THE DOCTOR AS TEACHER — HIS PRACTICAL PROBLEMS

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There is a growing awareness of the importance of the doctor's educational function, both in curative and in preventive or promotive work.[1-14] An explanation of the nature, causes and treatment of an illness may be a most important means towards improving the patient's prognosis[15] or preventing contagion. To the doctor who concerns himself with promoting his patient's future health, health education is an essential technique. With our growing understanding of the relationship between health and patterns of daily living, it becomes increasingly apparent that, to a considerable extent, the adult's health is in his own hands, and the child's in his parents'. The general practitioner, in particular, has a special obligation and a unique opportunity to modify his patients' habits of behaving, thinking, and feeling. The BMA Committee on General Practice stated: 'No one else is in so advantageous a position to give advice on the maintenance of health, the principles of healthy living and the prevention of disease. The family doctor is welcomed into the homes of his patients; he knows their circumstances, and their jobs, the family problems and responsibilities; thus many opportunities for health education will occur in the home, in the surgery and at the special sessions which many general practitioners hold for antenatal examinations, nursing mothers and infant welfare'.[16]

Some practitioners are in fact active health educators. A recent study of the working week of 41 selected Washington physicians revealed that, on the average, 19% of their working time was spent on health education, and a further 7% on 'counselling'.[17] Likewise, 50% of British general practitioners stated, in their replies to a questionnaire, that they took a real interest in this aspect of their practice.[18] The picture should not, however, be overpainted; many doctors pay little attention to this side of their work. The same British study indicated that 43% of general practitioners, though they gave advice on inoculations when asked, took no very positive steps in the matter of health education. Hadfield, in his study of British general practitioners, found

that only 9% were 'enthusiasts' about health education.[19] 'The G.P. is apt to smile at himself as a health educator', said Taylor in his report on the Nuffield study of general practice.[20] Among 1,073 "doctors' interests" submitted by British members of the College of General Practitioners as topics on which they were interested in conducting research, 'education of the patient' featured only 5 times.[21] It is probably true that in South Africa, by and large, health education of patients falls far short, both in quality and quantity, of what is required to improve the health of our disease-ridden population.

The reason for this neglect to make full use of such a manifestly valuable medical procedure probably lies, at least partly, in the difficulties which its application presents. Some of these practical problems will be discussed below, in the hope that a clearer realization of their nature may point the way to possible solutions.

THE PATIENT'S EXPECTATIONS

A patient cannot be regarded as an open vessel, awaiting an influx of instruction. Many patients expect very little health education from their doctors. Hadfield, reporting on his survey, said: 'Patients are not, as a rule, receptive to positive instruction; they regard it as preaching and treat it with suspicion. I often noticed that when the doctor's remarks veered from the symptoms and the pills to such things as open windows, suitable clothing, and other precautions a curious blank look came over their faces'.[19] Similarly, a study of medical out-patients at a New York hospital indicated that they did not expect their doctors to provide the information they wanted.[22] When asked to characterize a good physician, few of these patients mentioned that the type or extent of information the doctor gave was relevant. During their consultations, they 'seldom made forceful demands for information of the physician. One third made no request for information at any time.' Yet when these same patients were interviewed by an investigator immediately after their consultations, it was apparent that most of them wanted information about some fundamental aspects of their condition. What patients expect of their doctors may, however, vary considerably. When patients in a US tuberculosis sanatorium were asked what the most important quality was for a physician to have, 57% said, 'To keep the patient informed.'[22]

Clearly, these considerations pose problems for the doctor interested in patient education, particularly if his interest extends beyond the mere giving of information to the production of changes in living habits. The patient may want information and not ask for it, or may want only a bottle of medicine or a needle-prick, and resist any treatment going beyond this. Partly, the solution to these problems lies in the doctor's awareness of their existence in the individual case, so that he can modify his approach accordingly. Partly, it lies in long-term efforts by the medical profession to modify patients' expectations by accustoming them to this kind of management. People tend to expect what they have been used to. In Balint's words: 'By their apostolic function doctors train the population from childhood what to expect and what not to expect when they go to the doctor's. This training, though very efficient, is not unalterable.'[23]

DIAGNOSING THE PATIENT'S 'EDUCATIONAL CONDITION'

Not only cannot the patient be regarded as an open vessel, he also cannot be considered as a vacant vessel, ready to accommodate whatever the doctor wishes to instil into him. On the contrary, each individual has his own set of beliefs and practices, derived from his experiences within his culture. However wrong these may appear to an outsider, they are no less right and reasonable in his own eyes. What a patient knows or suspects to be true must influence both his educational needs, and his response to efforts at health education. The patient whose best friend died of a stroke shortly after developing a severe headache, may think that his own headaches herald impending death. Though this belief may not be readily voiced to his doctor, its modification may constitute an important part of his therapy. The Zulu patient who knows or suspects that his cough, haemoptysis, chest pain and weight loss are symptoms of *isifuba sedliso*, a disease produced by the unwitting ingestion of a substance administered by an ill-wisher,[24] obviously requires very different handling, in his own interests and in those of his contacts, from the patient who knows that he is suffering from a germ-produced illness called tuberculosis.

It is thus important, as a preliminary to educational 'treatment', to probe the patient's knowledge and practices, and make a diagnosis of his 'educational condition'.[1] This, however, requires a conscious effort, and may not be easy. One New York study has indicated the inaccuracy of physicians in their estimates of the level of medical knowledge of the patients attending a hospital clinic.[25] Only to a limited extent can the doctor assume that the patient is a typical representative of his culture, and that he shares the beliefs and practices known to be widespread in his community. There may be much individual variation within a culture. A London physician, for example, may assume that his tuberculotic patients and their relatives are aware of the infectious nature of this disease. Yet in a recent study of public opinion, only 66% of a representative London sample stated that they thought that tuberculosis was 'catching'.[26] One Zulu patient may know he has tuberculosis and another that he has *isifuba sedliso*; and a third may believe that both these explanations are feasible.

The educational diagnosis, intrinsically a difficult one, becomes even more difficult when doctor and patient live, as often they do, in different 'worlds'. Commonly, the doctor is of a higher social status than his patient. Norms and practices may vary considerably in different social classes,[27] and the doctor may be relatively unaware of the patterns of thinking or behaviour common in the patient's social class. This problem of 'social distance' is intensified in a multicultural society such as ours, where what is natural to the patient may be completely foreign to the physician. Many patients, for example, believe strongly in witchcraft. Only 18 of 50 African mothers whose babies had been admitted to a Durban hospital for gastro-enteritis ascribed their child's illness to natural causes, while 12 blamed supernatural causes, and 20 'did not know'.[28] Doctor and patient may often find themselves separated by a chasm which neither of them is easily able or, sometimes, willing to bridge.

Such considerations assume even greater importance when the doctor seeks to probe, as he must if he is to be an effective health educator, into the *meaning* of his patient's behaviour. What are the attitudes and values on which it is based, what are the patient's motivations? Twice-daily enemas may be deemed harmful to a baby; but before attempting to modify this practice it is as well to know that in the eyes of the mother, as of many Zulu mothers, this procedure may be essential for the infant's well-being.[29] 'Dr. Samuel Darling, a malariologist who worked on the Panama Canal project, once remarked, "If you wish to control mosquitoes you must learn to think like a mosquito". This advice applies not only to mosquito populations one seeks to damage, but also to human populations one hopes to benefit. If one wishes to help a community improve its health, one must learn to think like the people of that community. Before teaching people new health habits, it is wise to learn the existing habits, how these are linked to each other, what functions they perform, and what they mean to those who practise them'.[30] Such knowledge is not acquired without effort.

THE PATIENT'S EDUCABILITY

A host of factors may limit the patient's educability, or capacity for change. His circumstances, his personality, his fears, values and beliefs, his feelings towards the doctor, the views of his friends and family—all these and more may militate against educational success, however capable the physician. Discouragements aplenty are met by the doctor who believes that changed behaviour patterns will improve his patient's health. It may not be practicable to advise an impoverished man to improve his diet; or to tell an impoverished mother to give up her employment, although her absence is impairing her child's health. The patient with a long-term illness, seeing no dramatic improvement with treatment, may become convinced that his illness is a consequence of 'tricking' or bewitchment, and abandon his therapeutic regimen. The diabetic patient, 'wishfully thinking' that her freedom from symptoms means that her illness has left her, may give up her dietary restrictions or insulin injections. Anxious to 'live up to the Joneses', the malnourished family may prefer a new radiogram to extra milk and fruit. The obese Zulu woman may feel at heart, in common with her family and community, that the fuller figure is a thing to be valued—beautiful in itself and material evidence of health and prosperity. Not surprisingly, attempts to reduce her weight may meet with little success. The father of a tuberculotic girl, temperamentally inflexible and convinced that prayer

or supernatural help is the right treatment for her condition, may refuse to send her to hospital in spite of her manifest deterioration. A patient given advice she believes to be wrong may completely ignore it, even though at the time, possibly out of politeness to the doctor, she may indicate her complete acquiescence. Such examples could be multiplied indefinitely.

Of particular interest is the effect of the patient's illness on his educability. The successful treatment of an illness may, by its effect on the patient-doctor relationship, greatly facilitate patient education. It has been stressed that, in 'underdeveloped' areas particularly (a term which must include the major part of our country), health education, which is 'the chief function of a medical service' in such areas, 'must be accompanied by treatment of illness whenever treatment is necessary.'[31] On the other hand, illness itself probably constitutes a barrier to learning. The anxious patient is prone to mis-hear, misinterpret, and forget. Eager to be helped by an expert in whom he has faith, the ill patient may gladly but uncritically and submissively follow 'doctor's orders', only to abandon them when he feels that his health is restored. In Steuart's words: 'Once he has had his complaint labelled and has been told to take a tablet at certain times, to change his diet, or to rest more often, this may mean little more to him than the anxiety-relieving rituals of magic to a primitive. Thus, with the physician in an active dominating role and the patient in a passive dependent one, we have a contradiction of the best educational situations where the learner actively and intelligently participates in solving his own problems and meeting his own needs. Moreover, the somewhat undignified dependence of the patient often means that, as he recovers and his feeling of independence is restored, while gaining a greater respect for himself, he tends to lose it for his regimen. It is therefore not uncommon to find the patient, in his final stages of recovery, avoiding desirable contact with his doctor and neglecting the advice he received. The result is that considerable numbers of patients resume their daily rounds as before.'[13]

The 'health examination' may be a useful answer to this problem. Such an examination may be made to comprise, not only an opportunity for a 'medical check', but also a valuable learning situation. This procedure is fortunately gaining in popularity. A recent US survey showed that, on the average, 54% of paediatricians' consultations were for health supervision rather than the care of ill children, and that 30% of the services rendered to children by general practitioners were for the health supervision of 'well' children.[32]

POSSIBLE HARMFUL EFFECTS

Much concern has been expressed about the possible harmful effects of ill-considered health education of the public or, as it has been termed, 'health miseducation',[33] or 'public education in disease'.[19] As has been pointed out,[15] false hopes may be raised and false fears induced, or fears may be produced which, though well justified, may impair health. For example, awareness that a lump in the breast may be evidence of cancer, may be an important cause of delay in seeking medical advice.[34]

Similarly with the individual patient, ill-considered health education may have harmful effects. A prediction of its likely effects may require considerable clinical skill. For example, the question of 'what to tell the patient' about his diagnosis and prognosis is a thorny one, and must be answered anew for each patient.[35] Even when the doctor can accompany his frightening diagnosis with suggestions for a regimen which will minimize the patient's danger, he may still fear that it will harm his patient. 'The general practitioner, who, above all other doctors, has to do the explaining, is, not unreasonably, afraid that, in preventing a coronary thrombosis, he may only induce a psychoneurosis. Of what use is it to a man to live ten years longer if, during every day and night of that ten years, he feels his pulse, counts his respirations, and lives in fear of sudden death?'[2] The possibility of iatrogenic disease is always present.

Unwittingly or unthinkingly, too, the doctor may raise harmful fears. The suggestion that heart disease may be present, for example, may aggravate the symptoms of a patient with neurocirculatory asthenia.[36] Such fears may find their basis in the doctor's manner, in his silences, or in his use of expressions which have a fearful connotation to the patient. A number of commonly used medical terms may arouse considerable anxiety among patients.[37] To the doctor, 'tonsillitis' may connote a healthy response to infection; to the patient, it may portend a surgical operation. Patients' interpretations may be markedly influenced by cultural factors. While one patient may find it reassuring to be told that his pains are 'only rheumatic', another, brought up in a different culture, may regard 'rheumatics' as a dangerous and often fatal disorder. The explanation given to a patient with urticaria that it is 'something he has eaten' may serve to confirm his own suspicion that he has been bewitched by poisoning, and that he is in fact gravely ill.

Education of the patient may prove disturbing, not only to the patient, but also to the doctor. It is sometimes questionable, for example, whether it is to spare the patient from pain that unpleasant facts are concealed, or to spare the doctor. Furthermore, the process of patient education may involve threats to the doctor's self-esteem. It may be hard to reconcile an explanatory, suggestive approach, a respect for the patient's views, and a readiness to discuss pros and cons, with a doctor's conception of himself as an authoritative expert. The frequent need to admit doubt or ignorance may further threaten the doctor's self-respect. If a doctor is prepared to sit down and talk with his patient, the need for it must often arise. Medical knowledge is limited—witness the uncertainties and fluctuations of fashion in infant feeding—and the knowledge of the individual doctor is even more restricted. There are few physicians who cannot be 'floored' by a patient who regularly reads the popular digests. In the face of these difficulties, many doctors may prefer to limit the opportunities for such exposure of their ignorance.

WHAT WILL BENEFIT THE PATIENT?

It may be far from easy to define the educational goals for a particular patient. For example, the mere fact that a belief is false or probably false, does not mean that it must needs be changed. If a mother believes that tooth-grinding is always a symptom of 'worms', is this belief harmful, even if it is false? If she believes that 'roundworms are caused by eating too many sweets', is it necessary to deny this possibly beneficial belief, and perhaps arouse the patient's resistance? May it not be preferable to explain that the prime cause is the ingestion of faecal material—an essential piece of knowledge if she is to take intelligent steps to prevent reinfection—while being non-committal about the possible relationship between sweet consumption and the growth of the worm once it has entered the body? If a woman believes that because she has been bewitched her breast-milk is causing her baby's illness, should she be persuaded, against her better judgment, to continue breast-feeding? What will be the effect of her self-blame should the baby die? May unacceptable or unrealistic advice not do more harm than good? Should she be told that she is not bewitched? Or should she be advised to continue being treated by her witch-doctor, in order to relieve her anxiety?

Sometimes such decisions may present extraordinary difficulty. A 31-year-old Zulu woman ascribed her numerous neurotic symptoms to 'high blood pressure', from which a doctor had told her she suffered. She believed that this high blood pressure was an effect of the premature cessation of her menses 5 years previously, after 6 years of childless marriage. Her early menopause, in turn, had been supernaturally caused by an unknown ill-wisher, jealous of her marriage. Basically, her symptoms were probably expressions of her frustrated wish for a child and her fear of losing her husband's affections. Her explanation, quite rational in her own eyes, was defective in her doctor's. But what modifications in her understanding of her condition would help her? This question cannot be glibly answered.

The task of defining the educational objectives is often further complicated by the introduction of an irrational element. Inevitably, the doctor is influenced by his own attitudes, motivations and assumptions, which may markedly influence his care programme. Two thorny examples illustrate this point: Faced with a promiscuous youth with gonorrhoea, does his doctor advise him to use condoms, in order to reduce the risk of reinfection? Or with an unmarried mother of three children, fathered by three different men, does he advise her to use a contraceptive? And if not, is he motivated by consideration for his patients' welfare, or by his own moral standards?

EDUCATIONAL TECHNIQUE

'It is unthinkable', it has been said, 'that when attending a tubercular patient the physician should fail to educate both his patient and the family.'[9] It is probable that in such circumstances most doctors do in fact discuss the methods of spread of the disease,

in order to reduce the chance of contagion. Yet in the London study of public opinion cited above it was found that an awareness that the disease was infectious was no commoner among persons with experience of tuberculosis in their families than among other persons.[26] This finding bears testimony to the fact that the technique of patient education, or educational 'therapy', may require considerable skill.

It may not be easy to transmit information to the patient.[14] Concepts that appear simple to the physician may be far from simple to the patient, and may be difficult to explain in intelligible terms. Particularly in a polyglot society such as ours, an interpreter may be needed who, by 'interpreting' in more senses than one, may distort more than she translates. Moreover, merely to impart information is not enough. In a recent Edinburgh study[38] it was found that no fewer than 45% of smokers believed that smokers were more likely to get cancer, but smoked nevertheless—clear evidence that information alone may not produce a change in habits. Similarly, 'advice' alone may be insufficient. Thousands of South African mothers boil tap water for their infants, because they have been advised to do so, but are little concerned about the flies which settle on the teat or the baby's mouth, which are far likelier to infect the infant than unboiled tap water is. They have been given advice, but not an awareness of its rationale.

What people do, depends not solely on what they know or what they are told, but on what they want. To be successful, health education must be founded on the patient's real-life goals—and health may or may not be one of these. 'The boy of six cares nothing about calcium and its relation to bone structure. But if you can promise that he will be as big and strong as Popeye the Sailor—if but he eats spinach—spinach he will eat. And . . . why? So that he might be healthy? Hardly! But so that he might, like Popeye—be powerful and unconquerable.'[39] The doctor has the difficult task of learning something about his patient's motivations, and of helping the patient to learn how changed behaviour may be able to contribute to the achievement of his goals.[40] What is needed, Steuart has said, is: 'for the physician to develop and exploit a more psychiatric type of relationship than is at present current. This would include greater opportunities for self-expression by the patient. . . . In such a clinical context his guidance could be more closely related to the felt and expressed needs of the patient.'[13] 'Health education . . . must aim, too, to stimulate to a conscious level those needs which are not felt.'[41] In the last resort, the purpose of health education is to equip and motivate the patient that he is enabled to make intelligent personal decisions which will improve his health and the health of those whom he affects. This may require no mean clinical skill.

Skill apart, it requires time—a commodity of which the doctor often has little to spare. 'Above all we must have time to allow our patients to talk to us—and time is one thing we lack,' says a general practitioner.[42] This is in many cases a very real practical problem. It is found by 41% of British general practitioners that their load is such that it is difficult or impossible for them to give adequate care to their patients.[43] To an extent, practice and skill in patient education may reduce the time requirement. But it is likely that under present conditions the problem of time, which not only comes into health education but also into many other aspects of good clinical practice, will remain a difficulty for many practitioners.

The use of group discussions—for example, for expectant mothers or diabetics or obese patients—partly answers this problem. Group education is both economical and effective. Follow-up studies have shown that group discussions may be considerably more effective than individual sessions in producing changes in the way mothers feed their infants.[44] Naish found that the formation of parents' clubs among her patients, and their use for health education, contributed to a reduction in the unnecessary hospitalization of children.[45] The use of groups, however, presents the doctor with new difficulties. First, groups (except the family group) are not ready made, but have to be organized. Secondly, it requires considerable skill to make effective use of group situations. Lectures have little educational value, while to lead a group discussion, which has much, requires training and practice.[46]

POSSIBLE SOLUTIONS

By and large, the doctor of today does not appear to be a very efficient health educator—witness a New York study which showed that persons who had had a disease tended to have little more knowledge about the disease than persons who had not.[47] To a considerable degree, the doctor's difficulties in health education are produced or aggravated by his own lack of motivation or ability as an educator. Few of us have had the privilege of an adequate undergraduate training in this clinical skill.

Clearly then, better training of the doctor for this function must go a considerable way towards meeting the difficulties which have been discussed. A doctor equipped by his theoretical and practical training with the ability to diagnose his patients' 'educational condition' and the motivation and skill to carry out health education, must be more effective as a teacher, not only of his patients, but also of the public. Both postgraduate instruction in health education, which may be impracticable on any large scale, and undergraduate courses, which are easier of achievement, have been advocated.[3,48] A growing number of medical schools, among them that of the University of Natal,[49] are providing formal instruction in health education.

But for many of us it is still necessary to find our own solutions. The references cited in this article include many helpful suggestions. By schooling ourselves, for example, to find out what the patient ascribes his illness to, we may gain a keener appreciation of the educational problem. By feeling and showing an interest in our patients' views, we can augment our effectiveness as teachers. By using charts, models and other visual aids,[5] we can make what we say more easily intelligible; and by asking the requisite questions we can make sure that we have in fact been understood. By a less didactic approach, we may produce more lasting changes. If we are aware of our shortcomings and difficulties many of the solutions will follow automatically.

Whatever can be done to reinforce the continuity of the patient-doctor relationship will improve our chances of success. If we can see our patients when they are well as well as when they are ill, this will provide us with extra opportunities. Prepaid medical schemes, because they facilitate health examinations, may be particularly useful media for effective patient education.[50]

Similarly, if our contact with the whole family can be improved, so may the success of our teaching . Family members profoundly affect one another's ideas, habits and health, and the family is a most important educational unit. The hospital doctor who seeks out his patients' relatives, or the family doctor who establishes a good relationship with all the members of his families, improves his chances of success.

Even the time problem may be lessened, if not removed, by the judicious use of appointments or other control systems,[20,51,52] and by the careful planning of a record system.[20,53] With the help of a nurse in the practice, considerable time may be saved;[20,54] a nurse trained in educational method may in fact be able to augment considerably the doctor's own efforts.[55,56]

Of particular value is the potential contribution of the professional health educator, either supplementing the doctor's work among his patients, or working in the community at large. Such personnel could play a valuable role, for example, in the slowly growing health-education activities of hospitals and clinics.[57-62] In one experimental project at a Durban hospital, trained health educators organized group discussions among women in-patients whose homes were in one of the city's worst slum areas. Visits to the patients' homes while they were still in hospital, and again a month after their discharge, revealed significant improvements in refuse disposal, fly control, the storage of food and water, and the consumption of milk.[63]

Trained health educators can produce valuable improvements in a community's living habits and health. A number of reports have dealt with such work among White, African and Indian populations in South Africa.[7,64-67] Community health education of this sort is not directly concerned with meeting the particular educational needs of individual patients, but aims at promoting healthful living in the community at large. By increasing basic biological knowledge in a neighbourhood, by encouraging the population to make fuller use of its medical facilities and other resources, by stimulating group action in the interests of health, and by modifying unhealthy practices, such programmes provide a valuable background to the physician's efforts with his own patients. For example, in certain South African communities it is believed that brown bread is inferior, or that thin cereal gruels or sweetened condensed milk are adequate substitutes for breast-milk, or that haematuria is less a symptom of disease than a necessary stage on the road towards manhood. Where such beliefs

are widespread, it is difficult for the doctor to persuade his individual patients to take action counter to them. Community health education may be able to modify such general attitudes. The doctor in an area in which health educators are active cannot feel that he is working in an educational vacuum. He is not 'going it alone'.

SUMMARY

The education of patients may present the doctor with a number of practical difficulties. Some of these practical problems, and their possible solutions, are discussed.

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