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Whither Medicine in the Next Five Years in Rhodesia?

BY

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(An Address to the Medical Council of Seventh Day Adventists on 7th January, 1971, in Salisbury.)

I would like to do justice to the title of this address. I feel honoured at being asked by a body of men and women who spend their lives helping others without any consideration of material gain.

This concept of service forms the basis of our medical practice — to heal the sick and prevent illness. Some of you may be a little concerned as to whither medicine is going. Is it becoming more and more scientifically orientated? Already there exists more than a fear that the doctor is losing contact with his patients, turning his attention to the laboratory and machines and beginning to lose his role of healer. Medicine in its many branches is moving inevitably in this direction. The public (including the rural African) is steadily becoming more X-ray conscious and anxious for other scientific investigations of their complaints.

This modern trend must be of some concern to many of you, as you are all imbued with spiritual and humanitarian qualities. In my own experience I find that the attachment between doctor and patient is still very real despite the many scientific instruments we use. One of the great strengths of medicine is the help and comfort the doctor brings to his patient. Therefore, one need have no qualms that the position of healer, enjoyed by the physician, will disappear, particularly in Africa.

In this connection the African's attitude to medicine is of relevance. Does he look upon it any differently from the Westerner? I doubt it.

To him, every medicine has a property, virtue or badness, a quality that can help or, under certain conditions, do harm. It is true he cannot give a scientific reason for its efficacy and is amazed by its wonderful powers. He believes that this property is vested in the medicine — root, herb or plant. It is put there by the Creator and the *nganga's* spiritual endowment or knowledge enables him to find this out. The western world might attribute this property to a particular chemical, about which it knows nothing, but this does not matter. It is the one who has the knowledge of these matters who can bring it to the notice of the world. The Westerner will say that it is the doctor or chemist who knows this. The Shona says his spiritual healer, the *nganga,* knows it — not through his own knowledge, but through that of the special spirit of healing which possesses him to know the secrets of nature. This knowledge is what the Shona understands as magic; if the *nganga* is a bad person with a cruel heart he can employ these secrets of nature to the detriment of man. Such a *nganga* is none other than a witch. It must be obvious to you, therefore, that the Shona will use any medicine so long as he thinks it has these miraculous properties. He has no need to know its chemical formula; all he is anxious to find out is whether the remedy is in the hands of an evil or good practitioner.

I have tried to show that the Shona tend, as a whole, to attribute an illness to a spiritual agency. There are at least two aspects to his arguments on medical procedure. The *nganga* prescribes herbs or other medicines with the object of neutralising and so rendering inert the harmful agency. The symptoms disappear and recovery can be expected. Western medicine usually stops when this stage has been reached unless the patient is required to appear from time to time for check-ups to ensure that the disease has not recurred. But the Shona is still concerned. It is true that the medicine has eliminated the sickness, but he believes that the spiritual agency, responsible in the first instance, may continue to operate if it so wishes. To be certain of a cure he must learn what caused the illness in the first place, i.e., which spirit was offended and is likely to trouble the patient or his family. Therefore, when he has received a herbal remedy from a *nganga* or after being under care of a doctor in hospital he usually consults a *nganga* to make sure that the spirits will not take action again.

It must be clear, I hope, to my audience, that, in the minds of the Shona, an illness is attributed to a religious or spiritual upset; I have tried to show that just as Christians may link a mishap in life to God's will, so does the Shona think in terms of an angered ancestral spirit or the evil heart of a rival. In other words, since both Christian and Shona believe ultimately in God, the Christian turning to Christ and the Shona to the saints of his clan, and, since in both the ethical and moral values are not widely dissimilar it becomes quite possible for the Shona to accept both Shonaism and Christianity. He does not see anything wrong in praying in church on a Sunday and yet consulting a *nganga* in times of sickness, making a sacrifice or offering to the offended ancestral spirit.

Much to our surprise we are finding today men who are practising Christians, yet at the same time treat the sick in exactly the same way as a *nganga.* Their clientele know they belong to a church despite following the principles of *nganga.* In the same way in the Apostolic Faith, a Christian sect, its prophets or priests behave and practise in a way not very unlike that of the *nganga,* even pointing a finger at the supposed witch.

The message of the Shona *nganga* is really one of victory over the forces of evil. By means of propitiation, forgiveness for an omission can generally be obtained. Even if a *nganga* declares the prognosis of an illness to be bad, another may be found who holds out a ray of hope for eventual recovery. The real problem then is to find this *nganga.* Find this wonderful man and all will be well.

It is important to stress that the Shona and, I believe, other traditional African peoples, are highly spiritual in outlook. In the same way as a good Christian would thank the Lord for helping him to recover — despite his good doctor — so the Shona attributes his recovery to his God or his ancestral spirits, whether tended by the witch-doctor or the Western one. I believe there is a real place for the doctor in Africa where its people whilst still wishing to be free to contact the spiritual world, still want orthodox medical advice.

So far I have shown that when a person is confronted with a disease, his reactions are similar — whether he is a Christian or a traditional Shona. But there is a major difference between the two religionists. Whereas I think it would be true to say that very few Christians would attribute an illness to a spell cast by an evil person, the traditional Shona is firmly convinced that this does happen. At least half the illnesses that occur are attributed to the witch. This has a practical effect as measures are taken to nebulise the effects of this dangerous being in their midst.

For a number of reasons the African population is growing rapidly. And so in the minds of people, other than Africans themselves, there is

an increasing fear about this tremendous rise. Many consider that they should plan their families to ensure that their children will have a reasonable chance of better living. Indeed, support for this movement has come from many medical quarters. But this subject is a very debatable one. I agree that every child should be given a reasonable chance in life, but what is reasonable? What standard should we accept and who is to lay down the criteria? In Europe some people have very large families indeed and the parents believe they can give their children what they consider a good future. If a Shona tells me he loves all his many children, he has sufficient food for them, he sees little need to spend much on education, and believes his family feels secure in numbers, who am I to say that he is wrong? Surely the size of a family is not really a medical problem, but rather a personal desire on the part of the mother and father.

I think we can understand the urges of a white man, but do we really know what is at the back of the mind of an African with regard to children? Of one thing I am certain. It is most essential for a Shona man to be survived by a son or sons to pray to his spirit in the next world. A childless man or woman has no one to remember him when he leaves this world. So if a man has but one son and this child dies, his spirit will be forgotten. Thus, as infantile mortality is still high, although not nearly so high as formerly, in order to feel secure in the next world a man reckons that he needs at least two sons. As his first two children might not necessarily be boys, he would think in terms of four children and to be even more secure he might want six.

There are three influences which define the pattern of medicine. The first is the public itself, the second the medical profession and the third the environment in which pathogens and other types of illness develop. For instance we can influence the frequency of malaria in an area. Likewise interference with the natural surroundings can cause illness. Those who mine the quartz may develop pneumoconiosis. In Rhodesia we can ask ourselves what are the diseases surrounding us that we have to attack? Being aware of the rapid increase in our African population and of the great economic forces at work, we can assume that there will be no dramatic change in the occurrence of nutritional and parasitic diseases, including malaria and bilharziasis. To a certain extent the rise in education of the children will affect their personal hygiene, but I doubt if this will alter their basic standard of living. Most will remain on the land and continue their traditional way of life, most will be in close contact with nature. On the other hand the traditional culture of the Shona people may slowly change because of the influence of the Press, Radio and swifter communications by bus and motor car. We must never underestimate the thinking capacity of the indigenous population. As far as I am concerned, they have never been other than great supporters of the medicine of the white man. Look how they flocked for medical aid to the early missionaries and how government was pressed to do something for them. The missionaries at Lobengula's kraal were inundated with requests for medicines for the various ailments of the people living around them.

To go back even further, one has only to read David Livingstone's letters to see how in the 1840's he was beseiged by the people of Botswana for medicine. Therefore I would conclude that there will be an ever-increasing demand by Africans for medical help and that slowly even in the more remote places, the public will come to expect a more searching examination than that to which they were hitherto accustomed. I have noticed this in my wanderings in rural parts of Rhodesia, where some of the people show a preference for a better type of examination and want a picture of their chests. The news has spread far and wide, by word of mouth perhaps, that at Harare Hospital, for instance, there are many healers to tend a patient as well as nurses and orderlies.

So far I have spoken of the environment and what the attitude of the African people is likely to be. We now come to the important attitude of the medical profession itself. What is it likely to be in this country? How is medicine here shaping? I for instance have seen a change in the pattern of medical practice over the last 30 years or so in Central Africa. There can be no doubt that in every territory one has seen the coming of the specialist into the main centres, although the type of medical practice at the periphery has remained much the same as before. One has seen the advent of the surgeon and physician, the radiologist, the laboratory specialist. All these men, who were once believed to be rare and expensive items of medical practice, have come into their own. Even the more specialised type of surgeon with his particular speciality has been accepted — the gynaecologist, the ophthomologist, and in some places even the thoracic or cardiovascular surgeon. As I see it, these different specialists would be stationed in the large and well equipped central hospitals. On the periphery (mission stations and other focus centres) the mode would be for cases to be seen and dealt with as best as possible

on the spot, the more difficult ones to diagnose or requiring special care would be referred to the specialist.

Obviously there are bound to be exceptions. For instance there is no reason for not encouraging the establishment of good hospitals in the tribal trust lands, such as already exist at Nyadiri and Driefontein. Nevertheless the tendency must be directed, I believe to specialist facilities in the large centres. I need only quote radiology as an instance.

To determine the likely pattern of disease in our African population is likely to be no easy task. Twenty years ago we hardly ever saw an African patient with coronary thrombosis. The same could be said about thyrotoxicosis and ulcerative colitis, but there is no doubt that this seems to be changing, even if slowly. For example, Malcolm Ross (1969) was able to collect no less than 16 cases of coronary thrombosis in this country — all proven at autopsy. Men are beginning to publish typical cases of thyrotoxicosis and ulcerative colitis. In Harare Hospital too, we see with fair regularity Africans with typical peptic ulcers and their complications. We see a fair number of cases of diabetes mellitus and are well aware of acute appendicitis in our city hospitals where surgeons are finding this condition a fairly common occurrence and no longer unusual.

Now whilst many of these diseases are not seen with the same frequency as in the European, nevertheless they are now appearing in greater frequency than hitherto, causing us to ask the following question. What influence has urban or Western culture on the pattern of disease?

In contrast to this experience, I have visited a number of tribal trust areas regularly over a number of years and spoken to doctors and sisters in charge of mission hospitals and the concensus of opinion has been that acute appendicitis, diabetes mellitus and peptic ulcer are only seen occasionally. It would seem to me that those who live in their traditional environment do not appear to run a very great risk of contracting any of these diseases so well known in the Western world. Yet when we come to look at the figures of the acute abdomen at Harare, we find that acute appendicitis is seen more often than, say, acute strangulated hernia or volvulus. I think it would be true to say that the acute surgical abdomen is uncommonly encountered in the rural districts and I doubt if many such cases are overlooked.

Table I
CASES ENCOUNTERED IN HARARE HOSPITAL DURING 1967-1970

	1967	1968	1969	1970	Total
Acute appendicitis	75	77	84	86	322
Strangulated hernia	57	47	64	41	209
Volvulus	33	60	39	57	189
Diabetes mellitus	137	139	186	220	682
Peptic ulcer	90	91	107	104	392

These figures show that the general surgeon will be needed even if in rural areas; diseases like acute appendicitis and perforated duodenal ulcers are seen only now and then.

It might interest you to look at the figures of what were the ten most frequent diseases at Mpilo and Harare Central Hospitals.

In the case of Harare the figure is for 1968 and for Mpilo for the ten years 1959-1968. This gives us a good idea of the most important groups of diseases in the two biggest hospitals in the country. (Fraser Ross, 1969).

Table II
TEN TOP DISEASES
HARARE CENTRAL HOSPITAL
1968

Genito-urinary system
Non-septic abortion
Gastroenteritis and Colitis
Fracture of the limbs
Ill-defined and unknown causes
Lobar pneumonia
Bronchopneumonia
Lacerations and open wounds
Benign and unspecified neoplasms
Head Injury (excluding fracture)

MPILO CENTRAL HOSPITAL
1959-1968

Genito-urinary system
Fracture of the limbs
Non-septic abortion
Gastroenteritis and Colitis
Lacerations and open wounds
Lobar pneumonia
Bronchopneumonia
Ill-defined and unknown causes
Infections of Skin etc.
Head Injury (excluding fracture)

You must be struck by how closely the frequency of disease corresponds in the two hospitals. The two exceptions are infections of the skin (Mpilo) and benign and unspecified neoplasms (Harare).

I have also been able to study the figures of the "principle diagnosis on discharge at Harare Hospital for 1969" and the categories of disorders which appear more often than others are:—

Trauma	3303
Diseases of the Respiratory System	2083
Infections and Parasitic Disease	1684

Complications of Pregnancy and Puerperium	1595
Diseases of the Digestive System	1528
Neoplasms	1464
Diseases of the Genito-urinary System	1460

Now let me give you the figures of the common disorders for the period of one year for the Wedza and Mount St. Mary's Rural Hospitals. (Dr. Mary MacIntosh).

Table III

TEN TOP DISEASES
WEDZA AND MOUNT ST. MARY'S
RURAL HOSPITALS 1.4.1968-31.3.69

Bilharziasis
Acute Respiratory Infections
Gastroenteritis and Colitis
Avitaminosis and other Nutritional Deficiency Disorders
Measles
Pneumonia
Genito-urinary system
Bronchitis, Emphysema and Asthma
Infections of the Skin, etc.
Inflammatory Disease of the Eye

INPATIENTS ADMISSIONS, 1969
(W.H.O. Classification of 150 Causes)

Delivery without mention of complications	225
Bilharziasis	145
Acute respiratory infections	129
Ankylostomiasis	114
Enteritis and other diarrhoeal diseases	88
Pneumonia	40
Avitaminosis and other nutritional deficiency	39
Bronchitis, emphysema and asthma	36
Anaemias	28
Infections of the skin and subcutaneous tissues	27
Fractures of limbs	27
TOTAL ADMISSIONS	1459

As a result of this information can we predict what sort of hospital specialist we shall require? It seems to me that our major hospitals might cater for:

A physician; a general surgeon; a trauma specialist; an obstetrician.

In the surgical field I consider we need a number of high priority specialists even though these may not seem essential from the figures in either of the two main hospitals we have studied. Eye disease does not appear in the list, yet I must advocate the necessity for the ophthalmic surgeon. In the Wedza list eye diseases assume tenth place; at Harare Hospital there were 659 admissions for various eye disorders. Another surgical specialist who must be retained in our main hospitals is the urologist. We notice how common genito-urinary disorders figure in the lists in our main hospitals and although not all cases are surgical, the need for this specialist is very real.

The third important surgeon in the main centres is the neuro-surgeon. He plays a definite role in the treatment of head injury. In Harare Hospital in 1969, 268 patients were admitted with head injuries and then there are a host of other conditions in which the services of a neurosurgeon are sorely needed.

Another specialist who would have a real place in our major hospitals is the radiotherapist. There is a great need for this expert. One only has to think of his role in treating carcinoma of the cervix in the African woman as well as the great alleviation of pain and discomfort in the many disorders helped by deep therapy.

With regard to the physician, whilst we want the general physician rather than the one-system specialist, we do need physicians with a special interest, especially in renal and perhaps cardiac diseases. There are increasing number of cases being referred to as acute renal failure and whilst we may not be able to think in terms of a nephrologist, we should encourage the physician who has this special interest. The cardiac specialist too has much to offer in the correct recognition of a heart lesion and the use of the very skilled techniques.

To summarise, therefore, what I see we need in the next five years in medicine are:

General physicians. General physicians with a special interest (tropical medicine, kidney, heart, blood disease, dermatology, gastrointestinal disorders.) General surgeons. Traumatic surgeons (including the orthopaedic surgeon). The Obstetrician. The Ophthalmologist. The Urologist. The Plastic Surgeon. The Radiotherapist.

Now whilst the figures we have studied point to the frequency of categories of disorders we are meeting in the country today, we must always bear in mind that some may change. There are at least four major problems which concern almost every traditional African patient to a greater or lesser extent, but as he moves from his environment its influence begins to disappear. These four major factors affect the clinical picture in an almost unpredictable manner or combination. Thus we must consider:

The parasites, especially those of *P. falciparum,* schistosomiasis, the amoebic parasite and, to a lesser extent, the ankylostome and the filarial parasite.

The question of nutrition.

The haemopoietic system.

The liver.

How very different this is from the problems of disease in the Westerner living in Europe who may easily be suffering from diabetes mellitus and hypertension. The rural African may well have one of these diseases, but at the same time he might also have what I shall for convenience call a tropical anaemia, an enlarged liver or spleen, one or two of the parasitic disorders besides, and

be living on a diet deficient in proteins and often in vitamins. I doubt whether this pattern in the rural African will alter in the next five years and so our medical personnel will still need to direct their attention and skill to this state of affairs.

When it comes to the periphery of our medical services, we have to consider another set of circumstances. We have here smaller or medium-sized hospitals in centres like Gwelo, Umtali, Fort Victoria, which can cater for most medical and surgical emergencies, but cannot provide the more specialised services, which, as already mentioned, can be found only in Salisbury and Bulawayo. In these hospitals we have essentially the general physician and general surgeon who are called upon to handle almost anything in the medical or surgical field, but who refer the more difficult cases or ones requiring special investigations to the two larger centres. I think this practice will continue.

For the small rural or minor hospitals or clinics catering for the sick, it is much more difficult to predict. We must admit that there are very few doctors working in this environment. There are many reasons for this. Mostly the doctor from the nearest centre visits those small minor rural hospitals once or twice a month. Here he sees any case kept over for him by the orderly in charge and then moves on leaving him to cope. It might be argued that it would be better for the medical school to change its policy and not try to produce a very fine medical practitioner with high qualifications, but rather to put through more doctors of a lower grade in order to man these stations. But I believe that once standards are lowered at the top level, medicine as a whole will degenerate. I believe it is better to have a few highly skilled doctors than dozens of poorly trained ones. Further, I believe it is important for medical progress. The medical profession must be capable of thinking and must play its part in the advances of medicine; otherwise the profession becomes static. The value of a medical school in a country like Rhodesia lies not only in its main duty of producing doctors but also in the lead it gives to others by its researches, its arguments, its newer methods and, like the ripple on the lake, its influence spreads far and wide to the periphery, making its impact there.

The fact that one cannot hope to obtain doctors for the very small rural hospitals has led authorities, like Professor Fraser Ross, to consider training the nurse, as we know her today, a little further so that she can be a better diagnostician and a fairly good therapist. She should be capable of minor surgical procedures. Surgery is not often required in those smaller units, but can be referred to the better equipped centres, where the necessary procedures can be performed. This community nurse would correspond in a way with the near doctor found in other countries. She would be better trained than the present state registered nurse. She would be a fine obstetrician capable of handling the majority of acute obstetrical emergencies and she would be fully informed of the different preventative measures.

Professor Ross states that in Rhodesia there is probably a greater need for nurses in rural areas than there is in urban ones. If we wish nurses to work in rural areas their status in the rural area should be greater than that of nurses in the urban area. The status of "the community nurse", whether she works in an urban or a rural area, must be shown to be greater than that of the mere hospital nurse. Community health should be co-ordinated under the provincial medical officers who would have community nurses in their teams.

What training should a community nurse receive? We must accept that she would have to have a basic nurse's training in a general hospital as well as midwifery. Then after two or three years of nursing experience, she should undergo a university diploma course in community nursing. This would include subjects such as the diagnosis of disease, minor surgical procedures, social customs of the population, disease patterns, community investigation programmes for infectious diseases and school problems in relation to health.

Professor McKeowan of Birmingham, a leading authority on social medicine, gives the main reasons for improvement in health in England in order of importance; firstly a decline in the birth rate; secondly a rise in the standard of living, first in food supplies and later in housing; thirdly the removal of specific hazards in physical environment; lastly specific measures for preventing and treating disease in individuals.

I think it is necessary for us to reflect on our own history. We should not think that it was the influence of medicine alone that is responsible for the wonderful progress we are seeing today. It is important to look at our progress in proper perspective and make sure which are the influences which are operating.

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