© Olabisi Onabanjo University Press,
Ago-Iwoye, 2004.

All rights reserved. No part of it may be reprinted, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, electrostatic, magnetic tape,photocopying, recording or otherwise, without the prior written permission of the copyright owner.

First Published, April 2004.

ISBN 978-36556-5-5

Published by Olabisi Onabanjo University Press
P. M. B. 2002, Ago-Iwoye, Ogun State. Nigeria.

THE NIGERIAN CHILD: AN ENDANGERED SPECIES?

BY

PROF. DUROTOYE MICHAEL OLANREWAJU
(PROFESSOR OF PAEDIATRICS)
M.B.B.S (Ib.), FWACP.
Head, Department of Paediatrics, Faculty of Clinical Sciences,
Obafemi Awolowo College of Health Sciences,
Olabisi Onabanjo University, Ago-Iwoye, Nigeria

**30TH INAUGURAL LECTURE
OLABISI ONABANJO UNIVERSITY
AGO-IWOYE.**

Tuesday, 27th April 2004

The Vice-Chancellor,
Principal Officers of the University,
Provosts of Colleges and Deans of Faculties,
Colleagues, Friends from Sister Universities and Institutions
Our Royal Fathers,
Gentlemen and Ladies of the Press,
Distinguished Ladies and Gentlemen,
Great OOUITES!

PREAMBLE

You are all welcome to this 30th Inaugural Lecture, the third from the Department of Paediatrics, Faculty of Clinical Sciences, Obafemi Awolowo College of Health Sciences. The title of this lecture is "**THE NIGERIAN CHILD: AN ENDANGERED SPECIES?**"

My personal experience in the care of critically ill children both within and outside the Olabisi Onabanjo University Teaching Hospital within the last few years has influenced my choice of title for this lecture. I have witnessed needless deaths on a daily basis and have witnessed anguish and deep pains by bereaved parents on a scale similar to that of a nation under siege.

Perhaps I would have been discussing paediatric haematology, which is my area of sub-specialty, if this lecture had taken place about five years earlier. However, the magnitude of the current crisis in our health sector has made it imperative for the health problems of the Nigerian Child to be discussed in a holistic manner.

To "endanger" means to put someone in a precarious situation where he/she can be hurt, injured, or killed. When the exposure persists over a period of time, a crisis point is reached and the subject or animal species is classified by conservationists as an endangered species, that is, a species that may soon no longer exist. A classical example is the whale, which, as a result of continued poaching, has now been officially classified as an endangered species. We are all familiar with the frantic and sometimes amusing efforts made to protect these animals.

The last few years have indeed witnessed an unprecedented increase in morbidity and mortality from preventable diseases in our

paediatric units across the country. From personal experience over the l
seventeen years since I joined the service of the Olabisi Onaba
University Teaching Hospital and from interactions with colleagues
several Teaching Hospitals, it is obvious that the situation has now reach
a crisis point.

I, as one of the custodians of these children, have the mo
obligation to speak out loud and clear to alert the nation, otherwise I will
as guilty as those who have led us into this unfortunate situation.

You will all agree with me that there probably cannot be a bet
opportunity for me to do so than now.

INTRODUCTION:

Children have always been acknowledged as 'leaders of tomorro
and there is no doubt that the future of any nation is determined largely
the quality of her children. Unfortunately, there has always been
disregard for the welfare of children, dating back to biblical times : In t
book of Mathew chapter 19 ,verses 13 and 14 we are told how the discip
of Jesus almost prevented Him from attending to little children who w
brought to Him to be prayed for. The children were considered as a m
nuisance who were not worthy of any attention.

I recall vividly that when I was appointed Head of Paediatrics
1988 , we tried to set up an oral rehydration therapy and diarrhoea traini
unit (DTU) at the teaching hospital in Sagamu and I approached the th
Chief Medical Director for approval of an identified block as the ORT u
His response was that we didn't need any room since oral rehydrati
therapy could be carried out under a tree! We never got the space
requested for and we had to carve out a little portion of the children's w
as our ORT/DTU.

In like manner, successive Governments in Nigeria(both military a
civilian) ,have not given sufficient attention to the welfare of our childre
The consequence is that our physical, political, economic and soc
environment, as presently constituted, cannot guarantee a secure future
our children.

We are currently paying dearly for the neglect of yesteryears a
our action or inaction today will determine the fate of future generations.

In the mess in which we have found ourselves , even the rich also cry. While the poor daily face the threat of extinction, the rich feel highly insecure .The craze among the ruling class now is the purchase of customized bullet-proof cars. Perhaps they need to be reminded that the assassins currently on the prowl are the products of a neglected generation and that poverty is an obstacle to peace. There cannot be peace without justice and equity.

DID WE SET ANY GOALS, OR HOW COME WE HAVE FOUND OURSELVES IN THIS MESS?

Goals and targets have been set on several occasions, but none has been met. In 1979 we participated in the celebrations marking the International Year of the Child. This was done with a lot of fanfare at State and Federal levels. As usual, the cost of these activities ran into millions of Naira.

There was a lot of rhetoric by the military and civilian politicians. Yes, there were cultural dances as well, but as usual, no meaningful actions whatsoever were taken. I recollect that the major question for my Part IV Final MB.Ch.B Examination in Preventive and Social Medicine at the University of Ibadan in June 1979 was to "Write an Essay on the International Year of the Child". This reflected the importance attached to the event by the medical profession.

There was a complete lull for another 10 years during which we didn't even talk about children at all, let alone take any action, until the United Nations came up with the **U.N. Charter on the Rights of the Child** in 1989. This was closely followed by the African Charter. In both documents the rights of children were enumerated, including the right to free health, education, and freedom from exploitation. Nigeria participated actively at the conventions and was a signatory to the final declaration. The Child's Rights bill was not signed into law until late last year, 14 years after the U.N. Charter on the rights of the child.!

At the World Summit for children in 1990, a ten year plan of action for the world's children was unfolded and concrete and achievable goals were set . The **major goals of the 1990 world summit for children** were to be

achieved **by the year 2000** and were as follows:

1. Reduction of morbidity/mortality rates for children under five.
2. Reduction of maternal mortality.
3. Reduction of malnutrition among children under five.
4. Provision of universal access to basic education
5. Provision of universal access to safe drinking water and sanit[a]
   condition.
6. Improved protection of children in especially difficult circumstances.

WHAT IS THE SITUATION IN THE YEAR 2004?

Four years after the 'magic year 2000', poverty is still widespre[ad] and severe, children bearing the brunt as usual. The Nigerian economy w[as] recently classified by the world Bank as one of the least developed in [the] world, worse than that of Angola. Most of the poor live in rural areas , b[ut] urban poverty is increasing. Table I shows the Gross National Inco[me] (GNI) of Nigeria, compared with those of a few countries, both developi[ng] and developed. Nigeria's GNI is similar to that of Ghana ,but far less th[an] those of Angola and Cote d'Ivoire, not to mention that of the Asian natio[ns]. One important observation is that our low GNI is not solely responsib[le] for the widespread poverty since countries with similar or even low[er] GNIs are doing better than us.

TABLE I:
GNI per capita of some selected countries

Country	GNI per capita ($)
Nigeria	$290
Angola	660
Ghana	270
Cote d'Ivoire	610
Malaysia	3,540

Using the most recent poverty indicators such as illiteracy leve[l]

access to safe water and the number of poor people, Nigeria ranks below Kenya, Ghana and Zambia. Some indices are even better in countries still at war or have recently emerged from the throes of war such as Rwanda and Burundi. Ladies and Gentlemen, are we the giant or the midget of Africa?.

Table II shows the percentage of the rural population with access to safe water in selected countries. In some parts of the rural area of Nigeria, access to safe water is NIL, whereas over 90% of the rural population in Botswana and Egypt have access to safe water. Is it not obvious why there is a high prevalence of water-borne illnesses among our children?

Table 2:
Access to safe water.

Country	Average % of population With access to safe water	
	Urban	Rural
Nigeria	78	49
Egypt	99	96
Burundi	91	77
Botswana	100	90
Zimbabwe	100	73

Table 3 shows that about 70% of Nigerians live on less than $1 (140 Naira) a day. Only Ethiopia (82%) and Uganda (82%) fare worse than us in the whole of Africa!

TABLE 3:
% population living on less than $1 a day (2001)

Nigeria	-	70%
Burundi	-	58%
Ghana	-	59%
Kenya	-	23%

2. IGNORANCE IS RIFE.

Four years after the magical year 2000, ignorance is rife and almo half the adult population can neither read nor write. As can be seen in Tab 4, adult literacy level in Nigeria is one of the lowest in the continent a as a result, there is considerable belief in harmful traditional practices su as female genital mutilation, use of cow's urine concoction to treat childr with convulsion and the widespread notion that immunization is harmf Many mothers also deprive their children the benefits of balanced mea early in life because of ignorance. For instance, it is the belief th consumption of eggs by children will make them steal while those giv meat early in life will suffer from worm infestation. As if they have heard about worm elixirs.

TABLE 4:
ADULT LITERACY LEVEL (2000)

	M	F
Nigeria	72	56
Ghana	80	63
Kenya	89	76
Zimbabwe	93	85
South Africa	86	85

3. DISEASE IS WIDESPREAD

There is a vicious cycle of poverty, ignorance and disease. UNICE classifies Nigeria as a country with severe child malnutrition and very hig under-five mortality rate. Access to education, health, water and dece housing is inadequate. The infant mortality rate has changed little sin independence44 years ago. Table 5 shows that our infant mortality ra which was 123 per thousand in 1960 dropped only marginally to 110 2003,giving a percentage reduction of only 10.5%. In sharp contrast this, Ghana reduced infant mortality by 55% while Malaysia reduced by 90% within the same period.

TABLE 5:
Infant mortality rates

	1960	2003	% Reduction
Nigeria	123	110	10.5%
Cote d'Ivoire	195	102	48.0%
Ghana	126	57	55%
Malaysia	73	8	90%

A child in Nigeria is two and a half times more likely to die before his first birthday than a child in neighbouring Ghana. The same child is 22x more likely to die before his 1st birthday than a child in the U.K.(Table 5)The same trend can be observed in the pattern of the under-five mortality rate. Table 6 shows that the U5MR in Libya was 270 per thousand in 1960 while that of Nigeria was 207. By the year 2002 however , Libya had an U5MR of only 19 per thousand, which translates to a reduction of 99%! Our dear country reduced her U5MR by only 8.8%. This is a highly significant observation when we bear in mind the fact that the U5MR is used by UNICEF as the principal indicator of the level of child well being. It reflects a wide variety of inputs such as the nutritional health and the health knowledge of mothers; the level of immunization and ORT use; the availability of maternal and child health services (including prenatal care) income and food availability in the family; the availability of clean water and safe sanitation; and the overall safety of the child's environment. The U5MR is less susceptible to the fallacy of the average. That is, it is much more difficult for a wealthy minority to affect a nation's U5MR, and it therefore presents a more accurate picture of the health status of the majority of children and of society as a whole. For these reasons, the U5MR is chosen by UNICEF as its single most important indicator of the state of a nation's children. That is why the tables rank the nations of the world not in ascending order of their per capita income but in descending order of their U5MRs.(Table 7). Nigeria occupies the 15th position in UNICEF's rankings of under 5 mortality rates, side by side with Rwanda. What a pity! That is, we are better off than only 14 countries in the world.

TABLE 6:
Reduction of U5MR

Country		1960	2002	% Reduction
Nigeria	-	207	183	8.8
Libya	-	270	19	99%
Cote d'Ivoire	-	290	176	40
Ghana	-	215	100	54
Malaysia	-	105	8	92
U.K.	-	27	7	75

TABLE 7:
U5 Mortality rates and rankings (UNICEF 2004)

Country	U5Mrate	Rank
Sierra Leone	284	1
Niger	265	2
Angola	260	3
Nigeria	183	15
Rwanda	183	15
Ghana	100	47
Canada	7	161
Sweden	3	193

Table 7 shows that the best country for a child to live in is Swede with only 3 deaths per 1000 children under the age of 5 years per annun A child in Nigeria is 60x more likely to die before his 5th birthday than child in Sweden. Is the Nigerian child not clearly endangered?

WHAT ARE THE CAUSES OF DEATH

1. **Preventable diseases** such as measles, tetanus, tuberculosis, ar still prevalent in both urban and rural areas of Nigeria. In an analysis o admissions into the paediatric wards of the Olabisi Onabanjo Universit Teaching Hospital in Sagamu, we found that the leading causes o childhood deaths were :

a. Complicated malaria...........preventable.

b. Gastroenteritis with dehydration.......preventable

c. Pneumonia......and......other......acute...... respiratory infections.....preventable.
d. Measles ....preventable.
e. Protein-Energy Malnutrition.......preventable.
f. Anaemia ....preventable..

This has not changed from the pattern earlier observed by Adeyokunnu, Taiwo and Antia in the 1980s , in a study of over 22,000 consecutive admissions into the children's emergency ward of the University College Hospital in Ibadan. The same pattern was also recently confirmed by Akang, Asinobi , Fatunde et al in a review of autopsy findings in the same institution.Table 8 shows the trend of admissions into the paediatric wards of the OOUTH over a 5-year period. It can be seen that admissions into our paediatric wards have trebled within a 5-year period without a corresponding increase in facilities.

Table 8:
5-year admissions into the paediatric wards of OOUTH

	1999	2000	2001	2002	2003
CHER	257	478	448	565	609
NNU	120	309	307	343	371
Ch.Wd	120	342	306	401	446

The apparent drop in figures for 2001 is due to a 4-week strike action by hospital staff. This is not an uncommon occurrence in Nigeria and is one of the factors responsible for high childhood mortality.

Infectious diseases that were on the verge of being conquered have now re-emerged in more virulent fashion. A classical example is measles which recently caused the deaths of thousands of infants across the country. It was so bad that even babies as young as 4 months old who ordinarily are regarded as less susceptible, also suffered severe attacks.

2. THE MALARIA BURDEN:

Malaria accounts for significant morbidity/mortality among childr world-wide. 300-500 million clinical cases per annum are caused mai by *Plasmodium falciparum* and *vivax* malaria.1-2 million deaths fr P.*falciparum* malaria occur per year, 90% of the deaths occurring in S Saharan Africa. Africa has the most efficient vector species in the wo (Anopheles gambiae).71% of deaths due to P. *falciparum* malaria are children below the age of 5. In Nigeria, the average child would ha experienced at least 3 life-threatening malaria infections by the age o year. The poorest people are the most vulnerable. The increasing inciden of resistance of the malaria parasite to Chloroquine is complicating t clinical picture. Chloroquine, synthesized by German researchers duri World War 2, is effective today ONLY AGAINST VIVAX MALARIA.

Consequences of increasing resistance to Chloroquine

1. Increasing prevalence of severe anaemia.
2. A corresponding increase in the case of fatality rate of seve malaria.
3. Increasing maternal and neonatal death rates.

TABLE 9:
% under 5 children sleeping under mosquito net

Angola	-	10
Benin R	-	32
Kenya	-	16
Mali	-	37
Nigeria	-	0

The malaria burden is partly severe in Nigeria because it is not our culture to sleep under mosquito nets. This is clearly evident in Tables and 10. Both tables show that the number of under 5 children in Niger sleeping under any form of net (treated or untreated) is practically nil . any case, how do you sleep under a bednet when your place of abode under the flyover at Yaba? Only a few secondary school students slee

under mosquito nets and are usually compelled to do so by school authorities.

Table 10:
% under 5 children sleeping under a treated bednet

Country	%
Benin Rep.	- 7
Gambia	- 15
Kenya	- 3
Malawi	- 3
Nigeria	- 0

3. THE AIDS SCOURGE

The AIDS pandemic is assuming frightening dimensions in most parts of Africa, Nigeria inclusive. Will it be the 'last straw'? Only time can tell.

More than 11 million African children have already been orphaned by AIDS alone and the worst is yet to come, according to UNICEF. In a recent survey, half of the orphans on the continent hardest hit by disease were between 10-14years of age and 35% were between 5 and 9 and around 15% under the age of 4.

Even without HIV/AIDS the number of orphans in Africa would still exceed those of other continents because of lower life expectancy in Africa. Worst affected is Sub-Saharan Africa where in total 34 million children (12% of all minors) were orphaned for different reasons including HIV/AIDS.

By 2010, that is, in 6 years time, it is estimated that there will be approximately 20 million children in Sub-Saharan Africa who have lost at least one parent to AIDS, bringing the total number of orphans in the region to more than 40 million.

The AIDS pandemic has led to an unprecedented increase in the number of new cases of pulmonary tuberculosis and the emergence of multi-drug resistant super-strains of tubercle bacilli. This is posing considerable global challenge presently. I ask again, will AIDS be the 'last straw'?

4. NEONATAL DEATHS:

That is, deaths in infants below the age of 28 days.The curr neonatal mortality rate in Nigeria is unacceptably high, accounting for 60% of all infant deaths. In a two year prospective study of Neonatal dea at the Olabisi Onabanjo University Teaching Hospital Sagamu, Njokan and Olanrewaju reported a mortality rate of 343 deaths per 10 admissions. The major causes of death were severe birth asphyxia, l birth weight, neonatal infections including tetanus and kernicte complicating severe neonatal jaundice. Deaths due to neonatal jaundice preventable and treatable condition, occurred mainly as a result of l presentation to hospital. Most mothers believe that ampiclox is treatment of neonatal jaundice and therefore have a false sense of secur in its use. In addition, 25% of deliveries at OOUTH were unbook emergencies. That is, many pregnant women do not avail themselves routine maternity services . They present to us only in the face of sev complications, thereby imposing an unusually large proportion of hig risk cases.

To worsen an already bad situation , there are no facilities neonatal intensive care such as continuous positive airway pressu central venous catheters and total parenteral nutrition. We cannot ev monitor blood gases! Unfortunately, this is the lot of most neonatal units Nigeria today. As things stand now, any baby who is unfortunate enou to be born with a birth weight of less than 1.0kg in Nigeria is virtua doomed. This is in sharp contrast to the situation in developed countri where babies weighing as low as 600gm at birth have very good chances survival. Table 11 shows a comparative analysis of neonatal and childho deaths at OOUTH.

Table 11

5-year mortality in the paediatric wards, OOUTH

	1999		2000		2001		2002		2003	
	no	%	no	%	no	%	no	%	no	%
CHER	23	8.9	43	9.0	45	10.0	36	6.4	62	10.2
Ch Wd	5	4.1	24	7.0	13	4.2	24	5.9	33	7.4
NNU	30	**25**	64	**18.7**	75	**24.5**	94	**23.4**	109	**24.4**

The mean mortality rate over the 5-year period for the children's emergency room was 8.9% while it was 5.7% for the children's ward. The corresponding figure for the neonatal unit was a staggering 23.2% . In other words almost a quarter of all babies admitted into the neonatal unit died!

The situation in our paediatric wards is so bad that the number of parents requesting for discharge against medical advice is on the increase. In a study of DAMA cases carried out in 1986, Oyedeji found an incidence of only 0.9% among patients at the Wesley Guild Hospital in Ilesha. In a more recent study, Olanrewaju and Olowu reported an incidence of about 4%, representing a four and a half fold increase in incidence. It is saddening to note that in as many as 36% of our DAMA cases at OOUTH, the clinical course of patients' illness either remained the same or actually grew worse prior to request for DAMA.. The majority of cases were in the neonatal unit. What this implies is that financial constraints are not the only factors responsible for hospital DAMA. The confidence of our patients in the health care system has been and is still being systematically eroded by the moribund state in which our health facilities are at present.

5. NO PROTECTION FOR THE VULNERABLE CHILD.

A recent survey conducted by the Federal Office of Statistics in collaboration with the International Labour Organisation has shown that there were about 15 million working children in Nigeria comprising 7.8million males and 7.2 million females 70% of the children started work between the age of 5-9 years. 61% of working children who were attending school saved their money to go to school.

WHY ARE THE CHILDREN DYING?

1. One major reason responsible for the current situation is p budgetary allocation to health and education.

Table 12 shows that only a meagre 1% of the Federal Budget allocated for health services in the year 2001-2002 while education go allocation of a miserable 3%. This has been a consistent pattern for sev years now. The figure for education has been marginally increased to 5 in the 2004 budget. Compare this with Togo where health was alloc 5% while education got as much as 20% or Ghana with an allocatio 7% for health and 22% for education.

TABLE 12:

% allocation to

	Health	**Education**
Nigeria	1	3
Burundi	2	15
Togo	5	20
Benin R	6	31
Ghana	7	22

2 DECLINING IMMUNISATION COVERAGE

Another reason why our children are dying is that immunisa coverage has drastically declined over the years to such an extent that current levels are one of the lowest in the whole world. Table 13 sh that only 44% of our pregnant mothers are currently vaccinated aga tetanus and again, this figure is much lower than what obtains in m other parts of Africa. Similarly, Table 14 shows that the no of inf currently being immunized against the major childhood killer disease very low indeed. Note that we have not even started immunizing infants against Hepatitis B while Ghana has already attained 8 coverage.

TABLE13:

Immunisation coverage of pregnant women against tetanus(%)

Nigeria	44
Benin	66
Ghana	73
Egypt	70
Rwanda	82

TABLE 14:% of 1 year olds immunised in 2002 against;

	TB	DPT	POLIO	MEASLES	HEPATITIS
Nigeria	54	26	25	40	-
Ghana	91	80	80	81	80
Benin R	94	79	72	78	15
Liberia	67	51	50	57	-

3. MALADMINISTRATION The third major factor responsible for the death of our children is maladministration. Is it not saddening to note that about 90% of those currently involved in the National Programme on Immunization are not paediatricians? Immunization has now been politicised with the first ladies at the forefront. The Paediatric Association of Nigeria (PAN) is not in any way represented, neither is the opinion of its members sought before any major policy decision concerning immunization is taken.

4. RELIGION

Religious sentiments have led to avoidable deaths on many occasions, and this cuts across the three main religions in Nigeria. It is well known that members of the Jehovah's Witness sect usually refuse blood transfusion for their children even when such children face imminent death. Some babies have become vegetables as a result of kernicterus following refusal of their parents to consent to exchange blood transfusion. Perilous times are here indeed and there are 'diverse miracles' and the indiscriminate use of 'anointing oil', leading to delay in presentation to hospitals. Controversy based purely on religious sentiments still surrounds the polio vaccine in Nigeria. This unnecessary

debate was triggered by the National President of the Supreme Coun for Sharia in Nigeria. The argument that the vaccine contains the H virus shows complete ignorance on the part of the anti inoculati campaigners. Perhaps they have forgotten that the virus cannot survi outside the human body for any length of time. At present, Nigeria is one only 5 countries in the world where the polio virus is still endemic a Nigeria accounted for half of all the 758 cases worldwide in the ye 2003, according to the WHO.

In the wake of the controversy, samples of the vaccine were sent South Africa(a predominantly Christian nation) for analysis, but furtl samples had to be sent to Indonesia , perhaps, to balance the religio equation. Meanwhile, the polio virus is having a field day and millions Naira are being spent unnecessarily. Our neighbours are also needless being endangered, since the polio virus needs neither passport nor visa cross our borders.

Fortunately , it appears that the case will now be finally laid to r in view of the results : The bone of contention is the amount of hormone called **oestradiol** in the vaccines. The analysis shows that t vaccine contains 0.25mcg of oestradiol per drop. That is, even if a chil given 2 drops of **OPV** every 3 months for 5 years (that is , a total of drops) he would have received only **10 mcg** of oestradiol. I repeat mcg. On the other hand, the **daily** intake of oestradiol from the mothe milk is about **30,000 to 100,000 mcg** and breast feeding might contin for anything from 12 to 24 months.

Kano State has now finally decided to import a fresh batch vaccines produced in Indonesia and Malaysia, both mainly Islan countries because the current vaccines "were adulterated as part o western plot to depopulate the region".

On what premise was the argument that the vaccines contain an fertility drugs and the HIV virus based in the first instance? Where are t victims of previous immunizations? Let them show us all the patients t have earlier been rendered HIV positive by the vaccines. Now, let us t the sake of argument agree that the polio vaccine indeed contains an fertility drugs. may I ask this question: What is wrong with populati control so that the lives of those already born can be improved?

PART 2

NOW, WHERE DO WE GO FROM HERE, WHAT IS THE WAY OUT?

A. GENERAL:

1. Honest leadership and transparency in Government is desirable, so that scarce resources can be evenly and meaningfully distributed This is fundamental if we are to make meaningful progress.

2. Governments at all levels must avoid misplacing priorities and invest wisely. Many projects and programmes are not designed to solve the problem of unemployment. A case in point is the Heineken-NBL brewery in Enugu State commissioned last year. It is said to be the most modern in the world and can produce 2000 bottles of beer per minute. It was built at a cost of $300 million i.e. N42 billion. The plant is so automated that it hardly needs human beings to function. Of what benefit is this to the starving millions of Nigerians?

   In what way will the purchase of a 10 billion Naira jet benefit the teeming number of starving children in Nigeria? Or how will the purchase of bullet-proof cars eliminate ignorance? Governments must embark on agricultural investments such as processing of perishable items like tomatoes, onion, pepper and fruits to guarantee year round availability and stable prices.

   Other areas yearning for attention include investment in dairy products, fish farming and animal husbandry. These are veritable foreign exchange earners. If we cannot earn foreign exchange from these, we will at least feed ourselves and conserve the foreign exchange currently being used in importing these products. We have no excuse for not being self-sufficient in food production.

B. WAY OUT OF THE CURRENT CRISIS

1. HEALTH:

(1) Immunization: The key to the reduction of childhood morbidity and mortality is to strengthen immunization coverage.

Marginalisation of key professionals in the implementation of t
Current NPI must be stopped forthwith. Immunization is serio
business and not the duties of first ladies. The current circus sh
must end. The Paediatrics Association of Nigeria (PAN) should
allowed to play an active role in policy formulation a
execution. The recommendations of PAN with regard to t
content and schedule of immunization should be adopted. Th
is. Haemophilus influenza type b and MMR vaccines should
included in our immunization schedule to guarantee protecti
against mumps, rubella, and infections caused by haemophil
influenza.

The procurement and distribution of vaccines must
decentralised to guarantee availability. Local production must
encouraged.

Recently, a new strain of measles virus was isolated in at least t
different parts of Nigeria. This will explain the current epiden
as well as the severity of the illness. A significant number
previously immunized children were affected in the last epidem
While a break in the cold chain may be blamed partly for the lat
observation, it is quite likely that the measles vaccine currently
use does not confer adequate protection against these new strains
the virus because of antigenic differences. Further research
therefore necessary to monitor the strains prevalent in t
environment. This should be done for all the vaccine-preventab
diseases. Institutions of learning should be involved in t
implementation of the NPI. For instance, it may be desirable
parents to produce a **certificate of immunization** as evidence
satisfactory completion of immunization at school entry. Su
Certificates should however not be used to prevent unimmuniz
children from attending schools. Rather, it will provide
opportunity for those who have either missed or have not had t
opportunity of being vaccinated to receive them.

2. We must look inwards and develop appropriate technology a
devise local solutions to our problems where feasible. For instan

at the Olabisi Onabanjo University Teaching Hospital, Olanrewaju , Olusanya and Oluwole studied the efficacy of fluids derived from locally available foodstuffs in the rehydration of children with mild to moderate degrees of dehdration following episodes of diarrhoea. The study was necessitated by the observation that not all mothers could afford to buy the ORS satchets and not all households had sugar at home at all times. We found that addition of salt to either pap or gari water was effective in correcting dehydration. Thus, we came up with the **pap-salt** and **manioc-salt** solutions. These two solutions are effective in the management of mild to moderate degrees of dehydration and have the additional advantages of being readily available and culturally acceptable.

3. **MALARIA CONTROL:**

As a response to the antimalaria drug resistance situation, the WHO recommends that treatment policies for falciparum malaria in all countries experiencing resistance to monotherapies should be combination therapies, preferably those containing an artemisinin derivative (artemisinin based combination therapy or ACT).The following are the therapeutic options currently recommended by the WHO for antimalarial treatment in Africa:

A. **Artemether - Lumefantrine**
This combination kills gametocytes, thereby decreasing transmission.
B. **Artesunate - amodiaquine**
C. **Artesunate- SP(Sulphadoxine-pyrimethamine)**
D. **Amodiaquine - SP**
E. **Artesunate-mefloquine.**

This current WHO policy on antimalarial treatment is based on the recommendations and conclusions of two consultations of International experts on malaria chemotherapy held in November 2000 and April 2001.

Nigeria is one of the very few countries in Africa that still have Chloroquine as the first line drug for the treatment of malaria. This is

despite the evidence of local resistance figures ranging from 20-50%. is not uncommon to see children treated with chloroquine brought b after 48hours in coma from cerebral malaria or severely pale as a resul overwhelming haemolysis. This situation is unacceptable and the Natic policy MUST be changed in line with WHO recommendations NC Chloroquine has outlived its usefulness. It borders on professic negligence to treat an under 5 child with CQ monotherapy in the y 2004.

In 2002 the Global Fund to fight AIDS, Tuberculosis and Mal (GFATM) was established, and it has become one of the main Internatic funding mechanisms to support the implementation of highly effec interventions for the control of these three diseases in endemic develop countries.The GFATM has become the largest financial supporter Artemisinine Based Combination Therapy. A total of US $ 30 million been committed over 5 years for African countries for the purchase ACT's at cost price from NOVARTIS, the leading manufacturer artemisinine-based combination formulations. Many countries in Afi which originally requested funding for Chloroquine have already evaluated their drug policies towards the use of ACT's. Examples Senegal, Ghana, Mali, Chad, Kenya and the Gambia. Nigeria sho follow suit TODAY.

In addition to prompt recognition and treatment of clinical cas preventive measures need to be intensified. In this regard, lo production of insecticide-treated nets need to be encouraged significantly bring down the price. Intermittent presumptive treatmen pregnant mothers with SP needs to be intensified.

4. **FIGHT THE HIV SCOURGE:**

Over 5 million people are newly infected with HIV worldw annually. Painstakingly accrued gains in human development ha been rapidly eliminated in the hardest hit countries. When a motl becomes debilitated by AIDS, her children are more likely to m immunizations against childhood diseases, eat fewer and l nutritious meals and be taken out of school, especially if they girls, to assume domestic responsibilities. Controlling the spread HIV will ensure that more girls stay in school. In the absence o

vaccine, EDUCATION is society's best defence against HIV/AIDS. Better educated people have lower rates of infection. Educated young people are more likely to protect themselves and those who are in school spend less time in risky situations.

5. **CONTROL OF NON-COMMUNICABLE DISEASES:**

Nigeria has the largest number of sufferers of Sickle Cell Anaemia in the world. The frequency of the S gene in Nigeria is 25%. That is,1 out of every 4 Nigerians carries the **S gene**. The disease affects 2% of all newborn babies. Similarly, 1 out of every 4 Nigerian males suffers from another genetic disorder known as Glucose-6-phosphate dehydrogenase deficiency. None of these disorders is currently routinely screened for. Rather, we wait for the patients to present to us when they are in crisis.Routine neonatal screening as is currently practiced in countries with lower incidence of these diseases will ensure early diagnosis and better chances of survival. Treatment should be provided free of charge for children with sickle cell disease and all other forms of chronic illness, to reduce the financial burden on their parents.

6. **ESTABLISH PAEDIATRIC HOSPITALS:**

Specialized Paediatric Hospitals should be established in at least each of the 6 geopolitical zones. **A shift in political will toward improving paediatric, especially neonatal services is fundamental**. The present set-up has led to the marginalisation of children. At present it is difficult to carry out certain investigative and therapeutic procedures in paediatrics due to lack of appropriate components of available equipment. This is due to the fact that children are usually not considered when ordering these equipment. Examples abound: there are no suitable transducers for paediatric echocardiography in many of our paediatric units despite the availability of expensive echocardiography machines. Similarly, there are usually considerable delays in carrying out dialysis for children with kidney ailments for the same reasons. Establishment of centres specifically designated for the care of children will rectify this anomaly. This is the standard practice in other parts of the world e.g. Great Ormond Street Hospital for

Children, Royal Belfast Hospital for sick children in the U.K. the Hospital for Sick children in Toronto, Canada.

7. **NUTRITION:**

The government should provide at least 1 balanced meal per for every pupil in our public primary schools. After all, prisoners are fed free three times a day seven days a week. This reduce the incidence of stunting among our youths.

8. **EDUCATION:**

Making education free and compulsory is the keystone of national plan to eliminate gender disparity in education and achi Universal education. Faced with an economically driven cho between sending sons or daughters to school, poor families of send their sons.

Removing fees or offering financial support to families w daughters in school, as well as explaining the advantages sending girls to school, can make a real difference.

The government should consider the imposition of sanctions 'anti-school' parents. We can take a cue from a local counci Britain where the recent imposition of a 100 pound fine has le a significant reduction in truancy.

Budgetary allocation to education must be significantly increas The sum of 94 billion Naira set aside for education in the 20 budget, which represents 5.6% of the total budget still falls short of the 26% recommended by UNESCO.

Education systems and programmes must

1. be efficiently managed and equitably financed.
2. assure that all students graduate with the essential ski knowledge and values to succeed.
3. Assure gender equity in access and quality

9. **INTER-ETHNIC CLASHES**

We should take urgent steps to prevent and halt inter-ethnic clas in various parts of the country, particularly in the Niger Delta a the middle belt regions. According to the **Human Rights Wat** 'all wars are wars against children'.

10. **DEVELOP SOCIAL INFRASTRUCTURE**

Provision of regular water and power supply will prevent the situation where life-saving equipment lie idle simply because of lack of electricity or water. It is not unusual for premature babies in the neonatal units to be hypothermic in the midst of idle incubators. This situation is unacceptable.

11. ENCOURAGE PRIVATE SECTOR PARTICIPATION

Finally, private sector involvement through NGO's and foundations to fund specific projects, similar to the Rockefeller foundation, will go a long way in complementing efforts of the Government. Examples

(a) Eyitayo Fawehinmi foundation by the Fawehinmi Furniture Factory (FFF) which donates N1million annually to 3 children's wards at LUTH and to 2 other institutions in the country.

(b) National Paediatric Centre at Ijebu-Ode and the Otunba Tunwase children's emergency ward at the U.C.H. Ibadan, donated by Otunba Subomi Balogun.

(c) Manna Foundation in Delta State which provides Health Information and Education Systems. Government should encourage more of such foundations as well as coordinate their activities, for maximal benefit to society as a whole.

CONCLUDING REMARKS

I will like to end this lecture by referring to the book of Ezekiel In Chapter 33, verses 2-9 it is written: "If a man appointed as a watchman over a city sees the sword coming upon the land and blows the trumpet to warn the people, then whoever hears the sound of the trumpet and does not take warning, if the sword comes and takes him away, his blood shall be on his own head.

Verse 6... "But if the watchman sees the sword coming and does not blow the trumpet and the people are not warned, and the sword comes and takes any person from among them, he is taken away in his iniquity; but his blood I will require at the watchman's hand" I, as one of the trustees of these children, by virtue of my being a paediatrician,

regard myself as a watchman and so, Mr Vice-Chancellor, ladies [illegible] gentlemen, we have an endangered generation of Nigerian children [illegible] this inaugural lecture has been an alarm signal by a watchman to [illegible] us all up to our collective responsibility. That is the only way in which [illegible] can avert a looming disaster.

Finally, let us ponder on the words of the Secretary General [illegible] United Nations in his preface to the 2000 edition of UNICEF's state [illegible] world's children:

"There is no trust more sacred than the one the world [illegible] with children. There is no duty more important than ensuring [illegible] their rights are respected, that their welfare is protected, that [illegible] lives are free from fear and want and that they grow up in p[illegible] KOFI ANNAN 2000.

ACKNOWLEDGMENT

I give glory to God Almighty for sparing my life to attain th[illegible] and stage of my career. From the humblest of beginnings, I am [illegible] grateful to Him to be standing here amongst distinguished guests an[illegible] cream of society.

To my late parents, especially my late mother. I say a big thank y[illegible] recognize the presence of my brothers, sisters, and in-laws here, esp[illegible] those that have traveled all the way from Akure and Ile-Ife to gr[illegible] occasion. I wish you all safe journey back to your various destination[illegible]

The contribution of my former teachers at the Government C[illegible] Ibadan and the University of Ibadan is acknowledged. I wish to men[illegible] particular Mr. M.F. Komolafe who was my mentor and who paid m[illegible] term fees at the U.I. until the bureaucracy surrounding my scholarship [illegible] resolved.

Prof. Esan of the UCH Ibadan was instrumental to my eve[illegible] choice of medicine as a career. I had been admitted to study Petro[illegible] Engineering at Ibadan but he persuaded me to study medicine b[illegible] resumption of classes. Mrs. Esan personally took me to the admis[illegible] office at Ibadan where a fresh letter was typed and issued to me [illegible] presented me with a dissecting set in Anatomy. I thank you both.

I am indebted to Dr. A. D. Adekile, formerly of the Department of Paediatrics, OAU, Ile-Ife, whom I regard as one of my mentors.

I am grateful to Prof. Halliday and Prof Garth McClure of the Royal Hospital for Sick Children in Belfast for adding an international flavour to my post-graduate training in paediatrics.

The presence of my colleagues from other medical schools in Ibadan, Ife, Lagos, Ilorin and Benin is hereby acknowledged. I say thank you all. I thank the entire members of staff of OOUTH for their support all these years . My thanks also go to the current Chief Medical Director and the Chairman , MAC of OOUTH for their support . I appreciate the support of members of staff of Paediatrics Department, OOUTH. I acknowledge the contribution of Dr. (Mrs.) Fetuga, Dr. (Mrs.) Adekanmbi and Dr (Mrs) Kehinde all of whom helped in the collation of data for this lecture. The support of members of staff of the medical records Department of the Olabisi Onabanjo University Teaching Hospital is also acknowledged. I thank the Provost and all the teaching and non-teaching staff of the Obafemi Awolowo College of Health Sciences for their support and encouragement. I am particularly grateful to Dr Familoni of the Department of Medicine and Mr S. O. Oyebisi for their special contribution toward the success of this lecture.

I thank past and present students of OACHS for appreciating the little efforts I have contributed towards their training. I thank all the old boys of the Government College, Ibadan, especially members of the 1968 set as well as the entire members of the Ijebu branch. The support of Novartis Pharmaceuticals of Switzerland is hereby acknowledged.

I want to recognize the presence of my children. Ayobami is a 200 Level medical student here. Timilehin is the baby of the house and he is here as well. Temitope, the eldest child, is unavoidably absent. Ayokunle, the third boy, is unavoidably absent as well. I say thank you to all of them for bringing joy into my life.

I thank all the distinguished guests who have come from far and near to grace this occasion.

I thank my best friend and special adviser, Mrs Christianah Dolapo Olanrewaju, for her support all these years. I would not have been at Olabisi Onabanjo University today if not for her advice and

encouragement. When I came for interview in 1986 this place was in s[illegible] a sorry state that the facilities could not be compared [illegible] Government College Ibadan. One of us was so [illegible] before the interview commenced. I remember [illegible] collect my letter of appointment, I was reluctant [illegible] congratulated me for my appointment. As far as I [illegible] have nothing to do with the then 'jungle'. My wife [illegible] and was able to convince me that it was worth [illegible] there for me all these years.

Finally, I congratulate the present and [illegible] all of whom have contributed immensely toward the [illegible] University.

Mr. Vice-Chancellor Sir,
Principal officers of the University,
Provosts of Colleges and the Postgraduate School,
Deans of Faculties,
Colleagues, friends from sister Universities,
Distinguished Ladies and Gentlemen,
Students of OACHS and other students here present,
Thank you all for your presence and attention.
May God bless you all. AMEN

REFERENCES

1 The Holy Bible-King James Version. Ezekiel 33: 2-9, Mathew 19:13-14.

2. Adeyokunnu A. O, Taiwo and Antia A. U. Childhood mortality among 22,255 consecutive admission in the University College Hospital Ibadan. Nig J Paediatr 1980; 1: 7-15.

3. Akang EEU, Asinobi: A. O, Fatunde O. J et al. Childhood mortality in Ibadan: an autopsy study. Nig. J. Paediat 1992; 19; 30 36.

4. Olowu A. O. and Olanrewaju D. M. Discharge against medical advice Ogun State University Teaching Hospital Experience. J. of Comm. Med. & Pry. Care 1990; 3: 57 - 65.

5. O. F. Njokanma, D. M. Olanrewaju and Olowu A. O. Pyogenic meningitis in Nigerian Neonates Nig. Med. J 1994; 27: 38 - 40

6. International Artemisinine Study Group. Artesunate combinations for the treatment of malaria: a meta analysis. The Lancet 2004; 363: 9 17.

7. WHO (2001) Antimalarial Drug combination Therapy, Report of a WHO Technical Consultation. WHO/CDS/RBM/2001.35

8. Fetuga M. B. Child labour among school children in Sagamu local Government Area of Ogun State. Dissertation submitted to the West African College of Physicians in part-fulfilment of the requirements of the Part 2 Final Fellowship Examination of the College. April 2001.

9. Olanrewaju D. M. and Olowu A. O. The continuing challenge of Neonatal tetanus in Nigeria. A 5-year experience at the Ogun

State University Teaching Hospital Orient J med 1993; 5: 72 7

10. Olanrewaju D. M. Complications of sickle cell anaemia Nig. Pract. 1988; 16: 107 110.

11. Olowu A. O, Ajayi F. O, Oyenuga S. O. and Olanrewaju D. M. of WHO's 25 mg /kg total chloroquine dose regimen in treatment of falciparum malaria infection in childhood Ori med. 1992; 4: 89 92.

12. Njokanma O. F. and Olanrewaju D. M. A study of neonatal deaths at the Ogun State University Tea Hospital, Sagamu, Nigeria. J trop med and Hyg 1994; 97: 1 6

13. Olanrewaju D. M. Sickle cell anaemia: The need for interv Afr. Health J 1992; 14: 48-49

14. Olanrewaju D. M., Olusanya O. and Laditan A. O. Acute bac menigitis in children. W-Afr J Med 1991; 10: 405-411

15. Olanrewaju D. M., Olusanya O. and Oluwole F. A. Clinical tr pap salt solution in the treatment of Dehydrated children Paed. 1994: 40: 360 364

16 UNICEF. Official summary - The state of the world's children

17. Children's and Women's Rights in Nigeria: A wake up Situation assessment and Analysis. UNICEF 2001

18. Ogunfowora O. B. and Olanrewaju D. M. Sickle cell crises School Absence Nig. Med. Pract. 2003; 43: 58 60

19. Ogunfowora O.B., Akenzua A. I., Olanrewaju D. M., Akesod School performance of children and adolescents with sickle anaemia. Nig J Paediatr 1995; 22: 18-22

20. Convention on the Rights of the child. United Nations. New York 1989:1-16.
21. Salaazar M. C., Glasnovich W. A. Better schools; less child work. Child work and education in Brazil, Columbia, Guatemala and Peru. The United Nations Convention on the Rights of the child. Innocenti Essays vii UNICEF 1996.
22. World of work : The magazine of the ILO. February 1998.
23. Olusanya O. , Olanrewaju D. M. and Oluwole F. A. Studies on the effectiveness, safety and acceptability of fluids derived from local foodstuffs in the management of dehydration caused by diarrhoea in Children. J Trop Paed 1994; 40:360-364.