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**THAT OUR CHILDREN WILL
NOT DIE: PART II**

BY
OLIKOYE RANSOME-KUTI



LAGOS UNIVERSITY PRESS - 1985
INAUGURAL LECTURE SERIES

THAT OUR CHILDREN WILL NOT DIE: PART II

An Inaugural Lecture delivered at the
University of Lagos on Wednesday, 3rd April, 1985.

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LAGOS UNIVERSITY PRESS
1985

314365

LAGOS UNIVERSITY PRESS

P. O. Box 132,
University of Lagos
Lagos, Nigeria.

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ISBN 978-2264-60-1

Printed at the Lagos University Press

THAT OUR CHILDREN WILL NOT DIE: PART II

WHEN I received the Acting Registrar's letter inviting me to give my Inaugural Lecture last December, I offered to give a valedictory lecture which he promptly rejected because there was no provision for it in the University Regulation. Perhaps it should be instituted. The rapid changes in the economic and social life of Nigeria must affect the philosophy and research pursuit of any academician during his tenure of service. Many will learn from the processes which produced the change. For example, I was appointed Professor of Paediatrics in 1970. In 1979, the University added Primary Care to my title. This lecture, therefore, inaugurates the chair of the Professor of Paediatrics and Primary Care indicating that a change had occurred in my philosophy, practice and research pursuits in the care of children.

I chose the title *That Our Children Will Not Die* for my Inaugural Lecture in 1974, but, due to circumstances in the University, it could not be delivered. I thereafter used it as the title of a film on Primary Health Care made by the Institute of Child Health in 1976. That was Part I. This lecture is Part II, because the reasons for choosing the title at that time remains the same.

The earliest medical services in Nigeria were pre-occupied with the eradication of malaria and improved environmental sanitation. Scant attention was given to children. From 1900 onwards, small hospitals and dispensaries were in evidence in towns to care mainly for European civil servants and army personnel. Missionaries provided services for the indigenous population in the rural areas. By 1925, Lord Lugard, referring to the European population wrote:

"The diseases of Tropical Africa are comparatively few; black water fever, malaria, dysentery and anaemia are the principal ones. Lung disease, enteritis and cholera are rare or uncommon among Europeans. We have now, in the Tropics, a most efficient medical service, and, generally speaking excellent hospitals with an adequate nursing staff. To the skill of the doctors and the improvements they have effected

in sanitation etc., it is due that the returns of deaths and invalidings now show such a wonderful decrease" (Schram 1971)

Ralph Schram, the historian of the Nigerian Health Services commended: "Lugard indoubtedly felt that the advances were wonderful; but for 9.5 million Africans in Nigeria, the day of excellent hospitals and improvements in sanitation was still far off". Need I say more!

The first School Health Services were begun by Dr. I. L. Oluwole in Lagos in 1925. Around 1926, maternal and child welfare services were established in the rural areas by missionaries. In those days, it was noted that deliveries often took place on the mud floor, in dark, smokefilled and overcrowded rooms. They were supervised by grandmothers who frequently introduced puerperal sepsis, and the babies left unattended until the third stage of labour with oozing cords open to infection from tetanus, a risk only increased by dressing the cord with cow dung.

In 1931, a report on health in Colonial Africa stated that "the main factors which lead to the high infant mortality rate and a high general death rate are lack of sanitation, widespread incidence of debilitating diseases such as malaria, helminth infections, schistosomiasis and venereal diseases, lack of medical care and dietetic deficiencies" (Schram 1971). It is still so to-day, with a few more additions to the list.

Vital Statistics

The collection of vital statistics became compulsory in Lagos in 1863; yet more than a century later, reliable data on vital rates in Nigeria are rare. For those that are, the method of reporting and collection are still unreliable and moreover they are badly utilised; for example in 1952, the late Dr. S. L. Adesuyi, a medical statistician stressed the stupidity of providing 90% of hospital beds almost exclusively for adults when, in fact, 40–50% of the need was for beds for children.

In 1900, the infant mortality rate (babies under one year old) for Lagos was stated to be 450/1000 live births.

Fifty years later it was reported to have fallen to 86/1000. In 1973, it was 70/1000 as stated by the UN Demographic Year Book and 45/1000 by the Federal Office of Statistics (Lagos).

More reliable data are available from surveys. In 1965–66, Demographic sample surveys gave the IMR of Lagos as 143/1000 for the former Western Region and 79/1000 for the former Federal territory. It must be admitted, however, that, because of the tremendous growth of the medical services and the prosperity of the people, there has been a steady decline in the infant mortality rate in Lagos and perhaps throughout the Federation.

The country's infant mortality rate is now stated as 178/1000; still one of the highest in the world, and the child mortality rate (0–5 years) as 322 for males and 306 for females in the rural areas. That is, 40% of children born at year 0 will have died by the age of five years, the majority of these deaths occurring in the first two years.

Paediatrics arrived in Nigeria in 1952 with the appointment of Lecturers in the specialty to the Faculty of Medicine, University of Ibadan. Although there were Nigerian specialists in other branches of Medicine, there was none in Paediatrics. From then on, health problems began to be defined mainly as they presented in hospitals and solutions, mainly curative, were found where it was possible. There was little concern with the problems as they manifested in the community, which was their main source.

Newborns

The high perinatal mortality attests to the poor quality of our Obstetric care. 45.6/1000 birth in Lagos (Akesode 1974), 60.7/1000 in Ibadan (Nylander 1971), and 52.3/1000 in Ife (Sogbannu 1979). These hospital data (except the one for Lagos which is supposed to be for the whole city) includes the outcome of deliveries commenced by traditional midwives and brought to hospital when they go wrong.

In the country as a whole, it is estimated that 80% of babies are delivered in a costaminated environment by

traditional healers and midwives or without skilled attendants.

In Lagos, 38% of deliveries were conducted by traditional healers or at home (Akesode 1974). In Epe, a Lagos rural area, 90% of deliveries are taken by traditional midwives (Oshinkalu 1970), in Owo Local Government area 30% were delivered at home by a relative or a neighbour, in a Church or by a herbalist (Alli 1983). In the Kainji Lake Area, 79% were delivered by the traditional healer and 16% by themselves or in religious homes (Adekolu-John, 1983).

Akenzua in 1981 found eight traditional mid-wives per 1,000 population in the rural areas of Bendel State. Among other responses he received from them, 56% did not think it was necessary to wash their hands and 36% the perineum before delivery is taken; 20% would manage dangerous child birth situations such as transverse lie and prolapsed cord, and 92% breech deliveries on their own. They are often known to fail. Asked about the methods used to resuscitate a baby who fails to cry at birth, the answers varied from "Sprinkle alligator pepper on baby" (60%) to "plug the anus with finger and pour cold water on baby" (eight per cent) and "Nothing! It's God's wish" (four per cent).

When deliveries take place in hospitals or health centres, they are discharged into the same contaminated environment from whence they came within 48 hours. Thereafter, ill babies pour from the community into hospital wards where facilities for their care are most inadequate in space and equipment. For example in the Lagos University Teaching Hospital, in 1981, 34.9% of newborns admitted from the community were infected, 31.5% were premature and 19.5% jaundiced; the cause of the jaundice, in the majority of cases, is associated with infection. Similar experiences have been reported from Ibadan (Effiong 1976) and other centres.

Five conditions account for 76% of deaths in the newborn admitted to hospitals — Neonatal Jaundice, infection, tetanus, low birth weight and congenital malformation. Except for congenital malformation, all the conditions stem particularly from factors in the community.

Neonatal Jaundice

Neonatal jaundice is the commonest cause of brain damage in Nigerian children apart from birth asphyxia. In 1967–68, 52% of children registered in our Neurological Clinic had brain damage due to this cause.

In Lagos, Olowe observed that mothers of jaundiced babies admitted to the wards stated that they had used mentholated dusting powder on the umbilical cord. A controlled trial on G-6-p-a deficient babies born in the hospital indicated that those on whom the powder was applied to the umbilical cord developed jaundice more often and more severely. (Olowe and Ransome-Kuti 1979).

Again, our studies on the cord blood of babies born in the Island Maternity Hospital in 1973 indicated that neonatal jaundice was also common in babies born with blood group ABO incompatibility. Our data indicated that of the 11,142 babies born in that hospital in 1973, 223 would have required exchange blood transfusion, but were discharged home within 48 hours of birth. Herbalists are familiar with jaundice in the Newborn (Oyebola, 1983). They believe it to be 'transferred from the mother (and occasionally from the father) to the baby' or caused by "shortage of blood in the new born; fever, mosquitoes-bites, blood spilling into the baby's eyes at birth, bad water in the baby's body and mothers eating bananas during pregnancy". They would treat it by "administering concoctions or herbal medicine or by washing the baby with black soap." None of these is known to be effective in preventing brain damage.

Older Children

When services were relatively free, large numbers of very ill children are seen in any hospital's children emergency room. It is the point of entry for most from the community into the out-patient department and for 80% of admissions into the wards. The conditions seen in the Emergency Room mirror the health problems in the community and is an indication that community health support systems have failed.

The majority of the disease seen in the Emergency Room are preventable or easily cured if diagnosed and treated early. But at this stage of the disease, they are not "interesting" to the Paediatrician based in a Teaching Hospital until they appear in their worst form. The worst affected are children two years and below. They constituted 94% of all admissions to the Emergency Room in Ibadan in 1968 (Familusi and Sinette 1971) and in Lagos (Ransome-Kuti 1967), and a similar proportion of deaths. The situation remain the same in 1985.

Gastro-Enteritis and Malnutrition

Bottle feeding the baby is an important cause of gastro-enteritis and a precursor of malnutrition. The decline in breast feeding is one of the tragic situations occurring in the care of our children. In 1968, dietary histories of malnourished children in Lagos indicated that bottle-feeding with cow's milk formula was added to breast milk by 100% of mothers during the babies' first month of life (Ransome-Kuti *et. al.*, 1972). In 1973, Data from Ibadan presented in a report to the UK Committee of the Freedom from Danger Campaign indicated that bottle-feeding was started at less than one month of age by 52% of the mothers and 94% introduced it by age of two to three months. In 1981, WHO confirmed those figures for babies aged two to three months in the urban areas, but found a lower prevalence of bottle-feeding in the rural areas.

In Lagos, the majority of mothers of malnourished children bottle-fed their babies because they "took a fancy" to it (Ransome-Kuti *et. al.* 1972). In Ibadan, mothers in the community said it gave the baby "health and strength" (Orwell and Murray 1974) and in Benin, because "their breast milk was not enough" (Alakija 1980). But it is well known that early bottle-feeding may lead to a failure to empty the breast, resulting in a dampening of the "let down" reflex and reduced breast milk production. The need for bottle-feeding is thereby increased and ultimately super-venes. When, because of ignorance or poverty or both, dilute

formula feeds are thereafter given to the baby, marasmus results.

Added to bottle-feeding, the highly contaminated environment, poor personal hygiene ignorance and the dearth of potable water supply also account for the high incidence of malnutrition and gastroenteritis.

Oral rehydration has revolutionised the treatment of gastroenteritis and is gaining ground rapidly. We taught mothers in our Primary Health Care area in Lagos to use it. After four years, our data indicate that 61% of registered mothers surveyed knew the correct formula for the home-made solution but only 32% of those mothers used it during their child's last episode of diarrhoea. It showed a reluctance of mothers to take responsibility for the care of a condition which, in their experience could lead to death (Bamisaieye 1983). At the same time, the dread of a depressed pontanelle is clearly shown by potients and pastes applied to it, but which is not associated with loss of fluid and the need to replace it.

Most children are weaned on maize gruel, a most inappropriate diet, dictated by culture and ignorance, is a major cause of malnutrition and gastroenteritis. This is in spite of the fact that there are staple food items in the community suitable for weaning infants successfully.

In Ilesha, the mothers of malnourished children know the disease protein energy malnutrition. They call it 'Kosoko (no hoe) or Ori nla (big head.) They believe the children have supernatural powers to die and be reborn, and that the disease is communicable (Ojofeitimi 1982). None stated "an inadequate diet" as the cause.

The cases of malnutrition seen in the hospital are the tip of the community iceberg with a large reservoir of potential cases ready to be struck down by measles, tuberculosis, whooping cough and diarrhoea. Community surveys by medical students last month in villages around Ifo indicated that a total of 25% of the children were malnourished; (17% boderline and eight per cent severely).

Malaria and Convulsion

In clinics, fever, due to malaria is the commonest complaint, most frequent and severe in children between the ages of nine and 24 months. By age five years the clinical manifestations of malaria are less severe and the child has acquired considerable immunity. In school children, death from malaria is rare, but it causes a high prevalence of morbidity (Fasan 1969).

This pattern is, however, changing due to the widespread use of anti-malarials by the people.

The most severe forms of malaria are often brought to hospitals. One form presents with high fever and prolonged convulsions in children between ages of nine months and two years. Thirty per cent to 40% of them die within 72 hours of admission, others recover with or without varying degrees of brain damage.

The disease is dreaded by parents who believe that when the child clenches the teeth, death is imminent. To prevent this disaster, the child's mouth is badly traumatised and the attempt to keep it open; shock treatment is also applied such as burning of the feet or buttocks or rubbing pepper into the eyes. A mixture containing cow's urine, tobacco leaves and several other and variable herb, demonstrated to cause hypoglycaemia in rats (Ojewole and Olusi, 1976) and in rabbits (Grange 1981) and cardiotoxicity in cats is given to many convulsing children. This poison is a major contributor to about 60% of the deaths due to this condition.

We surveyed mothers in the community regarding the use of cow's urine mixture; 27% gave it to their children regularly once, twice or more daily, on its own or mixed with herbs or other medicines, and, in the majority of cases, the child always improved. The mixture is often given routinely to prevent convulsion; so, when the child convulses, a large quantity is poured down his throat. This is the community's perception of a drug known to be poisonous.

Fortunately its use is considerably reduced in the urban areas, but continues in the villages.

Judging from a very heated discussion on malaria prophylaxis which took place at the Annual Conference of our Association in Calabar in 1983, Nigerian Paediatricians do not have a unanimous view on the subject. The fear was

expressed, on the one hand, that continuous chemoprophylaxis may suppress the child's immune responses necessary to protect him against malaria throughout adulthood; on the other hand, not to use it may expose him to a severe attack which may be fatal.

An ideal prophylactic regimen would be one by which the child could be partially protected so that he did not develop a severe attack of malaria, and at the same time would still be capable of manufacturing antibodies against the parasite. One such regimen was described by Morley (1971) who gave pyriminamine monthly and chloroquine for any episode of fever. With this regimen, the number of febrile convulsions in the children in the community was considerably reduced, presumably due to the prevention of those caused by malaria, and at the same time, hopefully, the children were given an opportunity of developing immunity to malaria. Further work of this nature needs to be done.

Measles and Immunisation

Of all the infectious diseases amenable to prevention through immunisation, measles is the most devastating. A high level of coverage with its vaccine is difficult to achieve because of its high cost and fragility. Again, although measles immunisation is recommended at the age of nine months, in Lagos, for example it is estimated that 30% or more of measles cases occur before that age, and vaccination at six months has often been ineffective. The fact that the child develops measles after immunization erodes the mother's confidence in the vaccine, and brings it into disrepute.

From the evidence available in Nigeria, the performance of our Expanded Immunisation Programme since 1976 has been dismal. Jinadu (1983) evaluated it in the Oranmiyan Local Government Area of Oyo State and found very low levels of immunisation coverage for most vaccines for activities carried out between 1977 and 1981. He identified the reasons for the poor performance as due to:

“(a) inadequate community participation in the planning and implementation of the programme.

(b) poor communication between different government representatives and;

(c) inadequate publicity.

Moreover, vehicles were grounded for most of the year and frequent power failure caused wastage of large quantities of vaccines which cast doubt on the potency of those administered to the children".

Alli (1984) reported that no child in Tafawa Balewa Local Government Area in Bauchi State and only nine per cent in Owo Local Government Area, Ondo State, were fully vaccinated after three years of the programme. She found that irregularities in financing of the State and Federal Health Ministries led to erratic purchase and distribution of vaccines. She also found a lack of planning to involve the grassroot implementers, and that these implementers were inadequately trained and poorly supervised. None of the refrigerators at the Local Government Office and at the two Health Clinics she visited were functioning because of power failure; the stand-by generator was also not functioning. She saw a lot of spoiled vaccines due to neglect in monitoring vaccine storage temperature and potency.

Comments

Running through this discussion is a well-known theme — that our children are so ill and die in such large numbers because of the inimical environment in which they live. The human, socio-economic, cultural and environmental elements of the society, therefore, needs to be transformed.

The majority of our people still believe in and utilise traditional medicine borne out of superstition, spiritualism and the worship of ancestors ingrained in us during our evolution over centuries. Many of us who have acquired the skills of modern scientific medicine were catapulted from a traditional past to this new era, perhaps in a generation. Just as when a pagan becomes a Christian, we tend to turn our backs on the past, enshrined in the community, and look to the future — the life and medicine of the developed world, forgetting that, even that had a traditional past, but developed through a process of research and application of its results

to the system. We have to go back to where our people are and evolve with them.

The majority of our doctors, and particularly paediatrician's work in the pinnacle of the health care delivery system — the teaching hospitals, perpetually reaping the morbid harvest of the contaminated community. We do not possess the skills to work with and transform the community to stem the tide of ill children.

Past Efforts to Evolve Effective Health Care Systems

In 1967, perceiving the need for a new approach to the provision of health care in the country, the Institute of Child Health, University of Lagos, in association with the Department of Community Health, Unilag, the Federal Ministry of Health, the Lagos City Council and the Johns Hopkins University, USA and funded by many international donors and the Federal Government, established a pilot project to evolve new methods of health care. It started at the Gbaja Health Centre, Surulere, and later moved to Oguntolu Street, Somolu. By 1971, the ICH team had started training Senior Nurses from various Nigerian States and other African Countries who returned home to reorganise and head — Family Health Clinics along the ICH pattern.

Between 1972 and 1976, the team established model clinics in Sokoto, Katsina and Calabar, and the process initiated in Port Harcourt, Kano, Ife and Abeokuta. The ICH, by then, had had a fairly good working experience in training, service organisation, management and evaluation of health services.

When General Gowon announced the Basic Health Services Scheme in 1975, we were beside ourselves with excitement. The services were to be set up in five years — between 1975 and 1980.

Here was an opportunity for us to participate in a unique enterprise in our life-time designed to spread health services nation-wide and to the grassroots in a way that it will be sustainable by the people themselves in the spirit of self reliance. Fortunately, we had prepared ourselves for it, we were in peak form and ready to go.

By 1978 it was clear to us that whatever advice, skill or services we or even WHO had to offer were to be totally

spurned. Money was lavished on things—buildings, equipments, mobile clinics to run around on land and water, but not on people who could conceive plans, implement, and provide the services, train personnel and set up health service management and evaluation systems. By 1982, the scheme had burnt itself out and was abandoned. Nowhere in Nigeria were services being provided under the scheme. Those were the saddest five years of my life. We had the money and the skill to bring relief to our people, but Nigeria was unfortunate to be led by people without knowledge, skill or vision.

In 1973, at the instance of Dr. Irene Thomas the Medical Officer in the Federal Ministry in charge of Maternal and Child Health, I was included in an UNDP delegation to Calabar to propose a program designed to assist the Cross River State Government to spread Family Health Services throughout the State. Dr. Ecoma, the State Chief Medical Adviser was very enthusiastic and accepted the plan. First the ICH Lagos was to establish a model Family Health Clinic in the City which will be used for training during the implementation of the model rural health services. This entire project was to be used to train other health personnel for the State-wide health service. Dr. Ecoma later left the Public Service to become director of the Project.

By 1979, all the elements of the project were in place. The city service was functioning well. In 28 villages, communities had provided space or building for village clinics. 123 traditional birth attendants, 35 Family Health Workers resident in the villages and supervisory staff had been trained and the system was functioning.

In 1980, during the last civil administration, the State Commissioner of Health previously a Professor of Dentistry of this University, decided that the project was too primitive for a modern state, and in spite of pleading from many quarters, it was terminated.

There are however bright spots here and there in the country today. UNICEF is urging Nigeria to improve its immunization coverage through the expanded Programme on Immunization conceived by WHO. Many church groups are working in cities and the rural areas with the people to set up primary health care systems; medical schools, particularly Universities of Lagos, Ife, Calabar, Ilorin and others have introduced imaginative curricula to prepare doctors to attend

to the primary health needs of Nigerians without sacrificing high standards of training. But have we got a minister or can we have a Director General of Medical Services with imagination, enterprise and proven ability who can mould all these efforts into a vigorous national programme? Somehow, the endless symposia, workshops, seminars and conferences of primary health care must yield some ground to action in which the country's abundant manpower and other resources will be mobilised purposefully to provide effective and efficient services for our people.

Without research, no country can progress. An atmosphere conducive to research must be created. Above all, its results should be utilised to solve the country's health problems.

In 1957, responding to a request from Prof. Collis Rochefeller Foundation donated an Institute of Child Health to the University of Ibadan which the University continues to fund with assistance from the Federal Government commencing in 1976.

At independence in 1960, again, following a request by Professor Collis, the first Professor of Paediatrics in Lagos University, Unilever donated an Institute of Child Health in every Region to the nation which the Federal Government agreed to maintain.

In the Northern Region, it was built in Kaduna and was used by that Government as an infant welfare clinic; the Eastern Region ICH was built in Aba and converted into a school for training community midwives. The £50,000 given to the Western Region disappeared, and that the Institute was never built. When the Cameroons seceded, its share was transferred to the Federal Territory of Lagos in 1962 which is the Institute I now direct. Its turbulent history will someday be told.

In 1972, the late Aminu Kano, the Minister of Health at that time accompanied my team to Sokoto to open the Family Health Clinic established in that city by the ICH, Lagos in collaboration with the North Western State Government. Prof. J.F.Ade Ajayi, the Vice-Chancellor of Lagos University at the time was represented at the ceremony by Prof. Tugbiyele. The clinic was funded by the Federal Government again, due to the efforts of retired Dr. Irene Thomas. At that opening ceremony, Alhaji Aminu Kano declared that

his ministry would establish an Institute of Child Health in every state. About three years later, it was announced that an Institute of Child Health would indeed be established in every Teaching Hospital, and money was voted for the purpose in 1976. Since then, Institute of Child Health have sprung up in Benin and Enugu. Two months ago, in 1985, the Federal Ministry of Health has given notice of withdrawal of annual subventions to all Institutes of Child Health, thus bringing the country back to where we were before independence. This tragic decision has been taken at a time when 75% of all deaths are in children caused by preventable diseases and those easily cured if treated early due mainly to conditions in the community, and to which problem the country, as yet, has no answer of its own.

Moreover, at a time when it was, at least, clear to many nationally and internationally that Specialist and Teaching Hospitals were not the answer to Nigeria's Health problems, the construction of such Teaching Hospital was embarked upon; and again in 1980 the Shagari administration decided to build six specialist children hospitals in various parts of Nigeria at a cost of 40 million naira each. The project was actively pursued by the Federal Ministry of Health up till December 31st 1983 when time and money ran out on them.

The Future

Asuquo Antia (1976), one of our distinguished Paediatricians, once sounded "a note of caution to all those concerned with child health in the Tropics that all change is not progress and that increased sophistication does not necessarily mean advancement". But the question to be asked is "What change do we need to ensure progress?"

David Morley in the early 50's worked in Nigeria and was the first to see the need for innovations in the delivery of child health services. Because of the shortage of doctors at that time, he transferred the majority of the responsibilities for treating the early stages of the common diseases to nurses. Since then, we have learned that even lesser trained health personnel, down to the level of the village health worker can be successfully trained to assume some of these responsibilities.

He integrated preventive and curative services, introduced the home-based record system, the road-to-health chart, simple diagnostic tools such as the arm circumference strip and therapeutic skills such as the use of salt, sugar and water solution to prevent dehydration. Although he demonstrated a reduction in mortality and morbidity in the treated villages using very limited resources, the system rapidly deteriorated after his departure because there was no government and community participation (Cunningham 1978). Of the two, the latter is the key to the transformation of a community for the delivery and maintenance of effective health services. Community participation means that the citizens control the process of transformation whereby they mobilise and act to improve the quality of their lives. In this process, existing social structures or those created for the purpose, such as village health or development committees, must be the medium and appropriate health technology utilised, which, as much as possible, must be transferred to the members of the community. On the other hand local technologies found to be effective should be encouraged; for example, the Hausa cut the umbilical cord with a red hot knife; for this reason, tetanus is said to be relatively uncommon in their newborns. At all times, the aim is to develop the spirit of self-reliance within the community and incorporate patterns of scientific health care into the traditional system. Properly motivated, the community will take action in its own interest towards the achievement of better health.

In Garkida, Northern Nigeria, the villagers built their health clinics and sponsored a man and a woman to train with the medical mission of the Church of the Brethren as village health workers, and are supervised by them after graduation. These village health workers are able to treat common ailments such as cough, fever, diarrhoea, skin condition etc., mobilise the community for preventive mass action such as the construction of wells and latrines and can also immunise children.

Mothers are our best ally in this enterprise. It is the uneducated women — and they are in the vast majority, who bears the largest number of children and loses the most, who fails to understand simple concepts such as the meaning of the growth chart, and performs worst of all in bringing her child for immunisation even when the services are made

available, affordable, accessible, and efficiently run. She is subjected to enormous social and constraints which prevents her from utilising the services effectively and is also subjected to conflicting advice from ancient and modern health systems regarding the care of her child. Moreover, the mother is striving to function in a modern economy with inadequate and inappropriate or no educational preparation.

A refractory problem is to convince mothers of the need and efficacy of preventive measures, hence elaborate outreach systems or community-based systems must be set up to induce her to use the services; for example, first infant visits to a health facility are usually for an episode of illness, often past the infants age of six months when the first phase of immunization should have been completed, and at a time when the child is most vulnerable to preventable infectious diseases.

Again there is evidence indicating that when adequate spacing or the reduced number of children per family is achieved, their health improves. For example, the chances of malnutrition (Morley et al 1968)* low birth weight babies (Burr Hunt II 1976)* gastroenterities, respiratory infectious and a lowering of intelligence quotients is increased, the larger the family.

It is believed that if parents perceive that their children will survive due to efficient child care services, they will take steps to reduce the size of their families.

One evidence in support of this hypothesis comes from Imesi-Ile where Cunningham (1971) found that additional births desired was less in the village with an efficient under-fives clinic than in the one without.

In Ebendo village in Cross River State, Frank Mott (1974) concluded that the women compensate by having additional children almost exactly equal in number to the number of deaths they have had, and that if, in fact, child mortality can be reduced, there might well be a compensatory one to one corresponding decline in completed family size.

The challenge is to establish a health care system which will touch the lives of every member of the community, especially children, who are the most vulnerable and which will tackle those conditions causing the highest mortality and morbidity. The system must be organised from the

grass-roots, integrating preventive, promotive and curative services, using the type of technology which the members of the community will accept at a level they can utilise, maintain and afford, with an efficient and effective system of supervision and referral. It is not reasonable that we should expect to supplant a traditional health system which the people have learnt to trust, is serving them well, its language understood and verdict accepted but to integrate it into a system based on scientific principles.

Traditional medicine demands compliance through dogma, communal pressure and faith; scientific medicine demands reasons and proof-attributes acquired through modern education.

The situation regarding the health of our children is still grim. But it need not be so. Had I been told that in the twilight of my academic and professional life the wards will still be filled with children suffering from tetanus, tuberculosis, measles and malnutrition, that our children's brains and limbs will continue to be damaged in large numbers by meningitis, jaundice and poliomyelitis, I would not have believed it. There is one consolation, however, we now know much better than before how to prevent them from dying and being damaged. We only need to be inspired; but from where will that inspiration come?

Many things can wait, the child cannot.
Right now, his hip bones are being formed.
His blood is being made, his senses are being developed.
To him we cannot say Tomorrow.
His name is Today.

— Gabriela Mistral.

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Printed at the Lagos University Press