

Removing Medicine's Cartesian Mask: The Problem of Humanising Medical Education* PART II

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Descartes and the Perception of the Doctor's Role

If the human body is regarded as a machine that can be analyzed in terms of its parts, and disease is seen as a malfunctioning of this machine, then the doctor's role is to intervene on a biological level either physically or chemically, to correct the malfunctioning of the specific disordered mechanism.

George Engel¹² has pointed out that three centuries after Descartes, the science of medicine is still based on 'the notion of the body as a machine, and of the doctor's task as repairer of the machine'. The medical profession and the public now have a view of the human organism as that of a machine which is prone to constant failure unless supervised by doctors and treated with medication. This concept probably underlies the well-documented reticence of doctors to discharge patients from their medical care on their own recognizances and to decrease or stop treatment. (The law even discharges criminals on their own recognizances, but we in medicine do not believe that the patient can take responsibility for the management of his own condition).

The notion of the organism's inherent healing power and tendency to stay healthy is not part of medical thinking,

nor is the relation between health and living habits an integral part of medical thought. The doctor's role in illness is therefore that of a technical manipulator to repair a disordered machine.

Kuhn (1970) has pointed out that the dominant paradigm within a science determines what the scientific community considers worthy of research and what methodology it accepts as valid. Because of the mechanistic and engineering type framework within which medical thinking takes place, drugs have become the key to all medical therapy while the study of the complex interactions of mind, body and environment that affect the resistance to disease and healing are not considered to be worthy of research. The cure of illness requires some outside intervention by the physician, which can be either physical (through surgery or irradiation) or chemical (through drugs). The whole of life and living has thus become medicalised. Doctors have become the high priests who pontificate on everything from what we should have for breakfast to what we may or may not do in bed.

In the same manner medicine has lost its appreciation for the patient as a responsible individual who can play a participatory role as an equal partner in the whole process and who can initiate and maintain the process of getting and staying well. Within the biomedical approach, all authority and responsibility is delegated to the doctor, or appropriated by the doctor.¹³ Because all knowledge about health is thought to be rational, scientific knowledge 'objective' clinical data (e.g. laboratory tests and other technological measurements of physical parameters) are generally considered more relevant to diagnosis than the assessment of the patient's life experiences, emotional state, social or economic

situation or other non-measurable parameters.

The physician's authority and responsibility make the doctor assume a paternalistic role. Although he may be benevolent or dictatorial, depending on his disposition, his position is clearly superior to that of the patient. This conceptual background also encourages and perpetuates sexist attitudes in medicine with respect to both women patients and doctors. Medicine is characterized by patriarchal patterns of power in which the full potential of other health professionals in caring and healing cannot come to their full fruition.

The much mooted concept of the Health Team Approach will never get off the ground while we adhere to this philosophy. While the task of medicine is conceptualized mainly in a technical sense, the other members of the team will remain subservient because the doctor's training ensures that he has more technical knowledge. It is therefore not surprising that nursing education is modeling itself more and more on medical education and is mainly concerned to improve the technical knowledge and training of the nurse to enable her to compete with the doctor in the so-called health team.

The distinction between illness and disease and between healing and curing is never discussed in medical education. The possibility that curing may not necessarily involve healing and that healing can take place in the absence of curing makes no sense within this paradigm. Therefore the role of the doctor is limited to that of technical intervention with the aim to cure. If this does not take place, the doctor is frustrated and sees no further roles for him or herself.

The well documented inability of the medical profession to give adequate support to chronically ill patients and to the dying patient, is also related to the fundamental paradigm within which medicine is understood.

Recuctionism and Research

It would seem useful, and as intellectually challenging, to study the complex interactions of mind, body, and environment that affect resistance to bacteria and other diseases, but because of the biological paradigm, these

aspects are not researched. The major research effort is directed towards identifying disease-causing micro-organisms and developing medicines to kill them or identifying malfunctioning mechanisms and medicines or techniques to correct them. There is no stimulus to study either the ecology of disease nor to study and enhance the natural resistance of individuals or societies to disease and illness. Therefore funds are not made available for this type of research.

Emphasis on Technology and Soaring Costs

The mechanistic view of the human organism and the resulting engineering approach to health has led to an excessive emphasis on medical technology which is perceived as the only way to improve health. At the turn of the century the ratio of supporting personnel to doctors was one to two; now it is fifteen to one.

The existence of high technology becomes its own indication and its (often unwarranted) application therefore is not only accepted and unquestioned but its application actually becomes unquestionable. The increasing dependence of medical care on complex technologies has accelerated the turn towards specialization and has thus reinforced the tendency to look at particular parts of the body, forgetting to deal with the patient as a whole person. 14

The practice of medicine has shifted from the home and the office of the general physician to the hospital. There it has become progressively depersonalized, if not dehumanized. Hospitals are large professional institutions emphasizing technology and scientific competence rather than human contact with the patient. In these environments patients tend to feel helpless and frightened. This situation is not fundamentally affected by having armies of little old ladies running around dressed in pink or yellow (depending on the color preference of the particular health authority!) with cups of tea in their hands. Nearly half of present hospitalizations are thought to be medically unnecessary, but alternative services that could be therapeutically more effective and economically more efficient have almost disappeared. The modern hospital is designed for the convenience and benefit of the doctor more than for that of the patient!

The costs of medical care have escalated in line with the development of technology. The excessive use of high technology in medical care is not only uneconomic but also causes an unnecessary amount of pain and suffering. Accidents in hospitals now occur more frequently than in any other industry except mining and high rise construction. Ten percent of iatrogenic illness is due to diagnostic procedures.

The Relation of Medicine to Health

To what extent has modern scientific medicine been successful in curing disease and alleviating pain and suffering? The best estimates are that the medical system (doctors, drugs, hospitals) affects about 10% of the usual indices for measuring health.¹⁵ Since biological mechanisms are very rarely the exclusive causes of illness, understanding them does not necessarily mean making progress in health care.

The biomedical model is superb in dealing with individual medical emergencies, but, although such medical care can be decisive in individual cases, it does not seem to make a significant difference to the health of populations as a whole. The great publicity given to spectacular medical procedures such as open heart surgery, tends to make us forget that many of these patients would not have been hospitalized in the first place if preventive measures had not been severely neglected. I sometimes think that one could say that the medical profession has conned the public into building great big hospitals by selling them the mistaken idea that the provision of hospitals will increase their (the public's) life expectancy!

The sharp decline in infectious diseases took place more or less simultaneously with the rise of modern scientific medicine; this has led to the widespread belief that it was brought about by the achievement of medical science. This is however erroneous. There was a striking decline in mortality since the 18th century due mainly to improvements in nutrition, hygiene and sanitation, purification of water, sewage disposal, provision of safe milk and improved food hygiene. The major infectious diseases had all peaked and declined well before this first effective antibiotics and immunization techniques were introduced. Most 19th

century public health reformers did not believe in the germ theory of disease but assumed that bad health originated from poverty, malnutrition and filth, and organized vigorous public health campaigns to combat these conditions.¹⁶

This lack of correlation between the change of disease patterns and medical intervention has been confirmed in several experiments in which modern medical technologies were used unsuccessfully to improve the health of various so-called underdeveloped populations. Biomedical intervention therefore has little effect on the health of entire populations. The health of human beings is predominantly determined not by medical intervention but by their behavior, their food and the nature of their environment.

Medical Education

The implications of the mechanistic view of life and its consequent engineering view of health and disease for medical education must by now be obvious. If biological mechanisms are the basis of life and disease, mental and social events become secondary phenomena, not essential for the understanding of either life or disease or for understanding what it means to be human.

With this philosophical basis medical education becomes completely dissociated from social concerns. Within this perspective it becomes quite clear why the medical profession did not object to segregation in health services. As long as the same machines were made available for doctors to use, the deeper ethical issues were not seen as being fundamental." If biological mechanisms are considered to be primary in the understanding of health and disease, then public health interests are essentially isolated from the medical education and practice, and this skewed emphasis cannot be redressed simply by introducing Community Health into the general curriculum. Issues that are crucial to health such as nutrition, employment, population increase, housing, how to change people's lifestyle etc., cannot be discussed in medical schools in any meaningful manner.

When physicians talk about disease prevention, they often do so within the mechanistic framework of the biomedical model. It is therefore quite understandable how the Department of Health can claim that it is giving adequate attention to these measures while spending only 5% of its budget on such measures. At the same time the Department (and the Health professions in general) can acquiesce in segregated health services, because within the biological model it simply cannot understand how segregation and social class in *themselves* can cause ill health.¹⁷

The image of the body as a machine also leads to the avoidance of the philosophical and existential issues that arise in connection with illness, health and health care. The question "What is health?" is generally not addressed in medical schools, nor is there any discussion of healthy attitudes and life styles. These are considered to be philosophical issues that belong to the spiritual realm, outside the domain of scientific medicine. Medicine is supposed to be an objective science, not concerned with moral issues.

The graduate of the medical school will therefore fail to comprehend the subtle cultural, psychological and spiritual aspects of illness, and that "complete freedom from disease and struggle is almost totally incompatible with the living process" (Capra, p144).

Within the engineering model of health and disease, the task of the doctor becomes that of curing. The ultimate existential issue, namely death, cannot be accounted for within this mechanistic framework. Medicine therefore becomes death-denying and technological medicine becomes devoid of spirituality. "The distinction between a good death and a poor death does not make sense: death becomes simply the total standstill of the body machine, and is a failure of medicine" (Capra).

The age-old art of denying is therefore no longer practiced in our culture, mainly as a result of the impact of the biomedical model. Death is seen as failure and doctors seem significantly more afraid of death than other people, whether sick or healthy.

The image of the body as a machine and the consequent engineering approach to health leads to a negation of

the relation between health and lifestyle. Both the public and doctors are encouraged to assume that doctors can fix anything, irrespective of lifestyle. It is quite ironic that physicians themselves are the ones who suffer the most from the mechanistic view of health by disregarding stressful circumstances in their own lives. Physicians' life expectancy is therefore less than that of the average population and they have high rates of physical illness as well as of alcoholism, drug abuse, suicide and higher rates of divorce and other forms of social pathology.¹⁸

Medical education itself is a highly stressful experience. The unhealthy competitive value system that dominates our society has found its most extreme expression in medical education in which medical schools are the most competitive of all professional schools, and represent high competitiveness as a virtue emphasising an aggressive approach to patient care using the language of warfare. "Thus medical education and practice perpetuate the attitudes and behaviour patterns of a value system that plays a significant role in causing many of the diseases medicine seeks to cure" (Capra, p147).

Medical schools not only generate stress but neglect to teach the students how to cope with it either in their own lives or in that of their patients. The emphasis that the patient's concern comes first is thought to be necessary to produce commitment and responsibility and to foster such an attitude the medical training consists of extremely long hours and very few breaks.¹⁹

Many physicians continue this practice in their professional lives. The excessive stress is aggravated by having to deal with people in states of high anxiety or deep depression. On the other hand they are trained to use the model of health and illness in which emotional forces play no role, and hence they tend to disregard them in their own lives.

Implications for Christian Doctors

If the basis of the crisis in medicine is a philosophical crisis i.e. a specific view of what constitutes valid knowledge and a consequent mechanistic view of man (the clockwork image), then Christian doctors are called not only to be willing to work in the rural areas

(which often seems to be seen as the only distinguishing feature of the Christian in medicine!) but also fundamentally to critique the philosophical basis of the medical enterprise.

We have seen how within the clockwork image of man emotions become subjective and unreal, how scientific rationality becomes the only valid form of knowledge, how medicine becomes a natural science and not a social science, and how the doctor then becomes the medical scientist and can no longer play the role of the loving carer.

I am convinced that we cannot humanize the present framework, without a fundamental critique of its philosophical basis. This must be a hard-nosed critique, not a lot of wishy-washy stories. I am referring to the type of hard thinking that is going on in many outstanding departments of Family Medicine all over the world.

It must also be a clinically relevant critique which will show that an alternative methodology based on different assumptions about man lead to a different type of clinical practice (where technology will still play a role, but will be used within a different philosophical orientation), which leads to better patient care and greater patient satisfaction. It must lead to solutions of problems that the biomedical model cannot solve.²⁰

We will need to show that love, respect, forgiveness, joy, sorrow and death, are all essential human experiences that have to be taken into account in understanding health and illness and that they can be utilized in medical care in both health and illness. We need to show that to talk about man's relation to God, however conceived within the various religions of our patients, is relevant to their and our health. This is the role CMG will have to play if it really wants to humanize medicine - it is not enough to hold conferences in which we exhort one another to be a little more friendly and humane. We cannot project the image of Christ while clinging to a framework in which the clockwork image of man is the dominant one.

Christian physicians must go for the academic posts,

and not only for the rural outposts. They need to demonstrate in the medical schools a relationship to students based on love and not only on academic excellence. They need to demonstrate to medical students a relationship to patients in which love, joy, friendship, humility, understanding of human frailty and human suffering, as well as an appreciation of the greatness of ordinary individuals, becomes manifest.

My argument is not meant to be an unbridled attack on technology as if it were possible to return to a pre-technological paradise. That is not the point. I am arguing that we need to understand the philosophical roots of the reign of technology and the natural science paradigm in modern medicine.

This will enable us to see not only the possibilities, but also the limitations of this model and thus hopefully to see new options that will enable us to transcend those limitations.

Tournier expresses the problem very succinctly when he says: 'We have a technical task and we cannot neglect it without a keen feeling of guilt. But we all feel that our task is broader, less narrowly defined, and we also feel guilty in evading it.'²¹ It is this broader task that needs adequate formulation, but for this to be done we need to look at the philosophical foundations of our discipline.

We need to critique ourselves to see to what extent we are driven by the biomedical paradigm and to what extent our professional practice expresses a view of man as the image of God.

If we do this, we may be able to make our little contribution to uncle's transformation through a kiss of love rather than shooting him.

References

12. See e.g. Engel G.L. The Clinical application of the biopsychosocial model. *The American Journal of Psychiatry*, May 1980, as well as his The Biopsychosocial model and the education of health professionals. *Annals New York Academy of Sciences*, 1978. Engel characterised the dominant paradigm in medicine as the biomedical model, and proposes an alternative based on systems theory which he calls the

biopsychosocial model. Jaros and Cloete (from the Universities of Cape Town and Pretoria respectively) have formulated an interesting alternative model also based on systems theory. (See Jaros G.G. and Cloete A. **Biomatrix: The web of life**. In press.) For an interesting case study in a South African context, see Harms J.H. and Lazarus J. Treating the patient as a whole. Continuing Medical Education December 1985. The major challenge at present to the biomedical model in medicine is coming from systems theory. See e.g. Brody H. The systems view of man: Implications for Medicine, Science and Ethics. Perspectives in Biology and Medicine, Autumn 1973.

13. I have, fortunately or unfortunately, several times had the salutary experience of ascribing the dramatic improvements in a patient's condition to the wonderful action of the medication prescribed, only to discover that the patient had taken only one dose and then stopped because of some side effect!

14. See Reiser S.J. **Medicine and the Reign of Technology**. New York Cambridge University Press 1978. Also Kriel J.R. Man, Medicine, Technology and Utopia. SA Family Practice, Nov/Dec 1985.

15. See Capra, op cit.

16. See Ivan Illic: Medical Nemesis.

17. See Kriel J.R. Is ons gesondheidsorg regverdig? Die Suid Afrikaan Nommer 8 Winter 1986 and Social Justice and Health Care. SA Family Practice, Vol. 7 No. 1 1986.

18. See Kriel J.R. syndrome du Bon-Dieu: a fatal malady affecting doctors. SA Journal of Hospital Medicine August 1982. Dr. Mervin Vincent who visited South Africa several years ago as a guest of CMF writes extensively on the personal problems of physicians and their families.

19. There is now e.g. an extensive literature on the Internship and its effect on performance, motivation, family life etc.

20. See McWhinney I.R. Are we on the brink of a major transformation of clinical method. Canadian Medical Association Journal, Vol. 135, October 15, 1986.

21. Tournier P. **Guilt and Grace**. Hodder and Stoughton 1974. Quoted in CMF News, January 1987.