

IGERIA



Inaugural Lecture Series 54

THE CHALLENGES OF PROVIDING COMPREHENSIVE HEALTH CARE FOR NIGERIANS

by **TAIWO DARAMOLA**

UNIVERSITY OF IFE PRESS



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**An Inaugural Lecture Delivered at the
University of Ife on Tuesday, April 21, 1981.**

Inaugural Lecture Series 54

University of Ife Press, Ile-Ife, Nigeria.

I. INTRODUCTION

The principal concern of the World Health Organization is to help developing nations in planning and putting into effect a system of health care delivery that will bring the benefits of good health to every family, even in the remote areas. Some call this a Basic Health, others, a Comprehensive Health Scheme. This goal remains unattainable in Nigeria and many other countries of Africa. The World Health Organization has set, as a target date, the year 2000 to achieve the goal of comprehensive health care for all. I have therefore chosen as a topic for this inaugural lecture, "The challenges of providing comprehensive health care for Nigerians".

All parameters available to measure health status of a nation indicate that Nigeria is in a very poor state of health. It is estimated that about one out of every five babies born die before the age of one year. The life expectancy of our average Nigerian is about forty years as compared with over seventy years for his counterpart in the countries of Western Europe and the United States.

Millions of Nigerians all over the country have no access to any form of modern medical care. Since the greatest asset of any nation is human, it is highly improbable that any nation which cannot adequately protect and maintain the health of its citizens can ever rise to a leading world power. The crisis within our health system is so well known both by the professionals and laymen that no useful purpose is served by recounting it here. What is needed

most of all is a basic understanding and clear thinking about the issues associated with our health care arrangements.

I will start, therefore, with a brief historical review of our health administration as a guide to possible evolution of a better and comprehensive health care system in the future.

Historical Review

Health service is a form of social service. In many developing countries, the evolution of social services depends on many related factors such as:

- a. the history of the country's geographical exploration;
- b. colonization and pacification;
- c. the development of its trade, commerce and industry;
- d. political administration and, above all
- e. the calibre and devotion of the men and women who pioneered these activities.

The history of medicine in Nigeria can be traced to our earliest contacts with the culture of the East and the Mediterranean littoral. These contacts date from about 600 B.C. during the period of the Phoenicians and Hanno the Carthaginian, to the time of the introduction of Islam, Arabic culture and medical care in the 13th century A.D. across the Sahara to the Western Sudan and Northern Nigeria.¹

Early Exploration

One of the earliest contacts of the Western World with Nigeria were the Portuguese who had traded with and sent religious missions to Benin and Warri. Some of them

settled there towards the end of the first half of the thirteenth century. These settlers were reported to have brought some form of European medical care. Another important landmark was linked with the trans-Atlantic slave trade with Western Europe and the Americans which began in the sixteenth century after the discovery of America in 1492 by Christopher Columbus. There is sufficient evidence to show that the ships of Portugal, Spain, Denmark, Holland, France and Britain brought with them licensed physicians who were employed to care for the health of the slave owners and their staff in various trading stations as well as the health of the slaves exported from Badagry, Lagos and the towns around the Niger and Cross Rivers.

The introduction of modern medical care to Nigeria in any proper form is due to the efforts of British explorers, colonial administrators and missionaries. It is of great historical significance that two early explorers in Central and West Africa, David Livingstone (1857) and Mungo Park 1771 – 1806 were both physicians.

The Niger expedition of 1832 – 1854 known as Macgregor Laid Exploration which was financed by himself dealt a mortal blow to the debasing and demoralising traffic, the slave trade. The expedition had two doctors – an English Physician, Dr. Briggs and a Scottish Surgeon, Dr. Oldfield. Only 9 out of 48 members of the expedition survived the trip. The high mortality among the explorers was due to the deadly diseases in Nigeria and West Africa. This experience later influenced the British Colonial policy in the training of medical manpower which will be dealt with later.

The Role of Missionary Organizations

The early Catholic and Protestant missionaries, though some of them were not medically qualified, exerted great influence on the development of medical care in Nigeria.

The Catholic Mission

Father Francis Borgero, an Italian, was the first to re-establish the Catholic Mission in Dahomey in 1861. It was known that 400 years earlier, Father Bolano, the first Catholic Missionary arrived in West Africa. Father Borgero established dispensary and orphanage work in Dahomey. But with the arrival of Sister Marie in 1886, Father Francois in 1888 and Father Conquard in 1890 the Catholic medical work expanded and led to the building of the Sacred Heart Hospital in Abeokuta in 1895.

The Catholic Mission has since then established a network of mission hospitals, dispensaries, and leprosaria in many parts of Nigeria.

Church Missionary Society (CMS)

Dr. E. G. Van Cooten was the first truly medical doctor to have landed in Nigeria in 1850. He died within a year in 1851. Rev. (Dr.) David Hinderer with Dr. Irving, a surgeon, carried on the Mission Medical work from 1852. The Church Missionary Society spread its activities throughout the country. In 1900, David Walter Miller established Wusasa Hospital in Wusasa near Zaria.² Wusasa was to become not only an important christian centre in the north but also an intellectual center where many prominent Nigerians were trained. The late Dr. Dikko, the first Northern Nigerian doctor, had his initial education at Wusasa, so did the former head of State, General Yakubu Gowon and the former vice-chancellor, Ahmadu Bello University and now Federal Minister of External Affairs, Professor Ishaya Audu.

The Methodist Mission

Rev. Thomas Birch Freeman (1809 – 1890), whose father was African and mother English, was the pioneer of Methodist Mission in Nigeria. Rev. Freeman sailed from

England in November 1837 and arrived in Ghana in 1838. He began mission work in Nigeria where he served for twenty years. Though it was not until mid 1940s that the Wesley Guild Hospital was built, the hospital and the subsidiary dispensaries built in the 1920s made a great contribution to the health of the people of Ilesha and Imesi-Ile in Obokun local government areas. It should be noted that the first trial of measles vaccine in Nigeria was undertaken at one of the Mission health units in Imesi-Ile.

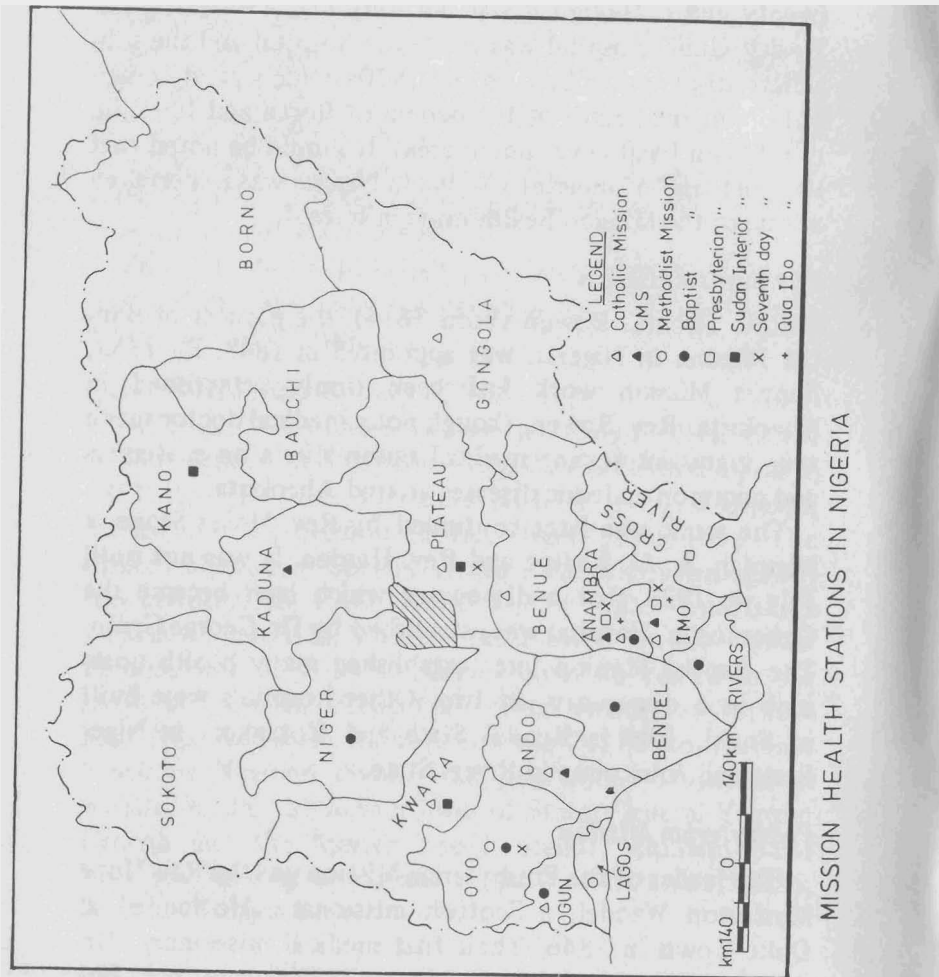
The Baptist Mission

Rev. Thomas Bowen (born 1814), the pioneer of Baptist Mission in Nigeria, was appointed in 1848. By 1865, Baptist Mission work had been firmly established in Abeokuta. Rev. Bowen, though not a medical doctor made very many interesting medical observations on epidemics and common endemic diseases around Abeokuta.

The work was later continued by Rev. Moses Stone, a Nigerian, L. O. Fadipe and Rev. Harden. It was not until July 4, 1923 that a dispensary which later became the Ogbomosho Hospital was established by Dr. George Green. The Baptist Mission later established many health posts such as a dispensary at Iwo. Other hospitals were built in Shaki, Eku in Bendel State and Kotangora in Niger State and Joinkrama in Rivers State.

Presbyterian Mission

The leader of the Presbyterian Mission was the Rev. Hope Masterton Waddel, a Scottish missionary. He landed at Duke Town in 1846. Their first medical missionary, Dr. Archibald Hewan did not arrive until ten years later. But dispensaries were opened in 1850 in Creek Town by Rev. Samuel Edgerley and at Unwana by Rev. Gartshore in 1888. The efforts of the Presbyterian missionaries to dis-



courage superstitious practice which were inimical to the health of the community in that area are too well known to be recounted here.

Sudan Interior Mission (SIM)

The Sudan Interior Mission work was established in the northern part of Nigeria in 1893 by Rev. Dr. Rowland Bingham. The mission was to become the single largest protestant missionary society in Africa.

Extensive network of medical units was established such as the Mission Hospital in Egbe, Kwara State, the hospital in Jos, the Eye Hospital in Kano, and dispensaries and leprosaria in many parts of the northern states.

Other Mission Establishments

There are many other mission establishments with keen interest in medical work such as the United Missionary Society by Dr. Andrew Stirret (1900) and the Qua Iboe Mission led by Dr. Samuel Bill from Belfast in 1891 and the Seventh Day Adventist Mission in Oyo, Imo, Anambra and Plateau States.

It should be noted that the mission organisations established training schools for nurses, midwives and laboratory staff in addition to operating health service institutions such as hospitals, health centres and dispensaries. In many parts of the country, they were the first to provide these services. I believe I would be speaking for many Nigerians as I express our profound gratitude for the valuable services which these christian organizations have rendered to the health services of our country.

II. THE WEST AFRICAN MEDICAL SERVICE

I have just completed a brief account of the Christian missionary contribution to the health service in different

parts of Nigeria. Let us now briefly assess the contribution of the British colonial administration to health services in Nigeria. Joseph Chamberlain accepted the post of Colonial Secretary in 1898. He wrote to the General Medical Council encouraging medical officers who were intending to serve in the tropics to study tropical medicine. Sir Patrick Manson had started the London School of Tropical Medicine a few weeks earlier. The Liverpool School of Tropical Medicine was just established. One Dr. Charles Hartford-Battersby founded the Livingstone Medical College, a centre where medical training for lay missionaries could be obtained. These institutions assisted the transfer of medical care from Europe to Africa including Nigeria. Similar institutions were established in other countries of Europe. Tropical medical schools were set up in Hamburg (1900), Belgium (1901), Paris, Italy, India and the United States.⁴

Africans in Colonial Medical Service

It was noted earlier that only 9 survived out of the 48 members of the Niger Expedition of 1832 – 1854. The high mortality rate among the early explorers, colonial officers and missionaries led to the decision of British Colonial Office to train Africans who must have acquired native immunity to many dreadful communicable diseases in West Africa as doctors. The first two West Africans to be trained were in fact Nigerians though born in Sierra Leone. They were:

- a. James Africanus Bexle-Horton, and
- b. William Broughton Davies

Horton was the son of an Ibo carpenter and Dr. Davies the son of a liberated Yoruba slave. Dr. Horton graduated M.D. from Edinburgh and Dr. Davies from St. Andrews the same year, 1859. These two gentlemen rose to the rank of Surgeon Major (Lt. Colonel) before they retired; Horton

in 1880 and Davies in 1881. Dr. Horton a number of books including the *Medical Topography of the West Coast of Africa* published in 1867. His interest in traditional herbs, the topic which is current in medical discussion in Nigeria today, will be dealt with later. The West Africa colonial service was unified and Horton wrote a proposal for training of more African doctors.

African Personnel in Colonial Medical Service after 1902

It would appear that the plan to train Africans to work in colonial medical service lasted for a short period. A most serious set-back was the reorganization of the service in 1902 in which African doctors were excluded and a segregated service was considered appropriate. As a result of this, three distinguished Nigerian doctors who had been in service from five to fifteen years, Dr. Obadiah Johnson, Dr. John Randle and Dr. Orisadipe Obasa left the service.

The Parliamentary papers for 1909 entitled “the Report of the Departmental Committee into the West African Medical Staff” contained many interesting comments on the issue.

Perhaps the case of ‘Adeola scandal’ more than any other represented the extreme position of some of the colonial medical officers of the time. Adeola, a lady from Awe in what is now Oyo State was picked up by the police in June 1888 at Ereko market in Lagos. She was taken to the Colonial Hospital (now the General Hospital in Lagos) where she was admitted. She was suffering from an incurable disease. A few days later, a Dr. Digby, the then colonial surgeon objected to her admission and discharged her. She died shortly afterwards. A meeting of Lagos intellectuals was called. A committee led by Dr. Obadiah

Johnson, the brother of the author of *The History of the Yorubas* made a strong protest to the colonial office.⁶ Governor Moloney held an enquiry, and Dr. Digby and two doctors involved were dismissed for "careless negligence and reprehensible conduct". In 1899, Dr. Obadiah Johnson then became the first African to be reabsorbed into the colonial medical service.⁷

The objective of the colonial medical service was to provide health service for:

- a. the nucleus of colonial officers and administrators including members of their family.
- b. to provide health services for the members of the armed forces and the police.
- c. to provide some form of health services for the members of the civil service particularly the senior civil servants.

The health service was never intended for the generality of Nigerians. The colonial medical service did not possess the men and material to offer a comprehensive service and did not pretend to do that. The mission organisation with keen interest in medical work provided health services to different communities in Nigeria and their services could not be described as comprehensive in scope.

III. PRE & POST INDEPENDENCE HEALTH SERVICE

Just before and immediately after independence, health became the responsibility of each of the regional governments and later of the states of the federation. The policy of each regional government differed widely. The old Western region government for example attempted to offer free medical services to children and young people under the age of eighteen years. This was a definite attempt on the part of government to assume a leading role in the provision of health services. Almost all the regional govern-

ments had a policy whereby all civil servants received free medical service from government institutions when available. No government in any part of the federation had any form of health service which adequately met the health needs of all the people.

Health in the Third National Development Plan (1975 – 80)

The Plan recognised the need of the federal government to make a greater and more effective impact on health during the Third Plan. The federal government developed more active policies in planning and training and also in medical research. Over ₦1.17 billion was allocated for health programme. The government decided under the programme to introduce a Basic Health Scheme to bring curative and preventive medical facilities within relatively easier reach of the general population. Emphasis was to be placed on the eradication and control of preventable diseases such as malaria, tuberculosis, measles, and small pox. Regarding malaria, the federal government allocated ₦20 million for the first phase of the malaria eradication programme. During the five-year plan period, the government was to set up 5,000 new health institutions. It was also to train staff and equip twelve new teaching hospitals, 1,400 health centres and 6,000 health clinics. There was also a provision for 1,500 mobile health clinics for rural settlements too remote or too widely dispersed to have their own health institutions. The federal government also planned to train more public health inspectors and nurses who would step up house-to-house inspection for environmental sanitation.⁸

The Third Development Plan therefore contained a health plan package which was bold and imaginative. Unfortunately, in Nigeria, there is a lot of difference between what is planned and what is achieved. The government health programme under the Third National Development

Plan will be evaluated in full under the Basic Health Service Scheme. Suffice it to say here that many of the noble objectives were not accomplished.

Responsibilities of Government in Health

The planning and provision of health service in Nigeria are joint responsibilities of the federal, state and local government authorities. The federal ministry of health co-ordinates health services throughout the country and provides a link between Nigerian health institutions and health organizations throughout the world. Each of the nineteen states of the federation has a ministry of health which takes charge of health services and trains personnel in various state-owned health institutions. In some towns and districts, local government authorities perform health care and related services such as environmental sanitation. Voluntary agencies also provide substantial contribution to health care delivery and personnel training. Some of the problems facing the implementation of government policies on health will be dealt with under a separate heading.

IV. DETERMINANTS OF HEALTH IN NIGERIA

It is necessary, before attempting to suggest any scheme of comprehensive health care, to identify those factors which affect the health of Nigerians. The theory of multiple causation of diseases states that a disease is caused by multiple factors and not by a single factor. Such factors are:

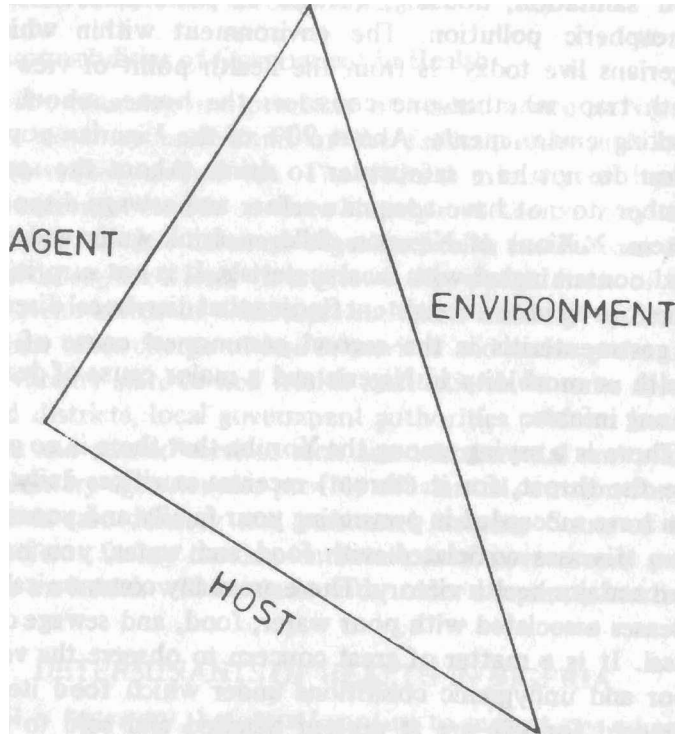
- a. the agent (which may be bacteria, viruses or others),
- b. the environment, and
- c. the host or factors within the susceptible host.

This is often referred to as the triangle of disease transmission. I should like to discuss these factors starting with environment.

Environment

Public health concern on the environment includes the following: supervision of water; sewage and refuse disposal; food sanitation; housing; vectors or pests control; and atmospheric pollution. The environment within which Nigerians live today is from the health point of view a death trap, whether one considers the home, school or working environments. About 90% of the Nigerian population do not have safe water to drink. About the same number do not have adequate refuse and sewage disposal system. Millions of Nigerian children drink water and eat food contaminated with fecal materials. It is not surprising therefore to note a consistent finding that diarrhoeal disease or gastroenteritis is the second commonest cause of ill-health or morbidity in Nigeria and a major cause of death among infants.

There is a saying among the Yoruba that there is no god like the throat, for it (throat) receives sacrifices daily. If you have succeeded in preventing your family and yourself from diseases associated with food and water, you have won a major health victory. There are many communicable diseases associated with poor water, food, and sewage disposal. It is a matter of great concern to observe the very poor and unhygienic conditions under which food items prepared for sale are at present handled and sold to the public. There is a need to intensify supervision of food to ensure that food is prepared under sanitary conditions. The methods of using sanitary inspectors should be revitalized. Dr. Africanus Horton, commenting on the poor environmental sanitation in West Africa in the eighteen sixties, made the following observations: "There is nothing so necessary for the healthy growth of a community as the drainage and sewage of the towns they inhabit, and the inefficient mode in which this is done in West Africa shows



Triangle of Disease Transmission

that the general population and their superiors have set a limit to their own existence”.⁹

No effort to improve the health status of Nigerians is likely to yield the desired result without the provision of safe water, adequate sewage disposal system, better housing and an aggressive vector control. Unless there is improvement in our environment, no effort on malaria control for example is likely to yield good result. The National Executive Council of the Nigeria Medical Association decided to produce a blueprint on health care delivery for the new civilian government in October 1979. I was asked to prepare a paper on rural health services. I made the following observations among others that “I am convinced that if no new hospitals, health centres and dispensaries are built within the first two years of civilian administration, but a safe water is supplied to all Nigerian communities, and adequate sewage and refuse disposal system provided more lives would be saved”. What is being recommended is that every community be assisted to provide these facilities. It should be an offence for anyone to defecate on the soil. Government should consider aided scheme of latrine construction. I know of no other means by which communicable diseases associated with water, food, and sewage can be prevented but by the provision of facilities enumerated above. Cultural permissiveness of Nigerians to unclean environment even among educated elite calls for considerable concern, and there is a need to intensify health education to change this attitude.

There are many diseases associated with overcrowding and poor housing. The provision of adequate housing for 80 million population is a gigantic project. Concern of government in this area is certainly a good gesture. One hopes that cultural background of Nigerians will be taken into consideration in designing low-cost housing for them.

All sanitary facilities should be provided before people are allowed to move into the new housing estates.

Nigeria is a country blessed with beautiful vegetation. The country is equally infested with many insects such as the mosquito, tsetsefly, blackfly (*simulium damnosum*) and so on which are dangerous to health of man and animal. Efforts made in area of vector control in Nigeria generally is yet to yield the desired result. Aggressive efforts should be made to reduce the population of insects which convey diseases (vectors) to the barest minimum. This is a tragedy for the developing countries like Nigeria in so far as the environment is concerned. While wealthy industrialized countries are pre-occupied with environmental pollution due to industrial wastes, we in Nigeria are yet to solve the basic problem of environmental sanitation. In addition, we are equally affected by the danger of industrial wastes. Governmental attention to this matter should be considered an important health priority.

Susceptible Host and Immunization

Among the factors in disease transmission is a susceptible individual. In order to improve individual and community resistance to a group of diseases, biological products (or vaccines) have been used for many years since Edward Jenner's discovery of small pox vaccine in 1796. This method of protecting the health of individual against communicable diseases by the use of vaccine, serum, live, killed or attenuated bacteria or viruses is known as immunisation.

Communicable diseases are the commonest causes of morbidity (ill-health) and mortality (death) among Nigerians and people in the developing world today. As a contrast to the patterns of death and ill-health in developed countries such as Britain, the United States and the Soviet Union where communicable diseases have been

driven to the background, the main causes of death in those countries are now cardio-vascular diseases (heart and blood vessels) and neoplasm (cancer). We know, from the example of other countries that there are means whereby communicable diseases now plaguing our communities can be reduced to the barest minimum. Man himself is the most important single source and reservoir of the aetiological agents of communicable diseases.

Let us briefly remind ourselves of the importance of Jenner's discovery of immunization. In 1802, Admiral Berkeley, Chairman of the Committee of the House of Commons investigating the petition of Jenner for a parliamentary grant said: "The discovery of Jenner is unquestionably the greatest discovery ever made for the preservation of human species". He noted that in the United Kingdom alone, 45,000 people die annually of small pox. "Not a second is struck by the hand of time but a victim is sacrificed at the altar of that most horrible of all disorders, the small pox".¹⁰

It is regretable to note that it took Nigeria 175 years after Jenner's discovery before small pox was eradicated. Yellow fever makes its appearance every 10 – 12 years in this country. Measles is a major cause of ill health and death among children; cerebrospinal meningitis occurs in epidemics annually in northern parts of Nigeria. Thousands of children in Nigeria are crippled as a result of poliomyelitis. Tuberculosis is a major cause of death and ill health in Nigeria. Tetanus is a major cause of death among the new born. Yet there are many vaccines produced as preventive measures against these and other diseases. These biological products are cheaper than treating the patients, yet they are not available in many health units in this country.

A survey conducted in Lagos in 1968 indicated that

while about twenty-five kobo was needed to immunize a child against tetanus, twenty naira was needed a day to treat the tetanus child in the hospital daily. On the average, tetanus cases stayed in hospital for 21 days. At best, only about half of these tetanus cases survived; the rest died.¹¹ It is sad to observe millions of naira being spent for treating patients for diseases that can be prevented.

One of the pillars of our medical care should be the provision of immunization to mothers, children and adults as may be indicated. Most of the communicable diseases can be completely eradicated by effective coverage of the people with immunization. It is estimated that, in order to break the chain of transmission, about 80% of population must be covered with immunization. As a means to achieve this goal, complete immunization should be made compulsory and a pre-requisite for admission to schools. Immunization programmes should be made available in all places where patient first makes contact for help, as in dispensaries, health centres, industrial centres, working places, schools and extended to houses. Adequate provision should be made for cold chain or storage facilities within certain areas to supply adjacent towns and villages. If this recommendation is implemented faithfully, I am convinced that a major victory would have been won over these communicable diseases.

Some might argue that in my discussion on health determinants I put my emphasis on environment and communicable diseases. This is because as of now, about 80% of causes of ill health in Nigeria can be traced to communicable diseases. In addition, most of the other diseases can be traced to social environment. Accident for example is an environmental problem. Mental illness may be linked with social environment. The discussion on environment must include micro-environment-activities

within each nuclear family and macro-environment-activities outside the family circle.

V. TRAINING MEDICAL MANPOWER

The goal of establishing a comprehensive health care remains unattainable to many countries of Africa. This is because good health services are dependent upon the availability and proper development of good health staff who, in their turn, demand an efficient and rapidly expanding programme of training adapted to the task that they must perform.

Achievement in Training Medical Manpower in Nigeria

It is on record that this country has made a tremendous achievement in the training of medical manpower of all cadres within the last fifty years. For example, the old Medical School in Yaba produced 62 doctors within 18 years (1930 – 1948), an average of about three graduates per year.¹² This year, the Medical Colleges of Ibadan and Lagos will produce about 200 doctors each. There are at least six medical schools in the country producing medical graduates and thirteen medical schools are planned for the nation. In this academic year alone, it is estimated that Nigerian medical schools will graduate about seven hundred physicians. This is indeed a success story when compared with the yearly output of the old Yaba College.

The same achievement in the area of medical manpower can be seen in dentistry, nursing, pharmacy, laboratory technology, X-ray technology, medical rehabilitation and other health-related professions. Yet the ratio of members of health team per population in Nigeria is so low and thus constitutes a definite stumbling block to comprehensive health care. The health personnel in various parts of the country, especially in urban and rural areas, are so dispro-

portionately distributed as to make any statistical calculation of health team per community meaningless. How can one doctor adequately take care of 20 – 30,000 people?

Preparation of Teacher

A serious obstacle to progress is the shortage of teachers to meet the needs for basic and continuing education of all members of the health team. In addition to the shortage of teachers, the problem is further complicated by the need for a qualitative as well as a quantitative change in the preparation of teachers. Traditionally, in higher education, faculty members have qualified as teachers by becoming particularly knowledgeable in some subjects and acquiring special competence in addition to that knowledge through research or in applying it in skilled professional practice. Whatever instructional competence acquired is usually acquired through apprenticeship system or through trial and error. Recently however, there has been a growing conviction among educators in the health professions that, while a solid grounding in subject matter and competence in research practice are essential preparation for the task of teaching, they are not enough. This view has been reinforced by an increasingly critical and articulate student body. Educators in the health professions are forced to seek some alternative to the traditional system of preparing teachers.¹³

It is now recognised that:

- a. there is a body of knowledge which is justifiably described as educational science;
- b. it follows logically that health professional educators should be familiar with that science and skilled in its application;
- c. since that science gives promise of increasing both educational efficiency and educational effective-

ness, as well as economising the use of scarce resources (particularly teacher-time and student-time), it is worthy of systematic application;

- d. there is widespread evidence of serious deficiencies in the present educational practices, some of which can be corrected by training teachers in the sound application of educational principles;
- e. the growing interest of faculties of medicine and other health professions in such training suggests that individual teachers and administrators find the results personally and professionally rewarding;
- f. the increasing array of practitioners, auxiliaries, and students who participate in the instruction of health profession makes some kind of training programme essential.

Application of New Teaching Methodology

A number of areas have been identified in the broad field of educational technology in which the application of new methods and approaches might be expected to contribute towards the better education and effectiveness of health team. There is now ample evidence that carefully prepared teaching/learning materials especially in audio-visual form, can help both teachers and students by reducing the basic instruction load of the teacher and by making the subject matter clearer, more vivid and more interesting to the students. Other new models such as integrated teaching and multidisciplinary laboratories are being evaluated.

Training of Health Team

It is now generally recognised and broadly accepted that it is cheaper to train members of a health team together than to train them in isolation. It is also desirable that

those who would work together as a team should learn to relate to each other very early in their training. Institutions training members of health team should encourage cooperation rather than unhealthy rivalry which is capable of destroying the spirit of team work which is the goal of such a programme.

Family or Community Health Physician

One of the greatest challenges of providing comprehensive care services in Nigeria today is gross inadequacy of general duty, family and community health physicians. It is generally recognised that medical students most frequently base their choice of careers upon the practice and success patterns of their elders. In the main, the patterns of practice and success that impress the students most are built around the phenomenon of specialisation. Specialisation, the need to fragment the growing body of medical knowledge into learnable parts, is a potent factor in reducing the number and interest of physicians who can or will give to the general care of patients. Furthermore, because of the increasing demands upon physicians' time and energy, the pattern of medical practice is increasingly presenting barrier to the concept of general care by forcing all physicians, irrespective of their manner of practice, to limit their activity to the episodic care of definite illness and therefore to avoid the entanglements that may come from indulging interest in the patients, families or environment in which illness occurs.

I believe that we must accept the fact that the knowledge important to medicine is going to increase at an ever-accelerating pace and that specialisation is going to increase at the same time. I think we must also accept as fact that as medical knowledge continues to grow we will no longer be able to produce physicians who can effectively carry on

according to the basic concept of general duty physicians. Yet I believe that the need for a special kind of generalist who will need a special kind of training will more and more emerge and that should be encouraged. Therefore, instead of attempting to resolve the problems of continuing comprehensive care in terms of today, I believe we should look ahead in the light of the present trends and try to anticipate what the capacities and patterns of medical care will be in the next two decades from now.

One is aware of the efforts of the Federal Ministry of Health in the training of nurses, midwives and community health officers who are to work in various dispensaries, and health centres in the country. The role of the community physicians as head of the health team is critical. This role as of now is ill-defined. The housemen and the Youth Corp doctors presently playing this role are grossly inadequate for this responsibility.

Training of Family Physician

The post-graduate training of family physicians should include paediatrics, adult medicine, psychiatry, gynaecology emergency medicine, surgery and community health. At the end of their training, they should be good diagnosticians capable of effectively handling community or family health practice — which is defined as “that aspect of medical care performed by the doctor of medicine who assumes comprehensive and continuing responsibilities for the patient and his family regardless of age.”¹¹ A high priority should be given to this area in order to avert crisis of insufficient family physicians in strategic areas of our health care. This training of this cadre of physicians should be accorded the necessary professional recognition and be given necessary incentive.

Recommendation on the Training of More Medical Personnel

Opinions are at present divided on whether or not more medical colleges should be established. Some experts have noted that establishment of more medical colleges in the face of inadequate teaching staff and equipment will lead to the production of low quality medical cadres. Others note that the annual output of physicians in Nigeria including those trained in foreign institutions is about one thousand doctors per year. This number, it is argued, is so low that it is not likely to achieve the government plan of comprehensive health care to Nigerians.

I believe both arguments are valid. I believe also that it is most likely that more medical colleges will be established in this country in the nearest future. The Nigerian Medical Council, the older medical colleges and the Federal Ministry of Health should rise and face the challenges. In this respect, one may recommend that selected medical colleges in this country should be reserved as centres for the training of basic medical scientists, and students. Such centres should be well staffed and equipped to train fairly large number of pre-clinical students especially for the new medical schools. At the end of the pre-clinical training, the students should be sent out for clinical training in the clinical centres especially equipped for such purposes in the country. This suggestion was made in the early 70s; unfortunately no effort has been made to implement it. It will be difficult if not impossible for the new medical colleges to adequately staff some of their pre-clinical departments. The older medical colleges and special basic medical science centres so identified can come to the aid of the newer schools. I recommend that this suggestion should be carefully studied and implemented.

In the same principle, certain medical centres in this country should be given special facilities, staff accomo-

dation and equipment to be upgraded as first class centres in clinical teaching, where clinical students can be trained. The original plan to establish at least a teaching hospital in each state of the federation should be implemented.

As one takes a look at medical colleges today, the following patterns are obvious:

- a. Most of the medical colleges are at present operating basic medical science departments that are poorly staffed and equipped. Some of the new medical schools are in no position to provide basic medical training, yet they are expected not only to train students now with them, but there is pressure on them to take in more students.
- b. Only very few older medical colleges have adequate basic medical science departments.
- c. Some older medical colleges with the minimum requirements for the training of basic medical student, at present have grossly inadequate facilities for the training of clinical students.
- d. Another category of medical colleges is the group which is deficient in the training facilities not only in the basic medical sciences but also in the clinical areas. Since our objective is to provide facilities to train more students both pre-clinical and clinical, and to provide facilities for training post-graduates in medical sciences, development of centres of excellence in basic medical sciences and clinical sciences would seem imperative.

Standardization of Medical Education

If, as it has been suggested, centres are to be identified for the preparation of pre-clinical students and also for clinical students, it means that one is suggesting better

cooperation among all medical institutions training medical personnel in the country. Such cooperation is necessary and indeed desirable because all such institutions are producing medical manpower for the country.

It seems obvious to me that there is a need also to fairly standardize our medical curriculum in terms of contents and also the number of years that students should take for a basic medical programme.

Continuing Education

A serious challenge to the training of medical manpower today is the neglect of continuing education. All members of the medical team should be exposed to refresher courses periodically to ensure that they are exposed to what is new in medicine. The experience of those who are practising medical art/science from the biggest city to the most remote areas will help the educators to replan their educational methodology and priorities.

Medical Ethics

The oldest medical institution in this country, the College of Medicine, University of Ibadan is only thirty-three years old. Most of the medical institutions for the training of health team in the country are relatively young, struggling to build up a reputation. The medical profession has built up traditions based on the contribution and practice of leaders of medicine throughout the world. The most important obligation of all members of the profession is to uphold this tradition. I believe there is a need to intensify the teaching of medical ethics to ensure that reputation of medical profession does not suffer. In addition, medicine is regarded as a noble profession, men and women practising the art and science of medicine should at all time be of exemplary character:

It is now generally accepted that the quality and quantity of the delivery of medical care of any country is directly related to the quality and quantity of training as well as availability of medical manpower.

Training of Personnel — a Priority

National and international support for health projects or eradication programmes are desirable, but should not take precedence over training personnel. When the life of such programmes or projects ends, in countries where local counterparts are not available, it is the programme that gets *eradicated* and not the *disease*. Training of medical manpower is therefore a priority in the health care delivery of any nation.

I submit that the medical schools, and the Nigerian Medical Council should set up an Institute to be supported by the Federal Ministry of Health to study the related problems of health personnel in our health service and submit an urgent recommendation.

Establishment of National School of Public Health

It is a matter of great concern that there is not a single public health school in Nigeria. Indeed, apart from a small one in Uganda and a new one just being established in Tanzania, there had been none in the whole of the African region of the W.H.O.

In view of the immense public health problems, a Task Force on School of Public Health set up by the Federal Ministry of Health has just submitted its report to the ministry. The original idea emanated from Ife. The Task-Force recommended the establishment of a National School of Public Health and that post-graduate programme in public health be developed in all our medical schools as soon as possible.¹⁵ It is our hope that such a school will

produce high level manpower in the field of public health and also train a large number of middle-level manpower in public health services. In addition, experts from this institution should be in a position of offer qualified and special advice to federal, state and local governments on the different facets of public health.

VI. MEDICAL RESEARCH

Permit me to briefly recall the fact that medical research in West Africa was stimulated by yellow fever epidemics. This led to the establishment of the West African Medical Research Institute.¹⁶

During the campaign in Cuba in 1890, American soldiers were dying in large numbers. Major Walter Reed headed a commission to investigate the disease about which very little was known except that it had a high mortality rate. Dr. Finlay, a medical practitioner on the Island of Cuba had suggested in 1881 that the disease was conveyed by mosquitoes (*aedes aegypti*). Though not proven, the suggestion was followed. The Americans, and the U.S Army immediately controlled the *aedes aegypti* and the mortality rate drastically fell.

By 1901, it became obvious that yellow fever was endemic in West Africa. The British government had earlier sent out Sir Robert Boyce (in 1901) to investigate yellow fever epidemic in West Africa. The Colonial Office, disturbed by Sir Robert's Report confirming yellow fever, set up a Yellow Fever Commission in 1913. The commission again confirmed that the epidemic of 1910 and 1911 had been due to yellow fever. The Rockefeller Foundation in the U.S.A. established a Yellow Fever Commission in 1913. This Commission visited West Africa in 1920 and confirmed the presence of yellow fever, though there was no epidemic that year. In 1925, the Commission again visited West Africa to:

- a. study the characteristics and epidemics of the disease in West Africa in relation to yellow fever in the Americas;
- b. discover the cause;
- c. determine the means of transmission; and to
- d. map out the endemic areas.

This was the beginning of an international cooperation in the field of health in this country. It was the beginning of an association between the Rockefeller Foundation and West Africa which has continued until today. The main base of the research was in Yaba, Lagos (now the National Institute for Medical Research) but members however travelled widely within the country and in West African countries. Earlier, in 1918, Dr. Noguchi, a Japanese scientist working with the Rockefeller Foundation in Ecuador inoculated guinea pigs with blood from what he supposed to be a yellow fever patient, and this had produced a leptospiral infection. He called this *L. icteroides* and claimed it to be the cause of yellow fever. Development later proved this to be Weil's disease.

In 1927, there was an outbreak of yellow fever in Kpeve in Volta region of Ghana. Dr. Mahaffy collected blood from a labourer aged 27 years called Asibi and inoculated it into a rhesus monkey. Four days later, the monkey became sick and died. Post mortem showed lesions similar to yellow fever case in human. The commission later conclusively proved the transmission of yellow fever by *aedes aegypti*. During the study of yellow fever, three leading scientists lost their lives:

- a. Dr. Stokes who was working with the commission was accidentally infected in the course of his experiments and he died.
- b. In 1928 Noguchi himself came to West Africa and

carried on his work in the Medical Research Institute in Accra. He later discarded his own theory. He paid a brief visit to Lagos where he contacted yellow fever. He died four days later on his return to Ghana.

- c. Dr. Young, the Director of Medical Research Institute performed post-mortem on Noguchi and confirmed that he died of yellow fever. It seems most probable that it was a laboratory infection. Unfortunately, Young himself also developed the disease and died on May 28, 1928. He was possibly infected whilst carrying out the post-mortem on Noguchi.

The result of this most fruitful period of the work of the Rockefeller Foundation sponsored Yellow Fever Commission led to the development of vaccine and other serological work. In New York, a vaccine was produced by innoculating the Asibi strain of the virus intracerebrally in mice. This when injected with immune serum gave protection, but the method was impracticable for mass immunization. It is interesting to note that later, culture of the virus resulted in permanent mutation into a non-virulent strain known as 17D which retained its antigenic properties and which is both safe and effective. A vaccine against yellow fever was thus found.

Medical research in West Africa was initially to solve the problem of yellow fever. This led to the development of vaccine in 1927 against yellow fever for which a nobel prize was awarded. Recently, the Japanese government, recognising the contribution of Dr. Noguchi to medical science in West Africa, donated a research centre in Kulebu Medical School in the memory of the great scientist. It is a pity however that in spite of various efforts made to control yellow fever in West Africa, the disease is still endemic in the zone.

Today, Nigerian medical scientists are reminded of the role of research in solving our health problems. It is our hope that government and the Ministry of Science and Technology will give the necessary support to and leadership in basic and applied research. There are still many unsolved problems such as:

- a. vaccine for malaria — a major cause of ill health in Nigeria;
- b. vaccine against leprosy, and ancient and crippling disease;
- c. problems associated with utilization of health services, and related to why the application of available knowledge in the control of diseases is lagging behind in Africa;
- d. solution to genetic diseases and so on.

VII. FINANCING OF HEALTH CARE

It is a matter of general concern that the inadequate availability of medical care presents problems of crisis, dimensions and intensities. It is also generally agreed that medical care services need reorganization for more adequate availability and more effective delivery to the population of this country. One of the common causes of the crisis includes high cost of medical care and a need for a better financing of medical care.¹⁷

Historical evolution of health services in this country has led to the greater participation of governments in health care financing. It would appear that governments will continue to increase such participation financially. As you are all aware, five U.P.N. states of the federation have offered free medical services to all their citizens. There is a strong indication to suggest that others might follow by

1983. Government leading role in financing health services has a great advantage, for as soon as the health of the people is elevated to the realm of conscious public policy, adequate funding will be provided by respective governments.

It is however important to note that until their health or that of an immediate relative is threatened, people do not generally put a high premium on health. One of the means to secure funding for health is to educate the people to put a high premium on health, thereby influencing public policy. Private health institutions and voluntary institutions must be seen as good partners in the provision of health services to the people, thereby contributing substantially funding for health services.

There are many other sectors which directly or indirectly affect health services:

- a. Sufficient funding to Water Corporations lead to the provision of more water and this directly affects public health.
- b. Improvement in agriculture, leading to availability and better distribution of food materials, will lead to better nutrition and improve the health of the people.
- c. Investment in education should normally lead to better information on health.
- d. Provision of adequate housing will lead to prevention of overcrowding.
- e. Improvement on transportation network and better supervision of roads should decrease road traffic accidents, and
- f. General improvement in socio-economic condition of the people has a positive correlation with health.

I assumed here that the responsibilities of the three levels of governments (federal, state and local) are too well known to be recounted here. Now that the federal government is to give direct allocation to the local government, one would suggest that both the state and the federal governments should come to an agreement on how best to monitor the allocation to health services in the local government areas and to all the states of the federation.

VIII. DRUGS IN THE HEALTH SERVICES

This discussion on comprehensive health care will be incomplete without due reference to the role of drugs in the national health service. It will also be regarded as a great omission and an unpardonable one since the Faculty of Pharmacy of this university is one of the oldest in the country. Health care is an integrated service designed to safeguard and improve the health of the nation. One vital part of that service is the provision of drugs or pharmaceuticals to persons requiring them for health reasons.

The outstanding progress made in medicine in the present generation would not have been possible had it not been accompanied by major advances, and in some cases by a break-through, in the discovery of new drugs and the development of improved pharmaceuticals to help physicians to combat, and in many instances, prevent diseases and illnesses. Effective and judicious use of drugs has made it possible not only to improve the health of the individuals and the nation but also to raise the economic benefits resulting from the provision of health services.

The challenges of drugs in the Nigerian health service include the following:

a. *Cost of Drugs*

It is estimated that in most of the medical care plans in force in various parts of the world pharmaceutical benefits

amount to 10% of the total health care expenditure. In a country like Nigeria where almost all the drugs are imported, this percentage may be higher. The need to support efforts to increase local production of drugs in Nigeria is therefore rather urgent. As of now, a large amount of the biological products (vaccines) used in Nigeria are imported.

b. *Quality Control*

There is need for a greater effort in the area of quality control of drugs.

c. *Regulations*

There is need to tighten regulation with respect to the manufacture, distribution, and administration of drugs and control of narcotics. It is therefore necessary that a Drug Advisory Committee be established on a national level to look at this and other problems relating to drugs. People need to be educated on health promotion rather than have them depend on drugs. Indeed indiscriminate use of drugs in our society constitutes a health hazard which should be discouraged.

IX. TRADITIONAL MEDICINE AND COMPREHENSIVE HEALTH CARE

One cannot afford to discuss comprehensive health care in Nigeria without making reference to traditional healers. This is because the role of traditional healers in the health care of Nigeria is a subject that is topical in the news media today.

Contrary to what is generally believed that Nigerian doctors have neglected the study of the practice of traditional medicine, permit me to review briefly the efforts of Nigerian pioneers of medicine in this area.¹⁸ Dr. Africanus Horton in 1859 wrote his M.D. thesis for the University of

Edinburgh on "Physical and Medical climate and Meteorology of West Coast". In this thesis, the following references were made to the use of traditional herbs:

- a. In Gambia, the bark of mangrove tree was used as febrifuge.
- b. In Cape de Verde Islands, the leaves of the castor oil plant (*ricinus africanus*) were used to promote the secretion of milk in women.
- c. *Citrus medica* (lime) was taken to prevent sea sickness.
- d. Unripe fruit of pawpaw (*carica papaye*) has been taken as vermifuge.

In his book on guinea worm (*dracunculus medinensis*) published in 1866, Horton.

- e. noted the use of common cassava starch (*jathropa mannihot*) as poultice, a palliative for guinea worm.

Similar references were made on the use of traditional herbs in his book, *Diseases of Tropical Climate*, published in 1879.

Dr. Obadiah Johnson in his own M.D. thesis for the same university in 1889 entitled "West Africa Therapeutics" wrote on different classifications of medicine men in West Africa. He noted the use of *gossypium spp.* (cotton) bark, the root of which contains oxytocic property, for abortion. Dr. Johnson lamented: "I can never obtain satisfactory reasons why they (herbalists) should endeavor so much to hide the knowledge."¹⁸

Many other examples abound. There is Dr. John Randle who graduated in Edinburgh in 1888 and wrote an article on the treatment of guinea worm making reference to the use of traditional herbs. Dr. Sodeinde Leigh-Sodiye wrote an essay on West African traditional medicine

for which the M. D. of the University of Durham was conferred on him in 1897. Dr. Oguntola Sapara took up the challenge of traditional medicine very seriously and became an advocate of investigating our traditional medicine. In an attempt to stamp out the recurrence of small-pox epidemic caused by *Sonpionna* worshippers, he joined the cult and learnt all their secrets. This led to the banning of the secret cult and an end to their nefarious activities. Sir William MacGregor M.D., governor of Lagos between 1899 and 1904, a great physician, during his administration encouraged the Curator of Botanical Gardens to write on "Nature herbs and their medicinal uses".

In view of the secrecy which surrounds the practice of traditional medicine, the secrecy which is still a handicap to the effort of modern investigators, all we can do is to hope for sufficient scientific evidence which will assure us of the positive role of traditional medicine in the health care of the future. Until the facts are available, we are left with no other alternative but to make our projection tentatively on what is known. In other words, it will be difficult as of now to define in concrete terms the role of traditional medicine on comprehensive care. Our efforts in traditional medicine should be directed towards more research to bring out the values it can offer to our health care.

Recently, attention has been focused on the activities of traditional birth attendants in maternal and child health care in African region. It is generally believed that 80% of pregnant women will have a normal delivery since pregnancy is not a disease but a physiological change. It is further suggested that a reasonable number out of these cases can be attended to by traditional birth attendants who must have delivered a large number of Nigerians alive today including myself. It is being suggested that efforts be made

to relate with these traditional birth attendants, know them, visit them regularly, offer suggestions covering some form of aseptic techniques particularly in cutting umbilical cords and so on. If our efforts to work hand in hand with this group who still handle a large number of deliveries as of today succeeds, then they will continue to carry some of our loads and reduce congestion in the hospital. I believe our effort to liaise with them should be intensified. It is however necessary to document our findings and our result so that they can be scientifically evaluated.

X. EVALUATION OF THE BASIC HEALTH SERVICE SCHEME

The Basic Health Service Scheme was to be the corner stone of the Third National Development Plan (1975 – 80) of the federal government of Nigeria. The scheme was intended to be a prelude to the establishment of a comprehensive health service throughout the country. The idea of the scheme was first brought up in a Report from the Consultative Council in Medical and Allied Services established under the Ministry of Health Act of 1919 in London under the chairmanship of the Rt. Hon. Lord Dawson of Penn.¹⁹ The Report was published as *The Dawson Report on the Future Provision of Medical and Allied Services* in 1920. The following issues raised in the report are worth mentioning:

1. Preventive and curative medicine cannot be separated in any scheme of medical services and must be brought together in close coordination.
2. Any health scheme must be available for all classes of people in the community.
3. The scheme recognised services which begin with the home and the services, preventive and curative,

which revolved around it.

4. It recommended the establishment of primary and secondary health centres to be linked with tertiary or teaching hospitals.
5. It recognised the role of supplementary services such as the management of specific conditions such as tuberculosis as a necessary part of the scheme.

The excellent report was really never implemented in Great Britain. It was only in the Soviet Union that the scheme was adopted as the basis of the reconstruction of the Soviet health system immediately after the revolution of 1918.

An important landmark in the primary health care concept was recognized in the late fifties and early sixties in Nigeria during the first republic. Dr. Majekodunmi when serving as the Minister for Health in the civilian government invited an Israeli expert, Dr. Halevi to visit Nigeria and to advise the federal government on pattern of health care to adopt. Dr. Halevi produced a Report in 1959 which recommended the establishment of a network of health centres for the federal capital of Lagos. The recommendation was immediately implemented and many health centres were established in Lagos such as: the Randle Avenue Health Centre in Surulere; Apapa Health Centre; Onikan Health Centre; John street Health Centre; and the Ebute-Metta Health Centre (on Lagos street). The Lagos City Council operated other health centres such as: the Harvey Road Health Centre; the Health Centre at the Railway Compound in Ebute-Metta and; Okoawo School Health Clinic among others. Let us briefly remind ourselves that during the period in question, the amount of money allocated for health of the people of Lagos and those of other provinces of the federation was about 75 kobo and 45 kobo per head respectively.

The health centre idea was implemented first in Lagos to be introduced in the rest of the country later. Unfortunately, this was interrupted by the change of government in 1966 and subsequent civil disorder. Earlier in the then Northern Nigeria, and some parts of the South, schools for health assistants were established to train personnel to run the health service of rural communities. Dispensaries, maternity and health centres run by the local governments and mission organizations advocated a similar policy. Unfortunately, the idea was more or less localized and not accepted as a national policy until 1975 when the Basic Health Service Scheme was adopted. It has now been generally accepted as the best health service scheme for developing countries.

The federal government adopted this scheme in the Third National Plan in order to change the unsatisfactory aspects of our health system such as:

- a. inadequate health facilities;
- b. **inadequate health personnel;**
- c. inadequate coverage of the existing health service;
- d. high prevalence of communicable diseases;
- e. slow improvement in the health status of the nation; and
- f. lack of coordination among health service agencies.

The broad objectives are aimed at achieving the following priorities:

- a. substantial expansion of, and efficient network of basic health units for the provision of primary health care for the entire population;
- b. acceleration of appropriate health manpower development and training programmes aimed at meeting the health needs of the population;
- c. equitable distribution of health service between

- urban and rural populations; and
- d. promotion of local production of essential drugs of acceptable quality, efficacy and safety.

Organization of the Scheme

The scheme which is an integrated health service is to provide the construction of:

- a. 20 health clinics each for a minimum of 2,000 people;
- b. 5 mobile clinics each serving a minimum of 1,000 population;
- c. 4 primary health centres each with 14 beds providing second line care for a minimum of 10,000 people; and
- d. rural/urban third line care for a minimum of 50,000 people.

In all, 285 comprehensive health centres, 1,140 primary health centres, 425 mobile clinics, and 5,700 health clinics costing 1.6 billion Naira at 1975 estimate, were proposed. In a lay man's language, the scheme is to provide health services to all of our people from the remotest village to the biggest city. The services are to be provided in dispensary/maternity centre, health centre, teaching hospital or by mobile clinic depending on the condition to be treated. The three levels of governments, the federal, state and local government are to assume a joint responsibility for the provision of these services.

As mentioned earlier, the scheme was bold and imaginative. But unfortunately it is yet to achieve its objectives. The federal government, recognizing this fact, has set up a Panel to review the scheme.

ORGANISATION OF BASIC HEALTH

SERVICE SCHEME

- (A) 20 HEALTH CLINICS EACH FOR A MINIMUM OF 2,000 PEOPLE
- (B) 5 MOBILE CLINICS EACH SERVING A MINIMUM OF 1,200 POPULATION
- (C) 4 PRIMARY HEALTH CENTRES EACH WITH 14 BEDS PROVIDING SECOND LINE CARE FOR A MINIMUM OF 10,000 PEOPLE
- (D) RURAL / URBAN LINE CARE FOR A MINIMUM OF 50,000 PEOPLE.

IN ALL

285 COMPREHENSIVE HEALTH CENTRES

1,140 PRIMARY HEALTH CENTRES

425 MOBILE CLINICS

5,700 HEALTH CLINICS

COSTING 1.6 BILLION NAIRA (1975 ESTIMATE).

Major Weaknesses of the Scheme

The following are some of the shortcomings of the scheme:

- a. Many states were tempted to put up expensive buildings for health centres with sophisticated equipment some of which have not been commissioned due to lack of personnel.
- b. Many observers believed some of the buildings were constructed without taking into consideration local conditions.
- c. Many states and local governments did not recognise their role in the scheme and expected the federal government to assume most of the responsibilities connected with the scheme. It would appear the scheme was conceived by the federal government with little or no input from the local and state governments.
- d. The local government, which is supposed to be the focal point of the scheme, lacks the necessary manpower, funds and perhaps the will to implement the scheme.
- e. The scheme did not adequately consider its relationship to the existing services in terms of the logistics of operation and personnel including the new cadre. It lacks any built-in methods of evaluation.
- f. The equipment especially such as the one used for mobile clinic is unsuitable for Nigerian local condition and rather expensive to maintain.
- g. Most of the local governments at present have no medical health officer to coordinate the programmes.

- h. Almost all the states and local governments put more emphasis on curative rather than preventive services with the result that activities to enhance health promotion are neglected.
- i. Most of the states and local governments lack supporting services such as communication network and basic sanitary facilities to make the scheme easily workable.
- j. The federal government has at present no built-in mechanism to ensure that the subvention on health is used effectively for the purpose for which it is given in each state (1.09 million Naira to each state).

The Role of the Universities in Health Care

Considering in what confused state of affairs our health care system is, people have understandably expressed public condemnation of all concerned with health care. Even the universities and medical colleges in the country have been attacked for not giving the right leadership. Unfortunately, such criticisms are not entirely valid. Recently, I visited a small district hospital to see a relative who was ill. I met a young doctor and a pharmacist in the hospital. They both impressed me and enjoyed a very good reputation in the community. When I was about to leave the hospital, the young doctor asked me whether I remembered him to which question I replied in the negative. He said that I was his external examiner at Ahmadu Bello University. The pharmacist said "you gave us a series of lectures when I was a student at the Faculty of Pharmacy at the University of Ife". They were both members of the National Youth Service Corps. The health personnel of the National Youth Service Corps and all other members of the Corps can be found in various communities throu-

ghout the country today giving welfare service including health care. They are products of our universities. The programme is one of the best (as of now) means of getting health personnel to rural areas. What is needed is the judicious use of the Youth Corp members.

It is true, that the patterns of diseases have not changed even in those communities where medical schools are established such as Lagos, Ibadan, Ife, Nsukka, Benin and Zaria. It is not the establishment of a medical school in a community that will automatically change the pattern of diseases in that community. Rather, it is the recognition by each community of the priority of the provision of basic sanitary and social facilities.

The universities and even the federal government are all concerned and recognize that the medical schools are in the position to offer expert advice, run and/or supervise a model health care system which can be evaluated and possibly used as pilot projects for basic health service in selected areas of the community. Such scheme can be operated within a local government area with the support of federal government and the cooperation of the state and local governments concerned. The support of the federal government to offer such service was suggested to the leaders of the Basic Health Service Scheme when the programme was launched. Unfortunately, the suggestion was not accepted at that time. It is interesting to note that the suggestion is being carefully considered today by the federal government. As of now, the role of the medical schools has been principally to:

- a. train medical personnel; and
- b. give expert service on cases referred to them from all the states' health service of the federation.

It is necessary to sound a note of warning at this juncture. If the area of service to be covered by each medical

school is not limited to a small and fairly confined zone, medical education and research will fall drastically with heavy involvement of service to a large community. In the long run, the result will be disastrous to medical care and medical education.

Direct Service by Medical Consultants

The question of whether consultants in medical schools should be able to give their services to the community after their normal office hours has been under consideration in medical circles in the country for about fifteen years now. The matter has not been resolved. In a country where there is such an acute shortage of medical manpower, it seems obvious that those available should be utilized to the maximum. Experts concentrated in the medical schools should be able to offer consultancy service to the state hospital, local governments, mission hospital, industries and individuals who might require such service. What is needed is to work out a system to check the abuse of such services. It is my hope that the Nigerian Medical Association and the federal government will come to agreement on this important issue.

XI. EVALUATION OF HEALTH SERVICE IN NIGERIA

I have just completed my report on the evaluation of the Basic Health Service Scheme of the Third National Plan 1975-80. What has been the result of all forms of health services on the health of Nigerians? The purpose of health services is to preserve or improve the health of the people or minimize the consequences of ill health. Hence their effectiveness will be judged, in the final analysis, by the extent to which they enable us to prevent, diagnose, or successfully treat illness, and to rehabilitate those who are

physically or mentally incapacitated by illness or injury.

Disease Pattern in Nigeria

A fairly accurate information on disease pattern in Nigeria has been known since the early 1900. The major causes of ill-health are still communicable diseases. Most of the known diseases since the beginning of this century are still with us, such as tuberculosis, malaria, measles, tetanus, diarrhoeal diseases and so on. Let us now check the balance sheet. The health programmes of this nation have succeeded in eradicating and controlling the following diseases:

a. Plague

Since the outbreak of the epidemic of 1922-25 in which plague was introduced into the country from Ghana, no known cases of plague has been reported in Nigeria.

b. Small Pox

The last reported case of small pox was in May 1970. The disease is therefore eradicated as a result of national and international efforts.

c. Yaws

The incidence of yaws was greatly reduced since the early 1950s perhaps due to the indiscriminate use of penicillin. There are however reports of new cases in some parts of the country.

New Diseases

The following diseases have either been newly introduced in recent years or the incidence of occurrence has been steadily increasing:

a. Cholera

This disease which had occurred in epidemic waves in many parts of the world for centuries was unknown in West Africa until 1894 when it was introduced into Senegal. It was quickly controlled and it did not spread to any other country in West African region. On December 26, 1970 cholera was introduced into Nigeria. The disease spread in epidemic waves throughout the country claiming thousands of lives. It has since become endemic in Nigeria.

b. Lassa fever

A deadly disease first diagnosed in village of Lassa in Gongola state is today one of the most dangerous diseases in the world.

c. Hypertension

Stroke or cerebrovascular accident as a cause of death is on the increase. The increase may be due to better diagnosis. The reason for increasing number of hypertensives in Nigeria is not known. It may become an important cause of morbidity and death in the future.

d. Accidents

Automobile accident is today one of the major causes of death and ill-health in our country. The lives of both rural and urban dwellers, young and old, poor and rich are constantly being threatened by accidents on Nigerian roads. At present, we have no answer to this problem.

On the balance sheet, therefore, it would appear that the major causes of ill-health and death known since 1900 are still with us; in addition, new ones such as cholera and

accidents are here to stay. The worsening health situation has been a great concern of people throughout the world in general and of the World Health Organization in particular. This concern led to an international conference sponsored by WHO and held at Alma-Ata in the Soviet Union on September 28, 1978.

Alma-Ata Declaration

The Alma-Ata conference expressed the need for urgent action by all governments, all health development workers, and the world community to protect and promote the health of all the people of the world. Some of the resolutions made at the conference were as follows:²⁰

1. The Conference strongly re-affirms that health, which is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, is a fundamental human right and that the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector.
2. The existing gross inequality in the health states of the people particularly between developed and developing countries as well as within countries is politically, socially and economically unacceptable and is, therefore, of common concern to all countries.
3. The promotion and protection of the health of the people is essential for sustained economic and social development and contributes to a better quality of life and to world peace.
4. The people have the right and duty to participate individually and collectively in the planning and implementation of their health care.

5. Governments have a responsibility for the health of their people which can be fulfilled only by the provision of adequate health and social measures. A main social target of governments, international organizations and the whole world community in the coming decades should be the attainment by all people of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life. Primary health care is the key to attaining this target as part of development in the spirit of social justice
6. **Primary health care** is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system of which it is the central function and main focus, and of overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.
7. The conference also urged all governments to formulate national policies, strategies and plans of action to launch and sustain primary health care as part of a comprehensive national health system and in coordination with other sectors. To this end, it will be necessary to exercise political will to mobilize the country's resources and to use available external

resources rationally.

XII. HEALTH IN THE 4TH NATIONAL DEVELOPMENT PLAN

The 4th National Development Plan emphasises the fact that health care is an essential part of overall socio-economic development. It also recognizes that health policies should be directed towards developing a comprehensive care.²¹ The orientation of the health sector of the Plan therefore is based on the constitution which has placed health on the concurrent list. The Plan recognizes the development of:

- a. primary or basic health care in health centres;
- b. secondary health care in hospitals;
- c. tertiary care in specialist or teaching hospitals.

The Plan also recognizes that the management of comprehensive care shall be the responsibility of the three tiers of government and in order to avoid duplication of health efforts, responsibilities of each were spelt out. The following are the responsibilities of the federal government: special hospitals; teaching hospitals; federal input into national basic health service scheme; national laboratories; control of communicable disease; surveillance of health care standards; federal component of specific health programmes; quarantine; and intersectoral health care linkages. The involvement of the state government in health is in the following areas: specialist care in wards of general hospitals; general hospital care services including out patient care; basic health care in comprehensive centres; training institutions especially for professional levels; public health programmes; intersectoral health care linkages at state level; and any health programme of particular relevance to the state.

RESPONSIBILITIES OF THE FEDERAL GOVERNMENT IN HEALTH

— **SPECIAL HOSPITALS**

— **TEACHING HOSPITALS**

— **FEDERAL INPUT INTO BASIC HEALTH SERVICE SCHEME**

— **NATIONAL LABORATORIES**

— **COMMUNICABLE DISEASES CONTROL**

— **SURVEILLANCE OF HEALTH CARE STANDARDS**

FEDERAL COMPONENT TO SPECIFIC HEALTH PROGRAMME

— **QUARANTINE**

— **INTER-SECTORAL HEALTH CARE LINKAGE**

— **INTERNATIONAL COOPERATION**

— **TRAINING.**

RESPONSIBILITIES OF THE STATE

GOVERNMENT IN HEALTH

- **SPECIALIST CAN IN WARDS GENERAL HOSPITAL**
- **GENERAL HOSPITAL CARE SERVICE INCLUDING OUT-PATIENT CARE**
- **BASIC HEALTH CARE IN COMPREHENSIVE CENTRES**
- **TRAINING INSTITUTIONS ESPECIALLY FOR SUB-PROFESSIONAL LEVELS**
- **INTERSECTORAL HEALTH CARE LINKAGES AT STATE LEVEL**
- **ANY HEALTH PROGRAMME OF PARTICULAR RELEVANT TO THE STATE**

The local government is responsible for: basic health service in dispensaries, maternity centres and in health centres, and provision of sanitary facilities. The health sector of the 4th National Plan accepts in principle the provision of comprehensive health care. The Plan recognizes the great participation of the three tiers of government in the provision of health services to the people.

XIII. SUMMARY

The following suggestions are here tendered as necessary in order to achieve comprehensive health care by the year 2000.

1. Basic Sanitary Facilities

The provision of basic sanitary facilities such as water, sewage and so on to all communities should be considered a priority.

2. Immunization

One of the pillars of our medical care programme should be the provision of immunization to mothers, children and adults as may be indicated. It is estimated that, in order to break the chain of disease transmission, about 80% of the population must be covered by immunization. As a means to achieve this objective, complete immunization should be made compulsory and a pre-requisite for admission to schools.

3. Supervision of Special Groups within the Community

Our health care delivery system should recognise vulnerable members of the community such as mothers and infants; school children; working popu-

RESPONSIBILITIES OF THE LOCAL GOVERNMENT

- **BASIC HEALTH SERVICE IN DISPENSARIES & MATERNITY CENTRES**
- **BASIC HEALTH SERVICE IN HEALTH CENTRES**
- **PROVISION OF SANITARY FACILITIES AND**
- **SUPERVISION OF ENVIRONMENTAL SANITATION**

lation such as farmers, workers in industries and so on; old age group; disabled members of the community and so on. Special arrangements must be made to provide health care coverage for these vulnerable groups.

4. **Medical Health Institutions**

The hospital is an integral part of a social and medical organization, the function of which is to provide complete health care for the population (both curative and preventive) and whose out patient services reach out to the family and its home environment. The hospital is also a centre for the training of health workers, and for bio-social research. The arrangement of medical health institution similar to the Basic Health Service Scheme is recommended with minor modification.

The Dispensary

The most rudimentary health unit for any village community shall be a dispensary or maternity unit. This should be the first contact place for the patient in the community. The members of the health team shall give both curative and preventive services to the community. They should give health education and supervise the environment in addition to curative services. Any community, be it a farm settlement, a small village or a school should be provided with a health unit of some sort. I believe this is possible both by community effort and support of governments. Any building can be converted to a temporary dispensary until one can be constructed.

Health Centre

A health centre shall receive cases referred from the dispensary or maternity centre to it. In order to maximize its use, efforts should be made for all health centres to operate a 24-hour service. Provision should be made for some in-patients and maternity patients. Doctors at the health centres shall see all patients referred to them by the sisters at the health centres. In other words, all patients should be screened and first seen by the health sisters. Depending on the level of staff available, the health centres should be in a position to give fairly skilful medical attention. Cases that cannot be handled should be referred to the district hospital. The doctor in the health centre shall make a routine visit to a group of dispensaries within its jurisdiction. The emphasis on the activities of both the dispensary and health centre shall be on health promotion

District Hospital

The level of this district or cottage hospital should be higher than that of the health centre. Highly skilful surgical operation and clinical attention should be available. The doctors in charge of the district hospital should have direct link with the health centres within the local government areas.

State Hospital, Specialist Hospital, Teaching Hospital

These hospitals shall receive referred cases from the district hospitals and health centres. These hospitals should be provided with equipment and transportation facilities to deliver highly specialized care at the places where they are situated, but should also be in the position to send a team of specialists to district

Relationships of National Health Units

Specialist Hospital
or
Teaching Hospital

General Hospital

District Hospital

Health Centre
Maternity Centre

Dispensary

hospitals and health centres in cases of emergency.

The arrangement presented here should be seen as a two way link from the dispensary to the tertiary or teaching hospital for the purpose of making available the best medical care even to the remotest community.

5. Centres of Excellence

There is a need in the country to establish centres of excellence in clinical practice in our tertiary or specialist hospital—where sophisticated equipment and well trained specialists are available. Then there will be no need to fly Nigerians to Europe and America for medical care.

6. Mobile Clinics

It should be noted that mobility of health personnel is vital for the efficient delivery of health care to rural communities, especially since there are scattered and isolated rural communities of nomads, migrant workers and other persons without a settled home. Health teams, including auxiliaries should visit these rural communities regularly. It may be necessary to travel by bicycle, motor cycle, canoes, and motor vehicle to deliver regular health services to these communities. A well equipped mobile unit is a necessary adjunct to rural health care.

7. Special Health Units

Special health units to take care of common endemic and common health problems which require special attention should be established throughout the states of the federation. The conditions which come under this category of common endemic and health problems include the following:

- a. Tuberculosis
- a. Diarrhoeal diseases
- c. Diabetes
- d. Hypertension
- e. Psychiatric illness
- f. Malnutrition and others

It is recommended that the following and other special clinics be established in our primary health care centres:

- a. Antenatal and post-natal clinics
- b. Immunization clinics
- c. **Child welfare clinics for well and sick children**
- d. Industrial health clinics
- e. Clinics for contact diseases
- f. **Nutritional demonstration** clinics, and so on.

8. Central Emergency Service

A major weakness of the Nigerian health service today is lack of facility for taking care of patients requiring emergency services. In a country where communication is inefficient, transportation system is poor and where there is no organized emergency service, one can imagine the lives that are lost daily due to lack of essential facilities to provide for those needing emergency services.

Every state of the federation should establish a central emergency service with a network of emergency health units in all local government areas. All these units should be linked by radio network to the central emergency service. Well equipped ambulance service should be available to provide the needed services, centrally controlled at the central emergency service. Staff should be specially trained to handle different categories of emergencies such as:

and health centres. Such a programme should be financed both by the State and Federal Ministries of Health.

12. Local Government Health Service

The local government is the closest government to the people within each community. The success in our health care system will be determined by whatever happens in each local government area. I recommend therefore that the health service of each local government be headed by a Principal Medical Officer of Health. He should have a full control of organizing the health services at local level and to relate closely with the State Ministry of Health. As soon as more health personnel are needed, each local government area should be subdivided into wards to be headed also by Medical Officer of Health. This I believe is the only way that all health activities can be closely monitored.

13. Voluntary Health Institutions

In the proposed scheme, what should be the role of voluntary health institutions? I take this opportunity to express my admiration for the contribution which these voluntary health institutions have made to the health of our people. As shown earlier, in many remote areas of our country, voluntary institutions operate the only health facilities available. In many areas, they have been the ones with special consideration for the health of the poor.

In many countries of the world, voluntary organizations were the first to show interest in the welfare of the blind, the deaf and dumb, the mentally retarded and others with different types of handicaps. It is

now generally appreciated that in view of the increasing cost in health care, the voluntary health organizations are severely handicapped. I believe that governments should recognize the services of these voluntary organizations, set up the required standards and indeed give grant in aid to enable them not only to continue to function but to expand their services.

14. Medico-Social Activities

It is said that the simplest method of assessing the civilization of any community is how much attention is given to its underprivileged and handicapped population. I therefore submit that all governments, federal, state and local must organize services for the handicapped members of the population.

15. Health Records

Records of data on health in many health institutions across the country are inadequate. In view of the importance of health information in health planning, I suggest that adequate measure be taken to improve our health record system. In order to make it easier to analyse data, it is necessary that a fairly uniform system of record keeping be adopted. The statistical division of the Federal Ministry of Health should take a leadership role in this matter.

XIV. CONCLUSION

I would like to pay sincere and heartfelt homage to the memory of men and women who paid with their lives to save the health of other people. Those who live on today and whom no sacrifice deters from helping other people to achieve the best possible state of health also deserve our acknowledgement and gratitude.

This presentation is not intended to offer the final solution to the problem of comprehensive care. Rather, it is to enlarge understanding of the issues involved, to present some possibly new views, and to be the basis for discussion, argument and creative dialogue. From the discussion and refinements of the ideal presented here, it is hoped that some advances can be made in the nation's capacity to cope with the problems of comprehensive health care.

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