

Removing Medicine's Cartesian Mask. The Problem of Humanizing Medical Education: PART I

Prof. J.R. Kriel

Professor of Medical Education, Jacques Kriel is with the Centre For the Study of Medical Education at the University of The Witwatersrand, Johannesburg, South Africa.

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The question seemed purely technical. But a human question is never purely technical.

Paul Tournier

The aim of this paper is to analyze the possible role of medical education in humanizing the face of medicine.' This is a rather problematic task, because if anything has been *well* documented about medical education, it is its dehumanizing effects! If one reads the literature, it is clear that if a medical student comes out of medical school a wholesome, well integrated and caring human being, it is purely by the grace of God, and not by any design of the medical education system!¹

My argument will not only be that it is impossible to humanize medical education but also that medical education cannot play a role in humanizing medical practice, because the basis cause of the dehumanized face of medicine and of medical education, is *a common conceptual framework or paradigm*. I will attempt to give an outline of what that conceptual framework consists of and how it determines the practice of medicine and of medical education.'

The problem of the dehumanization of medicine is primarily a philosophical problem and it therefore needs to be tackled on a philosophical basis. In other words, I am arguing that the dehumanized face of medicine is not a mistake, so to speak, it is not an accident which has disturbed an underlying humane essence. It is not like an ugly mask worn by an essentially warmhearted and loving uncle to scare the kids for a bit of fun at the party, but which can be taken off at will to reveal uncle's cherubic face and loving nature, so restoring harmony and removing the 'angst'!

The dehumanized face of medicine is in fact an *essential expression of the dehumanized and dehumanizing framework of philosophical assumptions* underlying modern medicine. It is therefore impossible to rectify the situation without questioning the foundations of modern medical practice those very foundations which are the basis of its tremendous power and success, and its claim to be being 'true'.⁴

To continue the metaphor of Uncle's mask: this process of elaborating the underlying philosophical assumptions of medicine is akin to the nightmarish experience of removing uncle's mask, only to discover behind the mask a face equally hideous. There are people who argue that the only solution to the situation is to shoot uncle.

Perhaps the kiss of a loving and caring princess may, as in the story of Beauty and the Beast, have an equally transforming but less lethal effect! The point is, however, that uncle must be transformed - we cannot simply change masks.

Philosophical Assumptions and Modern Medicine

The first point to establish is that modern medicine is in fact an expression of a specific theory as to what science and medicine is all about, that it is in fact based on an implicit theory of science. By theory I do not mean the theory of how this or that disease is caused or should be treated, but the underlying theory which determines how we define what a disease is and how we see the nature of treatment.

Most medical doctors will agree that philosophy is involved in medicine in that medicine is the application of scientific theory to the phenomena of health and disease. This is of course a *metatheoretical* or philosophical statement which fundamentally determines the rest of one's thinking about medicine. Once you have formulated that medicine is to be understood as one of the natural sciences, then what you will consider to be relevant data by which to interpret disease phenomena, what you will consider to be 'truth' and 'knowledge', is already determined.⁵

The view of medicine as a natural science was first coherently formulated by Flener at the turn of this century and has determined the course of modern medicine and medical education since then. It is, I believe, the root cause of the dehumanized face of medicine that we are discussing at the conference.⁶

Every day as we practice medicine, we are in fact acting out this implicit theory about what medicine is, a theory which determines how we define a disease, and what we mean by healing. Ultimately this theory links into a wider world view which implies a certain concept about health and illness, about man and society and even about knowledge and truth. Modern medical practice implies an underlying philosophy of medicine to which every practitioner of medicine gives unconscious allegiance in every action in his or her daily professional life.

My view is based on the assumption that it is not possible to separate theory and practice. Every human practice carries its own meaning or theory which can be explicated. This is so because human practice is always meaningful action. If it is not, it is not a human action.

This essential link between meaning and action means that all practice is essentially imbued with theory. There cannot be a practice which is not a theory-in-action. This theory may not be explicitly formulated or even consciously understood, but it can be explicated, and consciously formulated.

The founders of modern medicine were often quite explicitly aware of the philosophical foundations of what they were doing and therefore much more eclectic and less dogmatic than we, their modern counterparts. But these philosophical assumptions have become implicit, they have disappeared under the surface, they have become part of the scenery and are accepted as 'natural' or 'the normal state of affairs'. Modern practitioners are therefore largely unaware of the philosophical framework within which they operate. These assumptions have become the foundations on which we build our knowledge and understanding and can therefore no longer be questioned without endangering the whole enterprise - an enterprise in which much has been invested both in terms of money, but also in terms of energy and dedication.

The shortcomings of the present health care system (of which so-called dehumanization is but one) are all, I believe, rooted in this conceptual framework that underlies not only medical practice, but also medical education, medical research, institutional and personal health care as well as national health care systems.

Christian doctors have on the whole not questioned this basic philosophical stance, but simply act within it, often defending it quite vehemently when challenged e.g. by alternative forms of medicine! We may have shuffled the furniture around to make the waiting room look a little more friendly, but what happens in the consulting room takes place within the same basic structure.?

Cartesian Dualism and the Mechanistic View of Man

It was Rene Descartes who formulated philosophically for western man the view of man as consisting of a mind and a body which are essentially separate entities. He therefore had a dualistic concept of man. Apart from his dualism, he held a mechanistic view of life - man's body

is a machine that can be understood completely in terms of the arrangement and functioning of its parts. In this reductionist view of man, the body is seen as 'nothing but' a machine.⁸ Today this basic mechanistic understanding is formulated more subtly in terms of chemical interactions at a cellular and molecular level, but it is the same Cartesian mechanistic view.

Descartes' dualism was of extreme importance in the development of modern medicine. It took the human body out of the sphere of 'the holy' where it could not be investigated, and put it in the sphere of 'things'. This made a scientific study of the body possible. Without Descartes, Harvey would not have been possible. Descartes himself considered Harvey's discovery of the purely mechanical function of the heart and the circulation, to be the vindication of his philosophical stance:

At the same time, however, this philosophical stance defines the limits of the investigation of the body and of health and disease. The investigation will take place within the parameters of viewing the body as a machine and as-distinct from the mind. All other phenomena are thus excluded from consideration. Today we are experiencing the consequences of that reductionist view.

This philosophical paradigm is a tremendously powerful and successful one - after all it built the Universitas Hospital, the new Johannesburg hospital, Tygerberg hospital, and is at present revamping Groote Schuur!! It is the basis of the technological success of medicine. The only problem is that it has blinded us from seeing its limitations and from considering alternatives.

Whereas the originators of this view often knew exactly what they were doing philosophically in that they knew that they were taking philosophical decisions that had methodological implications, we have declared this philosophical stance to be the only one possible and thus anything that does not fit into this paradigm is ipso facto nonsense.

This view of the body as a machine has led to the situation where medical science now limits itself to understanding the biological mechanisms underlying disease. Thus illness has become equated with

malfunctioning of the machine at a biological level. From the large network of phenomena involved in illness, medicine has elected to study only a few and has e.g. neglected the social, psychological and environmental dimensions, the total ecology of health and illness. In spite of a lot of lip service to these concepts, medicine is therefore unable to deal with the concept *illness* as distinct from *disease*, and of *healing* as distinct from *curing*.

In this reductionist framework, medical problems are analyzed by proceeding to smaller and smaller fragments - from organs and tissues to cells and finally to the molecular level. It should be clear that in this reduction, the holistic phenomenon of illness, the person who is ill, must inevitably get lost. But the history of modern medicine, and especially its inability to deal with the lifestyle diseases and with third world health problems, has shown that this reduction of disease to molecular phenomena is not sufficient for understanding the *human condition* of health and illness.

It is this incomplete understanding, I believe, which is at the basis of the world wide dissatisfaction with scientific medicine amongst patients - a disenchantment which is reaching crisis proportions as evidenced by the ever increasing litigation-rate.

The Reductionist View of Health and Disease

The concepts of health and disease are not self-evident; they are formed by our wider philosophical and cultural frameworks. 'What is meant by health depends on one's view of the living organism and its relation to its environment. As this view changes from one culture to another, and from one era to another, the notions of health also change' (Capra, p119). We, of course, believe that our view is the final and ultimate one - we have 'the truth' regarding disease and its cure!

Within the reductionist view, *health becomes* faultless mechanical functioning of the body machine to the exclusion of all other perspectives and phenomena. The individual, social and ecological dimensions of health are not, and cannot be, accounted for within this view.

Disease thus becomes a purely biological phenomenon

namely the malfunctioning of biological mechanisms which are studied from the point of view of cellular and molecular biology. *Illness* as a disorder of the whole person cannot be considered and illness becomes equated with disease. The Cartesian dualism therefore leads physicians not only to concentrate exclusively on the body machine, but also to neglect the psychological, spiritual, social and environmental aspects of illness.

As the reductionist process in Biology progressed and the perspective of medical science shifted from the study of organs to that of cells and finally to the molecular level, the study and understanding of the meaning of illness and healing also became progressively reduced and constricted. Physicians thus found it more difficult to deal with the interdependence of body and mind - an interdependence which the man in the street is fully aware of.

The concept of '*specific aetiology*' as formulated by Robert Koch of infectious diseases, became generalized to the concept of 'specific causation' (one disease, one cause). This concept of disease being caused by a single factor was not only in perfect agreement with the Cartesian view of living organisms as machines whose breakdown could be traced back to the malfunctioning of a single mechanism, but also fitted in well with the mechanistic framework of 19th century Biology. The aetiology of disease thus became what Capra calls 'a uni-dimensional, linear sequence.'

One example of the difficulty in dealing with the interdependence of mind and body within the mechanistic model is found in the concept of '*the placebo effect*.' This concept is used extensively in all clinical trials, but the question is never asked exactly what it means that nearly 20% of patients can be cured or improve significantly without any 'real' medication being administered. The question is usually ignored, or it is assumed that they were not ill in the **first place**. But then of course they should not have been in the trial. They were admitted into the trial exactly because by definition they were ill. The placebo effect is in fact a major theoretical problem which cannot be solved by simply claiming that the original symptoms of these patients were 'obviously psychosomatic in origin.'

A second consequence of this model is that the clinical picture (i.e. the 'subjective' reality of the patient) is not really part of the disease - it is only important as part of the initial diagnostic work up - then it can be forgotten as the full power of medicine is concentrated on 'the disease' as a biological phenomenon. There is therefore a split between the meaning of the disease for the patient and the meaning of the disease for the doctor. This dichotomy underlies much of the dissatisfaction with biomedical medicine.

As a Registrar I often discovered while doing the case summaries after discharge of the patient, that we had completely forgotten about the actual symptomatology that brought the patient to hospital in our pursuit of the 'real disease' that we had 'discovered' in the diagnostic work up. I could just imagine what that patient was now telling the neighbors - about all the frightening tests she had to undergo and all the professors that had stood around the bed: 'but I still have the same pain in my back when I get up in the morning.'

Within this framework the biomedical scientist (because that is what the doctor has become) has three major *objectives*: the precise definition of the disease, identification of its specific cause and development of appropriate treatment (usually seen as some form of technical manipulation) that will eliminate the causal root of the disease. To anyone sensitive to the numerous other dimensions involved in disease and healing, the restrictiveness of this framework is obvious. Like patients suffering from renal or cardiac failure, on a conceptual level, medicine is today showing all the symptoms of a paradigm failure as described by Kuhn.¹⁰

A disease is not therefore an objective entity existing as such 'out there' independent of the life worlds of the patient and physician. It is in fact a conceptual construct developed by the clinician to understand certain phenomena. If we widen our perspective it becomes clear that the overwhelming majority of illnesses cannot be fully understood in terms of the reductionists concept of well-defined disease entities and single causes. The process of reducing 'illness' to 'disease' moves us away from the patient as a whole person. 'Whereas illness is

a condition of the total human being, disease is a condition of a particular part of the body, and rather than treat patients who are ill, doctors have concentrated on treating their diseases.' (Capra, p 152).

According to the biomedical view, there is no illness and thus no justification for medical attention, without structural or biochemical alterations characteristic of a specific disease. Within this framework it is impossible to understand that one can be ill without having 'biological disease.' Therefore half of all visits to the Family Practitioner for complaints that cannot be associated with any identifiable physiological disorder," becomes labeled as psychosomatic or unreal and not deserving of medical attention. Psychosomatic is another intellectual copout, like the 'placebo effect'.

In order to restore the human face of medicine it would require seeing 'ill health' within the broad context of the human condition, recognizing that any illness or behavioral disorder of a particular individual can only be understood in relation to the whole network of interactions in which that person lives his or her life.

I therefore believe that the biomedical definition of disease as a specific entity involving structural and functional changes at a cellular and molecular level, is a major theoretical problem today in contemporary health care and medical education, and that it underlies most of the problems facing 'the profession' today. (The concept of a medical profession is itself a consequence of the professionalization of knowledge of health and disease).

PART II will be published in the [Summer 1989](#) issue.

References

1. This paper was delivered at a conference of the CMF held in Bloemfontein in 1986. The theme of the conference was: Humanizing the Face of Medicine.
2. This is obviously an overstatement, but there is extensive documentation on the problems faced by medical students, one of these being increasing cynicism. See e.g. Coles, C. 1985. A study of *the relationship* between curriculum and learning in *undergraduate medical* education. PhD Thesis. University

of Southampton.

3. This analysis is largely based on F. Capra's **The Turning Point** published by Fontana Paperbacks, London, 1983.
4. In a television programme in the horizon series (ITV; editor Hilary Lawson) entitled 'Science-. . . fiction' the point is made that science does not give us an understanding of 'the way things really are'. We always see the world in terms of our theory. The theory provides the context which allows us to interpret what we see. Harry Collins of Bath University thus feels that the seeing that we do in science (experimental observation) is a creative activity and much more like seeing images in a fire, or pictures in a cloud. There is nothing inevitable in scientific 'truth' and scientific theories are accepted because they are useful, not because our observations in some magical way can demonstrate that they are 'true'. The programme ends with the statement that science is not powerful *because* it is true: it is true because it is powerful.
5. Many doctors (particularly the older generation) talk about medicine being both an art and a science (the younger) ones no longer bother about the 'art' often disparagingly categorising it as nothing but 'good beside manner!'). However, the implication that medicine is a discipline which straddles the social sciences (the art part) and the natural sciences (the science part) raises numerous theoretical issues that need to be faced.
6. For a critique of Flexner's educational theory, see Coles op tit.
7. Paul Tournier's work represents a fundamental and perceptive challenge to this framework, but it needs to be formulated, I think, on a more explicitly philosophical basis. Most Christian doctors who read Tournier do not realise that his position represents a fundamental questioning of the theoretical position that they hold as doctors.
8. See also '**The Clockwork Image**' by D.M. MacKay, published by Inter Varsity Press, 1974.
9. See McWhinney I.R. *Changing Models: The Impact of Kuhn's Theory on Medicine*. Family Practice vol. I No. 1, 1983.
10. Kuhn, T.S. **The structure of scientific revolutions**. 2nd ed. Chicago: University of Chicago Press, 1970.
11. McWhinney op tit.