

**DOWN THE MIRY CLAY AVENUE:
ENGAGING THE 3/5 AUXILIARY
GEAR**

*An Inaugural Lecture delivered
at the University of Ibadan*

on Thursday, 3 April, 2008

by

OLADIMEJI OLADEPO

*Professor of Health Promotion and Education
Faculty of Public Health
University of Ibadan, Nigeria.*

UNIVERSITY OF IBADAN

Ibadan University Press
Publishing House
University of Ibadan
Ibadan, Nigeria.

© University of Ibadan 2008
Ibadan, Nigeria

First Published 2008

All Rights Reserved

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, photocopying, recording or otherwise, without permission in writing from the author.

ISBN: 978 - 121 - 437 - 6
978 - 978 - 121 - 437 - 0

Printed by: Ibadan University Printery

The Vice-Chancellor, Deputy Vice-Chancellor (Administration), Deputy Vice-Chancellor (Academic), Registrar, Librarian, Provost of the College of Medicine, Dean of the Faculty of Public Health, Dean of the Postgraduate School, Deans of other Faculties and of Students, Distinguished Ladies and Gentlemen.

Preamble

I feel greatly honoured that I have been given the privilege to deliver this inaugural lecture on behalf of the Faculty of Public Health in the College of Medicine, University of Ibadan which has just turned six. I am the fifth professor to give an inaugural lecture in the Faculty of Public Health and the second in the Department of Health Promotion and Education.

My inability to accept the earlier invitation to present the inaugural lecture by the current Dean of the Faculty was not unconnected with my very busy schedule in the recent past. However, I changed my mind when I realized that my workload would not cease to increase; the probability of downsizing it was little, while the probability of not having the time to present an inaugural was increasing.

Mr. Vice-Chancellor, kindly permit me to start today's lecture titled "Down the Miry Clay Avenue: Engaging the 3 by 5 Auxiliary Gear" with a 'prologue' to illuminate its path. It is a reprocessed story derived from that which Professor Adetokunbo Lucas, a renowned public health physician, an international icon, and my mentor is fond of telling.

Prologue

On a bright Monday morning, an elegantly dressed physician in a white coat set off for the day's job at Lulu Tertiary Hospital. Five minutes into the journey, a tremendous downpour obstructed his visibility. Undeterred, he moved on, reminding himself that this unusual pattern of rainfall in the past two weeks was an outcome of a deranged ecosystem brought about by the greed and senseless destruction of the

your rescue effort with all your energy drained, would only lead to your own death and the deaths of many others that will continue to get drowned in this river. Look over there; another batch of 20 is being swept down into the river. Maybe it would be more rewarding if you could go up around the hill through which the river passes and find out what is pushing the people inside the river". The old man held his hand and, together they moved to the hill side and alas, found that the people falling into the river were trying to pass through the only road around the hill, which, now slippery, made them slip and fall into the river below. The old man said, "Let's cut some tree branches, stick their narrow ends into the ground around the section of the slippery road, creating supportive barriers at both sides for the people to hold on to". Mobilizing the swarms of people eager to cross, they created a twin barricade with additional scrapping of the muddy thin layer within an hour. The mammoth crowd then crossed one after the other. None of them slipped again into the river. The doctor then looked at the old man in disbelief and said, "I'm sorry if I reacted angrily to your remarks about me. Now I realize that I have always prided myself on dealing with problems after they occur rather than prevent them from occurring. I need a re-think of my actions henceforth". The old man heaved and said, "The hallmark of a civilized person is to re-examine his or her most cherished beliefs". This story partly forms the cornerstone of today's lecture.

Whether to focus on health rather than illness has been a consistent struggle among health professionals with different orientations. Some health workers seem to derive joy from seeing their clinics overcrowded with patients, which is sometimes perceived as a mark of professional popularity or diligence. Others however, see such as a failure of the health systems which consistently place undue emphasis on curative services as opposed to the more appropriate preventive services.

The understanding that health is not synonymous with the absence of disease or infirmity, led the World Health

Organization (WHO) to define health as a state of complete physical, mental, and social well-being. This definition has been broadened to recognize and incorporate the complex interaction of factors which operate at the individual and population levels, including the social, economic, and cultural environments. Therefore, within this robust definition of health which incorporates all the determinants of health and which guides the practice of health promotion, health is a capacity or resource, rather than a mere state. It is this resource that makes people pursue their goals, acquire skills and education, and grow within the spectrum of a range of social, economic and physical environmental factors that contribute to health (Health Canada, 1998). I do not need to remind the audience that a healthier population makes more productive contributions to the overall societal development, requires less support in form of health care and social benefits, and is better able to support and sustain itself over the long term. I will use a few indices (given the time constraint) to illustrate the health status of Nigerians—the largest population group in Africa.

Nigeria, which can be viewed conceptually as a truck carrying 140 million passengers in 36½ compartments (states) on 774 wheels (local government areas) has been on the road since 1960 (independence). A trend analysis of the occupants' health status is a useful thermometric gauge of the engine's performance as the vehicle cruises along the gold plated boulevard. Should the engine overheat and jerk violently, the driver in an attempt to keep the truck moving might attempt a swerve, which could cause a detour into the steep miry avenue. In order to accurately gauge the engines' performance, I have decided to conduct a time trend analysis. In addition, comparisons are made with some countries in Africa, based on the following considerations: First, almost all the countries selected are developing economies with their own peculiar health, social, and economic problems. Second, the countries are regarded as 'giants' in Africa in terms of relative political, economic, and social considerations; and

third, many of them share a similar colonial history with Nigeria.

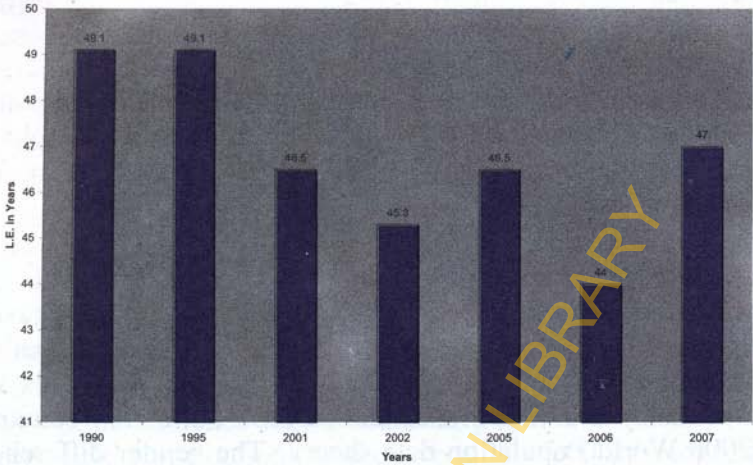
Health Status at a Glance

As mentioned earlier, there are many determinants of health. Mr. Vice-Chancellor Sir, let us watch together the unfolding picture of the health status of the people of Nigeria using the following snapshots.

i. Life Expectancy

In Nigeria, the life expectancy (LE) has been on an amazing zigzag slope in the past 18 years (Fig. 1). The compelling data make it hardly a surprise that in 2005, Nigeria's life expectancy rate at birth was ranked 155th out of 177 countries (2006 World Population data sheet). The gender differences in life expectancy at birth in Nigeria in 2007, when compared with some other countries in Africa shows that with the exception of Lesotho and Botswana, males and females in other countries have higher life expectancy probabilities than Nigeria (Fig. 2).

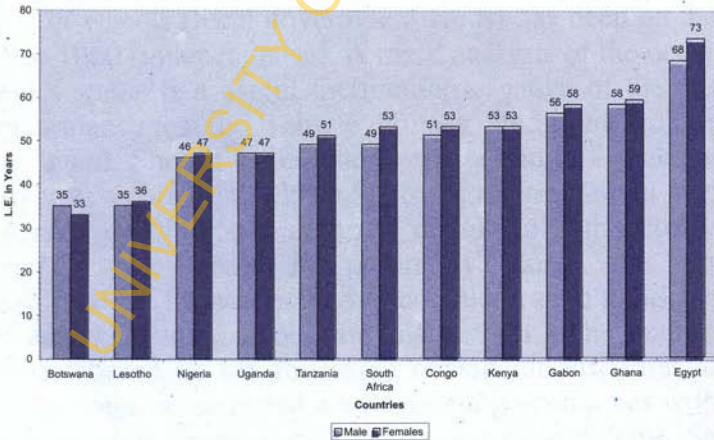
Fig. 1: Life Expectancy in Nigeria (1990 - 2007)



Sources: 2007 World Population Data Sheet, Population Reference Bureau
www.prb.org

<http://ldevdata.worldbank.org/ide/IDGProfile.asp?CCODE=NGA&CNP>

Fig. 2: Life Expectancy by Gender



Source: 2007 World Population Data Sheet

Since life expectancy is largely influenced by reduction in communicable and non-communicable diseases, it is instructive to focus on the infant and under-five, as well as maternal mortality rates as sensitive indicators of life expectancy. Added to this will be one or two examples of communicable and non-communicable diseases.

ii. Infant Mortality Rates (IMR)

The death rate among children below the age of one year has consistently remained high in Nigeria. The high Infant Mortality Rate (IMR) of 115 deaths per 1000 live births recorded in 1990 has not changed substantially 18 years after. The slight reduction in the rate—100 per 1,000 live births is hardly worth rolling out the drums for (Fig. 3a).

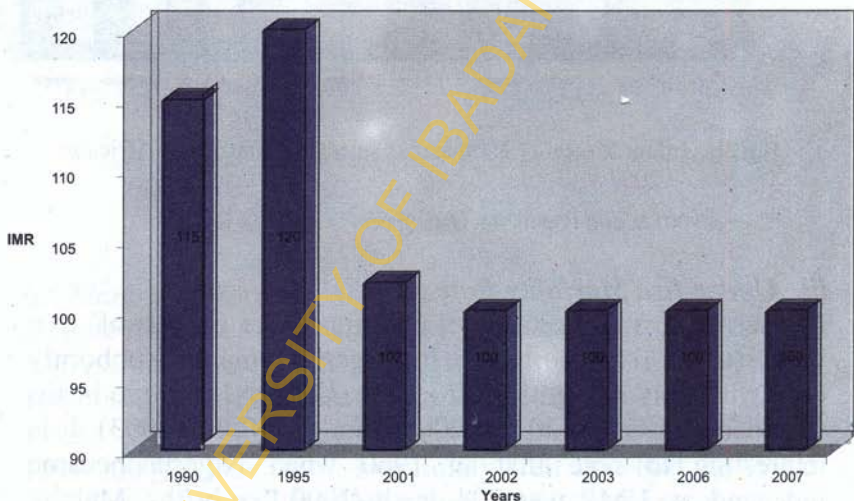


Fig. 3a: Infant Mortality Rate (IMR), Nigeria

Sources: World Developing Indicator Database, 2004; NDHS 2003)
[http://ldevdata.worldbank.org/idg/IDGProfile.asp?CCODE=NGA
&CNP](http://ldevdata.worldbank.org/idg/IDGProfile.asp?CCODE=NGA&CNP)

The 2007 infant mortality rate of 100 deaths per 1000 live births in Nigeria, compares disproportionately with selected

countries in West, East, North, and South Africa with much lower rates (Fig. 3b).

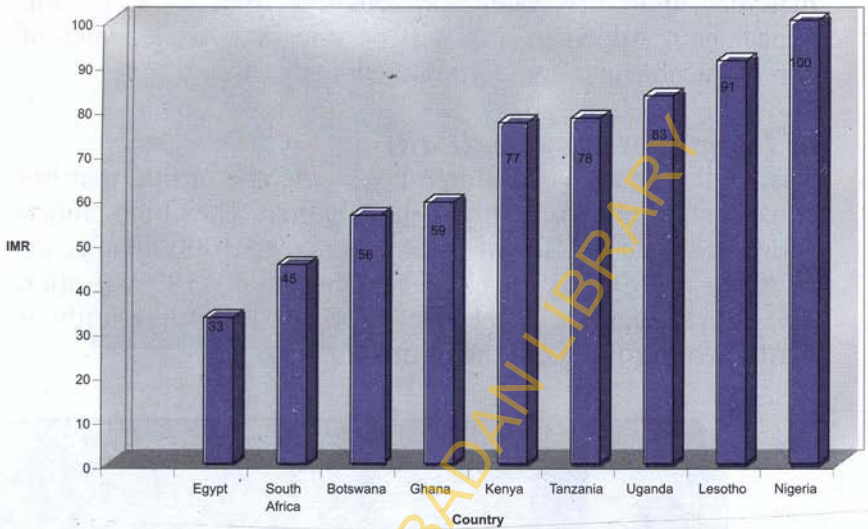


Fig 3b: Infant Mortality Rate across selected countries in Africa in 2007

Source: 2007 World Population Data Sheet

iii. Under-five Mortality Rate (UMR)

Furthermore, the mortality of children under the age of five years (under-five mortality) in Nigeria remains stubbornly high with only a slight dip from the 235 per 1000 live births recorded in 1990 to 201 in 2003 (Fig. 4) (NDHS 2003). It is interesting to note that in 1960 when Nigeria became independent UMR was 204 deaths/1000 live births. Malaria is a leading cause of under-five mortality (30%) (FMOH, 2000). Clearly, we are not winning the battle against childhood-malaria given the evidence that 26% of deaths of children under the age of five years, attributed to malaria in 2001 (Salako *et al* 2001) is hardly different from the 27% reported over 30 years ago in 1981 (Ola-Fadunsi *et al.*,1981).

Furthermore, the immunization rate in children has nosedived from 54% in 1990 to 27% in 2003 (NDHS, 2003).

Fig. 4: Under-five Mortality Rate (UMR) per 1000 live birth (1990-2005)

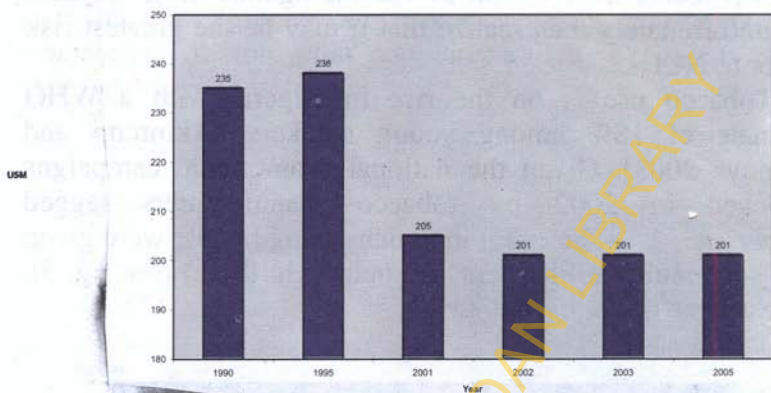


Fig. 4: Under-five Mortality Rate (UMR) per 1000 live birth (1990 – 2005)

Sources: <http://devdata.worldbank.org/idg/IDGProfile.asp?CCODE=NGA&CNP>
2007 World Population Data Sheet

iv. Maternal Mortality

Despite the dearth of Data on maternal mortality rate in Nigeria, the rate provided for 1999 and 2000 was 1000 per 100,000 live births respectively (World Health Report, WHO, 1999 & World Development Report, World Bank, 1999/2000). This rate marginally fell to 800 in 2001 (<http://devdata.worldbank>) but they are highly disturbing.

v. Non-communicable Diseases

The non-communicable diseases (NCDs) are emerging as new health challenges but they are not given enough attention in Nigeria. Heart diseases (cardiovascular diseases—CVDs) account for one-tenth of all deaths (Akinboye *et al.* 2000). Hypertension has emerged as the most important risk factor for heart diseases (CVDs), affecting more than 11% of the

The prevalence of traffic accidents including the total casualty (number killed and number injured) remain very high. The total number of accidents and total casualty doubled between 1960 and 1980 (Fig. 6) with a high probability of under-reporting, as is the case with officially published statistics. I postulate a four-fold increase in total casualties in light of our newest casualty generators—the commercial motorcyclist popularly called ‘okada’ in many parts of Nigeria.

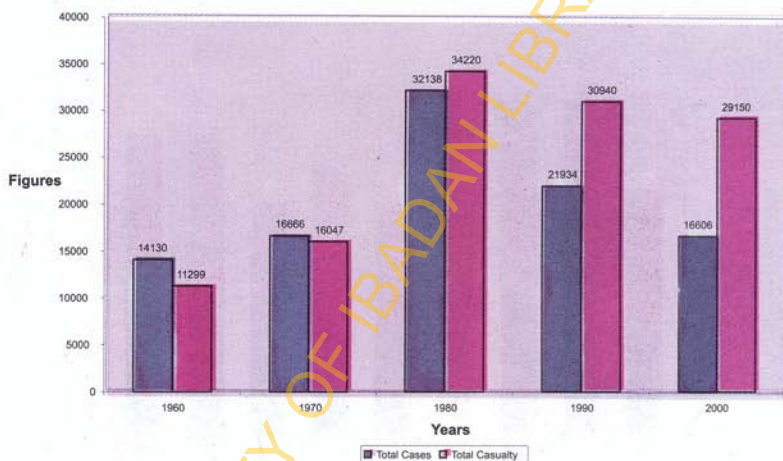


Fig. 6: Reported road traffic crashes trends In Nigeria (1960 - 2000)

Source: Nigeria Police/Federal Road Safety Commission

Overall, communicable and non-communicable diseases account for 72% and 21% of deaths respectively in Nigeria (NDHS 2003). Coupled with the enormous challenge posed by HIV/AIDS, the truck’s population depletion should be a constant worry to God, the creator of these lives.

Determinants of Health

These relate to proximal factors that affect individual and/ or community health.

i. Literacy

Education has been linked with improved health literacy which in turn positively affects peoples' health status. Women education has been associated with child survival and health of their children (Lucas, 2008). The adult literacy rate between 1995 and 2005 averaged 69.1 in Nigeria which is lower than 71.4% in Egypt; 73.6% in Kenya; 82.2% in Botswana; 82.5% in South Africa and 84.7% in Congo. Furthermore, a comparison of primary school enrolment in igeria in 1991 and 2005 with those in other selected countries indicates a lower position (Fig. 7).

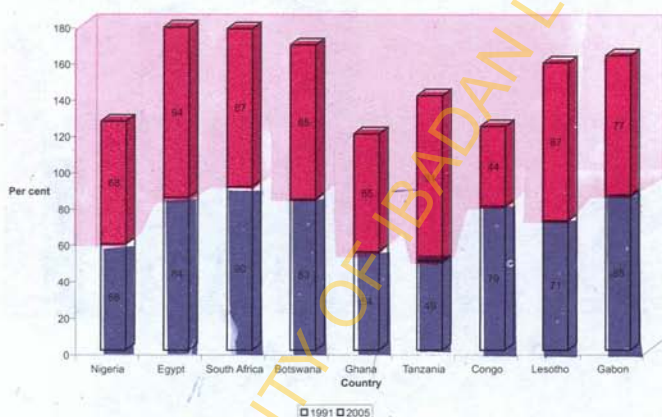


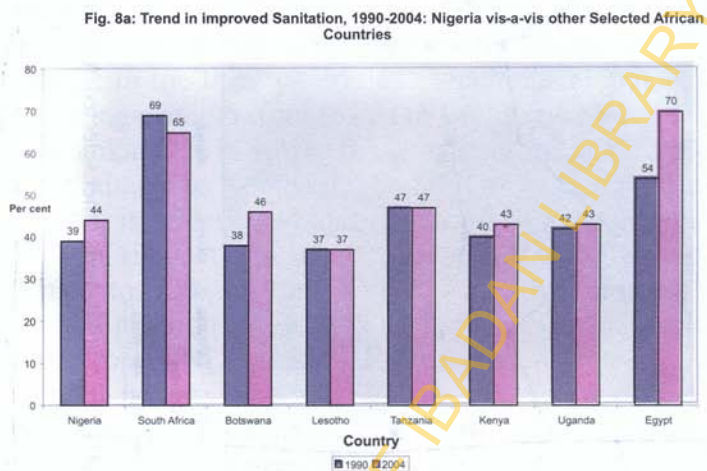
Fig 7: Net Primary Enrolment Rate across selected African countries (1991 & 2005)

Source: 2007 World Population Data Sheet

ii. Environmental Factors Water, Sanitation, and Nutritional Status

Access to portable water and good sanitation significantly affect the health of a population. In Nigeria, the proportion of the population with access to improved water supply has declined from 49% in 1990 to 48% in 2004. Although 39% of the population had access to improved sanitation in 1990, this

only marginally increased to 44% in 2004. Comparison with selected African countries in respect to urban-rural dichotomy in access to improved sanitation in 2004 shows that Nigeria is among the least positioned (Figs. 8a & 8b) (NPC, 2003 & NDHS, 2003).



Source: 2006 World Population Data Sheet

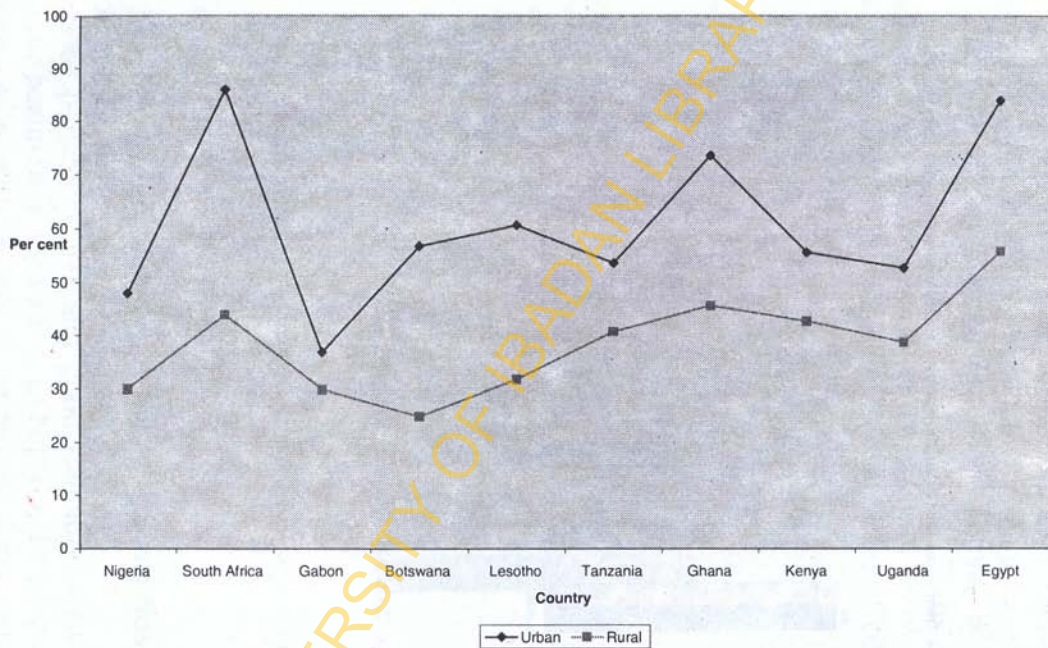


Fig 8b: Access to improved sanitation, 2004: Nigeria vis-à-vis other selected African countries
 Source: 2006 World Population Data Sheet

Undernutrition is increasing. According to NDHS 2003, 29% of children under the age of five years in Nigeria were underweight, 9% were wasted and 43% stunted. This was also confirmed by Nigerian Food Composition and Nutrition Survey (2003).

iii. Poverty

According to Tazoacha Francis (2005), “poverty is the oldest and most resistant virus that brings about a devastating disease in the third world called underdevelopment. Its rate of killing cannot be compared to any disease from the genesis of mankind. It is worse than malaria and HIV/AIDS which are claimed to be the highest killer diseases”. Poverty in Nigeria is widespread and increasing. From an incidence of 27% in 1980, it has more than doubled to 56% in 1996, and tripled to 70% in 1999 (NPC, 2004) in spite of Nigeria’s exalted position as the 6th oil producing nation in the world. Data from UNDP report of 2007 ranked Nigeria 80th in the human poverty index (Fig. 9) in comparison to lower positions of selected African countries. Hence, Nigeria can be said to be a giant nation in poverty. As noted in the National Health Promotion Policy, 2007, “Poverty is keeping more and more people in poor health, just as the poor health of an increasing number of Nigerians is retaining them in poverty”.

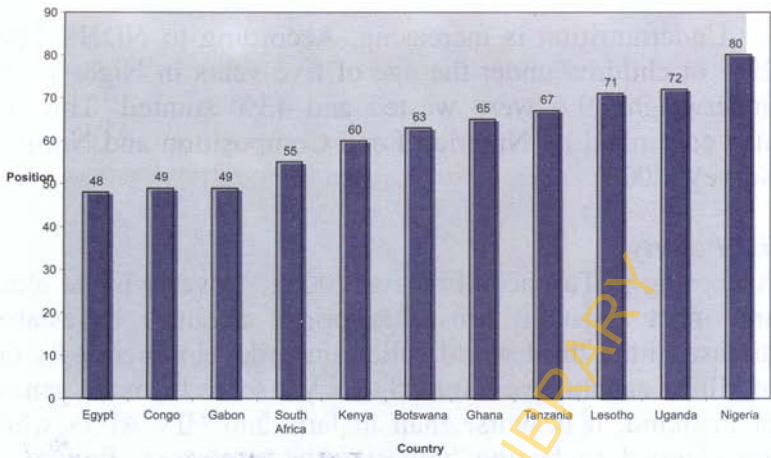


Fig 9: Poverty index across selected African countries in 2007

Source: Human Development Report 2007/2008

iv. Some other Pre-requisites for Health

According to the Ottawa Charter, the prerequisites for health include peace, security, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice, and equity. Improvement in health requires a secure foundation in these other basic prerequisites (Ottawa, 1986). However, these prerequisites are far from being achieved in Nigeria.

Health System Performance

The Nigerian health system has been performing dismally over the years. Professor Adetokunbo Lucas, aptly summed it up in one of the Nigerian newspapers thus; "The Nigerian health system is sick, very sick, and in urgent need of intensive care; it is blind, lacking vision of its goals and strategies; it is deaf, failing to respond to cries of the sick and dying, and it is impotent, seemingly incapable of doing things that neighbouring states have mastered". It is not surprising but still depressing news that Nigerian healthcare system was ranked 187th among the 191 UN member states by the World

Health Organization in Year 2000 as compared with 119th for Senegal and 132nd for Ghana. Fuelled by centrally determined health priorities, weak regulatory mechanism, inefficiency, and weak service delivery, the national health system is still unable to deliver a minimum package of quality healthcare (FMOH, 2004). This is further worsened by management mechanisms characterized by lack of teamwork, as health professionals engage in leadership power games and remain imprisoned in their individual disciplinary 'silos'.

Public Health Financing

The Nigerian health system is insufficiently financed. A snapshot of public sector spending indicates that Nigeria has one of the lowest national health budgets in Africa, spending approximately 4 US dollars per capita on health as compared with 14 US dollars which is the global minimum recommended by WHO for developing countries (FMOH, 2004). According to the World Bank in 2000, Nigeria's public financing of the social services at 0.3% of GNP, remains lower in real per capita terms compared with the late 1970s and early 1980s. In 2004, Nigeria allocated only 1.4% of its public expenditure on health as compared with 3.2% in Mali, 3.6% in Liberia, 4.3% in Rwanda, and 9.6% in Malawi (Fig. 10).

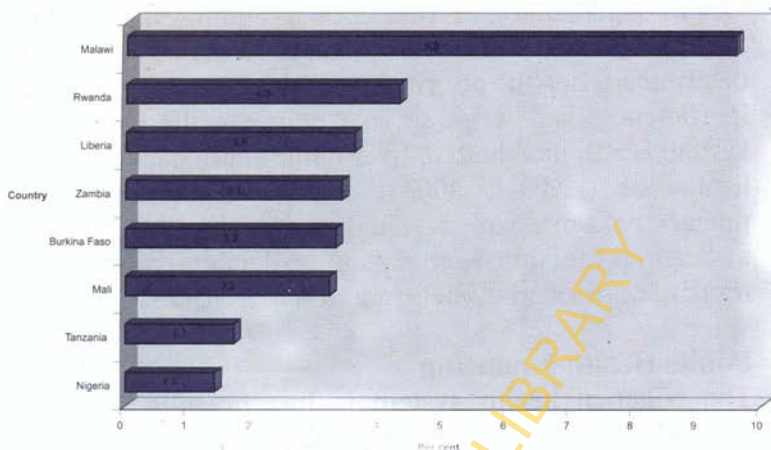


Fig 10: Comparison of public expenditure on health, 2004

Source: Human Development Report 2007/2008

Adeniyi, Soyibo, and Oladepo in a study conducted for the World Bank in 2003 showed that poor accountability and poor structures at government health facility levels have led to poor outcomes of any given level of resources, worsened by corruption and systematic leakages of budgeted allocations and resources before reaching the facility levels. These are consistent stressors to an already overheated engine of the 744-wheel vehicle.

Consolidated Index of the Health Status and its Determinants

The Human Development Index (HDI) trend provides an overall composite picture regarding the health and life chances of Nigerians in relation to their socio-economic development. Nigeria's HDI is lower compared with a country like Madagascar with a lower level of Gross Domestic Product (GDP) per capita (Fig. 11a). A comparison with other sub-Saharan African countries, and those in Asia, and the Organization for Economic Cooperation and Development (OECD), shows Nigeria at the lowest ebb (Fig.11b).

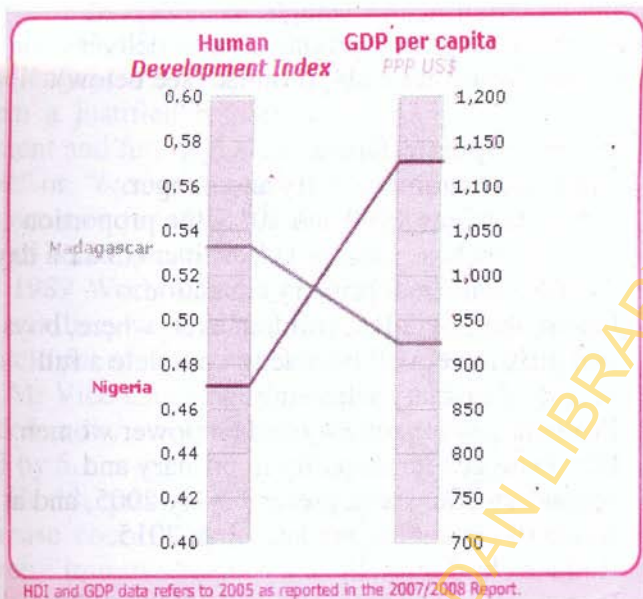
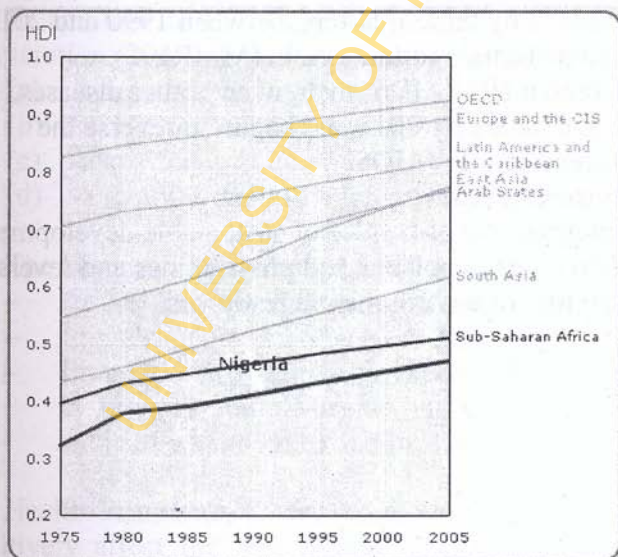


Fig 11a: Human Development Index and GDP per capita comparisons: Nigeria and Madagascar



Source: Indicator Table 2 - HDR 2007/2008

Fig 11b: Human Development Index: Nigeria compared with other parts of the world.

Thus, the Nigerian health vehicle has swerved down the miry clay avenue and compromises the delivery of the Millennium Development Goals' promise (see below).

Millennium Development Goals

MDG 1: Eradicate extreme poverty and hunger.

Target: Halve, between 1990 and 2015, the proportion of people whose income is less than US \$1 a day.

MDG 2: Achieve universal primary education.

Target: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

MDG 3: Promote gender equality and empower women.

Target: Eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels of education, not later than 2015.

MDG 4: Reduce child mortality.

Target: Reduce by two-thirds, between 1990 and 2015, the under- five mortality rate.

MDG 5: Improve maternal health.

Target: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio (MMR).

MDG 6: Combat HIV/AIDS, malaria and other diseases.

Target: Have halted by 2015 and begun to reverse the spread of HIV/AIDS.

MDG 7: Ensure environmental sustainability.

Target: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.

Employing The 3 by 5 Gear

Now that we are confronted with these daunting health challenges of the 21st century, resigned pessimism might seem a justified response by many people. However, the present and future generations cannot afford to take a “*siddon look*” or “*business as usual*” position. There is a window of opportunity for stopping these declining health impacts. The use of health promotion, a WHO global initiative engrained in the 1989 World Health Assembly resolution WHA 51/12, is the auxiliary gear to be engaged in getting the Nigerian stuck vehicle out of the miry clay avenue (Fig. 12).

Mr Vice-Chancellor, before I go further, kindly permit me to define the auxiliary gear and explain the gear’s composite of 3 by 5.

Health promotion is a process of enabling people to increase control over their health and its determinants, and thereby improve their health. It is a core function of public health and contributes to the work of tackling communicable and non-communicable diseases and other threats to health (Bangkok Declaration 2005).

In addition to the definition stated above, the Bangkok Declaration (2005) states that Health Promotion is;

- (a) central to the development agenda;
- (b) a core responsibility of all governments;
- (c) a key focus of communities and civil society; and
- (d) a requirement for good corporate practice.

The key goals of health promotion are:

- Addressing broad determinants of health;
- Improving quality of service delivery;
- Empowering communities to break the vicious cycle of poverty and ill-health and establish the virtuous cycle of wealth and good health.

Health Promotion’s core principles seek to identify and positively affect the root causes or determinants of health. These are the social and economic factors that determine

health status such as income, education, profession, working conditions, and mental status, which in turn can affect risk factors such as smoking, alcohol consumption, eating habits, and physical activities (Reddy, 2005).

With the auxiliary gear (health promotion) defined, I will now proceed to explain the 3 by 5 composite of the gear which in mechanical engineering translates to the “pebbles” and “synchronizer cones”. This in turn represents the 3 components and 5 elements of health promotion respectively.

The 3 components as shown in figure 12 are;

- Health education to individuals and families.
- Reorientation of health services to improve accessibility, acceptability, and appropriateness.
- Advocacy to influence policy makers to adopt healthy policies and enact and enforce laws that promote health and consumer rights.



Fig. 12: Components of Health Promotion

The 'lift' potential power of the 3 components in getting the stuck 744-wheel truck out of the miry clay avenue is greatly enhanced when they are integrated with '5 elements' as none of these separate components or elements will operate in isolation. These elements are:

1. Development of healthy public policy (e.g. about tobacco use control, prevention of unfair trade policies of international corporations, sale of junk and contaminated foods) and policies related to health system changes and enactment/enforcement of laws that promote health such as stricter pollution standards for refuse, sewage, vehicular smoke, toxic waste, and consumer rights.
2. Creation of supportive environments for health.
3. Strengthening of community action.
4. Development of personal skills.
5. Reorientation of health services.

Some examples of potential actions by individuals, groups, and communities in the vehicle, that would add value to the lift potential of the auxiliary gear (health promotion) are shown in the list below:

- Adoption of lifestyle changes (increased physical activities, healthy diet, stopping tobacco and alcohol consumption, and reduction of stress);
- Improved child care practices;
- Adoption of measures to prevent the spread of HIV and promote reproductive health;
- Appropriate use of health services in the early stages of disease;
- Adherence to treatment regimes prescribed by health workers and support for actions to control the sale of counterfeit drugs;
- Participation in screening programmes for disease prevention;

- Adoption of appropriate behaviours and safety measures to reduce injuries;
- Participation in other health-related programmes within and outside the health sector;
- Strengthening networks in families and communities to
 - provide support and care to members,
 - maximize potential to participate in health development,
 - promote mental health and enhance social capital,
 - support the introduction/improvement of health laws and public safety measures.

In addition, measures which have to be implemented within the framework of viable policies include promoting education for girls and women, income generation for the poor, and the development of a safe and healthy environment, among others.

The platform for this auxiliary gear in Nigeria comprises the National Health Promotion Policy which was approved by the National Health Council in 2006 and officially launched in January 2007 by the Federal Ministry of Health, and the strategic framework and implementation plan for the policy (Figs. 13a and b).

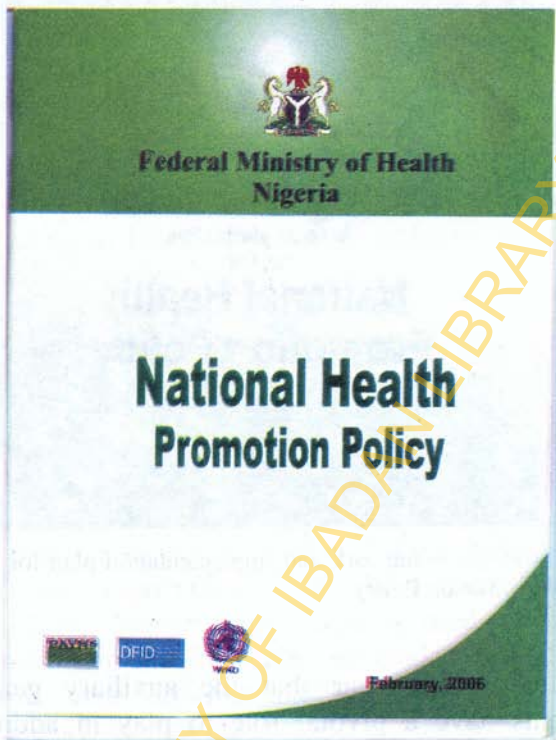


Fig. 13a: National Health Promotion Policy

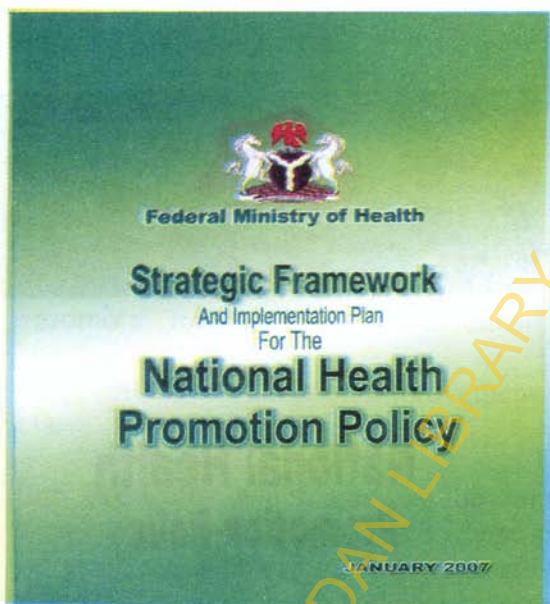


Fig. 13b: Strategic framework and implementation plan for the National Health Promotion Policy

It is therefore clear that the auxiliary gear and its components have a pivotal role to play in addressing the weaknesses of the health system, improving the quality of health service delivery, empowering communities to break away from the vicious cycle of poverty and poor health and establishing the virtuous circle of wealth and good health (NHPP, 2007). Health promotion practitioners and specialists are making a clarion call for a departure from the past approaches to changing the health status. We re-echoed the statement from the WHO's Kobe Centre in Japan which called for a "reform of the health and welfare system, to shift from a focus on health care policy, to healthy public policy; from access to services, to access to health; from institutions, to integrated services delivery; from provider-driven care, to client and community centre care; from narrow indicators of

morbidity and efficiency, to broader indicators of equity and well being;
and from expert opinions, to evidence-based practice” (WHO – Kobe, 2002).

Let me complete this lecture with some of my contributions to health promotion but before I do so, let me summarize the department’s contributions under various leaders—Professors Ademuwagun, Adeniyi and Oladepo. Since its inception, the department has been linked to major developments in Health Promotion and Education in Africa and globally.

Health Promotion and Education Resource Development (Human and Material)

The department, since inception in 1975, has remained a leading centre in Health Promotion and Education and in Human Resource Development in Africa. Over 750 Advanced Diploma in Health Education (ADHE) students, and 900 Master of Public Health (MPH) students and Ph.D students, and more than 1000 short course trainees on different public health areas including medical, nursing and other students in the University of Ibadan and other tertiary institutions from different parts of the world have been trained in the Department.

The department developed a unique training consultation model with strong evaluation components in partnership with USAID, the US Centre for Disease Control (CDC), and the Department of Health Behaviour and Health Education of the School of Public Health, University of North Carolina, and Chapel-Hill, USA. This model involved integrating operations research with group process strategy and consulting visits in strategically improving the working partnership between health educators and programme managers working with Combating Childhood Communicable Diseases programme in Africa. The model has been deployed to Francophone African Countries with a base at the School of Public Health, Democratic Republic of

Congo, University of Kinshasa in the former Zaire (Brieger et al, 2000).

A manual on health education practice entitled 'Education for Health: A Manual for Health Education in 'Primary Health Care' developed by ARHEC and published in 1988, has been translated into many languages. It has served as a basic reference manual for health education practice worldwide.

My own Contributions to Servicing the Auxiliary Gear

Apart from being an active player in the departmental efforts described above, I initiated the newly branded competency-based Health Promotion and Education short course acclaimed as one of the best by Dr Nyamwaya of WHO Africa Regional Office based in Brazzaville.

I have contributed to capacity building and institutional strengthening through my collaborative research work with other departments such as Environmental Health, Medical Statistics and Epidemiology (EMSEH), Pharmacology, Economics, Psychology, Community Medicine, Agricultural Economics, Nursing and the Nigerian Institute of Social and Economic Research (NISER) across the University and the ministries of health at all levels. My research grant on Intersectoral Model for Management, Control and Policy Formulation on Drug Resistant Malaria in Nigeria, funded by the WHO (Oladepo et al, 2004) between 2001 to 2004 built the capacity of the following people with full funding support: 3 PhDs (Dr. Bidemi Yussuf, Mr Odunbanku (about to complete) and Dr. (Mrs.) Onikepe Olunloyo (nee Folarin), and the following trainees also benefited from our capacity building initiative —Dr. Osowole (post-doc.), Abiola Olukosi (Ph.D) and Mr Abayomi Sijuade (M.Sc). My senate research grant of 1998 (Oladepo, 1998) was used to fully support the MPH research of Mrs. Toyin Jagha (nee Awobokun) who currently works in the World Bank while the second (Oladepo, 2007) currently supports Mrs. Ogunleye at the University College Hospital. My research funded by the

National Action Committee on AIDS and the World Bank supported the full MPH research studies of Pastor Awopegba and Mrs. Busola Oyeyemi. In the current FHS, one of the MPH students Mr. Femi Ogundipe is being built up for strategic communication with some funding support while the process of providing scholarship for 1 MPH and 1 Ph.D student is ongoing. I have succeeded in bringing key equipment to the university. For example in my intersectoral study referred to above, I succeeded in the acquisition of key equipment for molecular biology and analytical studies—equipment include spectrophotometric plate reader, thermocyclers, microscopes and computers, among others for the university and are still being used in training post-graduate students.

Policy Development

I have also contributed to policy development in Nigeria. I led the institutional team that worked with the Health Promotion and Education Division of the Federal Ministry of Health and other partners to produce the following policy and related documents:

- (i) Formulation of the National Health Promotion Policy;
- (ii) Development of the National Health Promotion Strategic Framework and implementation plan for the National Health Promotion Policy;
- (iii) Development of National Health Promotion Guidelines; and
- (iv) Development of the Health Promotion materials including Counselling Manual.

These policy documents are widely used by governments at all levels in Nigeria as well as the development partners. I specifically chaired the Behavioural Change Communication (BCC) component of the anti malarial drug (ACTs) Drug Transition Committee for the FMOH.

Evidence for Health Policy

Evidence for policy is a major area of my contribution to Health Promotion and Education in Africa through strategic research. I have obtained 33 funded grants from various international donor organizations and a few local funding agencies through which substantial funds have been generated for the University of Ibadan to the tune of a seven-digit dollar figure.

My research contributions on evidence for policy are many and varied. Mr Vice Chancellor, let me illustrate with a few examples—significant strands of my work that have impacted on regional policy. In 1994, I conducted the initial research that led to the design of Community-Directed Treatment (ComDT) with ivermectin strategy based on a grant received from the WHO. Ivermectin the drug for treating river blindness, has been distributed for years in endemic remote communities by formal health care workers but since the workers live far away from them, coupled with poor logistics, millions of infected community members living in thousands of villages were not opportune to receive the needed treatment once or twice a year for many years. This sore point informed the WHO to request for this alternative strategy that would show whether or not communities can take over this task of distributing ivermectin to their own members and report adequately on the distribution. After obtaining the grant, I commenced the task by identifying poorly accessible and far away villages from which I gained community support. This was followed by conceptually dividing the drug treatment process into (a) exclusion criteria, (b) correlating drug dosage to patient's weight, later changed to height, (c) verifiable evidence of using the drug, (d) recording the drug used and (e) reporting the total number of people treated and those untreated. Quantitative research methods were used to explore issues related to these steps. These include how people recognize pregnant women, children under five years and very sick people (exclusion criteria); how they determine half a tablet if

required in treating diseases, the criteria used to determine the medication dosage when sick and how they manage the side effects. Extremely valuable cost-effective measurement suggestions such as the use of straight sticks (cut from the bush or standing against the wall or tree) followed by marking of different height categories and engraving different numbers of tablets to be taken by persons whose heights fall within each category of the selected portions of the stick or wall or tree were obtained from community members. The central point or house to house distribution of the drug and people swallowing the drugs with water in the presence of the Community Drug Distributors (CDDs) that would ensure absolute compliance to medication consumption were suggested. To develop simplified reporting forms for keeping records of Ivermectin treatment given to people in communities with very poor literacy levels, I asked community members on how they number their trading goods e.g yam tubers or maize bags (rather than asking them how they would mark numbers on something abstract which they had not done before – e.g. distributing medicine). They showed me how they use simple strokes, and after each ten strokes, use a sign to separate them from the next ten. This method was then used in the form, and it functioned well. Reporting with pictures was perceived as an ideal way of reporting on eligible and non-eligible and total number treated. The pictorial forms were drawn up several times by two graphic artists to ensure the alignment of pictures with people's perceptions.

I field tested the pictorial form (Fig. 14a) for comprehension, and constructive, predictive and content validity with other tea members, followed by revision of the forms. A second field testing for conceptual and illustrative clarity was done in selected villages in Yola, Iwo and Enugu, *Nigeria with the other components of the strategy*. The forms were further revised and field tested in Mali, Ghana, and Uganda with overall results confirming that the forms were accurate recording tools (Figs. 14b & 14c). A manual titled

'Reporting with Pictures' was published for WHO. Thus, for the first time, this evidence shows that illiterate persons can record the treatment given for Onchocerciasis using the traditional methods of recording in strokes the drug distributed and report same. Furthermore, the robust evidence that the rigorously tested ComDT strategy is effective led to its adoption as a regional policy by WHO African Programmes for Onchocerciasis Control (APOC). The WHO published another manual that I wrote with other team members in 1998 (see Fig. 15) and it has been used to train Community-Directed Distributors (CDDs) to provide ivermectin to millions of people in onchoendemic countries. APOCs records in 2004 showed that the number of CDDs trained, has enormously increased from 539 in 1998 when the training process was launched to 242,826 in 2005 (Burmeister et al., 2005).

FREE TREATMENT WITH MELTZAN AGAINST
RIVER BLINDNESS



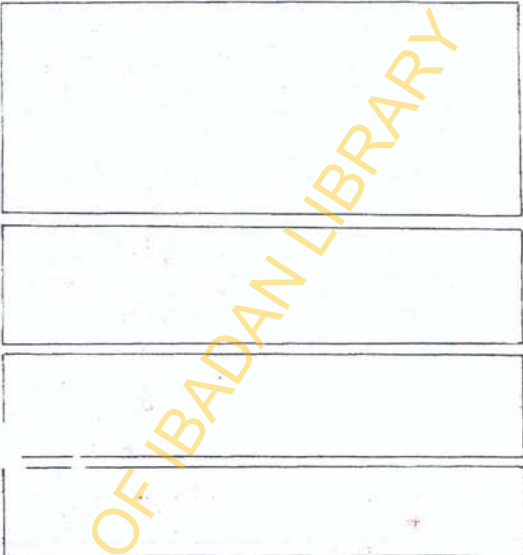

VILLAGE		MONTH OF TREATMENT
① 	People Treated	② 
③		
160		
140		
120		
90		
④		⑤
Number of people treated	<input style="width: 50px; height: 30px;" type="text"/>	Number of tablets given
		<input style="width: 50px; height: 30px;" type="text"/>

Fig. 14a: The initial pictorial reporting form designed with CDDs for distribution of Ivermectin

<p>People not to be treated</p>	<p>Not to be treated later</p>
<p>Children under 7 years of age</p>	<p>Not to be treated</p>
<p>Women in their first lactation</p>	<p>Women for treatment 2 weeks after birth</p>
<p> Sick people</p>	<p>Patients for treatment also out from hospital</p>
<p>People in towns or camps</p>	<p>Patients in treatment</p>
<p>Refused</p>	<p>Assistance</p>
<p>Total people not to be treated</p>	<p>Total patients to be treated</p>
<p>Total people treated later</p>	<p>Total patients treated later</p>
<p>Total tablets distributed to people requiring their 2nd treatment</p>	<p>Total tablets distributed to people requiring their 2nd treatment</p>

Fig. 14b: The pictorial reporting form for distribution of ivermectin









	<p>(22) Possible reactions to the drug of concern to the distributor</p>	
<p>(23) Difficult to breathe</p>  <input data-bbox="372 300 497 392" type="text"/>	<p>(24) Dizziness cannot walk or stand or horse</p>  <input data-bbox="787 300 896 392" type="text"/>	
SUMMARY		
<p>Total Population</p>	 <p>(25)</p>	<input data-bbox="782 462 901 546" type="text"/>
<p>Number of tablets received</p>	 <p>(26)</p>	<input data-bbox="782 585 901 685" type="text"/>
<p>Number of tablets distributed</p>	 <p>(27)</p>	<input data-bbox="782 746 901 839" type="text"/>
<p>Number of tablets to be returned to nurse</p>	 <p>(28)</p>	<input data-bbox="782 900 901 993" type="text"/>
<p>NAME OF DISTRIBUTOR</p>	<p>SIGNATURE</p>	
<p>Number of tablets needed next year</p>	<p>—</p> <input data-bbox="802 1124 885 1162" type="text"/>	

Fig. 14c: The final pictorial reporting form after field testing

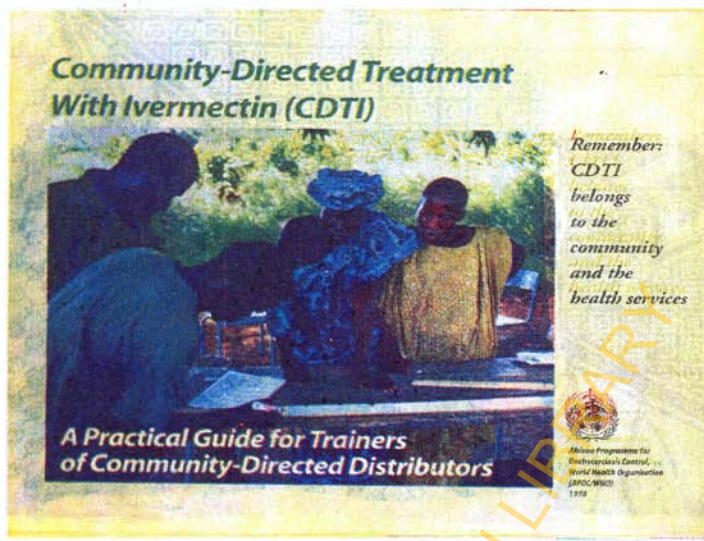


Fig. 15: Community-Directed Treatment with Ivermectin (CDTI)

The evaluation of the impact of this innovative strategy by APOC showed that between 2000-2004, a therapeutic coverage of over 65%, the minimum required for a twenty-year period, had been maintained in most countries using the strategy, compared with preceding years (Amazigo et al., 2007). Another external evaluation of APOC showed that the number of persons treated increased yearly from 14.58 million in 1997 to 22 million in 2000, 28.45 million in 2002 and 37.31 million in 2004. The study concluded that "ComDT has been a timely and innovative strategy...and communities have been deeply involved in their own health care on a massive scale. ComDT is a strategy, which could be used as a model in developing other community-based health programmes and is also a potential entry point in the fight against other diseases" (Burmeister et al., 2005). This strategy has been used throughout Africa and Latin America since 1998 to date.

I received another WHO grant in 2003 to study Community Directed Interventions of Major Diseases (malaria, prevention of blindness due to Vit. A and

tuberculosis) in Africa based on growing interest at the national and international levels in using the same ComDT strategy for interventions against other diseases (Homeida et al., 2002). Mr Vice Chancellor, I'm delighted to inform you that my proposal was one of the eight finally selected from 27 others in Africa by the WHO (Oladebo-Ibadan Team 1). Part of the initial activities is shown in Figure 16. Completed in December 2007, the integrated preliminary result from participating countries which has received commendation by the Joint Action Forum (JAF) of WHO/APOC, showed the following outcomes in the intervention communities compared with the controls:

- Malaria home management coverage was two times higher and largely exceeding the RBM target.
- ITN coverage was two times higher.
- Vitamin A and Ivermectin coverage were significantly higher.



Fig. 16: Author addressing the elders of Amolegbe community (Iseyin LGA) about community directed interventions for the control of malaria, blindness and tuberculosis

Furthermore, the WHO, Geneva hired the British Broadcasting Corporation (BBC) to film a special documentary of my team's project (Oladepo Ibadan I project, Nigeria) out of all the eight sites. The film was telecast worldwide several times for a whole week in September 2007. Thus, this set of research studies constitute unique contributions to knowledge in tropical diseases control by showing that the ultimate control of these diseases through the application of existing technologies will require that attention be paid to how their designs can be made responsive to the economic and socio-cultural characteristics of the intended consumers.

In 1983, my pioneering research on epidemiology of road traffic accidents on the Ibadan-Lagos expressway showed inadequate knowledge of expressway rules and identified accident hotspots on kilometre 75-100 and 100-125 kilometre sections of the Ibadan-Lagos and Lagos-Ibadan carriageways (Oladepo, 1983). These data were subsequently used by the Federal Road Safety Corps for policy decisions on increasing patrols at accident "hotspots" and education of vehicle drivers.

The findings of a co-study with one of my students on evaluation of unintended pregnancy among 306 pregnant teenagers in secondary schools in Minna, Niger state (Oladepo and Bawa, 1994) assisted the state government in reversing the policy of expelling pregnant students to that of allowing them to return to school with some financial assistance, since a major factor that brought about pregnancy was lack of money.

The results of my study on Intersectoral Model for Management, Control and Policy Formulation on Drug Resistant Malaria in Nigeria (Oladepo et al, 2004) conducted in collaboration with the Malaria Research Laboratories in the Institute of Advanced Medical Research and Training (IMRAT), in the College of Medicine, University of Ibadan led to the development, for the first time, of a Memorandum of Understanding (MOU) between the Ministry of Health and

the College of Medicine for an evidence of policy study, and the development of the Ibadan Malaria Study policy group. The results of the study were used by the Oyo State Government in initiating the development and evaluation of a community based programme for alleviating predisposing factors associated with malaria and drug resistant infection (Oladepo et al, 2004). The data also informed the policy decision at the Federal level (FMOH) to scale up drug resistant studies in the six Nigerian Zones, the results of which led to the change in Nigeria's anti-malarial drug policy in 2004. Furthermore, one of the unique results of the study is the redesignation of our research study centre by the WHO as a sentinel site for monitoring anti-malaria drug resistance in southwest Nigeria. This site provides critical malaria data for global use policy decisions.

Testing the effectiveness of new educational interventions backed with epidemiological data has been one of the ways that I have used to further increase opportunities for evidence-based policy decisions. One example will suffice. In one of my WHO funded studies in 1984 with onchocerciasis patients, the efficacy of the combined use of group counselling with family members as reminders of medication consumption was demonstrated. This led to 46.9% increase in absolute medication compliance with a course of 5 weeks, three times daily dose of 'banocide' and with parasitological evidence of zero-level microfilaria (Oladepo, et al, 1989). This intervention strategy is now widely applied to the control of these and other major endemic tropical infectious diseases.

My study on using gender-based data in promoting policy decisions on gender-based violence in Nigeria has introduced a new understanding to this phenomenon (Oladepo and Arulogun, 2006). Empirical evidence was provided for the first time that violence against men by women is a reality, despite the notion that domestic violence is always perpetuated by men (Fig. 17). Thus many men in this gathering today might have been verbally abused, slapped, beaten up or denied sex by their spouses but would hardly

report it! I have widely distributed our policy brief emanating from this study to different stakeholders (including policy makers from State and LGA levels and representatives of State assemblies, the media and representatives of the Ministry of Women Affairs, Ministry of Health and donor organizations) which have contributed to informed discussions on the new proposed bill on gender-based violence.

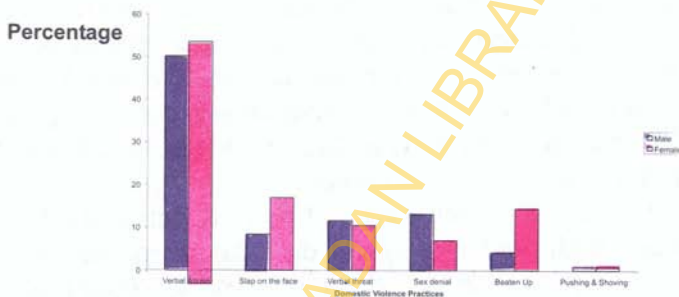


Fig. 17: Percentage distribution of domestic violence by gender

My ongoing Future Health Systems (FHS) Research Consortium in Nigeria recognizes and targets malaria and Patent Medicine Vendors (PMVs) who comprise a poorly understood and badly regulated market in Nigeria (Oladejo et al, 2007) (Fig. 18). Malaria is a major cause of illness and death in Nigeria and also constitutes a significant drain on its economy and a major financial burden to the poor. Most Nigerians do not get the right treatment. When someone has a fever they believe to be malaria, they usually go to a private patent medicine vendor (PMV) for anti-malarial drugs (AMDs). Although PMVs constitute the most common source of malaria treatment in Nigeria, little is known about them. It is important to understand the poorly regulated market in which they work because patients do not know what they are getting. There are a lot of substandard and fake drugs around and the malaria parasite has become highly resistant to the medicines that were used in the past. The government recently changed its guidelines and now recommends that

people use artemisinin-combined therapy (ACT). But it is not clear how this change in policy has affected the market that provides malaria treatment for most Nigerians.

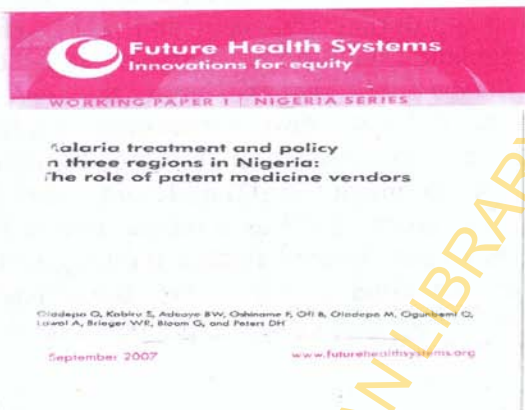


Fig. 18: Future Health Systems Working Paper 1: Nigeria Series

I led a team of researchers to undertake a scoping study in 12 local government areas (LGAs) in three states to explore the malaria treatment market and the role of PMVs, and to look at ways to improve malaria treatment. The main findings are:

- PMVs are the largest source of malaria treatment in all areas.
- PMVs have little knowledge of the new treatment guidelines, and most government officials know little about PMVs.
- The PMVs provide many different drugs for malaria (about 56), but the most common and cheapest (chloroquine) is the least effective.
- The recommended treatment, ACT, is not readily available, and is the most expensive.
- PMVs, other health providers, government officials, and community members share concerns about the quality of drugs.

The organization of the supply chain for pharmaceuticals differs between states, meaning that local knowledge and locally adapted solutions are needed (Oladepo et al. 2007). A mix of interventions in addressing these and other associated problems of inappropriate treatment and poor quality drugs through co-regulation with the government, citizen empowerment surveillance and demand, and the use of new technologies to facilitate drug monitoring and communications, received commendation by the Department for International Development (DFID) mid-term reviewers, based in London in December 2007 as a unique innovative effort. This project has been assured further funding by DFID but has also attracted other donors. One donor has recently requested for a concept paper for possible large-scale funding.

Theory Development

My research efforts have led to theory development. I developed the Health Belief Synthesis Model (HBSM) which posits the bridging of the gap between indigenous explanatory models or indigenous knowledge and the western scientific worldview to improve health communication in indigenous communities (Oladepo et al. 1985; Oladepo et al. 1987). This theory was based on my findings that some of the traditional notions of causation, prevention and treatment of Onchocerciasis which appeared to have been based on unscientific reasoning showed that their close interpretation could be consistent with current epidemiological, diagnostic, environmental or clinical knowledge (Table 1) (Figures 19a and 19b show the author practically applying the theoretical concepts in field situations to identify rational and useful platforms to “synthesize” the traditional notions with the modern instead of outright condemnation and justification for “replacing” the traditional with the modern). This way, behaviour change for clinical management and control becomes less threatening in traditional communities with long established cultural practices. This model is being used by social scientists on a wide scale in Africa.

Table 1: Health Belief Synthesis Model: Improving communication for Onchocerciasis Disease Control.

Traditional	Synthesis	Modern
<p>Tiny germs which cause onchocerciasis are inside people</p> <p>Caused by the bite of a fly which is found on iroko trees forest vegetation and others.</p> <p>The flies are common during the rainy season</p> <p>It is a disease of farmers.</p> <p>The itching associated with the disease is provoked by eating "trigger" foods such as bitter leaf</p> <p>Two different types of onchocerciasis: the male which is characterized by raw skin and itching while female onchocerciasis is characterized by shiny skin without much itching</p> <p>Onchocerciasis is associated with itching and loss of vision</p>	<p><i>Onchocerciasis can be caused when amukuru flies that breed on fast moving rivers move from the breeding sites and patch on vegetations around the vicinity of the rivers including iroko trees from where they can bite farmers and transmit the disease germs to them.</i></p> <p><i>The flies are more common during the rainy season which is the time they actually breed</i></p> <p><i>Farmers are at risk of getting the disease since many of them do not wear clothing that cover all their body parts when farming</i></p> <p>The savannah type of onchocerciasis has the more serious sign of patchy skin while in the forest type, the skin is less patchy and may be smooth</p> <p>If untreated in time the person affected could loose his/her vision</p>	<p>caused by a nematode parasite called onchocerca volvulus</p> <p>transmitted by simuliium flies which breeds in fast moving rivers</p> <p>the flies ingest the microfilaria when they bite a human host</p> <p>the microfilaria develops within the fly into an infective stage which is transmitted to a person when bitten by the fly.</p> <p>the disease is mostly found in rural settlements close to rivers.</p> <p>treatment limits disability in the host including possible blindness</p>



Fig. 19a: Mr. A in a village discussing with the author about the local beliefs regarding the causation of onchocerciasis (river blindness) with an explanation that the fly hatches from the seeds of small iroko trees and perches on small 'iroko' trees.



Fig. 19b: The author showing Mr. A and others the breeding site of *similium dimnosum* fly (the vector for onchocerciasis breeds in fast moving rivers). Author explains that the flies can move from the breeding site to iroko trees and other vegetation from where they can bite farmers and transmit the disease.

I have also used my extensive qualitative and quantitative research findings to categorize culturally defined presumptive diagnosis of fever, referred to as "*Iba Ojo*, *Iba yellow fever*, *Iba lasan* and *Iba typhoid*" (different types of malaria) (Oladepo et al, 2004, Yusuf and Oladepo, 2004). This classification has just been used by another researcher who correlated the different categories with malaria parasite density verified by microscopy. The preliminary result which is about to be published show varying levels of parasitemia load with each set of defined category. This finding will be of importance to health workers in the future management of malaria as indigenous perception of different types of fever has always been discounted by many health workers. The applicability of this cultural typology of malaria is unique for improving evidence-based medicine in Africa and Latin America.

Overall, I have been a vital contributor to improving the health of the people of Nigeria, Africa and the world in general through strategic research programming and evaluation in Public Health and most especially in Health Promotion and Education as I work in collaboration with other team members in my department and across other disciplines.

Conclusion

From gold meltdown to the miry clay avenue, Nigeria has a window of opportunity to make a difference to the health of its people through health promotion. The nation has taken a bold step in adopting and launching the National Health Promotion Policy (health reform) and developing the strategic framework, but only as a first step toward repairing the fractured health of the people. The full implementation of health promotion activities as reflected in the Health Promotion Policy and Framework is crucial.

The first year has been devoted to building the capacity of health educators working at the Federal/State/LGA levels in this direction with funding support by the federal government and Partnership for Transforming Health systems. Although, through my tireless efforts, I have contributed significantly to oiling the auxiliary gear and some aspects of the engine/public health components, I'm still highly challenged to play proactive roles in 'servicing' the 3 by 5 auxiliary gear with more innovative cutting edge research and support services.

The health promotion actions taken or not taken in the years ahead by the government in collaboration with all stakeholders (with sustained funding) will have profound bearing on the future course of the health of the Nigerian people and their development. It would largely determine whether or not the vehicle will get out of the miry clay avenue or will remain forever stuck. I hope at this point, the burden of the title of this inaugural lecture has been unravelled.

Epilogue

Five years later, the doctor, who was trying to rescue people falling into the river and the old man met at a ceremony. "Hello young man, how is Lulu Hospital these days"? The doctor replied, "I don't know, I've been sacked. The Chief Medical Director told me that patients are no longer coming because they are getting healthier. Five of us doctors are out of job now".

Then the old man said, "why don't you think of getting another job". What job, said the doctor? A spiritual health specialist, said the old man. You just need to dump your stethoscope for a miraclescope, for so many people need spiritual health. You will be a magnetic icon". "That's innovative" said the doctor. "I will only be helping the WHO to achieve the 4th realm of her state of health component".

"Don't worry about your white jacket, the old man said. The clergy collar is also white. Maybe I can partner with you to collect the tithes". The doctor replied; "There is no problem with that but where are you going to spend the money, in heaven?

Acknowledgements

Mr. Vice-Chancellor Sir, I cannot conclude this lecture without expressing my gratitude to people and institutions that have contributed to my development and have seen me through to where I am today. Regrettably in a lecture of this type, time does not permit the acknowledgement of all these wonderful people. Time permits however, the inclusion of a few of them. But before I do so, my gratitude is first to the Almighty God whose grace and love spared my life till today despite the vicissitudes of life. All my achievements and glory I owe to thee my creator.

I like to begin by thanking my parents the Late Pa Joseph Oladepo whose 100th birthday was cut short by six years and my mother Iyabode Oladepo, not only for compassionately nurturing me for hardwork, painstaking achievement and commitment to help others but for their belief in my educational attainment in the future. I recount with joy the song that my mother used to render when I was in Primary 3:

*Oladimeji yio dagba
To ba dagba, a rele iwe
To bati jade tan,
Ilu Oyinbo ni yio ma lo*

Whatever inspired this song, which I was told started a few weeks after my birth, is left to psycho-analysts to determine. Next is my late grandmother, Iya Adedoja Ayinbo, who rose like a man to provide special financial support on those "dry days" during my postgraduate education, and to the octogenarian, Pa (Chief) Olaniran Ogunyemi Ogungbemi, and Mrs. Rachael Oyewumi Ogungbemi for their constant encouragement and for making me "their child" and not their son-in-law.

I am greatly indebted to my mentors: Professor J.D. Adeniyi, who inspired, in various ways, my academic development; Professor O.O. Kale, Professor Adetokunbo Lucas and Professor Bill Brieger who provided timely

support and encouragement at different times in my academic career.

I am grateful to Professor O. Akinyele, the current Dean of the Faculty of Public Health who made a passionate appeal that I should deliver the inaugural lecture irrespective of my very busy schedule.

Special thanks to Professor Ogunniyi, Mr. J.A. Moranti and Mr. Labeodan who contributed to saving my life, after a road traffic accident neck injury on Ibadan-Lagos expressway in July, 2007.

I appreciate the following people for their encouragement and unwavering support over the years—Professor Z.A. Ademuwagun, Professor A. Oyemade, Professor O. Ayeni, Late Professor Ogunba, Dr. Donald Johnson, Ms. Kathleen Parker, Professor John Hatch, Late Professor Guy Stewart, Professor I.F. Adewole, Professor A.O. Ojengbede, Professor A.M.J. Oduola, Professor David Peters, Professor Nike Oyejide, Professor O.O. Akinyinka, Dr. Gerry Bloom, Mrs. Ayo Tubi, Dr. Mrs. Okunade, Dr. Tunde Ahonsi, Dr. Aisha Muhamud, Ms. Cate Lane, FMOH/MOH/LGA health officials and all community members whom I have worked with, and my brothers and sisters.

I recognize and thank my colleagues with whom I have worked ceaselessly over the years and who have inspired me to give the needed leadership: Dr. I.O. Olaseha, Dr. A.J. Ajuwon, Dr. F.O. Oshiname, Dr. O.S. Arulogun, Mr. Musibau Titiloye and Mrs. Yetunde John-Akinola. I thank the non-teaching staff for their unwavering support: Mr. Olubodun, Mr. Begun, Mr. Adomu, Mr. Ayoade and Mrs. Ayede. Thanks are extended to my students for stimulating some of my research thoughts. Special thanks to Mrs. Mary Aluko, Dr. Adeoye and Mr. Odunayo Apuwabi for secretarial assistance.

I am particularly grateful to the following funding agencies for providing grants for my research: UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, Harvard School of Public Health, Gates

Institute at the Harvard School of Public Health, the Rockefeller Foundation, and National Action Committee on AIDS (NACA), for their consistent support in the last 25 years.

I thank my children Oladapo, Oladayo, Adeola, Oladiwura and Oladimeji junior for their understanding especially during periods of my absence from home and for constituting a special source of joy to my life.

Finally, to my darling wife Modupeola Oladepo, a timeless beauty whose love, support and encouragement have always been sources of constant inspiration. I thank God for your presence in my life.

Mr. Vice-Chancellor Sir, distinguished ladies and gentlemen, I thank you for listening so patiently and for the honour given to me to give this lecture.

UNIVERSITY OF IBADAN LIBRARY

References

- Adeniyi, J.D., Incorporating Social Cultural and Economic characteristics of Mothers and Caregivers in the Home Management of Malaria in Children. Report Submitted to Multilateral Initiative MIM, UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases.
- Adeniyi J., Oladepo O. and Soyibo A. (2003) "Survey of Primary Health Care Services Delivery in Lagos and Kogi: A Field Report" African Regional Health Education Centre, University of Ibadan, Nigeria.
- Adeniyi, J.D., Brieger WR, Ramakrishna and Oladepo (1985) "Social and Behavioural Aspects of Malaria, Schistosomiasis, Onchocerciasis and Dracontiasis in the Context of a Primary Health Care Approach" (Project I.D. 800042 and I.D. 840368). UNDP/WHO/TDR.
- Adeola Akinremi & Seun Akinoye (2003) Nigeria: Experience it, die from it. *Tobacco Control*: 12: 250.
- Ajayeoba E.O., Falade C.O., Fawole I.O., Akinboye D.O., Gbotosho G.O., Bolaji O.M., Ashidi J.S., Abiodun O.O., Osoyole O.S., Itiola O.A., Oladepo O., Sowunmi A. and Oduola AMJ (2004) Efficacy of Herbal Remedies used by Herbalists in Oyo State Nigeria for treatment of Plasmodium falciparum infections.
- Akinboye, O., Idris O. and Akinkugbe, O. Trends in coronary artery disease and associated risk factors in sub-Saharan Africans. *J. Hum. Hypertens.* 2003; 17: 381-387.
- Akinkugbe, O.O. (2000) Non-communicable disease, the next epidemic: Nigeria's preparedness. *Nig. J. Clin. Pract.* 3(2): 37-42.
- Amakiri, C.N, Akang, E.E, Aghadiuno, P.U, et al. (1997) A prospective study of coroner's autopsies in University College Hospital, Ibadan, Nigeria. *Med Sci Law*; 37(1):69-75.

- Amazigo U., Okeibunor J. Matovu V., Zoure H., Bump J., & Seketeli A. (2007) Performance of predictors: evaluating sustainability in community-directed treatment projects of the African programme for onchocerciasis control. *Soc Sci Med*, 64, 2070-82.
- Bangkok Thailand (2005) Charter addressing health determinants; health in a globalised world. 6th Conference on Health promotion.
- Brieger WR, Adeniyi J.D, Parker KA, Oladepo O. Health Education in Africa 1975 – 2000 (Editorial). *Health Education Research* 15(4): 303 - 391
- Burmeister H., Kayembe Kalambayi P., Koulischer G., Oladepo O., Philippon B. & Tarimo E. (2005) Report of the External Evaluation of the African Programme for Onchocerciasis Control. Ouagadougou, African Programme for Onchocerciasis Control.
- Courses in Health Promotion and Education. AGOI/WHO Collaborative Programme (10th – 14th September, 2007).
- Federal Ministry of Health (2007) Strategic Framework and Implementation Plan for the National Health Promotion Policy.
- Federal Ministry of Health Nigeria, (2004) Health Sector Reform in Nigeria: A vision of Better Health for All.
- Ferlay, J. Bray, F., Pisani P., and Parkin D.M. (2001). GLOBOCAN 2000: Cancer Incidence, Mortality and Prevalence Worldwide, Version 1.0. [CD-ROM]. IARC Cancer Basr No. 5 Lyon: IARC Press Available at URL: <http://www-dep.iarc.fr/globocan/globocan.html>
- FMOH (2000) Malaria Desk Situation Analysis, Abuja National Malaria Control Program.
- Francis Tazoacha, "The causes and impact of poverty on sustainable development in Africa" Paper. Proc. of Poverty and Sustainable Development Conference. Bordeaux, France, 2001. 3 August, 2005.
- Health Canada (1998) Taking action on population health: A position paper for Health Promotion and Programs Branch staff.*

Homeida A.M., Braide E., Elhassan E., Amazigo U.V., Liese B., Benton B., Noma M., Etya'ale D., Dadzie K. Y., Kale O.O & Seketeli A. (2002) APOC's strategy of community-directed treatment with ivermectin (CDTI) and its potential for providing additional health services to the poorest populations. African Programme for Onchocerciasis Control. *Ann Trop Med Parasitol*, 96 Suppl 1, S93 – 104.

<http://devdata.worldbank.org/idg/IDGProfile.asp?CCODE=N GACN>.

Leahy Elizabeth (2006) Demographic Development – Reversing Course? *Population Action* Vol. 1, issue 10.

Lucas Adetokunbo (2008) 'Choosing One's Mother with Care: The Key to the African Child's survival'. Keynote address, Paediatric Association of Nigeria. 39th annual and general Scientific conference.

National Planning Commission (2004) Nigeria: National Economic Empowerment and Development Strategy (NEEDS), March 2004, NPC Abuja.

Nigeria Food Composition and Nutrition Health Survey 2003.

Oladepo Oladimeji (1985) The role of patient education in the treatment of Onchocerciasis in a rural Nigeria community. UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases.

Oladepo, O. (1998) Perceived Stress Factors, Coping Mechanisms and Prevalence of High Blood Pressure Among Staff of the University of Ibadan. (Principal Investigator) Senate Research Grant, University of Ibadan

Oladepo O. and Arulogun O.S. (2006) Using Gender-Based Data in Promotion Policy Decisions on Gender-Based Violence in Nigeria. Report, USAID/ENHANSE

Oladepo, O., Arulogun O.S. and Ojengbede, A.O. (2007) Knowledge, Attitudes and Screening Practices among older men regarding Prostate Cancer in Nigeria UK Senate Research Grant

Oladepo O., Adeniyi Joshua D., William B., Ayeni Olusola and Kale O.O. (1988). Onchocerciasis: The Potential of

- Patient Education in the Control of Tropical Diseases. *Patient Education and Counselling*, 13(1989) 103 – 116.
- Oladepo O., and Bawa A.G., (1994) Factors responsible for unintended teenage pregnancies among Secondary School students in Minna Municipality. *Womens Behavioural Issues: A Journal of Network for the Psychological Studies of Women*. Vol. 1, No. 2. 85 -92.
- Oladepo O., Gbotosho, G, Adetunji G, Soyibo, and Oduola AMJ (2004), Intersectoral Model for Management, Control and Policy Formulation on Drug Resistant Malaria in Nigeria. Project ID No 98A080
- Oladepo O., Salami K.K., Adeoye B.W., Oshiname F., Ofi B., Oladepo M., Ogungbemi O., Lawal A., Brieger, W.R., Bloom G. and Peters G.H. (2007) Malaria treatment and policy in three regions in Nigeria: The role of patent medicine vendors. Working paper; Nigeria Series www.futurehealthsystems.org.
- Oladepo O., Brieger WR, Adeniyi JD, Kale OO (1987) Educational diagnosis of factors affecting compliance in the treatment Onchocerciasis patient education and counselling. Vol. 9, pages 111-120.
- Ola-Fadunsi, O.S., Lagunju, B., Odedahunsi, G.I. Egbonim, D.M., Negbenebor, O.J., Onyiuke H.C. and Etchie SOT (1981) Causes of death in under-five in Igboora (1970-1974). *Medical Student Epidemiological/Research Projects*. April – May.
- Ottawa (1986) Concepts, Principles and actions to assess Health determinants and tackle inequity. First International Conference on Health Promotion. 21st November.
- Reddy Srinath K. (2005) Public Health Needs, Public Health Policy. *Health for the Millions* Vol. 31 No 4 and 5
- Salako L.A., Brieger W.R., Afolabi, B.M., Umeh, R.E., Agomo, P.U., Asa S., Adeneye, A K., Nwankwo B.O. and Akinlade C.O. (2001) Treatment of Childhood fevers and other illnesses in three rural Nigerian communities. *Tropical Pediatrics* 47:38-46

- Salako, B.L, Ogah, O.S, Adebisi, A.A, *et al* (2007).
Unexpectedly high prevalence of target-organ damage in
newly diagnosed Nigerians with hypertension.
Cardiovasc. J. S. Afr. Mar-Apr; 18(2):77-83.
- WHO-Kobe (2002). Draft on Welfare and Health indicators:
compilation of recommended indicators for women,
health welfare, gender, empowerment and mainstreaming.

UNIVERSITY OF IBADAN LIBRARY