of chronic illnesses. They must have active staffs similar to those of the hospitals for acute illnesses, and these hospitals must be fundamentally different from the custodial repositories for derelicts, of which there are too many in existence today. Only thus can one give the right answer to divine scrutiny: Yes, we are our brothers' keepers.

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AIDS and Ethics: A Response to Professor Raymond

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If there is one condition that of itself would justify a journal and a project on 'Ethics and Medicine' that would be AIDS. It is a meeting ground between so many disciplines and philosophies. Nevertheless, I find the issue of the Journal devoted to AIDS (1987 3:1) confusing. It is a strange amalgam of straightforward moral and scriptural argument admixed with a pragmatism that is at times crude, and ethics that is tendentious.

A primarily Christian forum should be the last to underplay the significance of the homosexual contribution to AIDS in the northern hemisphere. No element of concern or compassion, or fear of fuelling 'the fires of already existing homophobia' should confuse the issues or cloud our judgement. The source of infection and primary mechanism of the spread of AIDS in Europe and North America has been overwhelmingly amongst homosexual men - who in turn have infected intravenous drug abusers - who have then involved the heterosexual population. Dr Raymond quotes disapprovingly a spokesperson from the Moral Majority who said, 'It's unpleasant to have to say homosexuality is disgusting but that's the truth'. Even if there were no AIDS it would still be true in a strict bacteriological sense that homosexuality is a dirty habit. In 1977 Dr Dritz and her colleagues [1,2] reported the increasing prevalence of shigellosis, ameobiasis and viral hepatitis in the young male homosexuals of San Francisco. Interestingly enough they had already found that a full scale public education programme had failed to halt the epidemic and made a plea for an effective and readily available vaccine.

Dr Raymond's argument is confused and contradictory, especially when considered alongside Dr Brown's clear marshalling of the facts in the same issue. First, her medical assertions are vague. For example, she states that 'as many as 100,000 to 200,000 false positive results may be generated by the ELISA test'. This is meaningless without giving the specificity and sensitivity rates. In fact, the test is very reliable on both counts when compared with the majority of laboratory tests in current clinical use. To state that there is 'powerful evidence for a strong association between HIV and AIDS', is surely a gross understatement. Furthermore, to argue that the test cannot be justified for clinical use begs a whole series of questions. The conclusion that the test should not be used because of 'our ignorance of the connection between a positive finding and AIDS' flies in the face of all the facts.

In the argument of autonomy and beneficence no mention is made of the interest or protection of other members of the infected person's family or society. The key to the weakness of Dr Raymond's entire position is seen when she says that our approach is 'fraught with assumptions about homosexuality and sexual promiscuity in general'. The Christian's 'assumptions' are not to be the determining factors. The guide here is still scriptural.

The fear of upsetting the sensitivities of the homosexual has resulted in a failure to point out obvious dangers. Hitherto the aim in the control of infectious disease has always been primary prevention, not the exhibition of vaccines or cures. The medical establishment has no hesitation in urging people to stop smoking. The primary prevention of AIDS must be in the field of human behaviour rather than a thin layer of latex.[3]

No-one, certainly no Christian, would question the need for compassion in dealing with AIDS victims. This, however, has nothing to do with soft-pedalling either the danger or the sin of practices that spread AIDS. Any reticence we may feel on this score should take account of the strength and stridency of the pro-homosexual lobby that has such an influence with the medical and political establishment and which has been so active in promoting its viewpoint amongst children and young people. Some of the literature published by the much lauded Terence Higgins Trust would be regarded as pornographic in any other context.

The ethical implications of the AIDS epidemic are more far reaching than the disease itself. Death from AIDS is one of acute suffering and fear. I know, by personal communication, that euthanasia has been both requested and carried out in some cases. The allocation, and diversion of resources in personnel and finance also carries with it value judgements. For these and other reasons it is difficult to see how Dr Raymond can find the ethical dilemmas posed by testing for and controlling AIDS 'clear-cut'.

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Reviews

The Great Evangelical Disaster
Francis A. Schaeffer
Kingsway Publications, 1985, 192pp., £4.95

This is the British edition of the late Dr Schaeffer's last book published in America just one month before his death from cancer in May 1984. It is reviewed in these pages not because it is a book on medical ethics (although medical ethics is certainly dealt with in the book) but because it can be seen as the last will and testament of a great Biblical thinker of the late 20th century, as Schaeffer's last prophetic word to the evangelical Biblical world.

For anyone who has read even some of Schaeffer's previous books (there are 23) this last book will be seen to fit into the mainstream of his thought developed over the last twenty years - 'the Lordship of Christ in the totality of life'. However, he believed that this was his most important statement. For anyone coming to this book as his first exposure to Schaeffer's writing there is nothing to fear - this book stands on its own, quoting frequently from previous works, and including a reprint of 'The Mark of the Christian' first published in 1970.

After a foreword by Schaeffer's son-in-law (incidentally, not mentioned in the index which instead refers to 'The Relationship of the Film and the Book' - presumably a feature of the American edition, and an unfortunate editorial slip) the book is divided into five parts, being an Introduction, consisting of one chapter, two parts of two and three chapters respectively, a conclusion and the appendix containing the reprinted article.

The first chapter, 'What Really Matters?', attempts to set the days in which we are living in the context of the moral and scientific changes of the second half of the 20th century. In particular the relationship between moral limitations on behaviour, both individual and societal, and absolute freedom are explained. The context is entirely set within the bounds of American experience, but what happens on the other side of the Atlantic is very rapidly translated to our shores, and Schaeffer soon moves on to the battleground on which evangelicals are fighting on both sides of the Pond. This battle is seen as a cosmic one in which Christians are set against the spirit of this world; this is a spiritual battle and must be fought with spiritual weapons. As always Schaeffer reminds us that our most effective weapon is 'the sword of the Spirit, which is the word of God'. Schaeffer has in all his writings emphasised that this means that Scripture, if it has to have any authority at all, must be understood to be relevant not only on 'salvation matters' but on every aspect of our personal lives, our scientific lives, our social lives. He believes that we are truly living in a post-Christian culture, and develops this theme with a historical survey from the Enlightenment of the mid-seventeenth century to the present day, illustrating how Enlightenment thinking at first gradually and then with accelerating momentum has affected our Christian thinking until today the Evangelical world has devalued its position by accommodating to the standards and the philosophies of the world, philosophies which are the antithesis of Christian truth.

The thesis of this book, then, is that the 'great evangelical disaster' has been to lose sight of the authority of scripture as it affects every aspect of our existence, and to accommodate to the pressures of this worldly, post-Christian society.

Part Two deals with 'The Watershed of the Evangelical World' and this watershed is the inerrancy of scripture, and the right of the Bible to speak clearly on all matters, spiritual and secular. Again a historical summary is produced to illustrate how slow, subtle changes have occurred over the years, and this is supported by quotations from 'evangelical' authors to show how Biblical authority has been undermined. The Bible is seen to be divided by these authors into that which can be believed and that which cannot i.e. the purely religious things as distinct from those things which might be regarded as in the realm of fact or science. The watershed point is the inerrancy of scripture - 'Does inerrancy make a difference?' (p. 61) is the watershed of both the evangelical disaster of the title and of the book. The mark of our age is to 'bend the Bible'. Schaeffer illustrates his thesis by describing the changes within the evangelical church in America over the last 80 years with particular regard to the battles over the authority of scripture.

Part Three, called 'Names and Issues', describes the development of the term 'fundamentalist' from the title of the response written by Machen and Wilson ('The Fundamentals of the Faith') to the assaults on Biblical authority. In the United Kingdom a parallel development was spawning the term 'evangelical'. However, even in 'evangelical' circles there has been a change of stance over the last 30 years. The issue of abortion is developed here as it illustrates the position of moral relativism which many Christians have taken. 'I believe abortion is wrong, but .... '. The fifth chapter deals with the conflict between the 'world spirit' and the Holy Spirit, and shows how many of the forms of church activity (social action, World Council of Churches, feminism) are derived from a secularist view of religion and have devalued the Bible's authority on these issues. The sixth chapter explains the Great Evangelical Disaster in simple terms: 'For the evangelical accommodation to the world of our age represents the removal of the last barrier against the breakdown of our culture'.

There are 10 pages of notes at the end of this challenging book.

The justification for reviewing it in these pages seems to me clear: we need to be reminded that a true medical ethic must be based not on how we feel about an issue, or about a case, or about a patient but on what the Word of God teaches us about mankind and about God. To say that we believe the Bible, but .... is to deny God's authority over creation. Schaeffer's theme 'the Lordship of Christ in the totality of life' speaks most clearly to those for whom medical ethics is important. I recommend this book wholeheartedly for study, and for application in our personal and corporate life.

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Modern Dilemmas in Modern Medicine
Michael Lockwood
Oxford University Press, £4.95, ISBN 0 19 286056 9

This book is a collection of articles based on a series of talks given at the University of Oxford in 1983. They were originally given to the 'Radcliffe Circle' – a group set up to focus interest on the social and ethical implications of science, medicine, and technology. It contains nine essays on topical issues in medical ethics and the contributors come from the backgrounds of philosophy, law and medicine. The editor (Michael Lockwood) makes the point that philosophers should come down from their ivory towers and get involved in issues with which 'ordinary men and women' have to grapple every day. His own contribution is to address the question 'When does life begin?', and I found his discussion of this subject particularly stimulating. He is careful to distinguish between the

terms human organism, person, and human being. A person must have a capacity for 'reflective consciousness and self-consciousness' and hence need not be human – possibly a dolphin or a chimpanzee are 'persons' in this sense. However, Michael Lockwood struggles to define the precise nature of a human being and, it seems to me, does his best to avoid using the Biblical term 'soul' when discussing the special nature of human consciousness. The beginning of life in the fullest sense occurs when the fetus has developed a brain, and therefore a human embryo before brain development is not an object of moral concern. Here we find Lockwood in agreement (in practice at least) with the majority of the members of the Warnock committee.

The contribution by Professor Ian Kennedy on *The Doctor, The Pill, and the Fifteen-year Old Girl* is in my view the best essay in the collection. Ian Kennedy's analysis is compelling and lucid and clearly demonstrates that (at the time of writing) the law was deficient and rigid when applied in this area. He argues that each case should be judged on its own merits and that the autonomy of the fifteen-year-old girl should carry greater weight with the doctor than the 'rights' of her parents. Kennedy argues that a reasonable doctor should be guided by a series of National Health Service memoranda covering various ethical and social situations – these memoranda having been defined by public debate in the media and parliament. Those of us who work in the N.H.S. will not be wildly enthusiastic about the last proposal!

The other subjects covered by this book include telling the truth to patients, the ethics of research on children, the artificial family, and comments on consent, the Warnock Report and compulsory removal. This book is excellent value and the thoughtful Christian will have much to ponder upon and to disagree with! The biblical view of man is largely ignored in these articles, but for those who need to be shaken out of a complacent orthodoxy to re-examine their own position on these very difficult issues, this book is a must!

R.D. Sturrock

The Beginnings of Life: Human Fertilisation and Embryo Research

The Reformed Presbyterian Church of Ireland and the Evangelical Presbyterian Church, 1986, 11pp., 30p.

This small booklet has been prepared by the co-operation of the Evangelical Presbyterian Church and the Reformed Presbyterian Church of Ireland and is available from the Covenanter Book Shop, 98 Lisburn Road, Belfast or the Evangelical Book Shop, 15 College Square East, Belfast at 42p by post (5 or more copies – post-free).

In a fairly limited compass this volume deals conservatively with the issues raised by the recent advances in medical technology at the beginnings of life. After dealing sympathetically with the difficulties of childless couples, and the medical responses to infertility, guiding principles for medical ethics are described under the headings of 'The humanity of the embryo', 'The sanctity of human life', The sanctity of marriage', and 'The sovereignty of God'. This is a concise summary of the Biblical texts dealing with these issues with a commentary.

The second half covers artificial insemination, drawing a distinction between insemination by husband's sperm (AIH) and donor sperm (AID). *In vitro* fertilisation (IVF) is discussed and the point noted that there is nothing in Scripture to forbid this procedure provided that husband and wife supply the sperm and egg, and that all the embryos so produced are returned to the wife's womb. This, of course, is the rub - there are inevitably excess embryos, and the sperm are often donated, even for lesbian 'marriages'. Embryo research is dealt with briefly and leads on to a discussion of the embryo's human status. Readers of this Journal will have read learned discussions of this topic in previous issues, and this is a very short section. The humanity of the embryo from the moment of conception is supported. I particularly liked this sentence:

> *Implantation changes the environment of the embryo but not its constitution.*

Objections to this position are considered, and summed up by placing the burden of proof on those who claim that the embryo is not human. Nine recommendations for Christian action are offered, including further reading.

This is an excellent little booklet. It is biblically based and easy to read. I've said this before, but every Church bookstall should have this on its shelf. It would be a useful guide for youth groups, women's guilds and study groups and at 30p per copy could easily be given away to interested parties.

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