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"THE DOCTOR'S DILEMMA" OR MEDICAL ETHICS IN PEACE AND WAR[1]

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SOME thirty years ago George Bernard Shaw, the famous English author and playwright, published a play entitled "The Doctor's Dilemma," which, like Molière's play, "Le Médecin malgré lui," has had a long and successful run on the stage. As in most of Shaw's published plays there is here a preface as long as the play itself in which the author condemns in wild but witty phrases current social conventions, and advocates Shavian Socialism as a cure-all. In "The Doctor's Dilemma" his unreal and emotional attack on medicine and science in general has just enough of truth in it to make it take with the general public. He denounces current medical ethics, pours contempt on the conscience of doctors, their assumed infallibility, their mercenary motives, their craze for surgical operations. He declares that doctors are not scientists, but pill dispensers and saw-bones; he denounces vivisection, and goes so far as to declare that bacteriology is a superstition, vaccination a craze, inoculations a public peril, and that doctors in general are animated with primitive savage and cruel motives. Finally the only remedy for this sad state of affairs is the "social solution" or the socialization of medicine.

The public, who see only the play on the stage and do not read the preface of the printed book, miss much of this diatribe, but they see Dr. Ridgeon of the play and his apprentice acting the part of Satan in the tangled human relations of greed *vs.* generosity, lust *vs.* love and murder *vs.* mercy.

My purpose in calling attention on this occasion to this and other absurd misrepresentations and exaggerations of the lack of ethics on the part of medical men is to contrast the high level of genuine medical

[1] Address at the graduation exercises in medicine, University of Pennsylvania, December 22, 1943.

ethics with the low level of social ethics in general. It has been popular for a long time in stage plays, such as "Le Médicin malgré lui," "The man who married a dumb wife," and many others, to poke fun at the pretensions and foibles of doctors and to shower contempt on their so-called ethics, but in reality the ethics of the medical profession in general is far and away higher and more ideal than the ethics of society as a whole, and it is certainly more realistic and at the same time more idealistic than that of any other profession, unless it be that of the minister of religion. From the beginnings of Greek medicine in the fifth century B.C. down to modern times the "Hippocratic Oath," named after Hippocrates, "The Father of Medicine," was taken by all persons entering upon the practice of medicine. This oath, in translation, reads in part:

I swear by Apollo physician, and by Asklepias god of healing, and by all the gods and goddesses:
To regard my teachers as equal to my parents.
To help the sick according to my ability and judgment, but never to injure or wrong them.
Not to give poison to any one, nor to cause abortion, but in purity and holiness to guard my life and art.
Into whatsoever house I enter I will do so to help the sick, keeping myself free from intentional wrong-doing and harm.
Whatsoever in the course of practice I see or hear that ought never to be published abroad, I will not divulge.
Now if I keep this oath and break it not may I enjoy honor in my life and art among all men for all time;
But if I transgress and foreswear myself may the opposite befall me.

Here is certainly a highly ethical professional code, and although candidates in medicine may not now be required to take this "Oath of Hippocrates," the profession as a whole is pledged to save life and to ease pain wherever this is possible, whether among friends or foes. The saving of life, like the saving of souls, is so much more important and vital than the saving of property or of social pride or of class and national prestige, that violations of humanitarian ethics on the part of physicians or ministers of religion are regarded as more reprehensible than in business or law or statecraft. The profession of medicine, like that of religion, is a humanitarian and holy calling and its ethical code is correspondingly high. These humanitarian professions point the way to better social and moral relations in all phases of society in the world to come after this great crisis in human history.

The contrast between the broad humanism of medicine and "the inhumanity of man to man" in many other social relations is most striking in times of war or preparation for war when the ethics of conflict justifies the wholesale slaughter of enemies and the saving and protection of friends only. This great contrast was nobly stated by Louis Pasteur, whom the French people have voted the greatest of Frenchmen, greater even than Napoleon, and of whom Sir William Osler, once professor of medicine in this university, said, "He was the most perfect man who ever entered the kingdom of science." Pasteur said in the concluding paragraph of his oration at the dedication of the Pasteur Institute in Paris on November 14, 1888:

Two contrary laws seem to be wrestling with each other nowadays; the one a law of blood and death, ever imagining new means of destruction and forcing nations to be constantly ready for the battle field—the other a law of peace, work and health ever evolving new means of delivering man from the scourges which beset him. The one seeks violent conquests, the other the relief of humanity. The latter places one human life above any victory; while the former would sacrifice hundreds and thousands of lives to the ambition of one. The law of which we are the instruments seeks, even in the midst of conflict, to cure the sanguinary ills of the law of war; the treatment inspired by our antiseptic methods may preserve thousands of soldiers. Which of these two laws will ultimately prevail, God alone knows. But we may assert that French Science will have tried, by obeying the law of Humanity, to extend the frontiers of Life.

The law of humanity *vs.* the law of the jungle, the law of peace *vs.* the law of war, the law of health *vs.* the law of disease, the law of life *vs.* the law of death —there are no greater contrasts than these in all nature and in all human affairs! In all these opposing laws, ideals and goals, medicine is always on the side of humanity and the angels. Even in the midst of wars of the utmost destruction and even of wholesale extermination of armies, cities and nations, medicine has not heretofore been employed to destroy life but only to save it. There have been proposals to spread epidemics of diseases, to shower enemy armies and peoples with pathogenic bacteria and viruses, to poison food and water supplies, but none of these have ever been put into practice on a large scale. No doubt this is in large part due to the fact that epidemics are too likely to recoil on those who attempt to spread them, but it is also due to the fact that biology is the science of life rather than of death, and that medicine is by its very nature humanitarian rather than the opposite.

And yet military medicine is one of the very potent factors in modern wars, but it is always employed to save life rather than to destroy it. To be sure it is employed chiefly in saving the lives of friends rather than of enemies, but nowhere is the contrast greater between the humanitarianism of medicine and the inhumanity of war than in the medical and surgical treatment of wounded and helpless friends and foes.

This terrible conflict between the ethics of war and the ethics of medicine is especially confusing in totali-

tarian war, when whole nations, men and women and boys and girls are called upon to lend all possible aid and to give their very lives for the aims and ideals of the warring nations. Medical men have not been slow to take a leading part in this conflict. Everywhere they have given their utmost services for the success of the ideals which are at stake. The medical units which have gone out from this university have rendered most valuable services in many parts of the world; their members have labored and suffered for the cause which they represent. Those who have remained nearer home have labored with equal enthusiasm for the success of these ideals. Indeed this is a war of ideals rather than of nations, and nothing is more worth fighting for and dying for than our highest ideals. But now and always medical men recognize that above all ideals of merely national patriotism and prestige are the ideals of humanity. And so we find medical men laboring to save life and to ease suffering whether among friends or foes, thus giving practical expression to the ideal that "above all nations is humanity."

This war of ideals will be won by the better rather than by the worse, for humanism is more potent than nationalism; truth and justice and liberty more enduring than falsehood, injustice and slavery; love and peace more universally demanded than hate and war. The ethics of medicine is thus in a peculiarly favorable position to influence the peace and the state of society after the war, for if this war is not to be fought and won in vain, the ideals of humanity must prevail in shaping the peace and the world to follow.

The world needs more statesmen and lawyers and educators and public leaders with the realism and idealism of scientific medicine. Too long have our social leaders treated the ills of society as savage medicine men, witch doctors, magicians and plain fakirs once treated the diseases of the body, trying to charm away the symptoms rather than to remove the causes of diseases. The disorders and diseases of society have natural causes and these causes must be controlled if social health is to be restored. Wars and social revolutions are man-made and they can be man-cured. May the spirit and methods of modern medicine guide our national leaders in treating this sickness of society, and may the humanitarian ethics of medicine grow and expand in all human relations!

The current discussions concerning the relative merits of socialized medicine as contrasted with individual or private practice is not so much a question of aims and ideals as of means and methods. The aims and ideals of the medical profession are now and have always been essentially altruistic and humanitarian, but there are quite naturally differences of opinion as to the best methods of putting these ideals into practice. The real question is how the advances of medical science can be made most widely available to those who need them. There is no doubt that large numbers of people now suffer and die for lack of proper medical attention. How can this sad condition be relieved most satisfactorily? For several centuries western civilization has recognized the humane duty to care for the sick, whether they are poor or rich. Hospitals have been established for all classes and conditions of men at first by private charity and more recently by public taxation. Health and sanitation are now recognized as of such vital concern to society that they have been cared for by public means if private provisions have been insufficient or lacking, but the need of additional medical services is still very great. Society in general now realizes that the health of the people is as important as their education. Indeed in respect to the welfare of a nation medicine and education stand on essentially similar ground, both must be provided for, either by private or by public means.

Education was formerly a private and individual concern. Those who could not find means to attend private schools were compelled to remain unschooled. Then came the free school system, supported by general taxation, for all who were unable to attend private schools, or who preferred the public schools. Finally came universal compulsory attendance on schools, whether public or private. There are certain advantages of private schools over public ones. Pupils can usually have more individual attention from their teachers, schools can be chosen which are better suited to the individual peculiarities of pupils, the individuality of both pupils and teachers can be better safeguarded in private schools than in public ones. On the other hand, there are certain advantages in public schools, apart from their being available to all the people, for they place especial emphasis on training for the duties of citizenship and for the democratic way of life.

Similar conditions are found in the private as compared with the public services of medicine, and for the present, in both education and medicine, there is room and need for both private and public systems. But there are strong currents at present making for the greater socialization of both education and medicine. The Russian social revolution has affected all nations, and now this world-war for democracy and against autocracy and special privilege is likely to affect both education and medicine in a new world order after the war. We may expect that men and women who have served and suffered for the ideals of democracy will not readily abandon those ideals when they return to civil life.

Our leaders have assured us that we are fighting

for the four freedoms—freedom of religion and of speech, and freedom from want and from fear. Freedom from want means not only from want of food, clothing, shelter for all, but also freedom from the want of medical services for all who need them. Freedom from fear not only from fear of foreign aggression, but also from fear of poverty, sickness and helplessness. Through many centuries and in many countries this struggle for freedom has been going on and much progress has been made. The present world crisis is perhaps the greatest as it is certainly the most wide-spread of all the battles for freedom.

In the matter of freedom from the fear of many epidemics, such as smallpox, the black death, yellow fever, diphtheria, typhoid, etc., medical science has largely conquered helpless and irrational fear. To-day fears of cancer, poliomyelitis, heart disease are wide-spread, but when their causes are more fully and generally known irrational fears will be relieved, even if their prevention and cure have not been solved. For example, in the epidemic of infantile paralysis in 1916 many towns and villages established shot-gun quarantine against all transportation of persons under sixteen years of age. In the 1890's similar quarantines were set up against all persons coming from yellow fever districts. Medical science has in large part removed such irrational fears even if it has not established unfailing cures of these diseases or means of their prevention. We fear most those things which are mysterious, "the pestilence that walketh in darkness," the causes of which are unknown.

But the want and need of medical attention and skill on the part of the population in general is more important than their relief from fears. The enormous amount of preventable sickness and incapacity for useful work is one of the greatest if not the very greatest of all social problems. This problem must be attacked realistically. In addition to private practice, supplemented by public hospitals and clinics, there must be increased facilities for taking the results of medical science to those who need them most, and if this is not or can not be done by the age-old method of private practice it will necessarily be done by some system of public or socialized medicine. For universal medical service is a social necessity and can not be indefinitely postponed.

I congratulate you who are to-day admitted into the ranks of this honorable profession. May you bring to it the skill and resources of modern science and the altruism and idealism which have made medicine a humanitarian profession and not merely a business or trade.

AGRICULTURAL RESEARCH IN THE WAR AND AFTER. II

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When Knowledge is a Matter of Life or Death

So much for the fruits of past research and the answer to my second question—What is agricultural research doing now?

More than any other crisis we have ever met, this war has proved that possession of scientific knowledge is a matter of life or death. As has been pointed out, it is not an accident that we are suddenly able to increase agricultural production beyond all previous records just when it is vitally necessary; that our soldiers and civilians are adequately fed for the strain of war; that we can develop scores of new techniques and products to meet specific needs and turn out the products in huge quantities. We can do these things only because science was not caught napping but was "tooled up" and had a stockpile of scientific knowledge and experience, patiently accumulated through many years of research—and enough well-developed techniques and trained personnel organized to tackle new problems with an excellent chance of success.

Nor could such a stockpile of scientific knowledge and the necessary techniques and trained personnel be improvised over night. We would not have them if it had not been for the support given to research pertinent to agriculture in this country during the past years and decades. The war has proved that no wiser investment was ever made by the American public.

There is a lesson in this for the future. I hope no one will ever again be tempted to doubt the value of research to the point where public support is reduced, so that vigilance slackens and effort lags. For though I hope we shall never have another great war, I am also certain that if we do have one, our success will again depend in no small measure on how well equipped we are with knowledge developed in times of peace.

It is well recognized to-day that research of all kinds will have to be enlarged and accelerated in every nation that hopes either to retain or to advance its present standard of living. Science truly is one of the great frontiers of a much shrunken world, and