

146

Discussion (ii)

Permanency of moral values questioned—change of attitudes with time—social control of research—speeding up the law by educating the public—individual conscience in research versus social control—extension of education to influence intelligence—hazards of drugs for intelligence—pay and insurance for experimental volunteers—doctrine of assumption of risk—social determinaton of the individual conscience—the researcher's social responsibilities—care for quality of human life, the permanent moral value—some wisdom from outside science—individual versus statistical morality, an artificial distinction—three permanent values—absolute versus absolute inferences—the application of traditional, immemorial morality—summing up.

DR. MCDERMOTT: Thank you, Dr. Dubos. Would any members of the panel like to volunteer to start attacking the morals of each other or of our community? Prof. Medawar, do you have a question that you wish to ask?

SIR PETER MEDAWAR: I would like to say, if I may, just by way of starting off the discussion, how very much I agree with Dr. Dubos's questioning the permanency of moral values. We tend to strike moral attitudes that are actually obsolete or are out of date in relation to what we actually believe at the time. I'd like to give you an example of such a change of attitude. The question of the justifiability of abortion is not a scientific question, but it is a question to which scientific evidence is highly relevant, and, as the scientific evidence enlarges, so in fact do our opinions change. For example, a hundred years ago it would have been perfectly reasonable for a married couple to think that the child they conceived on any one occasion was a unique and necessary product of that occasion. That is to say, they would necessarily have the child they actually did have, if they had a child at all. And the child himself

is apt to believe this automatically. A child does sometimes say, rather wonderingly, that if his mother and father had never chanced to meet and fall in love and marry then he himself would never have existed. He does, however, take it for granted that, as they did in fact meet and fall in love and marry, they necessarily had him—him uniquely and distinctively. One of the things that has changed is the realization from Mendelian principles that the actual child conceived on any one occasion is one of a million possible children who might perfectly well have been conceived on that occasion if the luck of meeting of sperm and egg had been otherwise: So the child actually conceived by any one occasion is conceived as a matter of luck. Sometimes it is cruelly bad luck: A phenylketonuric (PKU) child may be born in the 25% of cases that would be expected if PKU heterozygotes marry. Why should we be victimized by this process of luck? We now have a new understanding of the process of conception and the way in which luck enters into it. Why should we regard ourselves as morally bound by the laws of chance to put up with the birth, let us

say, of a monstrous child if there were some humane and sensible way of preventing such a thing occurring? Our attitudes have changed.

PROF. KRECH: I would like to speak to another of Dr. Dubos's comments. I wonder if we all realize how radical one of his suggestions is. It is to this effect: that the choice of our research problems—not only biomedical but all basic research—is no longer to be determined by the interests and preferences of the research worker alone. Rather, this choice is to be controlled by social needs, social priorities, or social values. And this, for many research workers, does represent a radical reorganization of thinking. I happen to agree with you, Dr. Dubos, so I am proud to be associated with you in this revolutionary position. But it is a revolutionary position and one to which I think researchers would object—vigorously and violently—raising against us the old standards of “freedom” of research.

JUDGE BURGER: I have a feeling that the medical profession has had a tendency to overreact to some of the fears about law and lawyers and judges and juries. Admittedly, they have something of a problem as to juries because they are unpredictable. But the fact is that over the years, as was pointed out, our progress in the law is not so terribly glacial at that. I was perhaps overstating its slowness. But I also countered by pointing to the changes in attitudes, and another one comes to mind. A hundred years ago the dissection of human bodies was forbidden in many places. That's all gone; it's part of mythology now. A decision of our court recently has made the world safe for the town drunk: He may no longer be arrested, because it is not a crime to be a chronic alcoholic. He has to be picked up and put away, but he cannot be prosecuted and put in jail. Probably in due course the same thing is going to happen with narcotics addiction. Only within the last 18 months Congress has passed an

enormously significant piece of legislation calling for the treatment—compulsory treatment to be sure—but treatment as an alternative to imprisonment, of narcotics addicts. All I intended to point out was that the law cannot lead these things. It can only respond. You must lead them, and you must take your case to the public, either directly or through articulate lay people who can argue your case for you. And when you do, I think the consensus of the people in this country will respond. Just as your medical research has had this fantastic rate of speed in the last 20 years more or less, you have forced the law to speed up. You have brought about swifter changes in public opinion; and public opinion, in turn, is what leads congressmen and senators to act. So I would not be disheartened, and I would think that the medical investigators perhaps should lose some of the fears they have about going ahead just so long as the medical profession is prepared to control and denounce the irresponsible investigator and the irresponsible kinds of things that occurred in some of the disasters that I mentioned.

DR. LEDERBERG: At Dr. Krech's request, I will add a point to the one I was previously going to make and will comment on what he said. I didn't take Dr. Krech's remark as implying a large degree of social control of research; he was appealing to the social conscience of the individual investigator that he, the investigator, perhaps pay more attention to the requirements of his community in whatever way he could find it within himself to do. And this I heartily applaud. If Dr. Krech was stating that he agreed with the principle of social control of research—which I think he was saying—I would want to express my vehement disapproval. I would regard this as an utter disaster and one from exactly the point of view of attempting to reach the same aims that he has in mind. The implication that social control or any rigorous effort to re-

discipline research should be vested in regulatory bodies such as the Councils of the National Institutes of Health would require a concentration of social wisdom in a few individuals in exactly the area where we can least expect it in terms of innovation and creativity.* No one else can possibly know what ideas I might have if I am left to the freedom of my own choice of investigation in an area whose social consequences are not yet apparent. In this matter I think there is an enormous distinction between an appeal to conscience and an imposition of control. (Applause.) I am beginning to wonder what was wrong in what I have said.

I shared Dr. Krech's amusement in the parlor game "what if" as applied to the expected appearance of chemical innovations in the development of intelligence. And by the way, I fully agreed both with his expectations of the occurrence of a breakthrough in this area and with his statement of the time scale on which it is likely to occur (assuming that psychologists do learn some of the tricks of proper behavioral control in the conduct of their experiments). My only riposte is that the change in availability of higher education is a social experiment that I believe to be strictly analogous to what he suggests may come about with the availability of chemicals to influence intelligence. Until rather recently, higher education was a resource open only to a strictly limited segment of the population—the economically affluent. Its availability to a wider variety of social groups and different countries represents exactly the kind of experiment that he was postulating would come from the introduction of drugs that influence intellectual competence. I am not greatly alarmed about any of the possible outcomes of either of these two experiments. I believe there should be

* Since the Colloquium was held, Dr. Lederberg has accepted an appointment to the National Institute of Mental Health Council.

the maximum availability of whatever resources we have that can augment man's most human attributes for the use of his own intelligence and cooperativeness with other individuals.

There is a "what if," though, that we didn't raise concerning, particularly, some of the drugs that have already been investigated, namely, their hazards. It seems to me very unlikely that we are going to have it so easy that a chemical will be found that will improve intelligence and will have an unambiguously favorable effect or a neutral effect on every other aspect of human performance. In fact, there are some individuals in whom the very increase of intelligence represents a hazard, sometimes even to themselves. But that is not quite what I had in mind. I think any drug that has this kind of effect on the central nervous system will almost certainly have a risk attached to it for some individuals. We then face the nice question, Is an increase in humanity, a general increase in IQ, worth taking some risk with respect to the performance of this individual?

I would like to make a general remark on the whole issue of medical experimentation. I think the law is properly alarmed at a situation where individuals face the risk of becoming "bamboozled" into giving up, without evidence of appropriate consideration, an important value, namely, their life or health. And this is why, of course, one has to be so touchy about informed consent because it seems unreasonable to expect that an uncompensated individual or an individual whose compensation is ambiguous will in fact respond so altruistically. The law is suspicious of altruists and properly so. I have an answer that I think deserves to be explored. Then why don't we pay medical volunteers? Why don't we establish some level of compensation for risks incurred in the same way that, to a degree, we pay firemen and policemen because of the risk they take on our

behalf in their hazardous occupations? To a certain extent we grossly underpay them; we even pay our servicemen for the risks that they undertake on our behalf in military engagements. You may think that this would be an economic burden that we cannot afford to pay. But if we paid medical volunteers at actuarially sound rates and if we bought insurance against the hazards that might accrue to them, this could only have a humane effect. I think we should consider the whole question of whether, if there has been an ample exchange of information between the physician or the hospital and the subject of research, we would not have a much better precedent and an understanding that a fair contract had been made. I would like to open this question for legal and lay consideration.

JUDGE BURGER: There is historical precedent, as I suggested earlier; for lawyers, you know, can always find precedents for something cushioning the unhappy consequences of medical research. A couple of hundred years ago people who worked in the mills and the mines were subject to what was called the "doctrine of assumption of risk." They took the risk, and if they got killed or maimed, they were on their own and often went to the county poorhouse whether it was in England or in early America. Dr. Lederberg has suggested money payment for taking the risk. Perhaps this should not be compensation in terms of paying a subject for undergoing the experiment but rather in terms of providing a broad-based fund, financed in any one of a dozen ways and geared to the NIH grants for medical research, by which the victim of the unsuccessful experiment—the person who is maimed or injured or killed—is covered just as is a coal miner or another workman who is paid a compensation when he is injured, without reference to negligence. This would take this whole area of experimental medicine out of the realm of negli-

gence and malpractice. This is a possibility that some of your fertile-minded medico-legal people might do well to think about.

PROF. KRECH: In the first place, we do have a precedent. We have a fund now, do we not, for the victims of a poor experiment—our economic society; this fund is called "social security." But that is not what I really wanted to discuss. I want to go back to Dr. Lederberg and his unhappiness at the applause he drew. I think I know, Dr. Lederberg, what was wrong with your statement that drew the applause. It was your easy distinction (which I find very difficult or impossible to make) between "social control" and "individual conscience." I think that there is nothing so socially determined as a man's private conscience. Now, one speaks of the doctor's "personal" conscience and his attitude towards his patient. But these very attitudes and ethics were built up from the doctor's very first day of medical school. He was *taught* what were the "correct" attitudes. The doctor's "individual conscience" was very much socially shaped and is very much socially controlled. There are various ways of socially controlling the basic researcher also. What do we teach our research people? Do we teach them to seek truth for its own sake and to pay no attention to the effects of our research on society? Do we teach them that society will somehow take care of the effects and that it is none of the scientist's business anyway? He must merely discover the truth? If we teach that, then we are inducing one set of social attitudes or personal conscience or "scientific ethics." But this is a set of attitudes that I find, at this stage of the game, to be medieval at best. Another position would be deliberately to teach the basic researcher that when he goes into the laboratory he continues to carry with him all of his social responsibilities. When he takes off his "civilian" coat and puts on a laboratory coat he does not shed these responsibilities. If we taught him

this, as deliberately as the medical student is taught his ethics, we would produce scientists with a different (and in my opinion, a better) set of "personal" values. That is one form of using social control—inducing the proper attitudes. Let me now mention another kind of social control. We all apply for money from the federal agencies. Money has been the greatest invention for the promotion of research in the last 30 or 40 years—government money. And who gets the government money? Obviously someone makes decisions about that, and his decisions are not based purely on chance. This is another area of social control that has been made without much thought. Perhaps we should do some thinking about this form of social control, too. But in any event, Dr. Lederberg, I fail to see the distinction between "an appeal to conscience" and an "imposition of social control"—a distinction that, when you merely stated it, brought down the house with approving applause.

DR. ELKINTON: I can't quite let Sir Peter and Dr. Dubos go unchallenged over their delineation of moral standards as shifting sands without making a comment. And I think that this comment applies both to individual morality and to social morality. It seems to me that what we have been talking about, and what we all are interested in, is enhancing the potential *quality* of human life. This is so whether we are talking about the human life of one experimental subject or one patient or a whole population. Perhaps we have acquired *some* wisdom down through the ages from outside the boundaries of science—wisdom as to what constitutes, and what kind of action leads to, goodness, truth, and beauty in human life. At the core of this wisdom lies the general concept that to care for oneself alone is not as likely to enhance the quality of one's own life as is activity directed outside oneself, that is, care and consideration for the quality of life of others. These are

moral insights that we tend to look on as old-fashioned but that I think we cannot write off entirely. Let us realize that, as our knowledge and insights accumulate in both science and the humanities, we should be much better able to predict what actions on our part, as individuals or as a society, are going to affect the quality of life of that as yet unborn fetus or of that over-expanding population in an underprivileged country. I do believe that there is an absolute common denominator underlying our moral judgments, namely, concern for the quality and dignity of human life.

PROF. STUMPF: In that connection I want to comment on the distinction that Dr. Dubos made between individual morality on the one hand and statistical morality on the other. I think I saw the spirit in which he said this, but I genuinely feel that this is an artificial distinction because, in the last analysis, when you talk about the greatest good for the greatest number, you are still left with the question, In the name of what is this called a good for anyone? It has to be defined as a good for someone in order to be a good for many. I am sure you recall that this was a nineteenth century philosophy that was worked out mathematically by Jeremy Bentham and later on by John Stuart Mill. This is the utilitarian philosophy, and it usually is stated in terms of the greatest happiness for the greatest number. Then you have to define what you really mean by happiness. So finally you are driven back to some interpretation of what it means to be a human being and what is good for each individual. And in this sense I have some concern with your stating that probably we should have had a theologian speaking here today and at the same time saying there are no moral absolutes. This in itself is rather an interesting combination of ideas primarily because I think that we are not all that much in the dark regarding morality, whether it be individual or social.

My comments are made on the assumption that there are at least three virtually universal and permanent values. The first major value is truth telling and, with it, everything that is involved with respect to what we think of another person. I remind you that the possibility of a lie depends on giving the impression that you are telling the truth. It's a rather interesting point—you can't lie unless you affirm the value of truth. The second permanent value is expressed in the saying that we ought not to willfully injure someone; the third is that we should not take what is another man's. And this, of course, is especially pertinent to our discussion here today, for what belongs to a person more than himself—his body and his consciousness?

I want to underscore your comment—which bears on many other comments here—that medicine is not autonomous. This is the moral point I would want to make. I think the drift of the discussion, the drift of your comments particularly as well as of mine, is that science will not generate its own values, that somehow we have to bring to them the consciousness and deliberate power of the human mind. I feel much happier in dealing with simple moral insights than with a system for the reason that you mentioned, namely, that there is a shifting complexion to our problem as we get more information. I take it that one of the reasons for the Vatican Council is to discover ways of getting out of the box formed by absolutes, or getting out of a commitment to a certain formulation of an absolute. I believe in some absolutes and I think you do too, but I think that what we feel uncomfortable with are absolute inferences from these absolutes.

SIR PETER MEDAWAR: I wanted to make a comment on Dr. Elkinton's point: his warning that we must not make too much of the changing standards of morality. Certainly we cannot neglect what one might call traditional, immemorial wisdom. I do

indeed agree with him. I think we ought to remember traditional wisdom more often than we do when we strike moral attitudes about problems like the problem of abortion. The fact is, we do treat the fetus quite differently from the way we treat the newborn child. For we don't in fact baptize miscarriages; we don't in fact hold funeral services for them. We do not regard every menstruation as a culpable deprivation of human life. I think that over matters like this we should revert to a traditional and common-sense morality that does in fact make a distinction between the fetus—particularly the early fetus—and the newborn child.

DR. MCDERMOTT: I shall now proceed to close. Interestingly enough, particularly in this last three quarters of an hour, there has been a very constant thread running through the discussion to the effect, first, that morals are a reflection of culture, that culture is in constant evolution, that one cannot have laws until the attitudes of the society are there to back up the laws, and that there is something called a public good. Whether that public good is no more than the sum of the individuals "goods" is a point that Prof. Stumpf and I could hire a hall and debate. But this is obviously a public good of some sort for, if there are no social priorities, there is no ethical justification for clinical investigation or other biomedical research that conceivably might put an individual at risk. So much for this common thread. But above all, I return to a comment made by Prof. Lederberg at the beginning that struck me as being really the text of our Colloquium today. His phrase, "known the pain of the consequences of his actions," is the text that is running through everything that everyone has been speaking about. And our problem is that today we are so very much more able to see this linkage between our actions and their consequences that we can never really free our-

selves from anguish whether we act or choose not to act. I am convinced that it is this that has given rise to this extraordinarily fine presentation this morning for which, on behalf of us all, I wish to thank the participants very much.

DR. WRIGHT: On behalf of the American College of Physicians I should like to extend our deep gratitude to those who have contributed so generously to this remarkable intellectual experience. Thank you all very much.
