VANCOUVER INSTITUTE

Lecture to be given by David V. Bates, M.D.
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THE HORSE AND BUGGY DOCTOR

I would like to begin by thanking the Vancouver Institute for giving me an opportunity to share some thoughts with you concerning the present status and problems relating to the medical profession. In attempting to give some kind of perspective to a difficult and rapidly changing scene, I will have to draw rather heavily on my own experiences and contacts as a physician. However, we are part of all that we have met, and I take it to be more or less inevitable that each one of us uses his own experience as a guide to contemporary problems.

The title of my talk is the title of a remarkable book published in 1938 written by Arthur Hertzler. We can, I think, at this point of time identify the period between about 1860 and 1940 as a period in which the individual practitioner, who was more or less self-sufficient, reached a very high point of development. Arthur Hertzler describes the life of a country practitioner in the mid-west of the United States practising alone. He was remarkably resourceful and travelled to remote farm houses under appalling weather conditions, and brought simple remedies and homely wisdom to the cottage fireside. His book opens with a description of five children of a family of eight dying of diphtheria. He writes "the reign of terror during the diphtheria epidemic brings out a trait common to the entire human race; when confronted with unknown perils, people seek aid from some supreme being. Prayers for protection literally filled the air in those days of doom. There was no appeal to the science of medicine because there was none. No one prayed that the doctors might find a remedy--no one thought of this possibility." No one knew better than the country doctor of this era how limited was his therapeutic capability. Morphine, digitalis, aspirin, and in the tropics, quinine, comprised the active pharmacopeia, and everything else he used has since gone by the wayside.

I wanted to begin with this concept because it was the one in which I grew up. My father was one of a partnership of four doctors practising 30 miles from London in a semi-rural area. His consulting room had a polished cabinet containing lenses and there were eye testing charts on the wall. He had a primitive anaesthetic apparatus with a nitrous oxide tap operated by the physician's foot; he had a small sterilizer, but enough to boil up some surgical instruments. He and his partners ran a dispensary staffed by a qualified dispenser, and all their prescriptions were filled there. Very early in my life I knew the colours of the different medicines, and before I went to medical school I was aware how often mixtures were prescribed to act as a psychological prop for the patient, rather than because they had any very specific action. My father was the physician in charge of a 40 bedded fever hospital built about 1880 and located in the middle of an orchard. This was for the care of children with diphtheria, scarlet fever, measles and German measles. Over the years this practice had developed links with hospitals and all of the physicians within it had some responsibility in a local hospital setting.

When I came back from three years as an army doctor in the Far East, in 1948, I found that the discussions relating to a National Health Service

in Britain were in full swing. At that time my father was a local representative of the British Medical Association, and asking himself the question of how to preserve the good aspects of the well-trained family physician in the midst of radical administrative change. He never doubted that the pattern of practice and of medical administration had to change and in an attempt to look at different models, he kept a keen interest in the Peckham Health Centre, which was a prototype community health centre. I remember he took me to visit it when I was in medical school. His own training had not been the kind it is now fashionable to prescribe for a family physician. Drafted immediately into World War I, he was one of three physicians who graduated from his year from University College Hospital out of a graduating class of about 60, who survived the war. He was injured in France and, after having been invalided at home, he spent three years working with Sir Thomas Lewis, then doing advanced cardiological research. After a brief period of training in surgery, he went into general practice. His work with Sir Thomas Lewis gave him a depth interest in cardiology which he maintained for the rest of his life. He believed that no family physician or general practitioner could survive intellectually unless he had, during his training, acquired a really strong basis in one or other aspects of internal medicine, obstetrics, or paediatrics.

I have dealt, at some length, with this pattern of practice because it seems to me that many of the problems it raises are those we are still considering. In the present tangle of health services, we can identify five different components, and one of these obviously is the individual physician and the professional bodies which represent him. A second, is the hospital, which may either be a large city hospital or a smaller community hospital. The third is government; the fourth is the medical school within the university; and the fifth are the so-called paramedical professions namely nursing, physiotherapy, dentistry, and many others. All of the individuals who work in these different environments in different ways constitute the health professions--and I do not need to remind you that this is fast becoming one of our major industries. I believe that in two or three years it is predicted that the health services as a whole will be the second largest "industry" in the United States.

In discussing the inter-relationships between these five components, I have to remind you that there are some basic propositions from which we all have to start. We are in a society based upon an ideal of freedom of choice. There are some who speak as if one segment or another of society involved in the health professions should be treated as if they were troops. They argue that doctors should be compelled to practice in different areas, overlooking the fact that such compulsion is not compatible with our present pattern of society and its objectives. Occasionally they speak as if one could compel a medical student to choose certain professional careers for themselves after they have graduated. Admitting that we may do something to steer students and doctors into certain channels by making them especially attractive, nevertheless we have to remember that we do not accept an idea of a society run on such rigid and autocratic lines. The second feature we can identify is the obvious need for planning in the present world to ensure high standards of quality and economy of operation. During the last ten years, 27 hospitals around

Boston have closed out their obstetrics services. This is partly to be explained by the reduction of work, but it was achieved without a government directive by collaborative planning amongst all the institutions serving a large metropolitan area. That kind of planning is clearly necessary in the future. Thirdly, we must recognize that there is a process of redefinition and evolution of roles within the health science professions. It was my predecessor, Dr. Jack McCreary, who played a leading part in Canada in arguing that since after graduation we required health professionals to work together, it would be sensible if we had this goal in mind during their education. As girls with a higher level of intelligence and a much better academic background are attracted into nursing, the responsibilities and roles which can be accepted by nurses will change and expand. The family physician practising in the urban centre hardly needs to be familiar with many of the acute medical and surgical problems that confronted the individual physician in a rural area thirty years ago, and it wouldn't make much sense to train him as if he was going to have to operate on the kitchen table. We shouldn't train him as a 'Horse and Buggy Doctor' until he has chosen that role for himself. Fourthly, we can recognize that our present society places a great deal of stress on the criteria of service to people as the yardstick of success. Slowly, the objective of preservation of the environment is taking precedence over immediate gain, and slowly the concept of service to people is in most of our minds becoming more important than preservation of hospital autonomy; or defence of a rigid bureaucracy; or a specialized plea of academic self-interest. Fifthly, we can identify the general point that the educational process, whether it be of physicians or nurses, must be adapted to what we believe to be the needs of the future physician and must take as a prime task the provision of continuing education for them and for all other health professionals.

With these general considerations in mind let me look at each of the components which I have sketched, and try and understand the problems they confront and the efforts they are making to adapt to the future. The primary physician is certainly making a valiant effort to redefine his role in relation to other health professionals, and to insist that he should be the primary reference point for most members of the public. He is confronted by the reality that one man, alone and unaided, no longer contains the potential for maximal assistance to any but a small group of patients. In my father's day, a good physician who understood the correct use of digitalis and morphine, and possibly oxygen, could do as much for a patient who had had a coronary thrombosis, as could anyone else. Modern medicine has made this concept outdated, just as it has swept away diphtheria and polio. Although the needs of continuing education for such physicians are agreed by everyone, we have made little progress in understanding how to organize this, since we do not know how to take physicians out of their practice, let us say for one year in every ten, and provide proper economic recompense for them. We recognize that the problems of physicians in rural areas have a good deal to do with the difficulty of persuading doctors with children that their own dedication to the community should take precedence over their children's need for high quality education. The primary physicians, and those who represent them, believe that medical schools have been training too many specialists and

neglecting the training of primary physicians; but they often forget that in a free society we allow people to choose what direction they take. Certainly the medical school must provide opportunity for students to be part of a family practice environment during their training, and our faculty at U.B.C. provides these opportunities in greater measure than most other faculties in Canada. However, we have to recognize the problem that exposure of students to a deprived environment too early in their lives may prove discouraging to them, since they will conclude that they can do little to ameliorate the social problems which they confront.

The large city hospital has problems all its own. It has been under tremendous pressure during the past few years for a number of different reasons, amongst which are the following. The public, perhaps educated by Dr. Kildare and his spectacular successes in the emergency room area, have used the hospital emergency department as a super sort of family physician's office, thereby putting tremendous strain on these facilities. Furthermore, medicine has changed over the past fifteen or twenty years and new techniques are needed in the hospital setting. Suddenly the hospital has had to find space for such things as nuclear medicine, expanded laboratories, cardiac catheterization rooms, pulmonary function laboratories, etc. and has difficulty adapting nineteen thirty space to nineteen seventy needs. As if all this were not enough, the hospitals have undergone a shift from being nineteenth century charitable institutions, to being major spenders of public money. Shortly after the National Health Service Act came into power in Britain, my hospital in London was involved in a legal suit. Giving judgement, Lord Justic Denning remarked that the hospitals must realize that it was no longer enough for them to give a basic standard of care on the basis of charity. The fact that they had become major components in government administered schemes, meant that the public was entitled to expect the highest possible standard of contemporary professional care from them. Yet the hospitals have been handicapped by inapposite financial structures often based on yardsticks for financing much too crude for their new and changing roles. All too often the politician has tended to look upon them as if they were the poor law institutions they are striving hard to adapt from. I might also note in passing that an additional problem has been the composition of the Boards of Trustees established usually many years ago. The distinguished local citizens who make up these boards are generally expert in handling investments and looking at balance sheets. They are far less well trained by their background to judge whether the interface between the hospital and the public is satisfactory, and they are generally in no position to judge whether the quality of the operation for which they are responsible, reaches acceptable high standards. As if all this were not enough, the increasing demands of medical schools dependent on such hospitals for their educational role in clinical disciplines has been a complicating factor. Very often the arrangements between the university and the hospital have been poorly defined. The responsibility now placed on medical schools for the quality of the education of graduate physicians to which I will refer later has added further stresses to the system.

Government has made an effort to meet the rising public expectations relating to health services. They inherited, however, several difficulties,

amongst which I would place in first position the problem of dealing with a civil service which is unused to public or community input into decision making. One has a general spectacle of the politician agreeing that public participation in decision making is necessary, and the civil servant striving very hard to prevent it being effective. Furthermore, the whole system has grown at such a rate that they have had to structure large organizations involving computer programes, etc. to handle what has become a major component of public spending.

The medical school, which is responsible in the final analysis for the quality of physicians and their graduate training, has also been under severe stress. It has had to structure ways for medical students to be educated within the community and by physicians miles away from university centres. It has had to fight to preserve hard-won scientific and research excellence on which all future progress depends. Without these advances continuing, we would be condemned to practising the kind of medicine our fathers practised. And, furthermore, it is the physicians who know where the frontiers of knowledge are, who are in the best position to introduce into hospital settings new techniques and new methods of treatment. If you were to visit the twenty or thirty largest community hospitals in Canada, and inquire when they introduced a new technique of value in the management of patients, and which physician was responsible for introducing it into the hospital, you would quickly discover that it was those physicians engaged in active medical research who brought these methods into the hospital setting. Unless you are aware of what is going on in the greater world of medicine, you are very slow to adapt to change. These stresses and strains have been compounded by serious questioning within the university community as to whether the Faculty of Medicine should exist at all. There are some university professors who regard the professional schools as somehow ancillary to the main purposes of a university, and they spend much time urging that the involvement of the university with the community through these schools is absorbing much too much of the university's potential.

The fifth component is the paramedical organizations and here there have been major changes in the midst of considerable difficulties. As Charles Dickens recognized, elderly nurses are not the most radical members of society. Schools of nursing with younger faculty keen to change the role of the nurse and give her a much sounder educational basis, have often been denied educational facilities in institutions whose nursing staff is unsympathetic to such a radical change. I came across this when organizing the medical intensive care unit at the Royal Victoria Hospital in Montreal 14 years ago. As soon as we began to train nurses in managing respirators and tracheotomies and in treating patients who suffered a cardiac arrest, we found that the main opposition came from the well-entrenched senior nurses, who perhaps were jealous of so much responsibility and education being given to their juniors.

Yet as we review all these organizations it should be apparent to all of us that the last ten years have seen major advances. In particular, the interface between the medical school and the community has been transformed. I have only been in Vancouver for three months, yet this is time enough to see the interface between the faculty and the community in some

detail. Not only the programs such as REACH, which bring paediatricians and students into contact with an urban community of children, but also the faculty involvement and leadership in establishing programs for the treatment of patients with renal failure both in the hospital environment and in their homes; the pioneer work relating to the establishment of family practice units and community care centres; and the responsibility accepted by the Department of Psychiatry under its new Chairman to integrate and improve and encourage development of psychiatric work at every level within the community. These are but three of many other examples I might have chosen and they illustrate advances made in one sector.

You will remember that it was C.P. Snow who, in a famous essay, spoke of "two cultures". He was portraying the growing division of outlook which existed between a scientific and technologically trained person on the one hand and someone working in the field of the humanities, on the other. His idea took fire, greatly to his surprise, because it corresponded to a public anxiety about the discordant objectives of these two individuals. Medicine represents one of the main interfaces between these two cultures and indeed it would not be too much to describe it, in a sense, as a third culture. One has only to look at the program of renal dialysis, for example, to see the intermeshing of modern technological advance and machinery, with an understanding of the patient's needs and anxieties. I was encouraged last week to hear Professor Dion of Laval University, who must be one of Canada's greatest political scientists, remark that it was in faculties of medicine that the university was doing its most distinguished work in relation to the community; and he said that, in his view, in Canada as a whole the faculties of medicine had made far greater contributions in this direction at this point of time than had departments of sociology. Needless to say, his speech was warmly applauded by the representatives of the Canadian Medical Colleges who were listening to him.

I want to turn then from these immediate issues to some more general considerations. Eric Hoffer in his book "Ordeal of Change" has pointed out what Dostoievsky stressed a hundred years before. He writes

> "It is my impression that no one really likes the new. We are afraid of it. We can never be really prepared for that which is wholly new. We have to adjust ourselves, and every radical adjustment is a crisis in self-esteem. The simple fact that we can never be fit and ready for that which is wholly new has some peculiar results. It means that a population undergoing drastic change is a population of misfits, and misfits live and breathe in an atmosphere of passion. There is a close connection between lack of confidence and the passionate state of mind....."

Perhaps this explains the heat generated by discussions relating to the dispensation of resources in the health field or its internal organization. All of the components at the present point of time may be suffering from a lack of confidence. There is, however, no going backwards. In T.S. Eliot's words "the rails slide together behind you" and we can recognize that few solutions are to be found by attempting to return to a previous era. In

particular, we must be very cautious that we do not depend on a romantic ideal of the past, forgetting its more desperate elements such as diphtheria, as a pattern for the future. Neither the family doctor my father was, nor the single-handed robust independent surgeon needing no assistance but his own resource; nor the medical scientist unconcerned with the interface between his work and mankind; none of these provide patterns around which we can structure the future. You will have noticed that these romantic ideals do not contain a romantic vision of a politician. None of us has a romantic vision of a politician so perhaps I can feel justified in leaving this one out.

We have to assert, therefore, the necessity of change, and be strong enough to welcome it and to plan for collaborative decision making. We have to welcome strong expressions of points of view, but we have to construct ways in which decisions are the outcome of many inputs. We can only do this successfully if we respect who has authority for what decision making, and not attempt to denigrate the roles which others are playing. For example, the question, how many doctors should be being trained in our medical school, is a question on which the Minister of Health should certainly have input. How many should be being trained for Canada as a whole? How many anaesthesiologists should be in training in our medical school? Into this latter question national bodies have to have some input advising us whether or not there is a serious shortage within a specialty, which in turn should have influence on the numbers of residents we have in training in a given training program. If what I have said has been clear to you, it should be evident that in those kinds of question neither the Minister, nor the medical school, nor the hospital, nor somebody like the Royal College of Physicians of Canada as a whole, should determine single-handed the answers to questions such as that. The decision making must be collaborative, and the executive means to implement the policy must be in the hands of those who are party to, and agree with, whatever decision is taken. The problems relating to resident physicians and surgeons at the present time well illustrate the difficulties which we all confront. Government pays them through hospital budgets; and quite legitimately feels it should determine how many it is prepared to pay for Hospitals know the service needs for residents in all the specialties, and are well aware that the quality of medical work done within the hospitals is critically dependent on the quality of residents who apply to work there. The medical school is held accountable by the Royal College of Physicians and Surgeons for the quality of the educational program in which the resident is working, and the medical school, by paying clinical faculty, determines to some extent those responsible for the educational component. Any of these four bodies, Minister, hospital, medical faculty or Royal College, can by unilateral action interfere with the whole structure.

I have observed that the effect of government legislation in the health field is very often not foreseen at the time the legislation is enacted. For example, the National Health Act in Britain in 1948 led to the separation of practising physicians from hospitals. This was unforeseen either by the profession or by the government in 1948, and a careful restudy of issues of the British Medical Journal and the Lancet of that period, reveal that neither party foresaw the consequences of the legislation in this particular field. The separation of the practising

physician from his community hospital has undoubtedly been one of the major reasons for emigration of physicians from Britain and three of my contemporaries in medical school in London left general practices in Britain for practice in Canada because of this feature alone.

In the spirit, therefore, that I have been trying to outline in this talk, I would like to outline some of the objectives of the Faculty of Medicine. Its prime task has to do with structuring the environment for the student which will best enable him to adapt to the future, and to continue to educate himself. It is all too easy for others, whether hospitals or government, to structure systems which act as real impediments to learning. The faculty is first and foremost, a resource of people. It has, in my opinion, already shown itself to be responsive to the needs of the community, and to be adjusting itself to the future work of the profession. As a Faculty we are responsive to government not just because it has the responsibility of deciding proportionate expenditures, but because collaboration and not arbitrary decision-making offers us all the only possibility of adapting to inevitable change. I have to point out, however, that the administrative structure of our hospitals, and indeed the established and practising profession as a whole, may be quite insensitive to the needs of the medical school and the resources required for us to meet better the challenges of the future. When all is said and done, and admitting that the administrative responsibilities and structures will change over the next twenty years, it has to be conceded that the quality of medical care available to all of us will critically depend on the quality of student attracted into medicine and the quality of the education he is given. In addition, the physician has to have every opportunity to keep up to date, and there has to be every opportunity for flexibility within the system as a whole. There are societies which put far more effort into planning the delivery of health care than they do into the structuring of first class educational opportunities for their students. This is not sensible. Admitting that it is easier to assess the physical state of school buildings than it is to assess the quality of the teaching going on within their walls, we must never confuse one with the other. Ultimately, our success in meeting the needs of the future will depend on the quality of the individuals we are training and on their dedication and expertise. Above all, we must enable the medical school to be looking forward to the future rather than insisting that it protect the past.

I would like to end by completing the quotation of a line with which I began this talk. It is from Tennyson:

> "I am part of all that I have met
> Yet all experience is an arch where through
> Gleams that untravelled world, whose margin fades
> Forever and forever when I move.
> How dull it is to pause, to make an end,
> To rest unburnished, not to shine in use!
> As though to breathe were life....."

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