

## The Unethical in Medical Ethics

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An increasing societal recognition that the rights and dignity of the individual must be protected has led to an appropriate imposition of stricter ethical guidelines in medical research and practice. Occasionally, however, medical ethics is exploited. Examples are irresponsible accusations of unethical conduct, sensationalism, undue concern for prisoners as opposed to other experimental subjects, a bureaucratic proliferation of ethical regulations and review mechanisms, and a trivialization of ethical objectives. Such misuse of medical ethics compromises medical research, enhances public distrust of the physician, and devaluates medical ethics itself. The unethical in both medical practice and medical ethics can be contained by determined and greater effort to achieve understanding between physicians and ethicists.

**A** SENSATIONAL BOOK entitled *Human Guinea Pigs: Experimentation on Man* was published in England in 1967 (1). Written by M. H. Pappworth, M.D., this account indicts some 200 human research projects as unethical. At the end is an index listing chiefly the names of those responsible for the studies Pappworth found objectionable. Among the "I"'s you will find one "Ingelfinger"—misspelled but nonetheless unmistakable—and the procedure to which this citation refers is indeed frowned upon today: the catheterization of hepatic veins without adequate explanation to the subjects as to the purpose of the study, which was the development of a method to estimate hepatic blood flow. But I take some consolation in the fact that far better-known clinical investigators are cited more frequently—one of them 23 times!

I use the Pappworth book for two reasons. Firstly, you may accept it, if you so wish, as an explanation for my bias.

Secondly, it shall serve as a paradigm of a practice that, if carried out in an unrestrained and overly zealous fashion, may in itself be questionably ethical—this is the cavalier and often imitative disposition to cry, "J'accuse." I shall go on later to four other examples: sensationalism; prisoners as a privileged class; bureaucracy of Ethics; and ethics on the slippery slope. I am using the term "medical ethics" in a comprehensive sense. Included in the five

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categories I shall discuss are not only some occasional well-intentioned, if unfortunate, practices of professionals in ethics, but also—and to a far greater extent—the activities of others who, for a variety of reasons, exploit medical ethics. Thus some friendly critics have argued that when I mention the unethical in medical ethics I should use quotation marks, or that I should speak of "the unethical in what passes for medical ethics." Moreover, when I use the word "ethicist" I refer not only to the professional but to anyone who undertakes to trade in medical ethics.

### "J'Accuse"

Although the Pappworth book is an example of the "J'accuse" phenomenon, Pappworths are nevertheless essential if moral climates are to be changed. Someone has to have the courage to stand up and demand, "Halt! What we are doing is wrong." This is what Pappworth did in England, and this, of course, is what Henry Beecher did in his article, "Ethics and Clinical Research" (2). These two physicians sensed the antitechnologic, prohumanistic temper of the sixties, and the emphasis on the individual as opposed to societal priorities that was emerging. And it was indeed fortunate for medicine that the first to call certain research practices into question were physicians. As Pappworth himself wrote as early as 1963, "Unless the medical profession itself stops the unethical practices of this minority, the public outcry will eventually be such as to cause opposition to all clinical research" (3).

At the end of his paper, Beecher calls for editorial responsibility and argues that data, even if valuable, should not be published if they were improperly obtained. Most, although not all, biomedical editors now appear ready to accept that responsibility, but the means that the editor should use to discourage questionable human experimentation is widely debated. *The New England Journal of Medicine* has tried to follow Beecher's suggestion, but others hold that all scientifically valid reports should be published, provided those based on ethically suspect methods are so identified in an accompanying editorial. It is this suggestion that first made me realize the predicament that should be sensed by any person who undertakes to accuse a colleague publicly of unethical conduct. What special insight or superior moral sensitivity gives me license not only to accuse but to judge? Occasionally, the impropriety of a given protocol is flagrant, but most of the time the editor who would be ethicist has to sort out the grays. For ex-

ample, what sort of ethical rating should be given to a randomized clinical trial of medical gallstone dissolution in which the placebo-receiving controls, as well as those receiving the drug, would be subjected to two liver biopsies?

Similar scruples do not appear to inhibit the Beecher-Pappworth imitators, who commit, in my opinion, ethical transgressions in the name of medical ethics. It is these imitators who still find it profitable to discover and to label with sanctimonious confidence this or that research endeavor as unethical. Particularly disturbing to me are those who, from the vantage point of our current social and ethical climate, point the accusatory finger at experiments carried out at a different time and under different conditions.

Even the overall reaction to the so-called Tuskegee experiment concerns me, that is, the Public Health Service program in which heavy metals and then penicillin were not given to poor black men to determine the natural course of syphilis. According to today's standards, the study was wrong—dreadfully wrong. Yet who is sure that he would have stood up and told the Public Health Service in 1933—or even in 1953—"You are committing an outrage"? Who is so sure? Many, it would seem. For after the Tuskegee experiments were brought to light in 1972 a wave of indignant writers and speakers jumped on the bandwagon of propriety to denounce both experiment and experimenters. But you will find little in the *New England Journal of Medicine* about it. Why? Because I find nothing ethically noble in joining the mob to deliver another boot to a dying beast—no matter how filthy the beast may be. Unfortunately, it is far too easy to be ethically obtuse; but likewise, it is far too easy to be ethically self-righteous.

It is quite another matter, of course, when a critic, within the context of current criteria, challenges the ethicality of a contemporary study. But even under such circumstances, the process becomes unethical to the extent that the critic is unaware of all the facts. In addition, the critic who bases his accusation on his perception of a risk-benefit ratio may impugn an experiment or procedure that ultimately becomes accepted by society on the basis of its own evaluation of price and profit. Pappworth, for example, was particularly critical of coronary angiography, for he believed that little could be done to treat coronary artery disease even after it had been radiologically defined.

Thus, unless he is dealing with a flagrant violation, the ethics of the finger-pointer concern me. If he is assailing a past event, he is applying today's standards to yesterday's action. If he condemns a contemporary practice, he may do so in ignorance of its future benefits.

### Sensationalism

If various professional types do not hesitate to bend ethics to their own advantage, what can one expect lay analysts to do? Few news items are potentially more sensational than charges of "research" doctors mistreating human beings (the secretary who transcribed my original dictation of this passage wrote, "research doctors' mouths eating human beings"—perhaps a more accurate rendition of the idea some reporters wish to convey). Often muck-

raking by the press and television are all to the good, particularly when the impropriety of the procedure is egregious—for example, the threat of physical punishment to coerce prisoners to participate in a drug trial. But when the ethical pros and cons of an experiment are not so easily segregated and measured, or if the accusations are in fact vastly exaggerated, it is the accused who is at peril. The investigator who is pilloried on page one, but later exonerated far to the rear among the ads, hardly gets a fair deal. Indeed, it may be the researcher's rights, rather than those of his alleged victims, that may be violated.

As an example of sensationalism, I shall cite a BBC program shown both in England and here in the USA under the imprimatur of the excellent Nova series. The very title of the program is pejorative: "Are You Doing This For Me, Doctor, Or Am I Doing It For You?" Although personal satisfaction and gain must to a variable degree motivate most researchers, the real and undistorted and hence the ethical question is, "Are you doing this for me, doctor, or are you doing it for others?" The issue hinges on the old dilemma of individual versus societal rights. To frame the question in words suggesting that individual rights are being weighed against the length of the investigator's bibliography represents a bit of mischievous sensationalism.

The opening sequence of the film as shown in Britain was even more unfair than the title. The first shots show an appealing infant, but the infant is blind, as emphasized by two black marks effacing his eyes. The accompanying narrative runs as follows:

"Although most experts were aware that a special form of blindness in premature infants was due to excessive use of oxygen, it was decided to prove this conclusively on a scientific basis. At a New York hospital, a group of premature babies were deliberately given large amounts of oxygen. This directly resulted in the permanent blindness of eight of them."\*

The implications are that the investigation was no more than a coldly scientific exercise. The film's producers were apparently unaware of the controversy that raged at the time of the experiment, and that pediatricians were extremely resistant to the idea of not giving high concentrations of oxygen to premature babies who otherwise might die of respiratory failure. Indeed, the controversy is still alive. A report in *Lancet* in 1974 (5) argues that the abandonment of high oxygen treatment led to many more infant respiratory deaths than the number of blind children that would have resulted had high level oxygen therapy been continued.

Today, of course, increased oxygen concentrations are again used to help premature infants with respiratory distress syndromes to survive, but dangerous blood levels of the gas can be prevented by the use of techniques of blood oxygen analysis available now but not formerly. The irony is that the BBC film could have made a valid criticism of the experiments, because appropriate animal

\* The narrator presumably referred to a study by Patz, Hoeck, and De La Cruz (4), carried out in Washington, D.C., in which grades III or IV retrolental fibroplasia developed in 7 of 28 premature infants exposed to high oxygen levels.

studies were not carried out until after the human experiment had been completed (6).

One other aspect of the BBC program is wryly amusing. I appear briefly—very briefly—in the film to comment on the role of the editor in restraining unethical human experimentation. It is therefore of interest that when, in one of the program's sequences the Pappworth index of culpable experimenters is shown, the middle of the alphabet is discreetly omitted.

### Prisoners as a Privileged Class

Much has been written about the experimental exploitation of institutional inmates, and of all such groups prisoners have elicited the greatest concern. (And by "prisoners" I refer to civil convicts, not to military captives). To what extent convicts have been maltreated in the pursuit of medical research is hard to ascertain. Some outrageous examples have been publicized, especially by Jessica Mitford (7). But the Mitford article is a crusading piece that, I assume, does not present a balanced assessment of medical experimentation in prisons. Just because one congressman is, or was, an ecadysiastophile does not mean that all his colleagues will turn up on a burlesque stage. Moreover, the quotation at the head of the Mitford account is noteworthy. Printed in large type, it reads: "CRIMINALS IN OUR PENITENTIARIES ARE FINE EXPERIMENTAL MATERIAL—AND MUCH CHEAPER THAN CHIMPANZEES."

Because this statement is in quotation marks, somebody, I would have thought, must have said it, and, sure enough, Mitford cites Pappworth (1), who in turn quotes Pertinax "in the *British Medical Journal* for January 1963":

"One of the nicest American scientists I know was heard to say, 'Criminals in our penitentiaries are fine experimental material—and much cheaper than chimpanzees.' I hope the chimpanzees do not come to hear this."

But there is something funny here. Pertinax, in the first place, is the pseudonym of a quondam columnist for the *British Medical Journal*. He is not identified, nor is "one of the nicest American scientists" he knows. Nor is it at all clear from the alleged Pertinax account that he himself heard what the nice scientist said. Furthermore, examination of the Pertinax columns in the January 1963 issues of the *British Medical Journal* reveals nothing whatsoever on the subject of experiments performed on prisoners. To complete this tale of words attributed to a person more vague than the customary "usually reliable source," Pertinax, whose identity I now know, denies ever having made any remarks of the sort. Thus the statement quoted at the head of the Mitford article about criminals being cheaper than chimpanzees is an outstanding example of ethical goals pursued with unethical tactics. And if there is one aphorism that ethicists like to embrace, it is that the ends do not justify the means!

Let us turn to more objective students of the problem. They argue that prisoners are under implied if not overt duress, and that therefore, no matter how ideal the conditions of the experiment, prisoners should under no conditions be used for medical experiments. For a number of

reasons, many of which have been expressed by others, the validity of this argument does not impress me, but my concern today about the nonuse of prisoners for medical experimentation involves another issue—that of distributive justice.

Some of the most important research on prisoners has been directed to projects supported by the military with the entirely laudable objective—military sponsorship notwithstanding—of reducing the morbidity and mortality of our troops as they are treated for shock, injury, or infection, including such devastating long-time scourges as cholera and shigellosis. Now, just who are these troops? We may have a volunteer army in peacetime, but in any major conflict the bulk of the young adults of the country will be drafted into service. The draftee, moreover, will be expected to put everything on the line: his health, his limbs, and his life. He will be expected to die, pro gloria patria, if his blood loss is massive, or if his immunologic system cannot contain the virulence of an infection. Should not these risks be distributed as equally as possible? Should not prisoners, relatively immune from military service, be allowed to participate in the development of new blood substitutes and vaccines, developments that appear imminent? I am not arguing that prisoners be compelled to serve as ordinary draftees are compelled to serve. I do suggest, however, that prisoners, under proper conditions of human experimentation, should not be excluded as subjects for experiments that may help save the lives of others required to make far greater sacrifices. To do otherwise impresses me as grossly unfair, and to be unfair is to be unethical.

### Bureaucracy of Ethics

Towards the end of the last century, the Prussians tried to control trichinosis. Laws and regulations were promulgated. Platoons of inspectors were appointed to examine samples of pork for the presence of *Trichinella spiralis* cysts. Platoons grew into regiments, and regiments into an army. When the number of inspectors came close to outnumbering those employed in raising, preparing, and selling pork, the value of the program came into question, especially since the Prussians were still getting some trichinosis. We are on a similar course with respect to the ethics of human experimentation, although, true to our democratic principles, we shun an army and create, by preference, a bureaucracy.

It is not easy to keep up with governmental regulations, proposed or actual, but a series of items in the Federal Register would suggest that HEW-supported investigations that involve human subjects will be controlled, supervised, and accredited by the following bodies:

1. An *Organizational Review Committee*, a local institutional committee responsible for reviewing and approving the ethical aspects of all research conducted at that institution, and for certifying that the institution is complying with HEW regulations concerning human experimentation.
2. A *Consent Committee*, a committee that must be appointed for each—I emphasize "each"—research activity that may involve fetuses, prisoners or the mentally disabled. The duties of such a committee are to monitor how

subjects are selected, how consent is obtained, and how the study is actually carried out. This type of committee was originally called a "Protection Committee" but the name was changed to "Consent" because the term "protection" is pejorative. So now we have a euphemism mislabeling a committee that unequivocally is a protection committee.

3. An *Ethical Advisory Board* (or Boards) established in the NIH to advise funding agencies concerning the ethical aspects of applications involving human subjects.

4. A *National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research*. This commission, already at work, is to study and promulgate basic ethical principles, study and define consent procedures to be used when prisoners, children and institutionalized subjects are involved, and to make special recommendations concerning fetal research and psychosurgery.

5. *Congress*, quite apart from this ethical bureaucracy, may pass special laws, such as declaring moratoriums on research involving fetuses and psychosurgery.

Surely the creation of this bureaucratic hierarchy is laudable in its objectives, but is it practical, and is it logical? What will it do to medical research, and most important, will it make medical research more ethical?

Think of the man-hours that must be devoted by consultants, staff and secretaries, of the reams of minutes, certificates, statements, and documents that must be prepared, duplicated and circulated. Think of the problem of recruiting informed and unbiased judges to sit on these various committees. Think of the assignment of the consent committees: if they are really to police day-by-day experimentation, obviously they have to be around day-by-day. And then, when this bureaucracy of ethics is added to that which already exists to evaluate a research proposal on the basis of its scientific merits, one has another example of a situation where the number of inspectors threatens to outnumber the inspectees.

The logical basis for a bureaucracy of ethics is also dubious. It appears quite unlikely that a person's moral sensibilities can be legislated. Squads of inspectors and a multitude of writs cannot control the habits and mores of a society, as the futile efforts to enforce prohibition or to contain drug abuse make all too clear. The reaction of bureaucracy to these frustrating facts is predictable: if it cannot force a man to entertain certain abstract principles of moral behavior, it can at least regulate all the tangible consequences of whatever principles he may have. It can create an ever growing pile of rules and administrative procedures to keep the investigator toeing the line. If, moreover, all the contingencies are to be covered, the lines of small print will have to be spun forth in endless skeins. But once a rule book becomes too thick its utility diminishes. All can remember and honor the simple rule that you shall not hit below the belt, but if there are countless exceptions, when such blows might be allowed, or when blows on the chest are forbidden, then the force of the basic ethic is weakened, the details become more important than their essence, the letter of the law takes precedence over its spirit.

A good example is the fine print with which the FDA

has attempted to improve the use of drugs. For over a decade, doctors have been exposed to congested instructions as to the good and bad effects of this or that prescription drug. But how effective has this process been? Only after Congressional hearings and other forms of publicity was the improper use of chloramphenicol gradually curtailed. And even now, large-scale efforts by the government, the AMA, and the American College of Physicians still appear necessary to inculcate the profession at large with the basic principles of good antibiotic usage.

Furthermore, when this mass of regulatory chicken wire is wrapped around a researcher what will happen? Many a would-be investigator will be appalled by the rigmarole involved and may enter private practice, where, ironically enough, he will be able to "experiment" with relatively fewer constraints. Popular belief to the contrary, much systematic research, such as the much-touted randomized clinical trial, is intellectually somewhat humdrum. If its intrinsic laboriousness and complexity are compounded by many additional conditions and specifications, other investigators will turn to the laboratory bench at the expense of conducting the ultimately crucial testing in man.

Let us agree that ethical human experimentation must be inculcated into the practices of the community of clinical researchers. We *do* need a list of ten ethical commandments. A national commission to debate the nature of such commandments may well serve a good purpose, although one may wonder if the diverse elements of the Commission really can reach any consensus. Or will eternal ethical verities be determined by 6 to 5 votes? And even should the Commission reach some agreement, will its report be accepted either by the President (recall the Commission on Obscenity), or by many of the public (recall the Commission on Marijuana)?

Institutional Ethical Review bodies such as now exist also can serve effectively and act as constant reminders and deterrents. But all the rest, a hierarchy of review bodies, and interminable regulations in the futile pursuit of covering all contingencies not only are superfluous: they approach the absurd. And to the extent that the absurd is interjected to bring about ethical behavior, to that extent ethical regulations become, if not unethical, at least anti-ethical.

#### Ethics on the Slippery Slope

My fifth example of the unethical in medical ethics deals with the untoward effects on public opinion and attitudes when medical ethics becomes a subject of misuse, of undue preoccupation, or of vogueish exploitation. To illustrate such misuse, I have selected extreme examples not at all representative of the mainstream of medical ethics. Yet it is just these extremes that in unwarranted proportion capture attention and influence the public. Ideally, ethics and science should in mutualistic fashion foster finer medical practice and research. Innumerable are the problems that call for a concerted effort of this kind. Instead, such is the

\* About 3 weeks after presentation of this paper, the Commission voted 8 to 1 (2 members absent) in favor of permitting certain strictly defined types of fetal research. At least one subsidiary issue, however, did lead to a 5 to 4 split.

dominance of what one might call the frenetic fringe of medical ethics that the goals become perverted. In the name of ethics, anti-intellectualism and anti-science are encouraged, hostility to medicine is nourished, clinical investigation is compromised if not castrated, and, paradoxically enough, the cause of probity itself is harmed.

Ethical principles are properly invoked to defend the rights, dignity and health of individuals or groups. But the pendulum swings too far when tactics are used that denigrate scientific inquiry and creativity. Thus programs labelled as documentary, but more properly identified as propaganda, emphasize the cruelty of animal experiments, the indifference of hospital personnel, the heedlessness of the prescribing physician, and the arrogance of the scientific investigator. In Wiseman's film, *Primate*, even the crushing of carbon dioxide ice with a hammer is filmed in a way to make the process look ominous. Senatorial rhetoric denounces the use of beagles for experimental purposes. The consequences are what might be expected. Public confidence in medicine is progressively diminished, and the rank growth of malpractice litigation threatens common sense patient care. The public, instead of being induced to participate in medical experimentation—to join the investigator in a common search for increased knowledge, a goal Hans Jonas (8) envisioned—is frightened off, convinced that guineapigism will be its lot. Serious and humane concerns as to the allocation of scarce medical resources, the considered management of those with hopeless disease, and the pros and cons of abortion for individual and societal purposes deteriorate into quarrels by activist groups ever ready to label the opposition as Nazi experimenters or fanatic inquisitors. Whenever medical ethics is used to promote an atmosphere so charged, its use is unethical.

Public fears of medical research are readily translated into legislation that is designed to alleviate those fears but that—incidentally or purposefully—hamstrings the search for new knowledge. In Massachusetts, for example, legislative proposals were considered that would have barred all fetal research. That such legislative maneuverings were directed against abortion rather than toward promoting more ethical experimentation is widely suspected. Fortunately, the initial bill was modified, and the nature of existing laws continues to be examined.

Nevertheless the mere threat of such laws, intensified by the results of the Edelin trial and the indictment in Boston of four other fetal researchers for "grave-robbing," has already exerted a deleterious effect on research. A basic genetic study, for example, depends on the use of human neonatal foreskins, which otherwise would be discarded after circumcision. Physicians who once supplied the investigator with this material are now hesitant to do so. In another institution, *in vitro* cultivation of the virus of infantile gastroenteritis has come to a halt because human fetal intestinal tissue essential for the organ culture is no longer available. And as recently pointed out in *Science* (9) development of a flexible amnioscope was turned down by an institutional review committee because this committee "thought the situation too risky with respect to the law." In the climate that has developed, moreover, medical

ethics has become a preoccupation if not a vogue. Rule-makers scramble in competitive haste to introduce some new ethical gimmick. A particularly objectionable consequence is the trivialization of ethical objectives. A good example is the idea that "informed consent" must be obtained whenever a health worker wishes to examine, for purposes of research, not only a patient's body, but also tissues removed for therapeutic reasons from that body, and—unbelievably enough—the wastes that that body has excreted.

"Mr. X," I must ask, "may I have permission to take a piece of that cancer recently removed surgically from your liver, so that I may examine it under the electron microscope? You should realize, of course, that this examination will in no way help you to get over your cancer."

Or, if I want to compare the usefulness of two tests for occult blood in the stools, must I stand guard at various appropriately labelled doors and petition each entrant for his authorizing signature?

Ridiculous and far-fetched? Far from it. Several institutions already have or are contemplating such rules (10). Others, alarmed at the prospect of wishing to examine some frozen blood sample taken some years earlier, but unable to find the sample's owners, are designing release forms that all patients will be requested to sign, and that will give the institution or the physician blanket permission to study whatever tissues and wastes are collected. Moreover, some legislative proposals would aggravate such trivialization. A proposal in Massachusetts, for example, would prohibit the use of any information obtained from what is called "health consumers" for the purpose of preparing a medical article—unless the written consent of each involved consumer is first obtained.

The ostensible reason for all such precautions is the preservation of confidentiality, but confidentiality can be honored by the use of various stratagems. Even the *New England Journal of Medicine* eliminated some five years ago the use of patients' initials in any published report.

The goal of confidentiality, moreover, should be viewed in context. As far as I know, most of us are the subjects of dossiers compiled by businessmen, by credit bureaus and, often enough, by government. In such dossiers the nosy can discover our foibles and faults, listed not only relentlessly but at times erroneously. Countless people already have access to hospital records, and once peer review and national health insurance are the order of the day, our privacy will be further eroded. To worry in such a setting, where solvency, sobriety, and sex life may be recorded in minute detail, about someone discovering that our urine contained oxalate crystals is like pulling down the shade another inch in a room completely bugged for sight and sound.

The costs of this trivialization of medical ethics are considerable. For minor gains in behalf of confidentiality, major advances in medical knowledge may have to be sacrificed. More alarming, however, is the dilution and the depreciation of the important by a proliferation of the trivial. The patient, asked to sign countless releases or consents, may respond with a blanket refusal or with a proforma signature. The physician, immersed in a pro-

fusion of unimportant detail will lose sight of, and respect for, the important issues. Perhaps he will feel compelled to practice defensive ethics—no more honorable than defensive medicine. For medical ethics, in short, trivialization is self-defeating.

#### Discussion

The ethicist, real or so-called, finds as he examines medicine, a pimple here, an inappropriate secretion there, or even a more widespread but far from universal behavioral aberration. On such anecdotal evidence, a case may be constructed suggesting that medicine is worse than it is.

I have used similar tactics in criticizing medical ethics and may have implied a far more unfavorable impression of this social science than I actually hold. But if medical ethics is to achieve its goal of imbuing medical research and practice with a loftier morality, both medical ethics and medicine will have to treat more vigorously the pimples, the inappropriate secretions, and the behavioral deviations.

How can such goals be attained?

One might, in the spirit of the day, establish committees, commissions, and a gung-ho staff to regulate all those regulating medical ethics. A less Kafkaesque but no more practical suggestion is to ask ethicists to police themselves and those who would abuse their discipline. The answer, I hope I have convinced you, is not more fine print, not more rulemakers.

Rather, it depends on a continuing and ever more intensive consciousness building. The physician must become more aware of the ethicist, and vice versa. With all that has been spoken and written, such advice might appear gratuitous. But a recent meeting, entitled "Experiments and Research with Humans: A Conflict in Values," sponsored by the National Academy of Sciences, showed that a huge gap in understanding still separates the medical scientist and the ethical philosopher.

The investigators at this meeting by and large recited the accomplishments of medical research—as if that were an issue! They were on the whole insensitive to the ethical pressures that society has generated.

Some philosophers, on the other hand, insisted that the care of patients should be the result of categorical absolutes, that a balance of risks and benefits should play no role. How abysmally ignorant of medical practice is such a position! It was all very disheartening\*.

Greater understanding can be achieved by promotion of

\* After presentation of this paper, similar opinions were voiced by Jonsen (11) and Gaylin and Gorovitz (12).

greater contact. The elaborate and unavoidably formal interchange of a conference such as held by the National Academy of Sciences will not do by itself. Ethicists should, as Paul Ramsey did, spend months at a university hospital. Investigators should involve ethicists in their early planning. Physicians should attend seminars in ethics and philosophy such as those currently sponsored by the National Endowment for the Humanities for health professionals. Local discussion groups should be formed, and at least one such group functions twice a month in the Boston area under the aegis of the Harvard School of Public Health. The value of these meetings is not—I emphasize not—the formulation of new ethical concepts, and certainly not the elaboration of new ordinances; rather it is the opportunity given to each to become aware of the other's ideas. A national organization promoting such mutual understanding is exemplified by the Institute of Society, Ethics and the Life Sciences (the "Hastings Institute"). Unless integrations of this type are aggressively sought, ethics will not exercise the influence it should have in medical research and practice, and medical ethics itself will continue to be tainted by unethical exploitation.

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