

Nigeria

National Health Conference 2009 (NHC 2009)

Theme:

**“Primary Health Care in Nigeria: 30
Years after ‘Alma- Ata’**

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**SPEECH DELIVERED BY PROFESSOR BABATUNDE OSOTIMEHIN, OON, HONOURABLE
MINISTER OF HEALTH, FEDERAL REPUBLIC OF NIGERIA AT THE OPENING CEREMONY OF
THE NATIONAL HEALTH CONFERENCE ON TUESDAY, JUNE 9, 2009 AT THE HOTEL Le
MERIDIAN, UYO, AKWA IBOM STATE.**

Your Excellency, the Governor of Akwa Ibom State,

Distinguished Senators, Honourable Members, the Honourable Commissioners of Health, Chairmen and Directors of various Government and Private Agencies, Delegates and Members of the Press, distinguished Ladies and Gentlemen,

On behalf of the Federal Ministry of Health, I want to warmly welcome you to this National Health Conference under the theme, **Primary Health Care in Nigeria: 30 years after ‘Alma Ata’** as put together by the various stakeholders in the Health Sector.

You will recall that a similar conference under the theme **Health in Nigeria in the 21st Century; Sustaining the Reforms Beyond 2007** took place in 2006. While it is acknowledge that many of the observations from that conference are still with us, it is reassuring to note that some of them are already being tackled by the current administration.

As many of you are already aware, the 1978 Alma-Ata declaration on the role and contents of PHC within the overall health system indicates that it constitutes the fundamental strategy for delivering public health. The pre-eminence of the PHC system suggests that how the health needs of the population are met at this level largely determines the overall effectiveness and performance of the entire health system. It is in realization of this very vantage position of primary Health that prompted the Ministry of Health to embark on several innovative schemes which will make PHC the cornerstone of our Health Delivery System.

This is in line with our belief that effective, accessible and affordable Primary Health Care is the only solution to deliver healthcare to the massive, teeming population of Nigerians.

It is gratifying to also note that after some delays, the National Assembly has finally passed and harmonised the National Health Bill. It is my belief that this laudable development will give us more leverage to deliver a quality Health Delivery System to the country.

I wish to thank the Akwa Ibom State Government, HERFON, the Federal Ministry of Health and all the other sponsors of this very important conference. I also wish to acknowledge the efforts of the various stakeholders in the Health Sector who have toiled day and night to make this event a success.

It is my hope that the various recommendations which will come from this very important interactive session will further assist the government in creating the desired environment for a worthwhile and effective Health Delivery System in the country.

Thank you.

**AN ADDRESS BY THE EXECUTIVE GOVERNOR OF AKWA IBOM STATE, HIS EXCELLENCY,
CHIEF GODSWILL OBOT AKPABIO, ON THE OCCASSION OF THE NATIONAL HEALTH
CONFERENCE 2009 (NHC 2009) AT UYO
ON TUESDAY, JUNE 09, 2009**

PROTOCOL,

On behalf of the good people of Akwa Ibom State, I welcome you to this blessed land of ours. We are happy that assembles here are people who are key to the leadership of healthcare in our country and we dare to believe that the optimism of this Conference will connect with the diving promises which make our State the ***Land of Promise*** and lead to a new dawn of hope in the health sector.

I have noted with interest that the theme of this Conference is “***Primary Health Care in Nigeria- 30 years after ‘Alma-Ata.’*** The importance of this theme cannot be overemphasized in a nation with one of the highest infant and pregnancy-related mortality rates in the world. Neither can it be ignored in a country which is not yet on the path of achieving the Millennium Development Goals within the set time frame – particularly the goals which call for action on the healthcare front.

This theme is also urgent because 48 countries (including Nigeria) have infant mortality rates higher than 10% compared to less than 1% in developed countries. More so 99% of maternal deaths from childbirth occur in the developing countries, while pregnancy is the leading cause of death for girls aged between 15-19.

Given this grim situation, I thank you for this well considered theme and express my hope that at the end of this Conference you will come up with ways to shore up our primary healthcare system to meet our health challenges.

Let me seize this opportunity to commend our health workers, for standing tall and doing their best to meet the health needs of our country. In a time when the treatment of diseases in First World Countries has become digital, you still lack digital systems and operate in the analogue era. Now that you have come to a digital State, your lot will change. You have done so much with so little, and we are overwhelmed with gratitude.

We know that 70% of deaths in the Third World countries occur before five years of age and are caused by diseases or a combination of diseases and malnutrition that are preventable in developed countries. But I believe, and strongly too, that this is the time for our nation to wake up to the reality that health is too important to be left in the hands of health workers alone. We must all be involved! The Government at all levels, the private sector, corporate Nigeria, individuals and others must join hands together and ensure that the day comes in the immediate future when no Nigeria would die an unnecessary death because of the sorry state of our health institutions.

This administration came with the message of hope for Akwa Ibom people. We came knowing fully aware of the challenges facing our people, and we came determined to change their “*mourning*” into dancing.

We regard good health as the inalienable right of every individual, and we have an unremitting commitment to effective healthcare delivery in our State. In this wise, early in the life of this administration we implemented free medical treatment to pregnant women and also free medical treatment for the elderly of 70 years and above. This has significantly reduced our infant mortality rate and pregnancy-related mortality rate in our State as our women do not patronize traditional birth delivery services anymore. When you consider that the Demographic and Health Survey conducted by the National Population Commission in 2005, posited that *“The South South Zone had the largest proportion of births attended by traditional attendants in 2003 (32.2% as against 6.1% by South East and 9% by North Central and the South West)”*. You would understand why we delighted with the situation as at today.

We also activated and expanded eight Anti-Retroviral Therapy Centres, 15 Prevention of Mother to Child Transmission (PMTCT) Centres and 37 HIV Counselling and Testing Centres and all of them are rendering free services to patients. We have provided infrastructural development in primary and secondary health facilities and trained and retrained health personnel both within the country and abroad in a bid for effective service delivery.

In calling for all to join hands in the provision of primary health facilities for our people, we are simply asking everyone to understand that we should not send to know for whom the bell of death tolls, it tolls for all of us. It tolls for all of us whenever we lose someone through an unnecessary death due to lack of facilities or qualified health personnel. We have assisted the University of Uyo Teaching Hospital, a Federal Institution, to serve us better, by building a dialysis centre and donating 17 dialysis machines for renal treatment. One year after this was done the hospital informed us that about ten thousand people have been treated here.

We also assisted the institution with funds to complete a Paediatric Centre for the treatment of children. In our determined fight to give our people the best health service delivery and ensure that the bell does not toll for anyone before his or her time, we do not draw a line between Federal, State, or Local Health Institutions.

Already, we have commenced the construction of four cottage hospitals and one specialist hospital complete with staff quarters at Eastern Obolo, Ibeno, Ukanafun, Essien Udim ad Uyo. Our primary health institutions are well-equipped to meet the challenges posed by the free medical treatment policy of this administration for the categories of persons listed earlier. Over 100 Primary Healthcare facilities have been renovated and we have recruited more medical personnel to cope with the health situation. We have also upgraded three primary healthcare centres to cottage hospitals.

It was Charles Horace Mayo (1865-1939), a US Physician who said that *“The prevention of disease today is one of the most important factors in the line of human endeavour.” We beg to differ, it is not one of the most important factors- it is the most important factor. We urge you to look at it as such in this Conference and set the stage a new dawn in our healthcare. In a word, you could not have chosen to host this Conference in a more health conscious State that Akwa Ibom State. And we assure you we will begin the implementation of whatever great decisions you arrive at in the course of this Conference before you arrive at your homes.*

I wish you a great Conference. God bless you all.

SUB THEME ONE

EFFECTIVE INTERVENTIONS TO ACHIEVE HEALTH RELATED MDGs IN NIGERIA

TRANSFORMING HEALTH SYSTEMS TO IMPROVE LIVES OF WOMEN AND NEWBORN BABIES

By

Kelsey A Harrison NNOM, MD, DSc (London)

Emeritus Professor of Obstetrics and Gynaecology

Introduction

First of all, I want to use this opportunity to thank all those who are trying to transform our health systems to improve the lives of Nigerian women and their newborn babies. At my age, invitations such as this help to keep the brain working, and at the same time make me feel that I am continuing to contribute in a way, which might impact favourably on maternal health in this country.

This presentation will start off with some general observations followed by a summary of how I see the present position. Next, attention will be drawn to landmark events on maternal health care in Nigeria during my lifetime. Notable previous achievements will be presented, damaging mistakes highlighted and caution against their repetition will be stressed. I shall then go on to present my personal views of ways of transforming the health care system to improve maternal and fetal lives based largely but not exclusively on my experience in coordinating the Zaria Maternity Survey. The success achieved in obstetric fistula prevention in Zaria will also feature because the insights might help to build economic, educational, and developmental and health successes in future. I want to stress that the focus here is primarily on the dangers of childbirth and not on issues about HIV/AIDS, abortion and family planning as important as they are.

In my view, one of the greatest failings in Nigeria and one that is partly responsible for much of the confused state of affairs existing both in health care and in other facets of our lives is not knowing enough about the past and an unwillingness to learn from it. Therefore, in this presentation, I shall try to correct this, in the belief that most things become clearer when viewed from a historical perspective.

General observations

In a nutshell, maternal survival during pregnancy and childbirth depends on three conditions. These are:

- general living standards must be good, so that most people are healthy;
- all pregnant women must receive appropriate antenatal care;
- measures must be taken to ensure that pregnant women who develop life-threatening complications get effective treatment including operative intervention if required, before it is too late.

As long as socio-economic, infrastructural, logistical, cultural, political, religious, and health care systems prevent the above conditions from being met, as is the case in most areas in Nigeria, maternal and perinatal mortality and morbidity will remain high. A further expansion of these determinants is shown in the panel, and is adapted from the work of the Commission on Social Determinants of Health ¹.

The direct and indirect medical causes of maternal death are not listed. They are universal and well known but the percentage contribution of each of these causes differs in different countries as well as between different areas within the same country. The recommendations on their prevention and treatment are also the same worldwide. It is the circumstances surrounding these recommendations that make all the difference between survival and death. These issues are covered very comprehensively in fairly recent publications especially the World Health Report 2005, the Child and Maternal Health Task Team report on Transforming Health Systems for Women and Children, and the Lancet series on maternal survival ²⁻⁸.

No mystery surrounds the operation of the range of activities best suited to cut down maternal mortality, which is one major component of death and serious disability among women of childbearing age in Sub-Saharan Africa including presumably Nigeria. There must be a basic or primary level of care equipped to satisfy very basic maternal health needs: it should have no involvement with mothers who develop complications except for case referrals. The responsibility for the care of complicated pregnancies and deliveries must rest squarely on secondary and tertiary tiers of health care. It is important that transportation and telecommunication services are managed efficiently in order to support the primary level of care in terms of supervision, supply and referral of emergencies. Also important are the collection of accurate information on births and deaths, maintenance of records in a form that permits periodic data analysis for assessing performance and for planning measures for improvement. In addition, benefits will doubtless accrue from access to family planning, safe abortion and research.

From a purely medical perspective, progress demands improvement at three levels: firstly the health team, secondly the government and finally and most importantly, the general public. The medical team has a responsibility at each of these levels. It should itself give efficient service, collect accurate information and publicise the facts. At government level, its responsibility is to ensure that government policies will bring realistic improvement not only in health, but also more importantly in the living conditions of the generality of the populace. Emphasis should be placed on eradication of illiteracy, improvement in food production and supply to the whole community, and other appropriate measures to lessen economic hardship. The health team's responsibility to the people is to encourage the development of awareness of their own needs.

Arresting the brain drain phenomenon will make a great difference but at the same time, its causes are easy to understand. The prevailing living conditions in Nigeria are too harsh. Long ties exist between Nigeria on the one hand, and UK, Europe and USA on the other. They remain strong, travel is easy and cheap for those who can afford it, suitably qualified immigrants are needed, job opportunities abound, and promises of career advancement are kept for the most part though not always.

The issue of the economic determinants is fundamental for obvious reasons. However, it boggles the mind that Nigeria, which has acquired billions of US dollars on crude oil export alone, cannot afford to finance proper education and health care for its citizens. Like most developing countries, and unlike most developed countries and those developing countries with low maternal mortality rates, we are yet to put in place the one type of health system financing known to be the least expensive and most equitable ⁹: it is tax based, public

funded, with universal access, and is free at the point of care. Surprisingly it is rarely recommended and practiced in developing countries including Nigeria, as it should.

On poverty and poverty reduction, J.K.Galbraith in 1994 put the issues more succinctly than most, and in these words: "There is, in our time, no well-educated literate population that is poor; there is no illiterate population that is other than poor". To this, I add: "If you think education is expensive, try illiteracy".

A summary of the present position in Nigeria

Nigeria has one of the worst records of maternal and child deaths in the world, and they are worsening with time in some areas. For every 100000 women who give birth, 1000 die. Infant mortality averages 60 per 1000 live births. Obstetric fistula – the distressing condition caused largely by prolonged unrelieved obstructed labour – banished over 100 years ago in developed countries, and several decades ago in some developing countries is still with us. The average age at marriage is as low as less than 12 years in some communities. Each woman bears an average of 6 children and doctors, nurses and midwives attend fewer than half of these deliveries. The reproductive health statistics given here are all derived from estimates, therefore, they are by no means accurate but they are the best that are available and they are dreadful. The explanations for them are straightforward. Failure to satisfy the basic needs of the poorest people who make up the vast majority in the country is at the heart of this problem. I am of the view that if we look after the poorest and the least powerful, the rest will look after themselves. Permit me to digress somewhat. I have seen with my own eyes and I know what it takes to look after women and their newborn babies in a conflict zone. This was during the Nigerian civil war of 1967-1970. The conditions were awful. To this day I still have nightmares about some of the gruesome sights. I shudder to think what must be going on in our current conflict zone in the Niger Delta.

There are all sorts of policies and strategies being proposed to turn things round for the benefit of women and children in our country. Perhaps the most topical of these policies and strategies are those that are enshrined in the United Nation Millennium Development Goals (MDG), which member states and some international organisations agreed to achieve by the year 2015. There are 8 goals, 16 targets and 48 indicators. Poverty reduction is Goal number 1, reducing under-fives mortality by two-thirds is Goal number 4, and cutting maternal death rates by three quarters is Goal number 5. The best thing that can be said about them is that they give cause for hope of better things to come. Supporters of the concept are many and its critics are fierce, but the bottom line is that action on the ground speaks louder than lofty speeches from on high. As I see it, as far as we Nigerians are concerned, because our natural resources are vast and there is an abundance of talented people, all things being equal we ought to do better. Sadly all things are not equal and neither are they normal, and that is the root of the problem of maternal health in our country.

Important historical landmark events: the gains

If one looks at the pathetic state of reproductive health in this country, one might conclude that the present is bad, the immediate future is bleak, and the distant future is too terrible to contemplate. That would be unfair. The achievements of the past give cause for hope for the future. The total coverage of these achievements is impossible. So only those considered to be land mark efforts in community maternity care in my lifetime (that is, from the 1930s onwards) will be presented. Those of us who are old enough to remember know

that in the 1930s through to the 1960s, elements of system of modern community obstetrics were practised to very good effect in some places in this country. Unfortunately they were not sustained and improved upon, as they should have been. All the same their recall is important.

In the 1940s, alarmed by the unsatisfactory obstetric outcome in the Niger Diocese in Eastern Nigeria, the people, their Native Administration, the Lagos-based colonial government, and the Church Missionary Society went into action. The effort was wide ranging and was directed to improve the way people lived and the way their health needs were being met. The details are reported elsewhere¹⁰. Basically it involved community health education on a massive scale, the setting up of trained midwives- manned-maternity homes, the rigorous supervision of these homes, and the institution of measures to boost staff morale and efficiency, including scaling up of their training and salary. In reporting the work done, two passages in particular intrigued me. The first described the aim of the work in these words, and I quote: “The plan was to raise the standard of midwifery work in this country and to try to bring it nearer to that of similar work in England and other countries”. The second passage gave an indication of the level of commitment shown. It read, “Some workers were sent out to teach people the prevention of diseases”. By 1949 the maternal mortality ratio became 46 per 100,000 births.

Next example was in Katsina province. Beginning in 1945 and for over 35 years, the province ran a reliable system of compulsorily obtaining and keeping records of all births and deaths in the entire province of over 1 million people. It was a fantastic effort. More will be said about it shortly. Here it is sufficient to add that some quality publications emanated from it¹¹.

Next, for decades the concept of a base hospital – Wesley Guild Hospital - that served all the maternal and child health clinics and many privately owned maternity centres in the Ilesha area with population of 100000 was practised by the Methodist Church of Nigeria. Records of its work during a six year-period beginning in 1957 were published in 1964¹². The report described the linkages between the base hospital and its satellite establishments at urban and village levels, down to the facilities provided, staffing levels and deployment, buildings, records, and how things were organised. It was close to perfection and offered a good opportunity for replication in the rest of the country but things petered out.

Less well known but important nonetheless was an identical effort in the 1960s from two other areas in Western Nigeria. The first was at Abadina village of the University of Ibadan and the second at IgboOra, some 50 km or so away. My humble self headed the first¹³. The second headed by the late Professor Percy Nylander was the more fruitful, as it established with characteristic rigour the uniqueness of multiple pregnancies in Yoruba land¹⁴.

The biggest gain without question is the Zaria Maternity Survey in the 1970s. Expert opinion elsewhere is that the lessons it teaches are absolutely fundamental and that the report is as relevant today as it was when it was first published over 20 years ago¹⁵. I describe it later.

Important historical landmarks: the mistakes

The mistakes I highlight here were equally spectacular because the damage caused continues. The first set of mistakes is in relation to the Katsina effort. The records collected and kept were very reliable, full community participation was obtained, the Emir led it, and

civil service personnel gave their unstinted support. Properly replicated elsewhere in the country, it could have laid the foundation for civil registration and the collection of health-related information in rural areas. It afforded an opportunity of nurturing countrywide, the culture of generating reliable health and socio-economic statistics and indeed population statistics but we blew it. Instead, the use of sporadic estimates of population data came into vogue. Pity, because if you want to change anything, you get your public facts first and in doing so, you should not distort reality in order to make the task easy. The best thing is to start from the reality, which for safe motherhood, means actual counts of births and deaths on a continuous basis and in a structured manner, not ad-hoc estimates of population data. The latter is a poor substitute for compulsory civil registration. Not surprisingly, it has failed to get us very far.

The greatest mistake, in my view, was the adoption in the early 1980s of neoliberal economic policies forced on us by the World Bank and International Monetary Fund. Branded as Structural Adjustment Programmes (SAP), they were meant to cure our economic ills. Weakening of governance structures, reduction of state machinery, drastic reduction in the size of the public sector, worker's retrenchment, increasing private sector involvement, savage devaluation of the naira, increasing privatisation, and the charging of user fees for cost recovery in health care were all part of SAP. The consequences were damaging. The results on maternal and child health and education (Figure 1) were catastrophic, and recovery is still nowhere in sight. SAP in one fell swoop wiped out much of the good work done by generations of dedicated men and women, both nationals and non-nationals. Hence adoption of the principles of SAP or anything remotely like them will mean reinforcing failure, which is never a good thing to do.

The Zaria Experience: The overall birth survey

There were two "projects" by my team and I, and they ran concurrently. The first was on the sociology of obstetric fistula¹⁶, and the second was the actual birth survey¹⁷. For a period of three and half years beginning in January 1976, I was in charge of a team which collected reliable information on all women who gave birth in the hospital and others who were admitted shortly after they gave birth outside. Full cooperation was obtained from every department and individuals I approached within and outside the local community. They included the Madauci, a post equivalent to that of a prime minister in the court of the Emir of Zaria. Funding for raw data collection in Zaria was from routine financial subventions from the university and its teaching hospital where I was professor of obstetrics and gynaecology. Computing and statistical analysis was in UK and was funded largely by the World Health Organisation. The aim of the whole exercise was to discover what the needs of these women were and what we could do about them.

There were a total of 22774 mothers and 23512 babies (multiple births were included). 238 mothers and 2718 babies died. Their needs were many. We thought the best way to highlight them was to consider the mothers and their babies in three subgroups (Table 1). The first subgroup (booked-healthy) received antenatal care, they were healthy and free of complications during pregnancy but not necessarily during labour. The second subgroup (booked –with complications) received antenatal care, but they developed complications during pregnancy. The third and last subgroup were unbooked emergencies: they had no intention of receiving antenatal care and they came to hospital only when they developed complications especially during labour and shortly afterwards. Maternal mortality ratio per 100,000 deliveries was 40 in the booked healthy subgroup, 370 in the booked complications

subgroup, and 2,900 in the unbooked emergencies. Perinatal mortality rate per 1000 singleton births was 22 in the booked healthy subgroup, 74 in the booked-complications subgroup, and 243 in the unbooked emergencies. It is noteworthy that the maternal mortality ratio and the perinatal mortality rate in the booked-healthy subgroup were similar to those in England and Wales in the late 1940s. The proportion of singleton babies weighing 2.50 kg and less at birth was 6% in the booked healthy subgroup, 13% in the booked complication subgroup, and 25% in the unbooked emergencies. The operative delivery rates (more than half of which were abdominal deliveries) were 6% in the booked-healthy subgroup, 25% in the booked-complications subgroup, and 30% in the unbooked emergencies. 10% of the survey population received blood transfusion; the demand in the booked healthy subgroup in terms of number of units of blood transfused, being less than 2% of what it was for the unbooked-emergencies.

It was clear that high maternal mortality especially in the unbooked emergencies subgroup was the real priority. There were too many women in this subgroup and they were not able to avoid much of the dangers of childbearing as the other two subgroups did. Their death in such huge numbers were the consequences of antenatal neglect- no malaria prophylaxis, unchecked hypertensive complications, anaemia, neglect in labour often leading to obstruction, uterine rupture, obstetric fistula and fetal death; neglect after delivery leading to heavy blood loss and infection. The women were too cowed to be able to escape from the disadvantages imposed on them by their society. It encouraged child marriage, so that childbearing began in the early teens and continued until menopause; there was no protection against childhood infections, so that the combined effects of poor childhood nutrition and infection caused growth to become stunted; late arrival to hospital was common, not just from transportation and other logistical difficulties, but far more often from wilful denial of access to modern obstetric care and preferment of harmful traditional medicine. Lack of education compounded all of these problems. Under these circumstances, we were in no doubt whatsoever that reducing this high maternal mortality would require that we work towards removing the underlying conditions that produce the unbooked emergencies. Changing the way we treat women is absolutely fundamental. There is no better way of achieving this than by the eradication of mass illiteracy through compulsory universal formal education preferably up to secondary level.

As it was for the mothers, so it was for their babies, with the added important issue of the influence of their size at birth. Figure 2 showed that in each of the three subgroups of women who gave birth: (booked-healthy, booked-complications, and unbooked emergencies), the death rates of their babies was lowest when the babies weighed 3.0 kg to 3.5 kg: it was 10 per 1000 births in the booked healthy subgroup, 35 per 1000 births in the booked-complications subgroup, and 170 per 1000 births for the unbooked emergencies. One thing to draw attention to was the fact that the low perinatal mortality achieved in the first subgroup compares quite well with rates in many developed countries. This indicates that poor pregnancy outcome is not innate in the Nigerian mother; rather it reflects poor health and very bad living conditions.

Also worthy of note is that the survival rate was very low among babies of low birth weight, and neither maternal health status nor antenatal care influenced it. High technology neonatal care is needed to save these babies, but this has clearly not been a priority.

There was also a higher perinatal mortality rate found in big babies (birth weight exceeding 4.0 kg) born to mothers in the unbooked emergencies subgroup. This was not because big babies are bad; rather it reflected the level of acceptance of modern maternity care in labour. The acceptance was low because of ignorance and the resulting delay in reporting to hospital for safe operative delivery.

We gained several other insights on looking deeper at the birth weight of these babies. On perinatal deaths, it was discovered that the largest proportion consisted of normally formed stillbirths of normal birth weight, who died before admission to hospital (Figure 3). Both neonatal deaths and low birth weight perinatal deaths occupied a subordinate position, and congenital malformations were of little consequence. Thus, reducing intrauterine deaths of normal birth weight babies is an area of priority, and to this end, there is a need for prompt and bold operative intervention especially emergency caesarean section, before it is too late. From these findings, the concept of emergency obstetric care at the first referral care level gained reinforcement.

We felt aghast by another discovery. Growth in height and presumably in the bony birth canal takes place during pregnancy in poorly nourished early teenage Hausa girls who got pregnant for the first time when they had not finished growing. Protecting them against malaria and anaemia during pregnancy made them to grow in stature by 2 cm to 16 cm, and although they produced bigger babies, they had a marked reduction in their need for caesarean section for cephalopelvic disproportion. This observation if confirmed opens up the prospects of preventing obstructed labour and VVF by providing malaria chemoprophylaxis and iron and folic acid supplementation during pregnancy in early teenage girls living in poverty in malaria holoendemic areas.

There were many more discoveries. They are covered in one issue of a major medical journal¹⁷, whose release in 1985, and the wide publicity thereafter, led to the beginning of the Safe Motherhood Initiative in 1987.

The Zaria experience in VVF eradication

As soon as I began work in Zaria in 1972, it was obvious to me that obstructed labour and its complications wreaked havoc on the lives of women and newborn babies, and were the dominant reproductive health problems in the area and elsewhere in Northern Nigeria. The gynaecological ward had 40 beds; women recovering from the operation performed to cure obstetric fistula (VVF) occupied half of them. Thanks to the generosity of one of my senior colleagues, the late Professor Una Lister, a hostel that housed women with VVF waiting their turn to be treated, was built next to the gynaecology ward. The hostel called *Gidan mata* was designed to accommodate 20 women but there were rarely fewer than 60 occupants at any given time. Though slummy largely because of the overcrowded conditions, running water was available, the hospital fed the women, and their treatment was free of charge in accordance with existing health management policy in the university and in the rest of Kaduna State. The hospital was the only centre in Northern Nigeria for the treatment of VVF. We were operating on the average 300 women yearly and achieving very respectable cure rates, but the number of women reporting for treatment kept rising. It was obvious that treatment by surgery was never going to be the perfect solution to the problem that faced us. So we identified prolonged obstructed labour as the major maternal health problem in the area. We reasoned that knowledge of the social causes and consequences of the condition would be needed, and the work of the late Margaret Murphy, a competent,

fully committed, and dedicated sociologist and medical social worker, supplied them. The women's age distribution, the number of deliveries they had had in the past if any, the number of children that survived, the distance of their home from Zaria, their ethnicity and religious faith and education, their transport and logistical problems, the level of social support they were getting at home, and a host of other pertinent information emerged and quickly served as a guide in our approach towards the solution of the problem that faced us.

At the same time, changes to enhance the quality of obstetric care in our base – ABU Hospital Zaria - were effected at moderate cost. Physical and health infrastructural facilities were improved, although constraints from staff shortages remained. Morale boosting measures featured in the department, and staff members and students were made to see themselves as adding to the advancement of the establishment. Good records were kept, and audit became a regular and accepted exercise. In subtle ways, private practice whether regulated or not regulated was discouraged and the department obtained the trust of the local population. Once this was achieved, the local communities were made aware of the fact that the prevention of prolonged labour was the key to the successful eradication of VVF. We made it known to the general public – men, women, husbands, wives, traditional rulers, students - in our antenatal clinics and wherever, that women still in labour after 24 hours must report to the hospital. The slogan was “never let the sun set twice on a woman in labour”. This began in 1973. The number of hospital deliveries rose from 3866 in 1973 to 6436 in 1977 and roughly in the same period, there was a striking change in the geographical pattern of the locations where the women with VVF came from. Although more cases were seen in 1977 than in 1972, the proportion that came from within 50 km from Zaria declined sharply, while the proportion from other areas, including places with schemes for retraining TBA's increased. By 1977, no Zaria woman had VVF ¹⁸ (Figure 4).

Not too long afterwards, changes unfavourable to the health care system my team and I had been allowed to operate in Zaria were put in place (see later). VVF promptly resurged and maternal health standards were never the same again.

Yet, there is something to cheer. The work on VVF that began in Zaria in the 1970s soon spread. A National Task Force was formed in 1990, it became active in advocacy, the international community took notice, efforts at surgical repair expanded and were headed by Kees Waaldijk, a Dutch national, and Ann Ward, an Irish national, but the task remains formidable. Estimates of the number of cases awaiting repair varies between 80,000 and 200,000.

Thoughts on transforming maternal health care in Nigeria.

Currently, a large proportion of our population recognises the need for modern maternal health care. But because the public system of doing this is badly run, people have no confidence in it, and one consequence is that those pregnant women who can afford to do so, seek care and support in two or more places at the same time - the public system, private clinics and hospitals, prayer houses and TBA's. Some go to the extent of doing without any assistance at all. Among the affluent minority, some go abroad just to have their babies normally. Frankly, this is a national disgrace. It is not acceptable. We need to perform better so that our women can have confidence in the system of modern maternity care, and patronise public hospitals and those private establishments that are properly regulated.

For a start, surveys of the type carried out in Zaria, but community-based instead of being hospital centred, are urgently needed in different areas of the country. Based on the results obtained, prioritisation of needs, their implementation and evaluation should logically follow, guided by well - established principles made widely available especially from WHO sources. It will mean among other things that the various sectors of our government need to work closely together to improve health standards. Perhaps, this is already the case but I am not sure that it is, particularly at the grassroots or Local Government Area – level.

We rightly complain of serious financial constrains. While this may be so, in my opinion, the system of funding health care in this country will need to be reviewed urgently. World wide, there is presently a lot of unease about the concept of user fees for cost recovery in health care systems. For most Nigerian families, the out of pocket payments they have to make in order to cover the cost of user fees charged, are unaffordable. Together with the exacerbation of rampant corruption, this system of cost recovery has resulted in inequalities in access and utilisation of proper health care services. The difficulties do not stop there. One glaring example has to do with the existing National Health Insurance Scheme. Presently, it covers those in employment in selected urban areas so that it does not satisfy the concept of extension of disease-free life from a lucky few to the teeming majority. Other serious impediments to its operation include the country's high illiteracy rate, weak personal income tax collection systems, endemic corruption, high unemployment, and unreliable population data. Another example is in respect of the implementation of The Abuja Declaration, which in 2002 recommended that government should spend 15% of its total revenue on health. To the best of my knowledge, we are not doing so yet. If so, why? What stops us from raising revenue through taxation? There is however another recent development that goes to the very heart of the matter. The unexpected is shaping up to become the expected. As I write, the developed countries with whom, we do business have realised that the economic model SAP represents, has failed. So why don't we go the whole hog and dismantle the tenets of SAP and put in its place, something else that suits us?

I am sure we have all heard about various low cost measures aimed at improving access to maternal health care. I mention them here because I cast doubt on the efficacy of some. TBA's constitute the prime example. It was widely held that the training of TBA's in basic intrapartum skills and in case referral would lead to maternal mortality and morbidity reduction. I still recall how hard it was for few sceptics like me to argue as we did 30 years ago, against this strategy, and also to point out that no system of traditional medicine is known to give full protection to women during pregnancy and childbirth. It is gratifying to see that nowadays, scarcely anybody believes in this form of intervention. As for major emergency obstetric operations by non-physicians, I remain lukewarm, because of the high risk of abuse in the complexities of our environment with its unique socio-economic and political characteristics. I have no problems against the use of maternity waiting homes. Properly set and managed, they have been proven to be effective in avoiding serious complications of obstructed labour in isolated communities. I applaud whole-heartedly the expansion of facilities for surgical repair of VVF in the attempt to clear the backlog of the estimated thousands of cases per year. However, all things considered, prevention is the key to a lasting solution to the problem. To this end, we can have at the VVF repair centres, small hospitals with facilities for caesarean deliveries, so that the two work hand in hand.

I turn briefly to the issue of NGO's. There are over 800 registered NGO's in Nigeria, of which around 100 operate in the fields of gender and women development, and about 50 deal

with children's issues. Their large presence would seem to indicate that action is increasingly being taken to make things better for our women and children. However, it is the coherence of their action and their level of commitment that are open to question. I believe it is up to our government to effect donor coordination so that the work they do enhances the well being of our people not only for the short-term but also more importantly in the long-term. We should state our priorities for them to follow not the other way round.

There is one further and last thought on the maternal and perinatal mortality reduction situation in this country. Those of us who are retired after a lifetime spent battling against enormous odds to reduce maternal mortality, now have plenty of time for sober reflection. We have come to realise that in focusing on reducing high maternal mortality in the Nigerian situation, we are looking at the wrong end of the problem¹⁹. Dead and damaged mothers and infants make up a cluster of conditions resulting from one thing, very poor obstetric care. There is no doubt about that. But then, very poor obstetric care is one result of the chaotic socio-economic and political systems, which is the major underlying disease. It is the disease, which has to be treated. Devoting resources at a single symptom such as high maternal mortality will at best lead to a temporary amelioration and at the worst, no improvement at all. In Zaria, in the 1970s, our efforts in improving obstetric care in the area, led first to an increase in institutional deliveries, then to eradication of VVF, but VVF has resurged because of failure to sustain the effort and at the same time tackle the problem at the correct end, namely its root. To transform a society such as present day Nigeria, where scarcely anything works properly into a society where most things work to the general benefit of society, only bold measures will have the desired impact. At the core of the strategy to achieve this, two things are absolutely fundamental. The first is quality basic formal education because of the social, economic, political and health benefits it confers²⁰. The current system has broken down. As I wrote elsewhere¹⁹, we must fix education, invest in it, resource it properly, look at the countries that do it best, seek their assistance and copy. The second is counting all births, deaths and cause of death²¹⁻²⁷. To do both well, we have to learn to organise and discipline ourselves. In the process, there will be pain and sacrifice for some, but it is difficult to see how such pain and sacrifice can be avoided. I am aware that the National Population Commission, an agency of the Federal Government, is charged with the responsibility of registering all births and deaths in this country. To be honest, it needs to do its work better.

Conclusion and summary

On the surface, women and children are dying and suffering in large numbers because of shortcomings in health care provision and management, infrastructural inadequacies and poverty in the midst of plenty. Having been a doctor for longer than 50 years, 44 of them as a specialist, and having had plenty of time for reflection following my retirement over 10 years ago, I have realised that these shortcomings are the symptoms and not the disease itself. The disease in my view is the all-pervading chaos due to societal dislocation and weak governance structures. We have lost the sense of public service we once had. It cannot be said too often. Blaming the bureaucracy, seeking private-public partnerships, and wholesale privatisation look good on paper, but they are peripheral issues. There will be little or no hope unless we get the politics and governance structure right, and bring back the spirit of public service.

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REFERENCES

1. Marmot M, Freil S, Bell R et al on behalf of the Commission on Social Determinants of Health (2008) *Lancet* 372, 1661-1669.
2. Campbell O, Graham W. on behalf of Lancet Maternal Survival Series steering group. *Strategies for reducing maternal mortality: getting on with what works (2006) Lancet; 368:1284-1299.*
3. Borghi J, Ensor T, Samanathan A et al. Lancet Maternal Survival steering group. *Mobilising financial resources for maternal health. Lancet (2006); 368:1457-1465.*
4. World Health Organisation. *The World Health Report 2005: Make Every Mother and Child Count. Geneva:WHO, 2005.*
5. UN Millennium Project. *Who's got the power? Transforming Health Systems for Women and Children. New York: UN, 2005*
6. Ronsman C, Graham W, on behalf of Lancet Maternal Survival Series steering group (2006). *Maternal mortality: who, when, where, and why. Lancet; 368:1189-1200.*
7. Filippi V, Ronsman C, Campbell O et al. (2006) *Maternal health in poor countries: the broader context and a call for action. Lancet; 368: 1535-1541.*
8. Koblinsky M, Matthews Z, Hussein J et al.(2006) *Going to scale with professional skilled care. Lancet; 368: 1377-1386.*
9. Berer M. (2007) *Maternal Mortality and morbidity: is pregnancy getting safer for women? Reproductive Health Matters, 15, 6-16*
10. Harrison K A (2003) *Reproductive health struggles in Nigeria. Lancet; 362, 582.*
11. Rehan N.(1982). *Sex Ratio of live-born Hausa infants. British Journal of Obstetrics and Gynaecology 89,136-141.*
12. Cannon DSH and Hartfield VJ (1964) *Obstetrics in a developing country. Journal of Obstetrics and Gynaecology of the British Commonwealth LXXI, 940-950.*
13. Harrison KA (2006). *An Arduous Climb: from the Creeks of the Niger Delta to a Leading Obstetrician and University Vice Chancellor. Adonis and Abbey Publishers Ltd London pages 125-126.*
14. Nylander PPS (1971). *Biosocial aspects of multiple births. Journal of Biosocial Science, 3, 29-38.*

15. Paintin D (2003) *The BJOG celebrates its centenary: a commentary on Childbearing, Health and Social Priorities: a survey of 22774 Consecutive Hospital Births in Zaria, Northern Nigeria* by Kelsey A. Harrison. *BJOG* 110, supplement 21, 127 - 128.
16. Murphy M (1981) *Social consequences of vesico-vaginal fistula in Northern Nigeria* . *Journal of Biosocial Science*. 14; 139-150.
17. Harrison KA (1985) *Childbearing, Health and Social Priorities: a survey of 22774 consecutive hospital births in Zaria, Northern Nigeria*. *British Journal of Obstetrics and Gynaecology* 92 (Supplement 5), 1-119.
18. Harrison KA (1980) *Traditional Birth Attendants*. *Lancet* ii, 43-44.
19. Harrison KA (2007) *Nigerian politics and safe motherhood*. *BJOG* 114, 771-772.
20. Harrison KA. (1997) *The importance of the educated healthy woman in Africa*. *Lancet* 349, 644-647.
21. Horton R (2007) *Counting for Health*. *Lancet* 370, 1526
22. Okonjo-Iweala N, Osafo-Kwaako(2007) *Improving health statistics for Africa* *Lancet* 370.1527-8
23. Setel PW, Macfarlane SB, Szreter S, et al (2007) *A scandal of invisibility: making everyone count by counting everyone* *Lancet*; 1569-1577.
24. Mahapatra P, Shibuya K, Lopez AD et al (2007) *Civil registration systems and vital statistics: successes and missed opportunities*.*Lancet* 370, 1653-1663.
25. Hill K, Lopez AD, Shibuya K et al (2007) *Interim measures for meeting needs for health sector data: births, deaths and causes of death*. *Lancet* 370, 1726-1735.
26. Lopez AD, AbouZahr C, Shibuya K et al (2007) *Keeping count: births, deaths, and causes of death (2007)*. *Lancet*. 370, 1744-1746.
27. AbouZahr C, Cleland J, Coullare F et al (2007) *The way forward*. *Lancet*, 370, 1791-1799.

PANEL

Broad range of socio-economic and health determinants for improving women's lives

- Health determinants – human resources (health professionals, ancillary health professionals, inspectorates, policy makers and bureaucrats); health care infrastructure; the supply of consumables e.g. essential drugs, fluids and blood replacement facilities etc.; utilities, grounds and gardens; information technology; maintenance of all of these; arrest of brain drain; research.
- Social and demographic determinants: Poverty; mothers' age and parity; height and nutrition; education; housing and communication; work and employment; food; water and sanitation; energy source and power supply and their distribution.
- Political determinants: conflict and war; legal systems; setting priorities, implementation, accountability and in particular, making politicians and top decision makers answerable to the general public they are meant to serve.
- Economic determinants: Funding and finance; tax administration.

Table 1. Maternal and perinatal mortality, mode of delivery and major morbidities in booked-healthy women, booked women with antenatal complications, and unbooked-emergencies in Zaria. 1976-1979

Groups of women			
Pregnancy outcome	Booked-healthy	Booked complications with	Unbooked emergencies
Mode of Deliveries			
Operative deliveries %	5.5	25.1	31.5
Caesarean sections %	2.5	19.1	18.2
Destructive operations (no)	8	9	221
Blood transfusions (no.)	252	336	1789
Puerperal sepsis (no.)	85	112	580
Obstetric fistula (no.)	2	1	75
Maternal deaths/100000 births	40	370	2870
Perinatal deaths/1000 singleton births	22	74	243
Birth weight less than 2.5 kg singleton births %	6	13	24
Number of women	11605	3418	7700

CAPTIONS FOR THE FIVE FIGURES

Figure 1 Percentage of 6-11 year olds who enrolled in primary schools between 1960 and 1999 (reproduced Grant J (1995) The State of the World's Children. Data are from UNICEF with permission from RCOG.

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Figure 2. Birth weight specific perinatal mortality rates in booked-healthy, booked-complications and unbooked emergencies subgroups in Zaria. 1976-1979

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Figure 3. Fetal birth weights, time and place of perinatal deaths in Zaria 1976-1979.

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Figure 4. VVF in Northern Nigeria 1972-1977: Distance from Zaria.

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DELIVERY OF AN EFFECTIVE MATERNAL AND CHILD HEALTH SERVICES IN NIGERIA

By

PROF O. A. Ladipo FRCOG, OON

BACKGROUND

Maternal and perinatal health has emerged as the most important issue that determine global and national wellbeing. This is because every individual, family and community is at some point intimately involved in pregnancy and the success of child birth (WHO2006). Despite the honour bestowed on womanhood and the appreciation of the birth of a new born baby, pregnancy and child birth is still considered a perilous journey.

The situation of maternal and child health in Nigeria is among the worst in Africa and has not improved substantially and in some areas of the country, has worsened over the past decade. The maternal mortality ratio ranges between 800-1,500 per 100,000 live births.(NDHS,2003) with marked variation between geo-political zones- 165 in south west compared with 1,549 in the North- east and between urban and rural areas(NPC, 2008). Total fertility rate is 5.7 births per woman and it is estimated that approximately 59,000 of maternal deaths take place annually in Nigeria as a result of pregnancy, delivery and post delivery complications (WHO, 2007). Nigeria is second to India in terms of absolute number of maternal death and regrettably, despite abundant resources, contributes more than 10% of all global maternal and under 5 deaths. The northern part of the county has generally worse indicators and is also the region where polio has proven most difficult to control.

Research indicates close link between the health of the newborn with the health of their mothers. About 30–40% of neonatal and infant deaths result from poor maternal health and inadequate care during pregnancy, delivery, and the critical immediate postpartum period. Data also suggest that a mother’s death affects the overall well-being of her surviving children (Strong, 1992). The infant mortality in Nigeria continues to increase. The estimate from 2003 NDHS indicates an infant mortality of 100 per 1,000 which is significantly higher than those of 1990(87 per 1,000) and 1999(75 per 1,000). 340,000 infants die every year during delivery and shortly afterwards especially if the mother dies in child birth (WHO, UNICEF, UNFPA, 2007). The under -five mortality ratio is 200 per 1,000live births (WHO, 2006). These unnecessary maternal and under five mortality reflect a significant breakdown of basic services, and in particular of primary health care in the country. Coverage and utilization of these interventions are correspondingly low. The Nigerian health situation makes it a major sector in the global achievement of MDGs 4 and 5.

The Federal Government of Nigeria in recognition of the need to strengthen and improve safe motherhood and child health programmes to reduce morbidity and mortality, has formulated several policies and strategic frameworks to accelerate the integration of reproductive health/family planning concerns into sectoral programmes and activities. The MDGs 5 and 4 requires improvement of maternal and child health. Target 6 of MDG 5 specified that between 1990 and 2015, maternal mortality ratio be reduced by three quarters. The chances of attaining this target depend on how policy, plans and interventions address the comprehensive set of social, economic, cultural as well as medical causes of maternal mortality in Nigeria.

This chapter therefore would focus on broad overview of maternal health issues, services, data and indicators in Nigeria; Access to safe motherhood services; Causes and challenges of maternal health services in Nigeria; Maternal health policy and support function, the legal and political framework of maternal health including rights issues and the way forward to effectively deliver maternal and child health services in Nigeria.

OVERVIEW OF MATERNAL HEALTH ISSUES, SERVICES, DATA AND INDICATORS IN NIGERIA

The 2006 census estimates that there are about 65 million females in Nigeria, out of which 30 million are of reproductive age (15-49 years). Each year, about 6 million women become pregnant; 5 million of these pregnancies result in child birth (WHO, UNICEF, UNFPA, 2007). Available data indicate that 59,000 women die yearly as a result of complications in child birth (WHO, 2007). A Nigerian woman is 500 times more likely to die in childbirth than her European counterpart. Mortality ratio is about 800- 1,500/100,000 live births (NDHS, 2003) with marked variation between geo-political zones- 165 in south west compared with 1,549 in the North- east and between urban and rural areas (NPC, 2008) and the second highest number of absolute maternal deaths, only outranked by India in the world (NARHS, 2005). More disturbing is the SOGON study that revealed a maternal mortality of 3,380 in Lagos state, 783 in Enugu, and 2,977 in Cross Rivers State, 846 in Plateau state, 727 in Borno state and 7,523 in Kano state indicating very serious health system failure. One in 20 Nigerian women dies of pregnancy/delivery related causes (Advocacy Brief, 2007), compared to 1 in 61 for all developing countries, and 1 in 29,800 for Sweden and Finland. Thus for all human development indicators, maternal mortality ratios show the greatest disparity between developed and developing countries. These deaths are largely preventable. Equally of concern is that yearly, about 1,080,000 – 1,620,000 Nigerian women and girls will suffer disabilities caused by complications during pregnancy and childbirth (Hill, AbouZahr and Wardlaw, 2001).

For every one that dies, 20 - 30 more suffers long term and short term disabilities such as Chronic anaemia, Maternal exhaustion or physical weakness, Vesico-vaginal or Recto-vaginal fistulae, Stress Incontinence, Chronic pelvic pain, PID, Infertility, Ectopic Pregnancy, and Emotional Depression. The UNFPA estimates that 2 million women suffer vesico vaginal fistulae globally, 40% of these (800,000) women are in Nigeria, majority due to prolonged obstructed labour that often terminate in still birth or neonatal death (UNFPA, 2003). Child survival is equally affected too as the chances of survival of a child in the absence of his or her mother is greatly reduced. In Nigeria, 340,000 infants die annually during delivery and shortly after delivery especially if the mother dies in child birth. These deaths are not unconnected with the poor maternal health services in the country and could be avoided through provision of quality and effective maternal and child health services.

In the year 2000, Nigeria and other members of the United Nations agreed on a number of Millennium Development Goals (MDGs) to improve the welfare of the people in their countries in the 21st century. Two of the health related goals concern reducing death among children under 5 years old by two- third (MDG 4 ie reduction from 230 -77 per 100,000 live births) and reducing maternal deaths by three-quarters (MDG5) by the year 2015, when compared with the 1990 figures (from 1000/100,000 live births to 250). Midway to 2015, Nigeria still records a rather appalling maternal and neonatal, infant and under five mortality rates compared with developed countries. Although many of these deaths are preventable, the coverage and quality of health care services in Nigeria continue to fail women and children.

A cursory review of the health services pre and post independence will place us on strong footing to assess the situation of maternal health services in Nigeria and the right way forward.

Maternal Health Services in the Pre- Independence Era: Since 1946, the Nigerian government has been involved in the provision of health care. However, much progress as it relates to health at the rural areas where most of the population resides was made during the post – independence era.

Post- Independence Era:

In 1975, the Nigerian government started utilizing a Primary Health Care (PHC) approach to the provision of national health care. PHC encompasses basic treatment, maternal and child health (MCH) and family planning services, the prevention and control of infectious diseases and the provision of essential drugs and supplies. Although MCH was an integral part of PHC, high maternal mortality in Nigeria first received international attention through a paper by an obstetrician and gynaecologist, Kelsey Harrison, in the British Journal of Obstetrics and Gynaecology (Harrison,1985). Also in 1985 across the Atlantic, Rosenfield and Maine (1985) published a paper titled “Maternal Mortality – a neglected tragedy: where is the M in MCH?”. The “M” which should have stood for maternal health instead often stands for maternal death, missed opportunities, muddled thinking, mistaken priorities and messy organization of health services. This provided the impulsion for convening an international safe motherhood conference in Nairobi, Kenya in 1987 which launched a global safe motherhood movement. Nigeria was committed to achieving the objective of “reduction in the number of maternal deaths by half by the year 2000” as agreed at the conference. A safe mother hood committee was subsequently established by the federal Ministry of Health and the Society for Gynaecology and obstetrics of Nigeria (SOGON) intensified efforts to promote maternal mortality reduction. Also, Columbia University established the Prevention of Maternal Mortality Network, conducting formative research. However, these initiatives were not scaled up and activities stagnated under the military rule. In 1988, the Nigerian government adopted the National Health Policy and Strategy to achieve health for all Nigerians and established PHC as an integral part of the national health system and a priority for national development. The policy articulated the goal of enabling all Nigerians to achieve socially and economically productive lives. According to the policy, health is “essential component of social justice and national security’.

In 1992, the importance of PHC system was reinforced by the establishment of the National Primary Health Care Development Agency (the “Agency”). The Agency sought to implement the National Health Policy by revising existing health policies where necessary, translating policies into feasible strategies, and providing technical support to the management of the PHC system. Prior to this, other polices relating to health were formulated. For example, in 1988, in response to the perceived adverse socio-economic consequences of rapid population growth, the government adopted the National Policy on Population for Development, Unity, Progress and Self –Reliance(the “National Policy on Population). This policy provided the framework within which family planning services are provided. It is predicted upon the principle that couples and individuals have the right to determine the number and spacing of their children. Reduction of maternal mortality was not explicitly on the agenda. However, the situation changed following transition to democratic rule in 1999, and the pressure of the 2000 MDGs. With the creation of National economic

empowerment and development strategy (NEEDS) - a poverty alleviation programme which has developed into a national framework for social change, maternal mortality was explicitly listed as an objective (Nigerian Central Bank, 2004).

Also, growing concern among the civil society about the unacceptable level of maternal mortality in Nigeria has spearheaded efforts to improve maternal and child health. For example, the Association for Reproductive and family Health (ARFH), Planned Parenthood Federation of Nigeria and Pathfinder International Nigeria have worked throughout the decade to expand reproductive health services for Nigerians. The Campaign for Unwanted Pregnancy and Ipas have made sensitive issue of safe abortion a subject of public discourse and to improve post-abortion care in the country (Oye-Adeniran, Long and Adewole, 2004; Ipas, 2005)

The FMOH adapted the WHO African regional plan of reproductive health and the process marked with the launching of the Population Development Agenda. All components of reproductive and sexual health services including MCH, Integrated Management of Childhood Illnesses (IMCI), Safe Motherhood, Adolescent sexual and reproductive health (ASRH), Post abortion care and management of abortion complication were integrated in the guidelines and standing orders for primary health care which was developed post-International conference on population and development (ICPD). The Federal Ministry of Health produced a national reproductive health policy in 2001 (FMOH, 2001) and a national reproductive health strategic framework in 2002 with specific maternal mortality reduction aims (FMOH, 2002).

A revision of the National Policy on Population for Sustainable Development in 2004 clearly called for reduction of MMR to 75 by the year 2015 (FGN, 2004). The Ministry furthermore established a multi-sectoral national Commission on Safe Motherhood. In 2005, the government with support by the World Health organization adopted a roadmap to attain the maternal and child health MDGs (WHO, 2005). The MDG has been a strong basis for commitment to maternal mortality reduction in Nigeria.

The Nigerian Road Map is an outcome of the one developed by the Regional Reproductive Health Task Force in collaboration with all partners in October 2003 in Dakar –Senegal and February, 2004 in Harare Zimbabwe. The Road Map is to provide a framework for strategic partnerships for increased investments in maternal and newborn health at institutional and programme levels. The aim is to focus on the availability of emergency obstetric and neonatal care, skilled attendance during pregnancy, childbirth and family planning as well as provision of essential equipment and supplies that will save the lives of women and newborns at all levels. The implementation will be in 2 phases of 5 year each; Phase 1-2005 - 2009, Phase 2 – 2010 -2014 and final reporting year will be 2015. The Road Map is expected to impact on the health and survival of mothers and their newborns as a means of attaining the MDGs. It is also expected to build on the ICPD Programme of Action, the Cairo +5 and the UN Millennium Summit agreements. Furthermore, the Integrated maternal, Newborn and Child Health (IMNCH) strategy 2007 was put together to fast-track a programme designed to revitalize primary health care in every local government to reduce maternal and under 5 mortality. The Ministry of Health has also put in place measures to expand access to Emergency Contraceptives and modern methods such as Norplant, female condom etc.

From the brief overview of the maternal health services, one would expect a comprehensive health system that would impact women's reproductive health and bring the maternal mortality to the barest minimum level. Despite the wide range of maternal health services available, the maternal mortality in Nigeria continues to rise. This is not unconnected to the weak management and implementation of health policies and service compounded with the socio-economic and cultural factors. For instance, in a 2003 report of comprehensive survey of health facilities in 12 randomly selected states in Nigeria, only 4.2 and 1.2% public facilities met the Basic Essential Obstetric Care (BEOC) and Comprehensive Essential Obstetric Care (CEO) respectively (Fatusi and Ijadunola, 2003). Only Lagos state meets the criteria of 4 BEOC facilities per 500,000 populations, and 7 states met the standard of 1 CEO per 500,000 population. For the few that met these criteria, the distribution of Essential Obstetric Care (EOC) facilities was uneven with most of them located in the urban areas while the rural areas where most of the population resides are highly underserved.

Similarly, only 13.9% of the estimated annual births for the 12 states took place in health facilities and a total of 35,790 obstetric complications were recorded across facilities and states over a 12 month period of the study. Haemorrhage and prolonged labour were the commonest. These findings reflect poor provision of maternal health services and low utilization of available ones. Furthermore, it is of concern because it gives a picture of inadequate access to reproductive health services including family planning by the population that deserve it. Although increasing access to use of family planning is not one of the MDGs goals, analysis however has shown that it can make contribution to achieving some of the MDG goals especially the ones relating to improvement of maternal health and reduction in infant mortality.

Nigeria has one of the lowest contraceptive use rates (8% ie about 1 in 12 women of reproductive age). The potential contribution of family planning to reduce maternal mortality is not fully realised by the average Nigerian, in particular the very poor, disadvantaged and uneducated. The most obvious demand problem was the resistance against small family idea which resulted in very limited demand for contraception as a way of ending child bearing. The resistance of males against male condom shifted emphasis to the targeting of women within the clinic context. The associated supply problems include narrow range of methods that are available within a weak and urban oriented family planning system. Unmet needs for family planning is estimated at 18%.

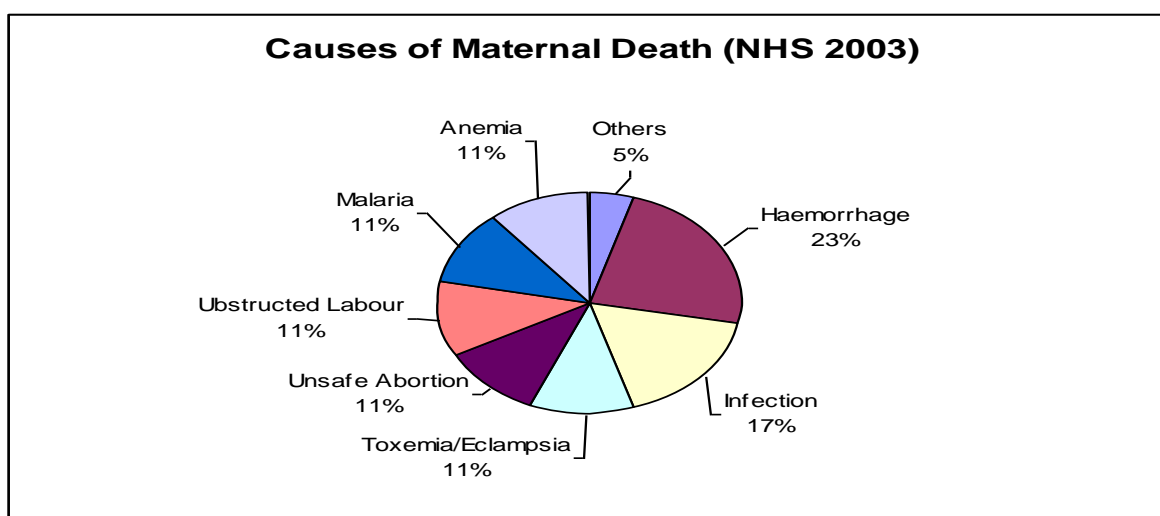
Many pregnancies are high risk pregnancies: many women have 6 children on the average; about one in four mothers in Nigeria is a girl of 15- 19 years. One in seven (15%) pregnancies yearly in Nigeria is unintended (NDHS, 2003) and one in six (17%) of married women who want to space or limit the number of births have no access to FP/Child Birth Spacing information and services. High risk pregnancies and abortion are pre-requisite to maternal mortality. Therefore, factors that influence the incidence of pregnancy will also influence the level of maternal mortality. Part of the response to the limited impact of the safe motherhood initiative was the development of the national programme for the prevention of maternal morbidity aimed at expanding and strengthening advocacy projects for safe motherhood. The programme was aimed at creating a better access to antenatal care facilities for the 27 million women of reproductive age of Nigeria (Okonkwo, 2002).

Causative Factors of Maternal Mortality in Nigeria

The cause of maternal mortality is an outcome of nexus of interaction of a variety of factors viz- the distant factors(socio-economic, cultural) which act through the proximate or intermediate factors(health and reproductive behaviour, access to health services) and in turn influences outcome(pregnancy, complication, mortality) – Campbell and Graham,(1990). This follows other models which have their basis on the premise that social and economic determinants of mortality operate through a common set of biological mechanisms and proximate determinants to exert an impact on mortality (Campbell and Graham, 1991). The health behaviours are actions that people do or do not take for their health e.g. attending antenatal care or seeking help when complications arise. Reproductive behaviour includes issues like age, birth spacing, pregnancy etc. Access to health services is a concept ranging from whether adequate facilities exist (adequate supplies, personnel, good quality of care) and if people can reach the services provided (cost, distance, information). The socio-economic and cultural factors for example the issue of women’s right especially the reproductive and sexual rights, female education, employment and empowerment, gender inequality are important especially as it relates to women’s decision making capacity over access to health care. Both the distant and the proximate factors operate together to impact mortality rather than a uni-directional causality. However, the causes in Nigeria can broadly be divided into 4 namely - Medical factors, Socio-cultural factors, Reproductive factors, and Health service factors.

Medical Factors

Some of the direct medical causes of maternal mortality include hemorrhage or bleeding (23%), infection (Sepsis -17%), unsafe abortion (11%), hypertensive disorders, and obstructed labour(11%). Other causes include ectopic pregnancy, embolism, and anesthesia-related risks (WHO, 2001, Ogunkelu B. 2002,). Conditions such as anemia(11%), diabetes, malaria(11%), sexually transmitted infections (STIs) including HIV/AIDS, and others can also increase a woman’s risk for complications during pregnancy and childbirth, and, thus, are indirect causes of maternal mortality and morbidity.



National Demographic & Health Survey, 2003. (National Population Commission and ORC Macro, Calverton, MD, 2009).

Socio cultural Factors:

Socio-cultural factors that relate to low status of women (gender disparity in education, access to productive resources etc), poverty, harmful traditional practices and other factors

that act as barriers to utilization of available health services have influenced the maternal mortality rate in Nigeria. Traditional practices that affect maternal health outcomes include early marriage and female genital cutting. Child marriage is a violation of human rights, compromising the development of girls and often results in early pregnancy and social isolation, with little education and poor vocational training reinforcing the gendered poverty. Women married at tender age tend to drop out of school and experience high fertility and maternal morbidity and mortality.

In Nigeria, over 15% of the women of reproductive age (15-49years) marry before age 15 and 40% of the women aged 20- 29 years married before age 18. Early marriage is a problem of the poor where 25% of girls in the poorest quintile are married early compared to 5% of the richest quintile. It increases northwards from 5% in SW or 6% in SE to 11% in NC and 33% in the most northern states. Pregnancies in adolescent girls, whose bodies are still growing and developing, put both the mothers and their babies at risk for negative health consequences. Female genital cutting, also known as female circumcision or genital mutilation, is a practice that involves removing all or part of the external genitalia and/or stitching and narrowing the vaginal opening (which is called infibulation). The practice still goes on in some parts of Nigeria. Social, cultural, religious, and personal reasons support the persistence of this practice. Some of these reasons include maintaining tradition and custom, promoting hygiene or aesthetics, upholding family honour, controlling women's sexuality and emotions, and protecting women's virginity until marriage (Population Reference Bureau. 2001). According to WHO, the rate of maternal death is doubled by genital mutilation and the risk of stillbirth increased several times. Female genital cutting can have profound effect on the outcome of pregnancy, cause difficulties and intense distress during intercourse and obstruction in time of delivery. They often also experience psychological and sexual problems. Educational status is highly associated with health seeking behaviour in pregnancy and delivery. Maternal mortality is much higher in women with no education as compared with those with secondary or higher education.

The Four Delays (why women & children die)

1st Delay – The first delay is based on inadequate knowledge base at the individual, family and community levels - Lack of information (inadequate knowledge) about pregnancy and labour complication signals and cultural barriers and low self esteem. Decisions to seek health care take place in a rather complex web of relationships and any delay in seeking care for maternal health problems can be fatal. Decisions to seek care are often made by the husbands, mother in-laws or the community women. Autonomy in deciding to seek care can be hampered by their economic dependence and the prohibitive cost of emergency interventions. This can be compounded by social restrictions on their movement e.g women in Pudah. The 1st delay- delay in recognizing the need to seek medical attention, or delay in recognizing complications. Awareness creation in communities about signs of life threatening complications and educating women and their families about where to seek care are of great benefit.

2nd Delay- relates primarily to the patients decision making context. Postponing the decision to seek care can be the outcome of the social, domestic, economic or cultural context in which a woman finds herself for example, Poor citing of health facilities, poor roads and communication network and poor community support in times of emergency.

3rd Delay addresses the accessibility problems. A woman may live next to the clinic but be precluded from gaining access in a timely fashion. Encouraging communities to create emergency transport plans, enhancing referral systems between communities and health care providers are good options to resolve this delay. Enhancement of referral systems must extend to the inter-tier referral of obstetric emergencies based on a realistic assessment of the health providers' skills available at each level of care.

Delay 4 addresses the of quality care. The standard and timeliness of care are the main focus of this delay. Upgrading quality of care at health facilities, including improvement in providers technical and personal skills, motivation and performance, establishing national protocols for treating obstetric conditions, adequate and sustainable supplies of emergency drugs, equipment, providing 24 hour service at facilities that provide emergency obstetric care among other things are all necessary.

Reproductive Health causes

A number of studies have shown that certain groups of women are at increased risk of maternal mortality. They include: Too young [<18 years], Too old [> 35 years], Too many [having 5 or more deliveries], Too frequent [having spacing of their deliveries less than 2 years apart] and Too sick [pregnancies contraindicated or at very high risk to life]. Other contributory factor include: unsafe abortions - 610,000 per year, High prevalence of malaria, High rate of malnutrition – 16%, HIV/AIDS pandemic 5.4% - 9%

Impact of Maternal Death

Maternal death without doubt is associated with considerable grief and depression. It also directly affects child survival as it increases the chances of newborn death by 2-4 times. The loss of a woman in the prime and productive part of her life also adversely affect family income and increases the socio-economic burden on the man and children. Indeed, women's economic contribution is essential to reducing poverty in Nigeria, and projected losses from maternal mortality deaths on the national economy over a 10 year period(2001-2010) are estimated at about 30 billion naira (REDUCE, 2003).

Health service causes

Lack of access to essential obstetric care, lack of access to family planning [FP] counseling and service, lack of drugs, equipment, essential materials, instruments, consumables etc in hospital, non-availability of health workers on essential duties, deficient transportation, communication and utility (power, water etc) facilities all contribute to increased maternal mortality in Nigeria. Most maternal deaths occur during delivery and during the postpartum period. Emergency obstetric care, skilled birth attendants, postpartum care, and transportation to medical facilities if complications arise are all necessary components of strategies to reduce maternal mortality (Dayaratna et al 2000). These services are often particularly limited in rural areas, so special steps must be taken to increase the availability of services in those areas. The prevention of maternal mortality network identified social distance as a barrier to access services for many respondents interviewed in rural communities. "Social distance" is described by the study as consisting of differences in language, behaviour and expectations between the consumer of health care and its providers. Ethnic and linguistic diversity also can be the cause of social distance, impeding access to services. Even when providers are of the same ethnic group, there can be social distance barriers caused by differences in education, experience and socioeconomic status. Hospital staff may ridicule the tradition or practices of a community and impose unfamiliar

dorsal supine position for deliveries, culturally inappropriate hospital dress, all of which may influence women in deciding to give birth in more sympathetic environment outside of health services (PNMN, 1997). These have contributed to the slow progress shown towards achieving the millennium goal related to improving maternal health in Nigeria.

MDG 5(reducing by 75% between 1990 and 2015 MMR

Country	Maternal mortality ratio(2005)	Life time risk of maternal death
Nigeria	1100	18
Eritrea	450	44
Ghana	560	45
South Africa	400	110
Egypt	130	230
Brazil	110	370
Mexico	60	670
Sweden	4	30,000

Source: Countdown to 2015; Tracking progress in maternal, newborn and child survival: The 2008 Report UNICEF 2008

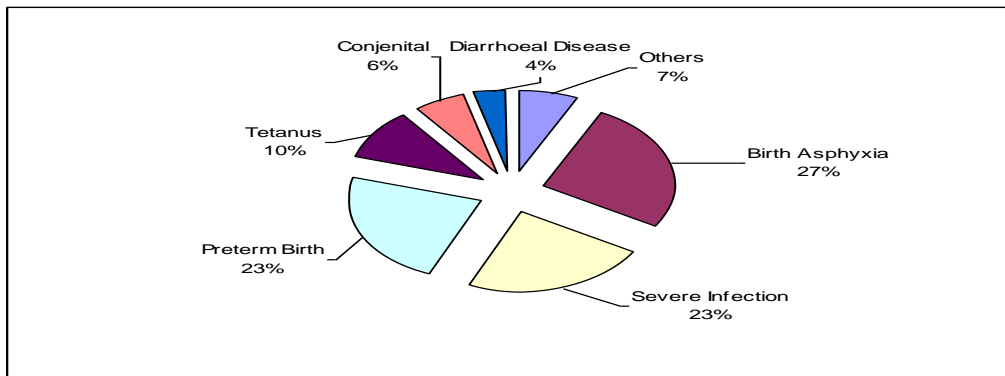
Infant and Under-5 Mortality

Neonatal death (death of infants within the first 28 days of life) in Nigeria is 48 per 1000 live births(NDHS,2003) and almost half of infant death per annum results from poor maternal health and poor care at time of delivery(Compass Project: Making motherhood safe in Nigeria). There are wide geographical variations. According to the National Demographic Health Survey 2003, the highest neonatal rates were recorded in the North-East and North-West zones while the lowest rates (34 per 1,000) were seen in the South-East zone. Most of these deaths occur in the first week of life and it is a reflection of the link with quality of maternal care. (FMOH, 2007). About 5.3 million children are born annually in Nigeria i.e. 11,000 per day. One million of these children die before the age of 5. Nigeria's newborn death rate (528 per day) is one of the highest in the world, almost two jumbo jets of children crashing everyday. More than a quarter (26%) of the estimated 1 million children who die under age 5 years die during the neonatal period (Advocacy kit FMOH, 2008).

The major causes of these deaths are asphyxia 27%, preterm 23.4%, sepsis 23.5%, neonatal tetanus 10.4%, congenital conditions 6.5%, diarrhoea 3.4% and others 7.2%. Other contributing factors are: only 36% of babies are delivered by skilled birth attendants who can manage newborn conditions; less than half(40%) of pregnant mothers receive two doses of tetanus toxoid and only 32% of babies are initiated on breast feeding within one hour of birth as required.(Advocacy kit FMOH, 2008).

Infant mortality (death of children under one year) and under-five mortality are 100 and 201 per 1000 lives births respectively and these deaths are from preventable causes such as malaria (24%), pneumonia (20%), diarrhoea (16%), measles (6%) and HIV/AIDS accounted for more than 71% of the estimated one million under 5 deaths in Nigeria in 2004. This is compounded by an underlying malnutrition. The highest record of under 5 mortality was seen in the North East and North-West zones while the lowest was recorded in the South – East zone (FMOH, 2007). These rates fall short of the National Programme of Action for Survival, Development and Protection of the Nigerian Child(1992) which was to reduce

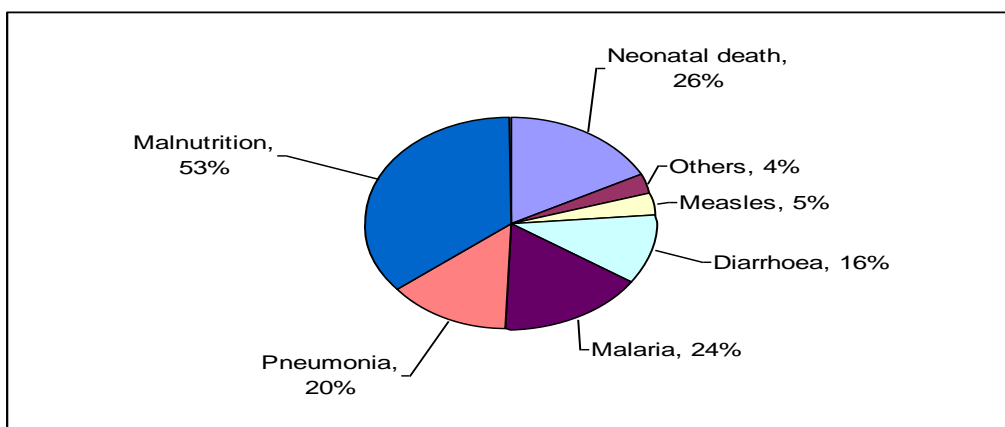
infant mortality rate to 50 per 1000 and under 5 to 70 per 1000, or by one- third of 1990 which was 230 per 1000



Estimated distribution of the causes of neonatal deaths, FMOH. Advocacy pack on improving maternal, newborn and child health, 2008

Determinant of infant and under 5 mortality in Nigeria

Child survival in Nigeria has achieved little improvement as compared with other African countries like Ghana, Cameroon and Kenya who have achieved significant improvement of 53%, 40% and 42% respectively* (ref). Some of the contributory factors to under 5 mortality in Nigeria include malnutrition, poor environmental hygiene, low access and utilization of quality health care services by women and children. Others include but not limited to low female literacy level, poor family health care practices, lack of access to safe water. According to the NDHS, 2003, only about 42.8% has access to safe water. The major causes of deaths in children under 5 years old and percentage contribution are as follows: Neonatal conditions- 26%, Malaria- 24%, Pneumonia-20%, Diarrhoea - 16%, Measles- 5%, HIV/AIDS - 5%. Other established underlying causes of child illness and deaths include: non-use of simple low cost oral dehydration therapy by about 80% of children with diarrhoea, non-use of appropriate antibiotics by 60% of children with pneumonia, non-use of insecticide treated bed nets by 10% of children, exclusive breast feeding for the first 6 months is practised by only 17% of mothers and severe malnutrition.



Estimated Distribution of Causes of Deaths in under 5 in Nigeria

Progress Towards MDG 4

Country	Under 5 mortality rate		MDG 2015	Average annual rate of reduction %		Progress towards MDG target
	1990	2006		Observed 1990-2006	Required 2007 - 2015	
Nigeria	230	191	77	1.2	10.1	Insufficient
Eritrea	147	74	49	4.3	4.6	On track
Ghana	120	120	40	0.0	12.2	No progress
South Africa	60	69	20	-0,9	13.8	No progress
Egypt	91	35	30	6	1.6	On track
Kenya	97	121	32	-1.4	14.7	No progress
Brazil	57	20	19	6.5	0.6	On track
Mexico	53	35	18	2.6	7.6	On track

Source: Tracking progress in maternal, newborn and child survival. The 2008 report UNICEF 2008, p18 -19

The Nigeria multiple indicator cluster survey 2007(MIC, NBS UNICEF) reports that some progress has been made despite the economic and political climate. For example, the infant mortality rate was 86 while the under five mortality rate was 138 compared with 191 in 2006. The Nigeria male child has greater probability of dying as an infant or as under five than his female counterpart, 92 versus 79 per 1000 at infant and 44 versus 131 per 1000 live births at under five, respectively. Infant mortality decreased from rural to urban sector of the population(94 to 62 per 1000) from the non educated to secondary school or higher educated mothers(94 to 63 per 1000) and from the richest to the poorest household(101 to 54 per 1000). There is considerably geographical zonal disparity in infant mortality rates from 68 per 1000 in the south west to 101 per 1000 in the North West.

Child Mortality and Welfare Mortality Rates, Nigeria, 2007

1	Sex	Infant mortality rate	Under five mortality rate
	Male	92	144
	Female	79	131
2	Geographical Zone		
	North central	74	117
	North east	84	135
	North West	101	166
	South East	88	142
	South South	71	111
	South West	68	106
3	Area Sector		
	Rural	94	153
	Urban	62	96
4	Women's Education		
	None	94	153
	Primary	84	134
	Secondary +	63	97
5	Wealth index quintiles		

	Poorest	101	165
	Second	99	162
	Middle	92	150
	Fourth	73	114
	Richest	86	138

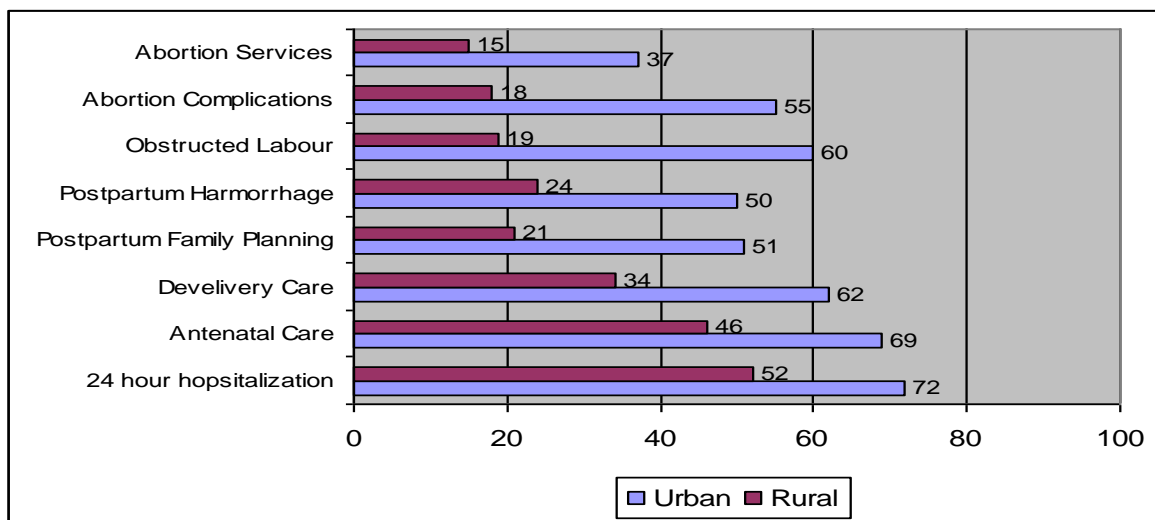
ACCESS TO SAFE MOTHERHOOD SERVICES

Studies have shown that 60-80% of birth in Nigeria occurs at home or in the village (FMOH, 2005 Safe motherhood in Nigeria). In most developing countries, access to safe motherhood services in rural areas is more limited than in urban areas. This is of particular significance to Nigeria because the majority (64 percent) of its population lives in rural areas (Population Reference Bureau. 2001). In a national survey on household practices on safe motherhood in Nigeria, data showed that only 20% commenced antenatal care in the first trimester, 13.7% of the mothers did receive tetanus toxoid. Similarly, 57.5% delivered either at home, by the TBAs, relatives or did not have assistance at all at delivery (25.3% at home, 15.9% with TBAs, 9.7% by relatives, 6.6% did not have assistance -FMOH, 2005). Decision to seek care when complication occurred was made mostly by the spouses of the women and heads of families (45.2%, 34.4% respectively) while only 17.2% of the women made decisions. Data on Neonatal and Childhood illnesses showed that during the first week of life, 15.5% of the children had fever, 10.1% had cough and 2.1% had convulsion. Less than half (43.7%) of these babies received treatment from government facilities while 10.2% received care from the private facilities. A fifth of newborn babies (20.6%) did not get follow-up care. Over 58% of females and almost 52.9% of males in the community knew people close to them who had been circumcised. Thirty-one percent as compared with 23.2% of women reported using family planning. Ensuring safe motherhood requires recognizing and supporting the rights of women and girls to lead healthy lives in which they have control over the resources and decisions that impact their health and safety. It requires raising awareness of complications associated with pregnancy and childbirth, providing access to high quality health services (antenatal, delivery, postpartum, family planning, etc.), and eliminating harmful practices. It is a continuum of care that connects essential maternal, newborn and child health interventions throughout adolescence, pregnancy, childbirth, postnatal, newborn periods and into childhood. Secondly, it is a linkage between the family, community and the health facility ensuring appropriate care in each phase. It is an educative approach to ensure that women are assisted to develop habits that promote good health through out the reproductive period.

In another study of 21,975 singleton Nigerian births in Zaria, young teenage girls constituted 6% of the survey population and 30% of the 174 maternal deaths, while the highly parous women aged 30 and over made up 10% of the survey population and 20% of the maternal deaths(Harrison et al. 1985). Short inter-pregnancies interval increases the risk of low weight gains during pregnancy, anaemia, difficult labour, birth trauma and infection leading to high maternal mortality. Also, women who have given birth to 5 or more children are more likely to have pre-eclampsia/eclampsia, difficult labour, ruptured uterus, hypertension, kidney diseases and even diabetes. Thus, the contribution of safe motherhood include: to ensure postponement of first pregnancy until 20, to ensure that reproduction ceases after age 35, to ensure a gap of 2 -4 years between pregnancies and to ensure the achievement of a planned total family size (Denis, 1980).

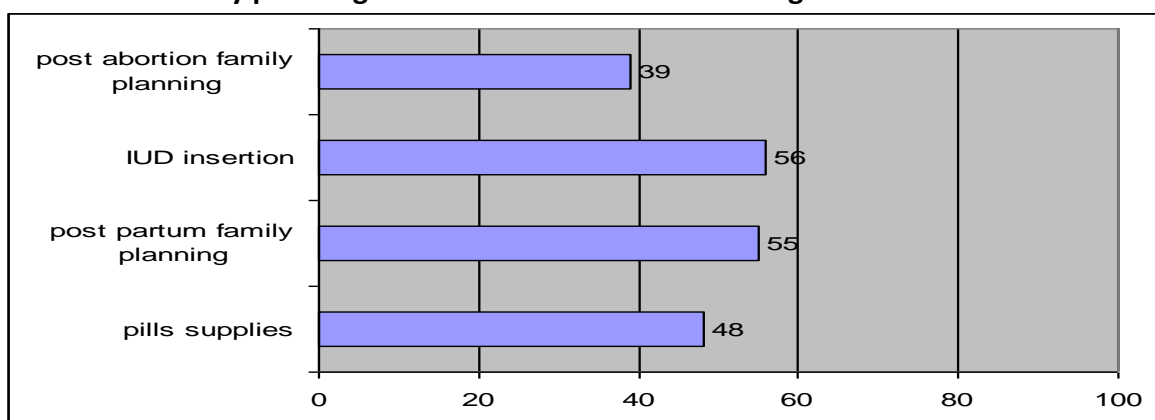
In 1999, around 750 reproductive health experts evaluated and rated maternal and neonatal health services as part of an assessment in 49 developing countries. The figure below shows the comparisons of access to obstetric services for rural and urban areas in Nigeria.

Comparisons of access to services for rural and urban areas in Nigeria

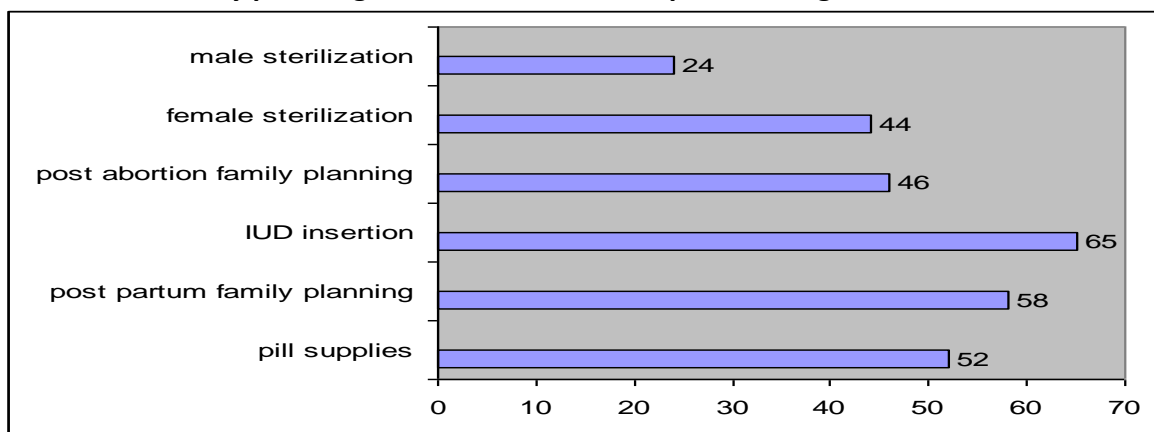


The ratings of family planning services provided in the health centers and facilities district hospitals suggest that family planning services are limited in Nigeria. Both health centers and hospitals received moderate ratings for IUD insertions (56% and 65% respectively), and lower ratings for pills supplies (48% and 52%). Post abortion family planning (39%) was the lowest rated service for health centers, while male sterilization was the lowest for district hospitals (24%).

Provision of family planning services at health centers in Nigeria



Provision of family planning services at district hospitals in Nigeria



Men as partners in maternal health

To exclude men from family planning information, counselling and services is to ignore the important role men's behaviour and attitude may play in the couples reproductive health choices. Traditionally, in Nigeria, men have played the role of decision makers. Improving their participation in the promotion of maternal health would strengthen their roles as promoters at the family, community and national levels. When men are involved, both men and women are more likely to communicate with each other, make joint decisions about contraceptive use, discuss how many children they would like to have and be actively involved in child rearing and domestic chores.

The Mother-Baby Package

The Mother – Baby package outlined interventions that were expected to help achieve the Safe Motherhood goal of reducing maternal mortality by half and neonatal and perinatal mortality by 30 -40% of 1990 levels by the year 2000. The principles of this package are:

- 1) Family planning to ensure that couples have the information and services to plan the timing, number, and spacing of pregnancies,
- 2) Antenatal care to prevent pregnancy complications where possible and ensure that conditions are detected early and treated appropriately,
- 3) Clean and safe delivery through provision of the necessary knowledge, skills and equipment to all birth attendants as well as postpartum care for mothers and infants and
- 4) essential obstetric care, to ensure management of high-risk pregnancies and their complications.

The implementation of the measures in the Mother-Baby Package assures a continuum of care, linking all levels of the health system and ensuring support and supervision

MATERNAL HEALTH POLICY AND SUPPORT FUNCTION

In recognition of the high maternal and child mortality, the government of Nigeria has shown commitment in reversing the trend. In the health sector, several policies and strategic frameworks have been formulated. These include: National Population Policy, 1988, revised in 2004, National Primary Health Care programme (1978), National Programme on Immunization (NPI, 1978), National Nutrition Policy, 1991, National Breast-feeding Policy, 1991, National Reproductive Health Policy and Strategy, 2001, Food and Nutrition Policy, 2001, Reproductive Health Commodity Security Strategic Plan (RHCS plan 2003), National HIV/AIDS Policy and Strategic Plan 2003, National Malaria Policy, 2004, National Health Policy, 1988 (revised in 2004), National Anti malaria Treatment Policy (2005), Reproductive Health Behavioral Change Communication Framework, 2005, National

Adolescent Reproductive Health Survey(NARHS), 2005, National Guideline on Micro-nutrient Deficiency Control, 2005, Road Map for Accelerating the Attainment of the MDGs Related to Maternal and Newborn Health in Nigeria, 2005, National Child Health Policy, 2006, Integrated Child Survival and Development (ICSD): Strategic Framework and Plan of Action, 2006, Infant and Young Child Feeding Policy(IYCF),2006, National Health promotion Policy(2006), National Policy on the Health and Development of the Adolescent and other Young People in Nigeria, 2007,Integrated maternal, Newborn and Child Health Strategy, 2007.

In addition to the above policies, Nigeria has received increased donor assistance to enhance the possibility of reducing maternal mortality. Such donor agencies include United Nations Population Fund, World Bank, African Development Bank, DFID, UNICEF, WHO, USAID (Fatusi and Ijadunola, 2003; World Bank 2002; FMOH and UNICEF).

CHALLENGES TO MATERNAL HEALTH SERVICES IN NIGERIA

Despite these policies, effective delivery of maternal and child health in Nigeria is still fraught with challenges. This is because there still exist some gaps which include: Health policies, programmes and activities are sectoral, uncoordinated and limited in scope; there is yet to be a strong and cohesive network of safe motherhood champions in the government and the civil society to drive the political and social system into action. Inadequate fund allocation to programmes and delay in the release of funds allocation result in ineffective programme implementation. Health services offered to mothers, newborns and children are run as separate programmes and not integrated. In Nigeria, the federalized system of government allows for delineation of power among the three tiers in terms of responsibilities for health care. The outcome is that despite commitment at the federal level, weak and poorly coordination of activities as well as overlapping of responsibilities affect implementation at the community level. The absence of a constitutional or other legal prescription of health-care responsibilities has resulted in a dysfunctional health-care system in which all three tiers of government have failed to prioritize their health-care duties, and have faced no political or legal repercussions for doing so(CRR 2008).

Communities non-involvement in planning and implementation of programmes and interventions lead to non-ownership. Only few Governors and state commissioners place safe motherhood a top priority on their agenda and offer free antenatal service. However, the introduction of free services has also been undermined by the lack of systemic capacity to sustain free services, including inadequate staffing and supplies of medication.

Consumer awareness of available programmes and services is lacking, pregnant women who access maternal health-care services face uncertain, informally levied costs, even when user fees have been waived, which has the potential to dissuade a poor or financially struggling woman from seeking maternal care. The family Planning /Child Birth Spacing policy is subsumed in several policies which fail to give it the desired attention, resulting in weak systems and structures that do not allow for efficient services at all levels of service;

Manpower in the health sector in most rural areas is mostly unskilled and inadequate. In spite of the efforts at promoting skilled attendance, the situation in Nigeria is still less than optimal. The NDHS (NPC, 2003) revealed that over 40% of the 6,219 births in five years preceding the survey had no trained assistance (modern birth attendants) during delivery.

Urban-rural differential was equally powerful. Assistance from doctors was four times more likely in urban areas than in rural areas. Regional variations also reflect the impact of uneven distribution in the health system in the country. In the North West, North East and North Central, the proportions receiving no skilled assistance were 61.5%, 51.5% and 43.7% respectively. In sharp contrast, the corresponding proportions for South West, South South and South East were 9.3%, 11.6% and 6.6% respectively. The limited number of skilled personnel could be attributed to low remunerations which encourages “brain drain syndrome” making the skilled personnel to seek for greener pasture outside the country. Female health workers are in short supply because of the lower levels of literacy prevailing in the northern regions. The importance of skilled assistance can be dramatically illustrated with the following data that shows a clear association between the low levels of antenatal care and the concomitant high MMR in Nigeria as compared with other developing countries.

Table 1: Skilled Attendance at Delivery and Maternal Mortality Ratio in Selected Countries

Country	% Skilled attendance at Delivery	Maternal Death per 100,000 livebirths
Trinidad and Tobago	98	90
Sri-Lanka	94	140
Botswana	77	250
Bolivia	46	650
Nigeria	31	1000
Bangladesh	5	850

Source: “Skilled Care during Childbirth” Safe Motherhood Fact Sheet, 1998, Family Care International, New York. USA.

As a result of the female staff shortages, women opt for delivery at home attended by TBAs or relatives. This option allows family and friends to provide support. It also allows the performance of religious rite and other rituals during labour (Acsadi and Johnson-Acsadi, 1991) and after delivery.

However, mother’s education was one of the most powerful determinants of access to skilled assistance during delivery. While 60% of mother’s with no education relied on unskilled assistance, just 9% of mother with higher education had no skilled assistance. An explanation of the reliance on traditional birth attendance rather than professional especially in the northern regions is not unconnected with the practice of the *pudah* system. The system restricts the access of women to modern health care facilities, even at the risk of dying. The emphasis of the associated religious beliefs also restricts the access of girls to education, thus denying them the “medication against fatalism” (Royston and Armstrong, 1989). The result is a compounding of the access factor by the education factor in the risk of maternal mortality in such societies. The preference of Muslim women is for female health workers. There is no doubt that the men too share the sentiment (PMMN, 1992). The fear of delivery by caesarean section is an added disincentive to utilization of the modern health facilities.

LEGAL AND POLITICAL FRAMEWORK OF MATERNAL HEALTH INCLUDING RIGHTS ISSUES

Nigeria is a signatory to the numerous UN conventions on the rights of women and children, population and development, women empowerment and elimination of harmful practices against women. In May, 2001, the ‘First Ladies’ of 14 West and Central African States met in

Bamako, Mali and initiated “Vision 2010” as a measure to accelerate the reduction of maternal and neonatal mortalities.

Nigeria, being a signatory to the Bamako Declaration adopted the Women and Children Friendly Health Services initiative (WCFHS) as a strategy towards the attainment of Vision 2010. This was launched in October, 2004 by the then First lady of Nigeria, the late Chief Stella Obasanjo, and approved by the National Council on Health for implementation in all the states and local governments. Other right issues which have been developed exist. Implementing the national policies involves active participation of all tiers and relevant government agencies and private sector. Legal and political support is required to accelerate implementation at both federal and local levels. Many see little political value in making safe motherhood a policy priority. The legislators can make a difference by taking the following actions: accelerate speedy passage of the national bill into law and ensure its implementation; make laws to ensure compliance with policies and programmes for maternal, newborn and child health and support constitutional review to place health in the exclusive list to make implementation of national policies at state and local government levels mandatory.

Delivery of an effective maternal and child health services therefore in Nigeria must consider the broad nexus of social, cultural, legal and medical factors influencing maternal and child health.

WAY FORWARD

There are a number of life cycle events which may not be linked directly to reproduction but have profound influence on the maternal mortality. Similarly, institutional arrangements that contribute to effective planning and policies that are needed as support to reduction of maternal mortality need be addressed as follows:

1) Female Genital Mutilation (FGM): FGM eradication should be made part of the antenatal health education component. It has tended to be based on bio-medical justification as well as from the human right approach because of the unintended consequences arising from the severity of the procedure. Government should legislate against female genital mutilation.

2) Girl Child Education policy: This policy should focus on the comparative disadvantaged position to which girls are exposed by the very nature of their sex and exposure to the risk of pregnancy and associated hazards in life. The core element of this policy should be to make the girl child a special resource by promoting her education which will take precedence over religious or cultural barriers to her educational development. This should be accorded a national priority as female literacy will increase access to stable employment and economic empowerment. Female education will delay age of marriage and also make the women appreciate the importance of utilization of health facility.

3) Age at marriage policy: There is an inexorable link between the timing of marriage, first pregnancy and the associated risk of maternal mortality (MM) in a young female (especially those under the age of 18). Marriage at 18 and above will reduce maternal death by 30%. The element of this policy should be to set a well discussed age limit that takes as its primary focus MM reduction without prejudicing the social dysfunction that later ages of marriage might create. The faith based organizations, RH professionals and associations

should be involved in such dialogue and the policy should be backed with necessary legislation.

4) Small family Policy: The risk of maternal death is high in women that have delivered five or more times. Strengthening of family planning services and integration into all tiers of healthcare can be a powerful component of this policy.

5) Legalization of abortion: Unsafe abortion is one of the major causes of maternal mortality in Nigeria and this is partly due to the restrictive law on abortion which forces women and girls to seek clandestine and unsafe abortions. Experience from countries such as Romania where abortion law was liberalised it has markedly reduced the maternal mortality rate without corresponding demand for abortion services or a rise in unwanted pregnancies (Sai F. 2004).

6) Infrastructure Development Policy: This should factor in elements that enhance the movement of pregnant. The improvement of roads and other transportation system has salutary effect on MM reduction.

7) Public/private Health Partnership: Bringing health professionals in the private sector into partnership with public health facilities should be promoted so that access to prompt EMOC no longer depends on the limited circumstances in the public sector but can call upon expertise in private practice. The mechanism for the accounting and financing of such a partnership comes within the purview of the National Health insurance Scheme. The advantage of such a partnership will be to give access to quality RH care irrespective of income levels of residence in RH disadvantaged areas. This will help in attainment of MDG 5 as MM is not a public sector tragedy but a tragedy that affects all.

8) Lifelong MM Monitoring and evaluation Database: There should be development of a mechanism for periodic assessment of progress towards the realization of the goals of policies. The collection and analysis of periodic data sets on RH indicators that include lifelong risk factors as FGM status, education level, age at marriage, number of pregnancies within the framework of national RH accounting can bring the pace of progress readily to attention. The NDHS series is serving some of the purpose. But making these indicators part of regular and ad hoc surveys needs to be backed by the force of national policy.

Another component of this M & E policy will be development of indicators that incorporate the immediate and remote causes of MM.

9) Free Maternal Health Policy: Free antenatal care and delivery services for pregnant women should be effected in all the states. There should be integrated approach to the delivery of health care services to mothers, newborns and children rather than the existing vertical approach in most of our primary health care centres. Provision of information and services about the family planning and contraception should be integrated as well.

10) Skilled personnel should be recruited and capacity of the health workers built. This will enhance efficiency in the health care delivery. *add: regular retraining of the staff

11) Multi-sectoral approach to reduction of MM: All relevant stakeholders should be involved in planning, implementation, monitoring and evaluation of maternal and child

health programmes. For example, a multi-sectoral approach should be employed whereby the Legislative Assemblies, Information, Education, Women Affairs etc should include MCH programming in their portfolios. There should be community participation and involvement of community leaders, women association leaders, men association leaders, road transport union etc)

12) Vital Registration system: The government should make compulsory the registration of all births, marriages and maternal deaths in all the states of the country. These will form the bedrock of sound analysis of the demographic progress in the nation. This can lead to a 3 yearly publication that will indicate the status and trend of MM in Nigeria. Such a publication will serve as the basis of assessing the progress towards the goal of policy.

13) There should be disease-specific preventive measures for child mortality in particular wide spread immunization coverage for childhood diseases.

14) Establishment of national institute for maternal and child to provide oversight function and data retrieval on maternal neonatal and child health and conduct relevant research on maternal and child health in Nigeria. The institute should also conduct annual audit for policy decisions on maternal and child health

15. Domestication of international conventions relevant to safe motherhood and child's rights 16. Health system reform should be considered a priority of government to ensure adequate infrastructure, skilled personnel and improved work ethics.

Conclusion

The magnitude of maternal and infant mortality is perhaps the greater social injustice of our time. Children and mothers are dying because those who have the power to prevent their deaths choose not to act. Our inability to act proactively is but a symptom, a tragic symptom of a larger social injustice of discrimination against women and denial of women's human rights. This indifference by politicians, policy makers, researchers and civil society is a betrayal of our collective hope for a stronger and more just society, one that value every life no matter how young or hidden from public view that life might be. As health professionals, we should not accept this pervasive disrespect for human life. No woman should die in the process of giving us life. We have voices, platform and a constituency that should be an instrument for radical change.

Analysis of health policy commitments for information, governance, services, finance and workforce show many gaps. There is need for stronger commitment to maternal and child health goals. Reproductive health, too often forgotten as a critical component of maternal, newborn and child health strategies, requires an immediate attention and financial flow, need to be scaled up dramatically for evidence- based interventions. The health services are characterised by inefficiency, wasteful use of resources, low quality of services, unmotivated workforce and poor enabling environment. The 2008 countdown results identified clearly the urgent need for government to focus on strengthening health systems. In particular, the crisis in human resources must be addressed so that clinical services for mothers and children can be provided on a 24 hours basis both in urban and rural communities.

There is need for urgent investments to strengthen infrastructure and supplies, planning, management, supervision and monitoring, thus creating an enabling environment that

would improve morale of health workers with the ultimate aim of improved quality of care. Secondly, innovative programme models should be scaled up, such as national pooled health insurance and performance –based contracting with non-governmental organizations and private sector.

Thirdly, there is need for better integration and link programmes and initiatives. For example, routine immunization (including measles campaign) and antenatal care have been important mechanism for distribution of insecticide-treated nets for malaria prevention. Other potential links such as those with reproductive health must be strengthened if consistently high and equitable coverage across the continuum of care is to be achieved. Opportunity also exist to link prevention of mother –child transmission of HIV with antenatal, delivery and post natal care.

Fourthly, we need to improve our monitoring and evaluation of various interventions and generate validated data for programmatic decision making. We must institutionalize annual audit process for maternal deaths, near misses and newborn deaths can lead to significant improvement in quality of care. If progress is to be made to achieve MDG 4 and 5 in Nigeria, we require rapid and effective scaling up of both quality and quantity of care through guided health system development.

Despite the galaxy of challenges, there is a ray of hope for improvement as evidenced by the windows of opportunities that exist during this democratic dispensation. With good leadership, transparency and effective use of available resources, we can accomplish local improvements in NCH outcomes, especially through programmes that improve health literacy, empower the communities and ensure access to quality local health services in particular emergency obstetric services and equitable distribution of skilled birth attendants.

Maternal and newborn mortality rates are indicators for measuring development of any country, hence, maternal health is a national priority in combating extreme poverty and hunger (MDGs). Without any doubt, women are likely to have fewer children if child survival is high. Investment in maternal and perinatal health will have positive ripple effects on the economy of Nigeria because safe motherhood and perinatal health represents an important key to the sustainable development efforts of Nigerian government. The current administration should therefore give priority to integrated maternal, newborn and child health programmes.

References

Abouzahr C, Wardlaw T. Maternal Mortality in 200: Estimates developed by WHO, UNICEF, and UNFPA.

Acsadi GT; Johnson-Acsadi G (1991) Social and cultural factors influencing maternal and child mortality in Sub-Saharan Africa with special reference to eastern African countries. In: The effects of maternal mortality on children in Africa: an exploratory report on Kenya, Namibia, Tanzania, Zambia, and Zimbabwe, [compiled by] Defense for Children

International-USA. New York, New York, Defense for Children International-USA, 1991. : 73 - 96.

Advocacy Brief: In An Integrated Approach to Improved Maternal, Newborn and Child Health Action Points for the Media. Produced by the Federal Ministry of Health with support from ENHANCE project/USAID 2007

Advocacy Kit : Improving maternal, newborn and child health, FMOH, 2008

Broken Promises: Human Rights, Accountability and Maternal Death in Nigeria. 2008 Center for Reproductive Rights and Women Advocates Research and Documentation Centre Campbell, O and W.Graham, 1990, Measuring Maternal Mortality and Morbidity, London School of Hygiene and Tropical Medicine, London

Campbell, O and W.Graham, 1991, Measuring the determinants of Maternal Morbidity and Mortality, London School of Hygiene and Tropical Medicine, London.

Countdown to 2015 for maternal, newborn, and child survival "Rapid progress is possible, but much more can and must be done". 2008. The Lancet. 371(9620): 1215 -1308.

Dayaratna, V., W. Winfrey, K. Hardee, J. Smith, E.Mumford, W. McGreevey, J. Sine, and R. Berg. 2000. Reproductive Health Interventions: Which Ones Work and What Do They Cost? (Occasional Paper No. 5) Washington, DC: POLICY Project. Available at <http://www.policyproject.com/pubs/occasional/op-05.pdf>

Dennis F (1980) The contributions of planned parenthood to family health. FORUM. 1980;3(2):11-5.

Fatusi A.O and Ijadunol KT. (2003). National study on Essential Obstetric Care Facilities in Nigeria. Technical Report

Federal Ministry of Health. National Reproductive Health Policy and Strategy. Abuja, Nigeria: Federal Ministry of Health, 2001

Federal Ministry of Health. Nigeria National Reproductive Health Strategic Framework and Plan, 2002 -2006. Abuja, Nigeria: Federal Ministry of Health, 2002

Federal Government of Nigeria. National Policy on Population for sustainable Development. Abuja, Nigeria: Federal Government of Nigeria, 2004

Federal Ministry of Health, UNICEF. Women and Children Friendly Health Services Initiative in Nigeria: National Guidelines. Abuja, Nigeria: Federal Ministry of health and UNICEF.

Harrison KA; Rossiter CE; Chong H; Lister UG; Bano Q; Briggs ND; Ekwempu CC; Memberr MT (1985) Zaria Maternity Survey--1976-1979. III. The influence of maternal age and parity

on childbearing with special reference to primigravidae aged 15 years and under. *British Journal of Obstetrics and Gynaecology*. 1985;92(Suppl No 5):23-31

Hill K.C, AbouZahr and Wardlaw T (2001): Estimates of Maternal Mortality for 1995. *Bulletin of the World Health Organization Source is 1995 WHO/UNICEF/UNFPA estimate of maternal mortality*. 79(3): 182 -193.

Integrated maternal, Newborn and Child Health strategy 2007. Federal Ministry of Health, Abuja

Ipas. *Ipas Nigeria Country Report*. Available: <http://www.ipas.org>(Accessed 15 July 2005).

Maine D and Wray J.(1997) *Prevention of Maternal Mortality Network, Supplement to IJGO vol59(suppl. 2) Elsevier*.

Mortality Country Health System Fact Sheets, WHO, 2006 : In An Integrated Approach to Improved Maternal, Newborn and Child Health in Nigeria. Produced by the Federal Ministry of Health with support from ENHANCE project/USAID and implementing partners. 2007

National Planning Commission (NPLC) and UNICEF. 1998. *Child Survival, Protection and Development in Nigeria: Key Social Statistics*. Abuja, NPLC and Lagos, UNICEF.

National Population Commission (NPC) [Nigeria] and ORC Macro.2004. *Nigeria Demographic and Health Survey 2003*. Calverton, Maryland: National Population Commission and ORC Macro.

Nigerian Central Bank. *Nigerian Central Bank Annual Report Statement of Accounts*. Abuja, Nigeria: Nigerian Central Bank, 2004

Nigerian Multiple Indicators Cluster Survey 2007, monitoring the situation of children and women preliminary report. September, 2007.

NDHS, 2003: *Infant and Child Mortality*.

Okonkwo A T(2002). *Nigerian government tackles maternal mortality*. *Lancet*.6: 360 -65

Oye-Adeniran B, Long C, Adewole I. 2004. *Advocacy for the reform of the abortion law in Nigeria*. *Reprod Health Matter*; 12: 209 -217

Ogunkelu B. 2002. *The State of Health in Nigeria: A Focus on Women and Children*. Statement Presented by Nigeria's Minister for Cooperation and Integration in Africa at the Advocacy Day, 29th Annual Conference, Global Health Council, Washington D.C, USA on 28 May 2002. www.acoshed.net/Documents/AdvocacyStatement-CongressionalLunch.pdf

Population Reference Bureau. 2001. *Abandoning Female Genital Cutting: Prevalence, Attitudes, and Efforts to End the Practice*. Washington, DC: Population Reference Bureau. Available at http://www.prb.org/pdf/AbandoningFGC_Enq.pdf.

Population Reference Bureau. 2001. *2001 World Population Data Sheet*. Washington, DC: Population Reference Bureau. Available at http://www.prb.org/Content/NavigationMenu/Other_reports/2000-2002/sheet4.htm1

Prevention of Maternal Mortality Network (PMNN), (1992) *Barriers to treatment of obstetric emergencies in rural communities of West Africa*. *STUDIES IN FAMILY PLANNING*. 1992 Sep-Oct;23(5):279-91.

Ross, J. A., and W. P. Mauldin. 1996. "Family Planning Programs: Efforts and Results, 1972-1994." *Studies in Family Planning* 27 (3): 137-147. Also see UNAIDS, USAID, and POLICY Project. 2001. "Measuring the Level of Effort in the National and International Response to HIV/AIDS: The AIDS Program Effort Index (API)." Geneva: UNAIDS.

Rosenfield A, Maine D. (1985). *Maternal mortality- a neglected tragedy: Where is M in MCH?*. *Lancet* 2: 83-5

Royston E and Armstrong S (1989) *Preventing Maternal Deaths*, WHO, Geneva.

The MNPI was conducted by The Futures Group International and funded by the U.S. Agency for International Development (USAID) through the MEASURE Evaluation Project. For more information on the MNPI, see Bulatao, R. A., and J. A. Ross. 2000. *Rating Maternal and Neonatal Health Programs in Developing Countries*. Chapel Hill, NC: MEASURE Evaluation Project, University of North Carolina, Carolina Population Center. Page????

Safe Motherhood in Nigeria: Patterns of Household Practices. Federal Ministry of Health, Abuja, Nigeria May, 2005

Starrs A., "Safe Motherhood Initiative: 20 years and counting". *The Lancet Maternal Survival Series*, September 2006; UN Millenium Project, *Investing in Development; A Practical Plan to Achieve the Millenium Development Goals*, UNDP, 2005.

United Nations Population Fund (UNFPA), *Maternal Morbidity*, <http://www.unfpa.org/mothers/morbidity.htm>. Accessed May 13, 2008.

WHO, UNICEF, UNFPA *Advocacy Brief: In Family Planning/Child _Birth Spacing for Health and national Development Action Points for Policymaker*. Produced by the Federal Ministry of Health with support from ENHANCE project/USAID 2007

World Health Organization. 2001. *Advancing Safe Motherhood through Human Rights*. Available at

http://www.who.int/reproductivehealth/publications/RHR_01_5_advancing_safe_motherhood/RHR_01_05_table_of_contents_en.html.

World Health Organization. Road Map for Accelerating the Attainment of the MDGs Related to Maternal and Newborn Health in Africa. World Health organization, 2005.

WHO and UNICEF 1996 Revised 1990 estimates of Maternal Mortality, WHO UNICEF, Geneva.

World Bank. Health Systems Development Project II. Washington, Dc: World Bank, 2002

WHO et al., Maternal Mortality in 2005 at 25 (2007). (India had the highest number of maternal deaths (117,000) based on the WHO's estimates).

Sai F. 2004. International commitments and guidance on unsafe abortion. African journal of reproductive health. 8(1):15-28

SUB THEME TWO
GOVERNANCE AND LEGISLATION (STEWARDSHIP) FOR PRIMARY HEALTH CARE

THE NATIONAL HEALTH POLICY BILL AS A MEANS OF IMPROVING PRIMARY HEALTH CARE AND ATTAINING THE HEALTH RELATED MILLENNIUM DEVELOPMENT GOALS

By

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Current Situation

From all available statistics, Nigeria is doing very badly in area of health care; Maternal Mortality is at 1100 per 100,000 live births and is one of the highest in the world; the under five mortality at 200 per 1000 live births, is extremely high and there is a high incidence of malaria and other infectious diseases that are no longer a problem in other parts of the world. Tuberculosis is making resurgence along with the continuing HIV/AIDS pandemic, which in Nigeria is along the lines of that of the rest of West Africa with a rate at about 5% but needs to be continuously monitored and prevented from getting higher given our large population. Life expectancy is at 47 years of age.

If health is wealth, we are indeed a very poor country, much poorer than most of our neighbours we generally believe ourselves to be wealthier than. Using health as the basis of measurement means we may be adjudged to be one of the poorest countries in West Africa indeed in Africa. In the Human Development Report 2007/2008 by UNDP, Nigeria's maternal mortality is only better than that of five countries namely Rwanda, Angola, Chad, Niger and Sierra Leone. These are not countries we would normally think were comparable to Nigeria, but on maternal mortality this group is where we belong; countries generally coming out of years of war.

One of the reasons we are far poorer in health compared to our neighbors has to do with our higher population and higher human density; which allows for more contact rates for infectious diseases, and therefore larger spread. The ability of an infectious disease to spread across Niger or Chad is limited due to the lack of large densely populated areas from which people can then carry diseases to rural areas. Larger countries need better organized health systems to help them better fight disease. As an epidemiologist, I was taught that the disease control systems now used all over the world, started during the industrial age when more and more people moved to European cities and it became apparent that an effective disease control system was needed which would hitherto spread slowly could now quickly kill thousands. For example, it was during the London cholera outbreak of 1832, that it was discovered that sewage dumped in rivers from which water was pumped to houses as drinking water was the cause of cholera outbreak. The more people there are the more opportunity for spread of infectious disease and therefore the higher disease rates will be. Nigeria needs to have a robust health system to take care of disease outbreaks occurring among its teeming population.

Health Policy Bill as a Solution

From all indications, our health system in Nigeria has fallen apart over the last 20 to 25 years. The primary Health Care Approach was introduced in Nigeria in the mid 1980s. According to World Health Organization (WHO) the specified aims and objectives of Primary Health Care is **“essential health care based on practical, scientifically sound and socially acceptable method and technology made universally accessible to individuals and families in the community through their full participation and at a cost which the country can afford to maintain at every stage of its development in the spirit of self reliance and self determination”**.

It is obvious that Nigeria is not currently practicing Primary Health Care as defined by World Health Organization (WHO). Primary Health Care is not universally available to Nigerians. The objectives of the National Health Bill are to make Primary Health Care start to fulfill the WHO definition. The way this is to be achieved is by establishing a Primary Health Care Development Fund which will be sourced from the consolidated revenue account. The monies in the fund will be divided 50:50 between the National Primary Health Care Development Agency (NPHCDA) and the National Health Insurance Scheme (NHIS). The Money will be disbursed as follows as stated in the Bill

- (a) 50% of fund shall be used for the provision of basic minimum package of health services to all citizens, in primary health care facilities through the National Health insurance Scheme (NHIS);
- (b) 25 per cent of the fund shall be used to provide essential drugs for Primary Health Care through NPHCDA;
- (c) 15 per cent of the fund shall be used for the provision and maintenance of facilities, equipment and transport for the primary health care through NPHCDA
- (d) 10 per cent of the fund shall be used for the development of Human Resources for Primary Health Care also disbursed through NPHCDA.

The National Health Primary Health Care Development Agency shall disburse the fund for items b,c,d above through State Primary Health Care Boards for distribution to Local Government Health authorities.

For any State or Local Government to qualify for Federal Government block grant such State or Local Government shall contribute –

- in the case of a State not less than 10 per cent of the total cost of project; and
- in the case of a Local Government not less than five per cent of the total cost of projects as their commitments in the execution of such projects.

The National Primary Health Care Development Agency shall not disburse money to any

- (a) Local Government Health Authority if it is not satisfied that the money earlier disbursed was applied in accordance with the provisions of the ACT; and
- (b) State and Local Government that fails to contribute its counterpart funding.

The National Primary Health Care Development Agency shall develop appropriate guidelines for the administration, disbursement and monitoring of the 50% of the fund under its administration. Furthermore, the remaining 50% of the fund will be dedicated to providing

Basic Minimum Health package to all Nigerians through the NHIS. This will be done to fulfill the goal of tackling the health problems causing the highest mortality and morbidity to our people. The basic minimum package as obtained from the ward minimum health care package defined by the National Primary Health Care Development Agency will be the items covered in the insurance package and these are:

- A. Control of communicable diseases (Malaria/STI/HIV/AIDS)
- B. Child Survival
- C. Maternal and Newborn Care
- D. Nutrition
- E. Non-communicable Diseases Prevention
- F. Health, Education and Community mobilization

Under each area I believe we should focus on specific goals as follows:
(adapted from NPHCDA Ward minimum health package)

A. **Control of communicable diseases (malaria/STI/HIV/AIDS)**

- 1) Provision of ITN's for all pregnant women coming for ante-natal services and children under age 5 coming for immunization
- 2) Provision of Artemisinin based combination therapy (ACT) for treatment of uncomplicated malaria.
- 3) Provision of sulphadoxine-pyrimethamine for intermittent preventive treatment in pregnant women
- 4) Instituting effective case management of malaria in the community and in all health facilities.
- 5) Provision of basic laboratory infrastructure and equipment for identification of TB at Primary Health Care Centres.
- 6) Ensure the availability of drugs and infrastructure for Direct Observation Treatment Short-course (DOTS) for TB.
- 7) Availability of VCT services
- 8) Availability of Condoms

B. **Child Survival**

- 1) To have 60% of the health workers at the primary health centres trained in integrated Maternal & Child Health.
- 2) Each local Government to have adequate cold chain equipment
- 3) All PHCs to have vaccine carriers and ice-packs
- 4) Every under-five child to be provided with a child health card containing immunization record.
- 5) All PHCs should have essential drugs for child health and all vaccines continuously available.

C. **Maternal and Newborn Care**

- 1) At least 4 midwives per PHC for 24 hours coverage
- 2) Provision of basic obstetric drugs and equipment

D. Nutrition

- 1) Each Primary Health Care should have health and nutrition educational materials
- 2) Provision of equipment for food demonstration at Primary Health Care
- 3) Establishment of community based growth monitoring for children

E. Non-communicable Diseases Prevention

- 1) Phased and gradual capacity building of health workers for prevention and control of chronic non-infectious diseases (e.g. Diabetes and heart disease)
- 2) Provision of IEC materials on chronic non-communicable diseases
- 3) Provision of basic equipment for screening and early diagnosis

F. Health, Education and Community mobilization

- 1) Each PHC to have relevant IEC material conspicuously displayed with culturally acceptable language and graphics
- 2) Each local Government should have a vehicle with public address system.

I believe the country can afford to provide these basic minimum packages to all its citizens at Primary Health Care Centres. Six hundred and eighty – four model Primary Health Centres have been built by the Federal Government across the country. If this is added to those already available in Local Governments then we have over 3000 Primary Health Centres across the country. The NHIS will pay decapitation per number of persons registered at each primary health centres. Each Primary Health Centres given its size and staff complement is supposed to cater for about 10,000 to 20,000 registered individuals. If we increase this number to 25,000 per primary health and we divide our current population of 140 million, we still need 5,600 Primary Health Care Centres to cover the entire population. Nigeria needs more Primary Health Centres.

The funds channeled through the National Primary Health Care Development Agency can be used to build new primary Health Care's, and such monies will be disbursed when proposals are submitted by States or Local Governments through State Primary Health Care Boards which must be constituted by each State, the State must contribute, at least 10% the total cost of the project and the local Government, 5% of the total cost of the project. The National Primary Health Care Development Agency must receive the proposal and fund it to be in-line with promoting Primary Health Care goals before approving the project and requesting the State and local Government counterpart funding. Once the counterpart funding is received, the full payment for the project is sent to the State Primary Health Care Board. The National Primary Health Care Development Agency must monitor the project and make sure it's successfully implemented. Any unsuccessfully implemented or uncompleted projects will exclude the State from further drawing from the fund.

To get started, NHIS must request for all states to submit location of all primary health centres within the state. Each of these facilities must have the ability to carry out the services outlined in the basic minimum package or be able to be quickly upgraded. Some kind of inspection must take place before the PHC is allowed to register individuals. Payment to the PHC will be based on the number of people registered at the site.

Once you register at your primary health care facility, you should have access to treatment for TB, Malaria and HIV for free as defined in the basic minimum health package. Also there should be free child health services and maternal and newborn care as defined in the basic minimum health package. Local Governments can request through proposals for nutritional aids, IEC materials, vehicles, additional PHCs or buildings, equipments, alternative sources of energy etc.

Basic Minimum Health Package as a means of attaining Health related MDGs

With our current dire health situation in the country attaining the Millennium development goals look at best like a mirage. Implementing the Basic Millennium Health package in all primary health centres starting now will bring us close to attaining the health related MDGs. The first three items on the basic minimum package are directly related to health related MDGs namely, Control of communicable diseases which is essentially MDG-6, Child survival which is MDG-4 and Maternal and newborn health which is MDG-5.

In implementing the bill, emphasis should be placed on these 3 (namely, (i) Control of Communicable diseases, (ii) Child Survival, (iii) Maternal and Newborn Care) with nutrition and health education integrated into Maternal and Newborn Care. Non-communicable disease control is the only aspect that can be delayed with slow build up of capacity and equipment in this area.

I fully believe that the health related MDG's are attainable with proper implementation of the National Health Policy Bill.

Issues with Implementation

1. Ability to use the service outside your registered facility
2. Not enough PHCs
3. Multiple registrations
4. Fake persons
5. Poor communication network
6. Capacity at State and Local Government levels to develop proposals

References

1. *National Health Policy Bill*
2. *Ward Minimum Health Package 2007-2012, National Primary Health Care Development Agency*
3. *Effective Primary Health Care in Nigeria; The Nigerian Academy of Science. Workshop Briefing Manual*
4. *WHO 1987, Evaluation for the Strategy for Health for All by Year 2000: Seventh Report on the World Health Situation, Vol.1, Global Review Geneva*
5. *Hill Bradford A. Observation and Experiment. The New England Journal of Medicine. June 1953, Vol. 248, Number 24.*
6. *UNDP Human Development Report 2007/2008*

CHALLENGES OF HEALTH CARE IN FEDERAL SYSTEM – The Nigeria Situation

*By
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INTRODUCTION

Nigeria's overall health system performance was ranked 187th among the 191 members states by the World Health Organization (WHO World Health Report 2000). Whatever may be the draw back of the process of this assessment, Nigeria health indicators rather confirmed the assessment. Nigeria has one of the worst human development indicators especially for women and children in sub-Saharan Africa and indeed the rest of the world. The country accounts for 10% of the world maternal deaths from pregnancy and child birth related causes but only represents 2% of the world population; Close to 200 out 1000 children born every year do not live to celebrate their 5th birthday and life expectancy for the average man and woman is still 42 and 47 years respectively. These figures hide huge disparities with the Northern part of the country accounting for the worst indicators.

The key social determinants of ill health in Nigeria still includes hunger, poverty, illiteracy, lack of clean water, poor sanitation, poor housing, gender disparity and unemployment. Apart from its inability to provide basic health care services for majority of the population, it lacks the ability for disease surveillance, prevention and management. For example, only 18% of Nigerian children age 12 – 23 months can be considered fully immunized (NICS 2006).

Nigeria is a federal country of 36 federating States. The States have considerable economic and political authority. It has been noted that some of the States in Nigeria have resources above the annual budgets of some countries in the sub region. Yet in many States, the health system is in a state of near collapse despite the substantial resources allocated to this tier of government.

Many analyst and commentators have adduced several reasons for the dismal performance of the Nigerian Health System, and major cross cutting factor is the Nigerian federalism.

This paper discusses the challenges posed by Federal System to the delivery of social services like health in Nigeria. It will attempt to draw from experiences in matured federations to suggest steps that could improve the delivery of health services in Nigeria.

WHAT IS FEDERALISM?

At the beginning of the 20th Century, there were nine formally constituted federal states in the world; Argentina, Australia, Brazil, Canada, Germany, Mexico, Switzerland, the United State of America and Venezuela. By 2000 this number had grown to over twenty including Nigeria, India, Pakistan, Malaysia, Ethiopia, Russia etc. Today more than half of the world land areas, and about half of its population is governed by a set of political, institutional and administrative arrangement known as "FEDERALISM". Many "new" federations are the outcome of decolonization process, where federalism has attempted to protect newly

developing countries against disunity and disintegration, particularly where there was and may still be – considerable ethnic diversity.

Federations are not only of interest due to their large populations but the MDG may not be achieved by 2015 if the several large populous federations do not perform effectively in their social services.

Federalism is a system of government in which power is divided between central authority and constituent political units. A Federation in a formal sense is a country in which through a written agreement (Constitution), legislative and other states powers are specifically distributed between a central (national) government and other representative governments (provinces, regions or states).

Federation recognizes the diversity of components parts and the autonomy of the provisional (or State) government to develop their societies within their respective spheres of jurisdiction. Federalism is usually a political or legal response to underlying social and political realities.

Federalism is not another form of decentralization in that it describes a territorial distribution of authority. Three elements make it distinct from decentralization;

- Power and authority at regional level are guaranteed constitutionally in a federation, rather than simply being handled down or devolved by central government.
- Regional units represented at the central level of government (often though not always) through a second chamber. This representation is also constitutionally guaranteed.
- The constitution is superior to all government institutions including federal government and powers can only be redefined through constitutional changes requiring consensus from all or the majority of the units

In practice, federalism gives regional units a significant degree of decision making autonomy from central government.

The essence of federal form of government is that the centre and the State government should be independent of each other in their respective constitutionally demarcated sphere of action. This situation is fundamentally different from that found in even highly decentralized unitary states, where one government dominates fiscal decisions and has ultimate control over service priorities, standards and spending.

In “ideal” federalism, once the fundamentals of the government are spelt out, it becomes equally important that each of the government should be provided with sources of raising adequate revenues to discharge the functions allocated to it. For the successful operation of federal form of government financial independence and adequacy form the back bone.

INTER-GOVERNMENT FINANCING AND FISCAL FEDERALISM

The distribution of financial resources is key to the performance of any government, hence one of the key issue in federalism is the allocation of taxation and expenditure functions and responsibilities, and the mechanism (i.e. fiscal instrument) by which they can be made to work. The design and operation of these establish the basic incentive structure for federal, state and local governments social spending. It also establishes the framework for different fiscal transfer to lower levels for social development. Sub-national units can rarely, if ever, raise sufficient revenues to finance their own capital and recurrent needs. Therefore financial transfers are used to make up the shortfalls.

Reasons why federal government transfer finances to state governments include

- Redistribution and responsiveness to state needs especially in public services such as health
- The presentation of common minimum standard of service provision across regions and equalization, a key mechanism by which wealthier regions support poorer ones.

The design of intergovernmental fund transfer is important not only for ensuring adequate funding for local services, but also for providing incentive for efficient expenditure allocation and resource. The type of transfer will to some extent determine who controls the resources, what they are spent on, and ultimately establish the extent of real federal, state and local government autonomy and discretion.

TYPES OF INTERGOVERNMENTAL FISCAL TRANSFER

The table below describes the summary of different types of intergovernmental fiscal instruments.

SOURCE: JACK EDON & CATORINA WADDINGTON- HLSP INSTITUTE.OCT.2007

	CONDITIONAL	UNCONDITIONAL
MATCHING	<p>Require state to spend for specific purpose and to match the fund transferred from the centre. Matching ratios can vary. There are two types of matching transfers:</p> <p>a) Open ended matching transfers (no limit as long as funds can be matched) use for example to stimulate local spending in key areas and to promote spending on central priorities</p> <p>b) Close matching transfers. Preferred by the centre as allow more budget control.</p>	<p>Unconditional closed matching transfers – Primarily to equalize fiscal capacities and help states financially.</p>
NON MATCHING	<p>Funds transferred without requirement of state to match, provided they are spent for a particular purpose. For services considered a high priority by central government but lower priority by state government. Non matching transfers therefore have lower risk of distorting local spending priority</p>	<p>No constrains on how it is spent, no minimum (i.e. matching expenditure expected) Best at enhancing the general welfare of state population.</p>

The evidence from mature federation is that conditional (i.e. “earmarked”) non-matching grants are most effective in ensuing compliance with federally specified standards for access and levels of service and in fulfilling redistributive functions. Federal governments frequently use a range of policy and fiscal means, including earmarked grants, to ensure that funds are directed towards expenditures they think are a priority.

NIGERIA FEDERALISM

The 1999 Constitution of Nigeria provided under Section 2 (2) that “ Nigeria shall be a Federation consisting of 36 States and a Federal Capital Territory. Section 3(1) listed the states and subsection (2) provided for the boundary of each State. Section 3 (6) provided for 774 Local Governments.

The legislative, Executive and Judicial functions of the Federal and State governments are provided for in Section 4, 5, 6 of the constitution.

The Local Government system was established by Section 7 of the constitution. The constitution provided for the details of the exercise of these in subsequent sections.

HEALTH IN THE 1999 CONSTITUTION

Health is not mentioned as an issue or service in the Constitution. There are 68 items on the exclusive legislative list and 30 items on the concurrent list; Health is not listed in either. Health is only mentioned in the following ways;

- In relation to industrial safety (Section 17(3c)
“The State shall direct its policy towards ensuring that – (c) the **health**, safety and welfare of all persons in employment are safeguarded and not endangered or abused”

Whereas for EDUCATION, the Constitution provides in Section 18(2), 3 (a,b,c,d) details of responsibilities and the delivery mechanism.

EDUCATIONAL OBJECTIVES

- 18(1) Government shall direct its policy towards ensuring that there are equal opportunities at all levels.
- (2) Government shall promote science and technology
- (3) Government shall strive to eradicate illiteracy; and to this end Government shall as and when practicable provide -:
 - a) Free, compulsory and universal primary education
 - b) Free secondary education
 - c) Free University education and
 - d) Free Adult literacy program

THERE IS NO HEALTH OBJECTIVES IN THE NIGERIA HEALTH CONSTITUTION

The implication of this constitutional lacuna on the health system and services include;

- Poor definition of responsibilities for different tiers of governments
- All tiers are involved in all aspects of health system resulting in duplication, wastages, ineffectiveness and inefficiency
- Inadequate co-ordination and collaboration by different tiers of government.
- Inadequate funding and
- Absence of effective linkages and referrals

We can expand this discussion further by examining the health sector within the broader fiscal federalism.

NIGERIA FISCAL FEDERALISM AND THE HEALTH SECTOR

In Nigeria, the fiscal laws gave significantly more tax powers to the federal government than to the two lower tiers of government. In this respect, Nigeria federalism can be said to be highly centralized. All major sources of government revenue including Petroleum taxes, royalties and VAT (Value Added Tax) are paid into a central ‘Federation Account’ and controlled by the Federal government, while State and Local government have jurisdiction only over low yielding revenue resources. Federally collected revenue amount to around 95% of total government revenue. Even among developing countries, Nigeria fiscal federalism is distinguished by the overwhelming concentration of tax jurisdiction and collection at the level of the federal government.

All three levels of government in practice have responsibilities for the provision of health care. The 36 States and the 774 local governments are each respectively responsible for all financial aspects of Secondary Health care and Primary Health care including personnel cost, consumables, running costs and capital investments. The Federal government sets overall policy goals, co-ordinate activities, ensures quality training and directs ‘national programme’ such as Immunization. The Federal government also finances Tertiary HealthCare Centres through its 52 Teaching Hospitals and Federal Medical Centres. The co-ordination of activities between (and within) the three tier of government is generally weak.

THE NATIONAL PRIMARY HEALTH CARE DEVELOPMENT AGENCY (NPHCDA)

The NPHCDA was established to provide a source of technical knowledge and expertise on the provision of PHC and monitor PHC delivery on behalf of the Federal Ministry of Health (FMoH). The capacity to undertake this is limited. Public PHC services are funded by all tiers but administered by LGAs with technical assistance and direction from the State ministries of health. Secondary Health services (SHC) are the responsibilities of the State government (and in some states) may be administered by a State Hospital Management Board.

However, typically, links between SHC and PHC are intermittent – and subject to frequent ‘fault –lines’. As a result, referral systems are poor and underdeveloped.

The ‘average’ Nigerian State receives about 85% of its revenues through federal transfers and generate about 15% of total revenue from all sources (H/m and Boex 2002). It is therefore not surprising that State and LG expenditure continues to be financed out of federal transfer.

The transfer of resources between different levels of government is clearly a critical issue in Nigeria and it raises a number of questions. The critical of these is, does fiscal transfer in Nigeria achieve three key objectives of responsiveness to State social sector needs, ensuring common minimum standards and equalization across states? The answer is NO.

The amount each State receives is governed by a revenue allocation formula which takes three factors into account viz; equality of State, Population and Social development factor. The Social development factors in Nigeria do not address needs and inequality. For example,

hospital bed numbers are used in allocation formulae as a measure of health care needs, rather than the incidence of disease. The resultant effect of this is that wealthy States with more hospital beds receive greater allocation, despite having healthier populations and State Ministries of Finance routinely press State Ministries of Health to purchase more beds as a priority as this increases the size of future transfers.

In addition, oil revenue, derived from nine states is distributed with 13% of total generation going back to the nine States regardless of their social needs.

In conclusion, Nigeria Inter Governmental Fund Transfer, are not designed with policy objectives that leverage better State and Local government performance and standards, they do not seek to improve accountability, and are certainly not poverty reducing. On the contrary, they are counter –equalizing favoring wealthier States, and have evolved through a series of political, short term imperatives rather than being based on needs and logical ways to meet them.

MAKING NIGERIA FEDERALISM TO DELIVER EFFECTIVE HEALTH SERVICES

Resolving the deficiencies in the Nigerian federal arrangement is a complex and difficult task. As pointed out above, the current arrangement does not ensure the delivery of effective social services. Hence, the dismal health indicators despite the huge resources available to the country. The situation is compounded by massive corruption in the system.

The fundamental deficiency in the Nigeria system is that resource allocation is not based on responsibilities rather than the Federal government received about 50% or more of the federally collected resources whereas the critical social services are left to the State. This situation required a major constitutional amendment where the responsibilities to each level of government would be reviewed and adequate revenues to discharge the responsibilities would be allocated.

Evidence from ‘mature’ federations underlines the importance of this approach of assigning responsibilities for spending before assigning responsibility for taxation, as tax assignment is generally guided by spending requirements at different levels. In other words, mature federations tend to calculate how much money is needed, by whom and for what before identifying where it should come from, who should pay for it and how and by whom it should be collected. This process provides a reasonable technical basis to begin thinking about the allocation of funds within the federating units.

Since the constitutional approach is a long term and difficult process, the short term approach would be to design a conditional (earmarked) transfer for health services particularly – Primary Health Care. This is what the National Health Bill (already passed by the two chambers of National Assembly) is attempting to do. The bill establishes the Primary Health Care fund and attempt to define the roles and responsibilities of the 3 tiers. There is the need for a comprehensive regulation to guide the implementation of the bill when it is finally signed into law.

One must however warn that the form of conditional transfer being prescribed by the Health Bill can only succeed if there is the will by the political leaders to make it do so and only if the current high-level corruption is addressed.

Experiences from other developing countries revealed that conditional transfers are frequently characterized by nepotism and the politics of patronage. Where revenue is highly centralized and States are highly dependent on fiscal transfers, the scope for political manipulation is high. The example of Education Task Fund (ETF) and the UBE(Universal Basic Education Fund) illustrate this assertion in Nigeria.

Nigeria may learn from the practice in Canada, a federation, where conditional transfer for social programme is used effectively. The Health and Social transfers is the largest Federal transfer to provide social services. It accounts for 73% of all transfer. It is a conditional block grant tied to healthcare, post secondary education and social assistance. The rationale for the programme is the particular interest of the Federal government in the delivery of these services.

CONCLUSION

This paper presents and argued that the current dismal health indicators in Nigeria resulting from poor performing health system could be located in the way federalism is practice in Nigeria. The Nigerians federalism in terms of social responsibilities and resource allocation is currently not based on resources according to needs to the level of government. The standard practice by mature federalism of assigning responsibility for spending before assigning responsibility for taxation does not apply. There are some forms of conditional transfers but this is characterized by nepotism and politics of patronage.

It is proposed that Nigeria requires a major constitutional amendment to address the current situation to responsibly allocate resources to its 3 levels of government.

In the short term, the National Health Bill which created a conditional transfer for Primary Health Care should be signed and implemented without delay. However, a comprehensive regulation and guideline for its implementation should be drafted and adopted.

Whatever of the solutions adopted (i.e. Constitutional amendment or Health Bill), they could only be effective if the current high level corruption and nepotism are addressed.

REFERENCES

1. *Alm J and Boex J(2002): An Overview of Inter Governmental Fiscal Relations and Sub-National Public Finance in Nigeria, George State University*
2. *Bossert T and Gamez E (2003): Federalism and Social Sectors in Comparative Perspective: Lessons from Nigeria, DFID Health Resource Centre*
3. *Constitution of the Federal Republic of Nigeria (1999) : Federal Government Press, Lagos, Nigeria*

4. *Elden J and Waddington (2007): Federalism Sub national Financing and Aid Effectiveness. HLSP Institute*
5. *Maclean I; (2003): Fiscal Federalism in Canada. Nutfield College Poetics Working Paper 2003*
6. *Suparno R (2004): The Political Economy of Intergovernmental Transfers in Indonesia. Master Dissertation, IDD. University of Birmingham*

STRENGTHENING NATIONAL HEALTH INFORMATION MANAGEMENT SYSTEMS: BOTTOM-TOP APPROACH FOR PHC SERVICES

By
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Abstract

Over the years, planning monitoring and evaluation of health services and programmes have been hampered by dearth of reliable data. Availability of accurate, reliable, timely and relevant health information is the most fundamental step towards informed public health action. The essence of National Health Management Information System (NHMIS) is that it is designed to improve the health of the population. Much of the data will relate to medical and other biomedical, operation of health services for both private and public and also to other health related events and programmes. NHMIS should be able to provide reliable, relevant and timely information to health system's policy makers, managers, professionals, and to the other sectors for effective decision making, planning, monitoring and evaluation.

In 1988 the Federal Government adopted the first comprehensive National Health Policy which calls for among other things the establishment of a National Health Information System by all governments of the Federation to be used as a management tool for the health sector. Nigerian NHMIS support to PHC system is largely underdeveloped. There are serious limitations in the value of the health information that 'data led' national health information system could provide, particularly regarding its availability and usefulness for the decision-making processes at local level. A lot of health events at the community level remain poorly recorded or collected as data. Data from health facilities is often inadequate, incomplete, untimely and very little of the events are captured as generated data.

For effective NHMIS, the lower levels (Bottom) need to be well established and equipped to provide adequate health information on PHC components and services. Data and Information generated at the lower level if processed appropriately with completeness and timeliness will provide a basis for informed decisions at the top. There can't be any meaningful information at the top if data is not gathered properly from the bottom.

Introduction

Availability of accurate, reliable, timely and relevant health information is the most fundamental step towards informed public health action. It is therefore important that for effective management of health and resources, government at all levels have interest in supporting and ensuring that health data and information are available as a public good for all stakeholders to utilize. Availability of accurate, up-to-date, reliable, and relevant data and information is essential for strengthening and managing the health system at all levels.

It is important to collect, analyze and make available information on health status, health behavioural risk practices, prevention and curtailment of epidemic outbreaks, support for essential national health research, especially at the local level. Information should be made available to the communities and individuals for them to make informed choices in matters relating to their health.

Over the years, planning, monitoring and evaluation of health services and programmes have been hampered by dearth of reliable data. Registration of births and deaths is defective. Size, structure and distribution of population are not readily available and therefore it is difficult to calculate simple indicators like crude birth rate, crude death rate at sub-national levels.

The essence of NHMIS is that it is designed to improve the health of the population. Much of the data will relate to medical and other biomedical, operation of health services for both private and public and also to other health related events and programmes. NHMIS should be able to provide reliable, relevant and timely information to health system's policy makers, managers, professionals, and to the other sectors for effective decision making, planning, monitoring and evaluation.

Primary Health Care represents more than 70% of all organized health care. It is at this level that majority of primary and secondary prevention (e.g. immunization, family planning, screening, etc) takes place. It is at the PHC level that health education takes place in the most efficient way. At the PHC level, most patients make their first contact with the national health system and simple medical conditions are diagnosed and treated.

Most of the Health Information Systems in the developing countries has a top-down approach. The type of data collected at the peripheral service delivery units are decided upon at the highest echelons of health services. These data are used to plan out targets and evolve strategies to achieve them. These targets and strategies are then passed down to the peripheral units for implementation; reports are then made available by the workers in relation to the targets they have covered. For health information system to be of use to the lower levels like the LGA, it must address their needs for essential data for local management purposes.

Objectives of NHMIS

An effective NHMIS should provide appropriate infrastructure, establish mechanisms and procedures for collecting and analyzing health data to provide needed information. The objectives of NHMIS include the following:

- To provide information which can be used as a management tool for decision-making
- To assess the state of the health of the population
- To identify major health problems
- To set priorities at all levels
- To monitor the progress towards stated goals and targets of the health services
- To provide indicators for evaluating the performance of the health services/programmes and their impacts on the health status of the population
- To provide information to those who need to take action, those who supplied the data and the general public

Development phases in NHMIS

The Federal Ministry of Health had a medical statistics system in place since the 1960s. Health manpower, hospital activities, morbidity and mortality data, records of births and deaths in hospitals used to be published on quarterly or annual basis.

Policy and strategy documents which attempted to define the health problems, health priorities and the distribution and coverage of health resources in Nigeria have highlighted the lack of meaningful, accurate and timely data. Since the inception of PHC, the Federal Ministry of Health has been committed to a simple and objective monitoring and evaluation of the programme. Various committees were set up to design methods and formats for monitoring and evaluation and to develop training manuals and instruction booklets.

The epidemic outbreak of Yellow Fever and Meningitis in 1986 – 1987 was an indication of the poor disease surveillance and notification system, this undermined the national capacity to detect and control epidemics. A national task force was set up on epidemic control which reviewed the surveillance and then established the Disease Surveillance and Notification (DSN) system. FMOH in partnership with international agencies established various vertical programmes which compounded the problem of coordination in data processing within the existing systems.

In 1988, the reorganization of civil service by Federal Government for effective, efficient and productive service created the Department of Planning Research and Statistics in all ministries. Also, in 1988 the Federal Government adopted the first comprehensive National Health Policy which calls for among other things the establishment of a National Health Information System by all governments of the Federation to be used as a management tool for the health sector.

Current Situation of NHMIS for PHC

Nigeria adopted PHC as a strategy for achieving health for all Nigerians, since then efforts have been made to have simple and objective monitoring of the programme. These efforts though with some results are yet to meet up to expected standards. Nigerian NHMIS support to PHC system is largely underdeveloped. There are serious limitations in the value of the health information that 'data led' national health information system could provide, particularly regarding its availability and usefulness for the decision-making processes at local level. The principal sources of health data and information for PHC include;

- Population and household census
- Vital events register – records of vital events such as births, deaths, marriages and divorces
- Routine health services data dealing with morbidity and mortality data; immunization, disease treatment, out-patient attendance, admissions, etc
- Epidemiological surveillance data - including immunization records and notifiable diseases.
- Disease registers for specific morbidity and mortality
- Community surveys undertaken by Government agencies, International agencies, Non-Governmental Organizations, research groups, etc

Currently, there is paucity of relevant health data for policy decision, planning and assessment of the health system performance at all levels of Primary Health Care.

Community level – A lot of health events at the community level remain poorly recorded or collected as data. The health events include births, deaths, morbidity, health care from Traditional healers, Traditional Birth Attendants, village health workers, patent medicine vendors among other primary health care activities. Data from the community level is expected to be submitted to the health facility covering the area 3 days after the end of the month that is been reported. Currently there is little horizontal information flow among actors and consumers, particularly between community and health facilities.

Members of the communities hardly have access to information data and information generated at the bottom. The public at large is often overlooked and underestimated in the Health Information System in Nigeria. People have a desire, a need and a right to know about their health as individuals and as a community. The more knowledge people have about health issues in their community the better they are prepared to make right decisions and take appropriate actions. For example:

- Personal behavior and lifestyle decisions – include information on nutrition, use of alcohol, tobacco, sexual behavior, exercise.
- Utilization of health services – decisions on how to use preventive and curative services
- Participation of health care users in decision making on priorities and strategies.

Health Facility Level

Data from health facilities is often inadequate, incomplete, untimely and very little of the events are captured as generated data. Information is hardly available on utilization of facilities, morbidity and mortality and on the various components of primary health care. Adequate provision for data storage is a common problem at the lower levels. This is worsened by the absence or low level of health information technology for data processing. Each health facility is expected to send its data to the LGA two (2) weeks after the end of the month that is been reported.

Data are not analyzed and converted into information for decision making at the health facility level. Data available at this level is hardly utilized for planning, decision making and evaluation of the various programmes that are implemented at this level.

Health personnel - Health personnel that are trained in health information are hardly available at the PHC facilities, the other health workers who attempt to capture some of this data do not have sufficient orientation or training on health information system. Most health workers at the PHC level consider data collation a burden and do not appreciate the relevance of the process to service delivery.

Materials for data collection - Materials required for data collection, compilation, collation and analysis are hardly available at his level. Data even when collected, compiled and collated, analysis is rarely done. Adequate measures are hardly in place for the storage of collected data at the facilities. Most often collected data are sent to higher level without keeping copies at the health facility where these data are generated.

Financial resources for NHMIS - Budgetary provision is hardly made for health information system at the health facility and LGA levels and therefore simple materials for data collection like cards, forms are often not available for use at the health facilities. The poor funding of health information at the lower levels account for the low or non-use of Information Technology in data processing. The National Health Policy document recommended that a minimum of 1.5% of the budgetary allocation to health shall be set aside by all levels of government as support for the development and operations of the NHMIS.

Data Analysis - Simple analysis that can be useful for decision making at this level is not usually done. In some cases data is collected and sent to the next level and copies are not available at the level where they are generated. This practice is a reflection of the poor awareness of the objectives of the Health Information System.

Information Technology – Computers are hardly available in health facilities and LGA Health Department for data storage and analysis. Where computers are available skilled personnel for data processing are not available. In the few places with computers, maintenance and power supply are often major problems.

Data transmission – Poor roads and non-availability of vehicles are constraints to timely sending of the data to the next appropriate level. Electronic transmission of data and information using fax and e-mails is very rare. This contributes to the major problem of timeliness in data submission.

Private sector - Private sector health data is largely not collected. A large proportion of the population patronizes private health facilities and if data from this sector remain missing then what is collected is a small fraction of the morbidity, mortality and health services. Health data are not properly kept at most private health facilities and forms used for NHMIS are usually not made available to these facilities to generate the required data. In a survey among private clinics in a state capital in Nigeria it was found that only 29.7% of the clinics had ever been supplied NHMIS forms and only 10.8% made data returns six months prior to the survey and returns are rarely made to M&E unit of LGA health department but to SMOH.

Disease surveillance - At the community and health facility level poor level of awareness of the disease surveillance system results in very poor reporting of priority diseases and when reported they are often reported late for effective intervention.

Inter-sectoral data - Health system goes beyond the health sector. Useful information for planning can also be obtained from other sectors like Education, Agriculture and National Population Commission. Management of health system is also not totally independent; it responds to activities and changes from the other sectors. Data from other sectors at the bottom is also very useful for health management.

Strengthening of NHMIS for PHC

For effective NHMIS the lower levels (Bottom) need to be well established and equipped to provide adequate health information on PHC components and services. Data and Information generated at the lower level if processed appropriately with completeness and timeliness will provide a basis for informed decisions at the top. There can't be any meaningful information at the top if data is not gathered properly from the bottom.

- **Financing of health data infrastructure**

At the LGA level where the bulk of the data within the NHMIS is generated, lack of budgetary allocation to NHMIS is likely to be a major obstacle. It is very important for LGAs and health facilities to have budget line for NHMIS activities and equipment. Advocacy is needed to LGA officials to provide adequate fund for NHMIS. Fund should be made available to provide materials, equipments for data collection, collation, analysis and dissemination.

- **Strengthening of the organizational structure for NHMIS**

Data from the bottom where most health events and activities occur have to be adequately captured. In view of the low level of health workers available for this service at the community level, community members through the village and ward health committees can play significant roles in nominating voluntary village health workers who can collect such data.

At the bottom, Community Based Records need to be kept on; VHW / TBA work and activities, Tracer diseases, ANC/Family Planning, Pregnancy outcome and deaths. At the PHC facility level registers of; Out and In-Patients, Family planning, Antenatal and maternity, Immunization and Child welfare need to be kept. The Ward health System should be used to strengthen data collection from the bottom. The Community Health Extension Workers (CHEWS) are expected to collate data on community-based NHMIS forms from VHWs and TBAs. In Ghana Community Based volunteers have been quite useful and are involved in the surveillance system. Communities can be involved in data collection and simple processing using simple forms, tables and visual presentations for local data analysis and provision of feedback.

A wide range of information is required in PHC system for planning and management. The data required include socioeconomic and demographic characteristics of the population, the extent of access and utilization of health services, and the coverage and quality achieved by health programmes.

- **Staff training and orientation**

Inadequate appreciation of the importance and role of health information in planning, monitoring and evaluation of health programmes among health workers remains a major problem. There is need to build capacity of people at community and health facility levels to collect and process data. Health personnel need to be properly trained and health information system should be part of the curriculum for pre-service training of all categories of health workers. Health workers need to have proper orientation on NHMIS and be motivated to play their own roles in data collection, collation, analysis and dissemination.

At the level of the LGA, regular data analysis should be done which will include comparison of monthly returns on health and health related problems and progress of intervention activities. This should also happen at the ward and health facility levels.

At the Ward Level, Community Health Officers and Community Health Extension Workers are expected to create awareness about M&E System and mobilize the JCHEWs, TBAs/VHWs and the VDC members to establish the system at community level. The expected activities will include:

- Training community – based workers, VDC and WDC on placement of home-based records.
- Ensuring that Clinic master Card for every household is completed
- Providing community based workers with pictorial records of work and training them on how to fill the records
- Put in place mechanism for regular collection of filled forms

There is a need for a clear multi sectoral policy in information gathering at community level in terms of who, when and how. Such a policy should encourage the use of existing community cadres like TBAs, community health workers, traditional leaders etc. The health workers should respond to and support the policy in various ways, such as, providing broad but clear case definitions for community data collectors, and providing appropriate and timely response and feedback to the community.

The use of rural participatory methods in health planning (get community priorities right!) should be promoted as it is expected to provide an incentive for community involvement in data collection. In Namibia, to help encourage staff at health facilities to use some of the data that they gathered and reported to the HIS each month, the FHIS (Facility Health Information System) and the CHIPS (Chart of Indicators and Progress) were introduced. CHIPS is a chart or graph format, supplied in a pad to each facility that staff could use for keeping regular track of progress or chart indicators that they selected to monitor.

- **Provision of appropriate information technology for Data and Information processing** – data collection, storage, analysis and dissemination. Health informatics is very relevant in Primary Health Care. Primary Health Care is usually responsible for programmes directed to the most common health problems and risk groups and thus deals with large number of individuals. This creates a requirement for a system with massive data storage space, fast retrieval and cross-linking of data. It is important to get reliable and accurate data from the bottom for any meaningful decision at the top. Computer-based system supporting PHC can result in the following achievements;
 - Increase efficiency of operation of all phases of the process of PHC
 - Improved and expedient recording and communication among health professionals
 - Improved accessibility and timeliness of patient / client information
 - Increase in the quality of health care services provided
 - Improved quality assurance of health care
 - Improved epidemiological surveillance and more reliable health statistics.

Even where computer is not available for data processing in some health facilities and ward levels, it is desirable to have simple graphs illustrating observations of changes in the trends

of events. With obvious challenges posed by PHC implementation at LGA level, there is need for application of appropriate technology in the development of PHC MIS in Nigeria. Due to varying levels of socio-economic development, resources and infrastructure, a combination of paper based and computerization would be more effective for a sustainable information system.

- **Data and Information Dissemination** – Data and information generated in PHC in this country is hardly disseminated to make meaningful impact on service delivery and for service and programme evaluation.

It is desirable to have at the bottom, means of sharing data and information generated at community and facility levels. Each LGA should be able to organize quarterly review workshops where all health facilities present their data with simple analysis of trend, performance and assessment of key health indicators for each quarter. At such quarterly review meetings, information can be shared and lessons learnt from the activities of the various health facilities. Each State can also organize such quarterly review meetings with active participation by all LGAs and other stakeholders. Provision of feedback to the communities by health facilities and to health facilities by LGA is very important. In Seychelles, health information reports were produced weekly, monthly, quarterly and annually. They were even discussed at cabinet level.

Several indicators have been developed within the context of NHMIS and PHC MIS because of ineffective national data flow policy in Nigeria. The PHC indicators should be measured and assessed regularly at the lowest level possible. These indicators at least should be available at the Ward or LGA levels. They can then be used to periodically monitor and evaluate intervention programs and routine health care services at the local level.

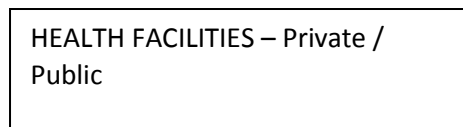
The PHC indicators include; % of children fully immunized at their first year of birth, proportion of children aged 0 – 59 months weighing below the 3rd percentile on the child health card, proportion of infants aged 0 – 3 months exclusively breastfed, proportion of children aged 0 – 6 months exclusively breastfed, coverage with Vitamin A supplement, proportion of newborns weighing less than 2.5kg, Percentage of pregnant women who had effective antenatal care (ANC), % of pregnant women fully immunized with potent TT by the 8th month of pregnancy, % of deliveries attended by a health worker or trained TBA, % of women of reproductive age group using modern family planning, mortality rate of diarrhoea, incidence rate of measles, incidence rate of Acute Respiratory Tract Infection (ARTI), incidence rate of Neonatal Tetanus, incidence rate of malaria, % of population living within 5kms or half hour travel time to the health facility, % of population living within 200 metres of a source of potable water supply, % of the population living within 50 meters of a pit latrine, % of VHWs/ Health facilities with drugs available continuously.

At the community level it is desirable to organize regular meetings of village and ward health committees where information can be disseminated. This step can motivate members of the community to get involved in reporting health events in their community. Communities should be involved in the design, implementation, monitoring and evaluation of health care delivery as it affects them.

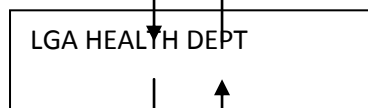
- **Strengthening of data flow** – Provision should be made to support data flow upwards and downwards. Upward transmission of data and information can be improved upon by the provision of necessary logistic support and by use of information technology (e.g. electronic-mails). If this is done it will improve timeliness and completeness of epidemiological data.

Flow of Information for IDSR

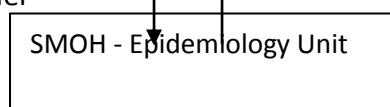
1st Tier



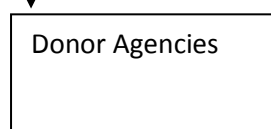
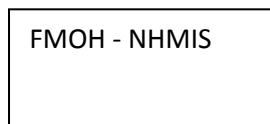
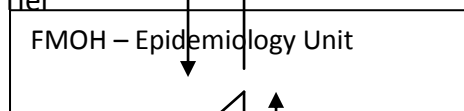
2nd Tier



3rd Tier



4th Tier



DUTIES

HEALTH FACILITIES

- i. Complete data on standard forms i.e. IDSR form
- ii. Appreciate importance of data collection

LGA

- i. Receive and collect forms from 1st tier.
- ii. Collate and forward to SMOH (Epid unit)
- iii. Analyze and feedback to HF

STATE

- i. Collate and forward to FMOH (Epid Div with copy to SMOH Statistic Div)
- ii. Analyze and feedback to LGA and public
- iii. Plan appropriate operation and strategies for disease control

FEDERAL

EPID DIV

- i. Collate and forward to FMOH (Statistics Div)
- ii. Collate data from other sources
- iii. Analyze and feedback to SMOH and public
- iv. Plan for appropriate intervention

NHMIS DIV

- i. Collate with data from other sources
- ii. Analyze for National planning purpose
- iii. Publish and disseminate as necessary

Feedback to the lower levels on the data and information generated and analyzed at the higher level will go a long way to motivate health workers at the bottom to perform better on NHMIS. The problem of transportation for early forwarding of data / reports must be addressed at the lower levels. Copies of all filled forms and returns should be available at each of the levels where they are generated, while copies are forwarded to the next level.

- **Data Collection from private health institutions** – Private health facilities like private clinics, pharmacies, patent medicine stores, mission homes and traditional medical practitioners are well patronized by people in this country. Data from this sector is largely not collected. Significant proportion of disease burden is seen by the private health care providers. In view of the high patronage private health institutions enjoy, the health data obtained from these clinics must also form a part of the information available to the NHMIS for the purpose of planning and decision-making. It is known that about 33% of utilization of formal medical services is accounted for by the private sector, surveys have found that

50% of the treated in cases of childhood illness use non-formal health sector particularly patent medicine stores. Data generated from considerable proportion of the population are not collected and therefore makes virtually no input into National Health Information System. It is therefore important to start a system that will be able to collect data from the private health sector.

Conclusion

Primary Health Care involves finding answers to questions such as the following:

- What are the local health, environmental and economic problems?
- Who needs help with which problem?
- How can help be provided in ways that are both affordable and acceptable?
- What are the local sources of knowledge and action?

The National Health Information System should be able to provide information that will address these questions at the local level. It is important to have an approach to information designed for bottom-up community action which will serve the interest of the people and give better opportunities for community oriented decision and action. Through this approach, communities can be involved in their own health care. If the PHC HIS is strengthened at the LGA level relevant and accurate data on local health situation and needs will be available and they will serve as a basis for well informed decision making and interventions.

At the Primary Health Care level simple, analysis of attack rates, coverage rates or geographic specific environmental problem can be displayed and used to define local demography, those who needs services, those not receiving services or the effectiveness of local intervention programmes. Lack of sufficient Information has been a constraint in the development of an effective and efficient Primary Health Care. This situation needs to be addressed through a bottom-top approach of Health Information System

Bibliography

Akande T.M. *Information Support for Primary Health Care. Issues in Health Planning & Management in Nigeria. 1996: 1(1): 85 – 97.*

Akande T.M., Monehin J. *Health Management Information System in Private Clinics in Ilorin, Nigeria. Nigerian Medical Practitioner 2004; 46 (5): 103 – 107.*

HERFON. *Nigeria Health Review 2006. Health Reform Foundation of Nigeria*

HERFON. *Nigerian Health Review 2007. Primary Health Care in Nigeria: 30 Years after Alma Ata.*

FMOH (2004). *National Health Management Information System Strategic Document.*

FMOH (2004). *Revised National Health Policy*

FMOH. *Health Information Management, Collaborating Centres Programme for Education and Training in Health Planning and Management. Student's Manual. FMOH Department of Planning, Research & Statistics.*

- FMOH (2006). National Policy on Integrated Disease Surveillance and Response (IDSR). Federal Ministry of Health, Abuja*
- NPHCDA. (2004) PHC Profile: Technical Report on PHCMIS Service Statistics. National Primary Health Care Development Agency, Abuja, Nigeria.*
- NPHCDA (2006). Introduction to Ward Health System. Briefing Package for Sensitization on the Ward Health System.*
- Oyemakinde A. Update on NHMIS. Bulletin of Epidemiology 2007; 8(2): 7 – 10*
- WHO. Informatics and Telematics for Health. Present and Potential Uses. World Health Organization, Geneva.*
- WHO (2002). Report on Strengthening National Health Information Systems: Workshop on the use of Geographical Information System Health Map Harare, Zimbabwe, 1–4 July 2000.*

SUB THEME THREE
RESOURCES FOR EFFECTIVE PHC SERVICES

ADDRESSING THE HUMAN RESOURCE CHALLENGES IN PRIMARY HEALTH CARE IN NIGERIA

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Abstract

Our current national health indices¹ indicate clearly that the performance of our health system is abysmally poor. Unless there is a drastic change in the performance of our health system at all levels, and particularly at the primary health care (PHC) level, these national health indices will most certainly remain poor for several decades and it is most unlikely that we will achieve the health millennium development targets within the stipulated time. **No health system can function effectively without an effective workforce. Indeed, human resources (the health workforce) play a crucial role in the effectiveness of the entire health system.** Unfortunately however, several challenges impede the smooth functioning and effectiveness of our PHC workforce. **Prominent among these challenges are the paucity of accurate data on the health manpower situation at the PHC level, inadequacy in numbers of the PHC workforce, inequitable distribution, low morale, poor job-satisfaction, inter-cadre conflicts, disparities in remuneration packages and continuing migration, etc. The results of all these are poorly performing and ineffective health personnel providing ineffective primary health services.** This presentation discusses evidence-based strategies for addressing these challenges. The strategies are derived from the factors which determine how health personnel perform including the characteristics of the external environment of the health system, the characteristics of the health system itself and of the health personnel who work within the system. The strategies use instruments related to the job, the support system and the work environment. **The major evidence-based strategies proffered include the use of written job-descriptions, the creation and support of professional codes of conduct, matching tasks with skills, applying supportive supervision, appropriate and regular remuneration, the use of incentives, the provision of adequate information and communication, the institutionalization of a culture of monitoring, evaluation and feedback, the improvement of infrastructure and supplies, the establishment of an enabling work environment, the promotion of life-long learning, the establishment of effective team management, and the institutionalization of a culture of accountability.** The skillful and conscientious application of these strategies would adequately address the human resource challenges in PHC. The paper emphasizes that moving from rhetoric to action will require drastic changes in our human resource management practices and that stakeholder and community participation are vital for the sustainability of the required changes.

Introduction

Since the adoption of the National Health Policy in 1988, several health policies have been formulated and adopted in Nigeria. If effectively executed, most of these policies would have contributed positively to the achievement of an acceptable health status for Nigerians.

Unfortunately however, this has not been the case and our current national health indices¹ have remained abysmally poor. Unless there is a drastic change in the performance of our health system at all a level, it is most unlikely that we will achieve any noteworthy improvement in the health status of Nigerians in general including the health targets of the millennium development goals (MDGs). The necessity for this change is most crucial at the primary care level. It is acknowledged that human resources, the health workforce, play a major role in producing health outcomes. **Indeed no health system can function effectively without an effective workforce. Unfortunately however, several challenges constrain the smooth-functioning and effectiveness of our PHC workforce in Nigeria.** Attainment of an effective workforce for PHC will require the recruitment of appropriate (potentially effective) personnel, optimizing the performance of the existing personnel and retaining them in the system. This presentation limits itself to measures which should be taken to optimize the performance of existing personnel by addressing the challenges which constrain their effectiveness. It begins with a brief description of the major human resource management challenges in Nigeria, an explanation of the major dimensions of workforce performance and a description of indicators for measuring each dimension. This is followed by an outline of the factors which determine performance and strategies which are known to stimulate better performance using various instruments or “levers” related to the job, the support system and the work environment. The skillful and conscientious application of these strategies would adequately address the human resource challenges in PHC. The paper also describes the changes which will have to be made in order to achieve PHC workforce effectiveness and concludes by emphasizing that job satisfaction among the existing workforce being a major by-product of effective performance, will have a positive effect on the recruitment and retention of personnel. Also emphasized is the importance of stakeholder and community participation for the sustainability of the required changes in human resource management practices.

2. Major Human Resource Management Challenges in the Nigerian Health System

There are several challenges confronting the management of human resources in the Nigerian health system. These include the paucity of accurate and comprehensive data on the human resources for health (HRH) situation. One finds that data is either non-existent or incomplete or inaccurate. The actual number of health personnel working at the PHC level is unknown talk less of having accurate information on the various cadres.² The data that exist indicate that the personnel is unevenly distributed with more shortages in the northern zones and rural areas of all zones.³ Furthermore, the PHC workforce is inadequate in relation to health needs throughout the entire country.⁴ The disparity in the remuneration packages and schemes of service between health workers on federal, state and local government payrolls gives cause for concern³ as do the low morale, inter-cadre conflicts and poor job-satisfaction among health workers.⁵ The continuing migration of health personnel to other countries is a major challenge.⁶ It is gratifying that the Federal Ministry of Health (FMOH) has recognized that these problems exist. FMOH deserves commendation for formulating a National Human Resources for Health Policy (NHRHP), but it is very worrying that the policy

has remained a “draft” since 2006 and is not being implemented. With all these challenges it is not surprising that the PHC workforce performs so poorly.

3. The Dimensions of Workforce Performance³⁵

Optimizing the performance of existing personnel is crucial to the ultimate well-being of Nigerians because it has an immediate impact on service delivery. Moving away from the traditional focus on inputs (the right number of personnel, in the right place, at the right time with the right skills and support), modern health personnel management focuses on outputs and outcomes. Thus the modern approach is to consider the dimensions of health workforce performance which contribute to better service delivery.^{7,8,9} These include:

- Availability – distribution and attendance
- Competence – technical knowledge, skills and behaviour
- Responsiveness – courteous treatment of clients
- Productivity – ability to provide maximally effective services and outcomes and to reduce waste of times, skills, etc.

Health service performance is not easy to measure and monitor. However, it could be done through the use of appropriate yardsticks or indicators. Hornby and Forte¹⁰ have described human resource indicators which may be used to monitor health workforce performance. These are summarized in Table 1.

Table 1. Human Resource Indicators to Assess Health Workforce Performance¹⁰

Performance Dimension	Indicators
Availability	Staff ratios Absence rates Waiting time
Competence	Individual: prescribing practices Institutional: re-admission rates, cross-infections, live births, etc
Responsiveness	Patient satisfaction
Productivity	Interventions delivered per worker or facility Occupied beds Outpatient or home visits

4 The Determinants of Health Personnel Performance

An understanding of the factors which determine how health personnel perform is key to formulating strategies for addressing the challenges which constrain their performance. These factors include the characteristics of:

- **the external environment of the health system** e.g the socio-cultural characteristics of the community being served such as the level of education, their knowledge, attitude and beliefs about health and diseases; economic characteristics such as income levels, the availability of resources, etc.,
- **the health system** e.g the allocation of health resources; the internal environment and culture of the system – its organization, how personnel are paid, managed, supervised; leadership of the system and its programmes, etc.,
- **the health workers** themselves such as their own socio-cultural background, knowledge, skills, experience, motivation, work ethics etc.

5. Strategies Which Stimulate Better Performance

Knowledge of the determinants of performance informs the formulation of instruments

or “levers” to be used in strategies for stimulating better performance of health personnel. Some of these strategies are related to the job, others to the support system and others to the work environment. Collectively, these strategies may be used to address the various human resource management (HRM) challenges. The strategies may be directed at individual personnel, at the health team, the organization or the entire system.¹¹

5.1 Job-related strategies include:

- **The use of written job-descriptions** which clearly state the responsibilities of the worker, his authority, reporting relationships, prospects for further training and development, methods for his appraisal, etc. Job descriptions have been effectively used in public sector health systems in many developing countries including Indonesia.^{12,13}
- **The creation and support of professional codes of conduct** to nurture professional values. Written codes of conduct and regulations are often used. Professional values can also be nurtured through the creation of professional associations. Experience has shown that this strategy can work even in resource-constrained countries where the challenges of maintaining professional values are so huge.¹⁴
- **Matching tasks with skills** to prevent situations in which health personnel carry out tasks for which they are not skilled or which other cadres should be doing e.g CHEWS taking deliveries when midwives are present.
- **Applying supportive supervision** which solves specific problems and is seen to be helpful and educational rather than faulty-finding and punitive. This should be extended to include private sector PHC providers as is done in Ghana.¹⁵

5.2 The support system related strategies include:

- **appropriate and regular remuneration.** All health personnel must receive a living wage which is commensurate with their responsibilities and fair when compared to what others in equivalent jobs receive. **The wages must also be paid regularly and on time.** If not, all sorts of coping mechanisms will be used-absenteeism, ghost workers, referring patients to private sector, migration, etc.^{14,16,17} The remuneration of health personnel has been successfully increased in recent years in Tanzania and Uganda following a job-evaluation exercise.^{18,19} One hopes that the current exercise being done here will also lead to an increase in remuneration. Efforts to remove health personnel from the civil service pay structure have unfortunately failed in Zambia and Ghana.¹⁸ Method of payment for services has also been found to affect productivity. Service-based methods (fee-for service) have been found to be more effective in increasing productivity and performance than time-based methods (salaries or fixed budgets).¹⁹ Performance-related methods are now increasingly being used in developed countries.²⁰ These methods require higher administrative capacity and incur high administrative costs.²¹
- **The use of incentives.** The uses of various types of allowances and bonuses have been shown to be effective incentives to enhance performance. These have included all manner of allowances, including allowances for working in remote and rural areas and **for specific services such as immunization.**²² This strategy was very effective in increasing the availability of health personnel in rural Thailand and other parts of the developing world.²³

- **Provide adequate information, communication, monitoring, evaluation & feed-back**

One of the unfortunate characteristics of our health services is that there is little feed-back of information to health personnel about the impact of the services which they give. Relevant information does help to increase performance.²⁴ Our national health information system must be improved so as to make the required information available. In addition **we must develop a culture of monitoring, evaluation and feed-back of information to enhance performance of the workforce.** Attention must be drawn to the use of modern communication technology to improve data, services and productivity in the developing countries.^{25,26} Let us hope that we also will get there one day! In the meantime, we can make better use of appropriate technology such as newsletters, verbal communication, etc.

- **Improve infrastructure and supplies**

No matter how skilled a health worker is, very little can be achieved without basic infrastructure and supplies such as clean water, vehicles, working equipment and essential drugs.^{27,28} Their availability make a significant difference to productivity.²⁹ A safe and pleasant environment is equally important. More attention should be given to stores and supplies management and to the availability of more support workers in the PHC system – store and supplies managers, accounts clerks etc.

5.3 Work environment related strategies

An **enabling work environment** may be promoted through the application of the following strategies:

- **The promotion of life-long learning**

The knowledge of health personnel needs to be updated constantly to keep up with the rapid increases in knowledge and practice which characterizes Public Health. Continuous professional development is necessary for health personnel at all levels of care and particularly for those at the lowest levels who go through the shortest periods of training. Experience has taught that interactive hands-on experiential training with continuing supervision and support is much more effective than didactic training without practice.^{30,31} Such methods have improved prescribing and dispensing behaviour^{32,33,34} and clinical skills³⁵. Distance education is being increasingly used and has been shown to be effective.³⁶ Care needs to be taken to choose the training approaches which are likely to be effective for specific needs.

- **The establishment of effective team management**

In order to stimulate better performance, the whole range of basic human resource management strategies must be routinely used and institutionalized. These include strategies for effective health manpower planning, procurement, preparation and maintenance with emphasis on leadership and team-building. Human resource managers need to establish a work environment where individual needs are harmonized with organizational demands, leading to the creation of a purposeful, willing, harmonious and well-motivated work team. This is no mean task at the PHC level where so many cadres from different backgrounds have to work together. But it is a task that must be done! The manager must give priority to ensuring that the workers understand the vision, mission and objectives, feel recognized and valued, participate in decision-making, work as a team, develop through mentoring, coaching, training etc, advance in their careers, are supervised supportively and are constantly monitored and evaluated, are given feed-back and rewarded or sanctioned as appropriate.^{37,38}

- **Combining Responsibility with Authority and Accountability**

Although decentralization of PHC has taken place and local ward managers have been given responsibility for service delivery, they are not always given enough authority over money and staff. This sometimes affects local performance. High level managers should ensure that a culture of accountability is developed at all levels. This is an uphill task, given the current culture of corruption in Nigeria. We can start by educating the community to know what they should expect from their health providers (Patients Bill of Rights) and that the community has a right to hold their health providers accountable for their actions.³⁹ **We can borrow a leaf from Uganda, where health district performance is ranked and published.**

6. Conclusion

This paper has presented and discussed various evidence-based strategies which when skillfully and conscientiously applied can successfully confront the various human resource challenges in PHC and thus improve workforce performance. The strategies vary in ease of implementation, relative cost and potential effect on performance. Thankfully, most of them have an immediate impact on workforce performance. We cannot improve on the effectiveness of our health workforce without using these strategies. It is necessary however to sound a note of warning. **Moving from rhetoric to action will require drastic changes in our human resource management practices. Considering our abysmal national health indices, it is imperative that these drastic changes be made in our PHC system right now.** I must also point out that without an improvement in health workforce performance and in job satisfaction; strategies to recruit and retain health personnel will remain ineffective. **Funding will be needed to make the changes. Specific allocation of funds to be used for this purpose must be made. Furthermore, the changes will not be sustainable without stake-holder and community participation.** These are **absolutely vital** to the sustainability of workforce performance.

References

1. Health Reform Foundation of Nigeria. *Selected Health Related Indicators for Nigeria. Nigerian Health Review 2007, Primary Health Care in Nigeria: 30 Years After Alma Ata, HERFON, Abuja, 2008, 324-326.*
2. Health Reform Foundation of Nigeria. *Human Resources for Primary Health Care in Nigeria In Nigerian Health Review 2007, Primary Health Care in Nigeria: 30 Years After Alma Ata, HERFON, Abuja, 2008, 66-69.*
3. Federal Government of Nigeria. *Draft National Human Resources for Health Policy 2006, FMOH, Abuja, 2006.*
4. Ogundeji, M O. *Background and Status of PHC Activities in Nigeria. Xanfun Press, Ibadan, 2002.*
5. Olumide, Aderonke, Iyiola, A., Osungbade, K., and Balogun, Yemisi. *Perceptions on Motivational Factors and Practices: A Study of Primary Care Personnel in Ibadan, Nigeria.*

- Proceedings of the Annual Scientific Conference of the National Postgraduate Medical College of Nigeria, Lagos. 2007.*
6. *Federal Ministry of Health. Health Sector Reform Programme: Strategic Thrusts, Key Performance Objectives and Plan of Action, 2004-2007, Abuja, 2007.*
 7. *Pantoja A. What is productivity and how can we measure it? World Health Organization, Geneva, 2003.*
 8. *Kurowski C, Wyss K, Abdulla S, Yémadji N, Mills A. Human resources for health: requirements and availability in the context of scaling-up priority interventions in low income countries. Case studies from Tanzania and Chad. London, London School of Hygiene and Tropical Medicine, 2003 (working paper 01/04).*
 9. *Gupta N, Diallo K, and Zurn P, Dal Poz MR. Assessing human resources for health: what can be learned from labour force surveys? Human Resources for Health, 2003, 1:5.*
 10. *Hornby P, Forte P. Human resource indicators to monitor health service performance. Keele University, Centre for Health Planning and Management, Keele, Keele, 2002.*
 11. *Ferlie EB, Shortell SM. Improving the quality of health care. The Milbank Quarterly, 2001, 79:281–315.*
 12. *Franco LM, Bennett S, Kanfer, R. Health sector reform and public sector health worker motivation: A conceptual framework, Social Science and Medicine, 2002, 54,1255 – 1266.*
 13. *Dolea C, Zurn P. Mission to evaluate the project of Clinical Professional Development and Management System (CPDMS) for nurses and midwives in hospitals and health centers in Indonesia. World Health Organization, Geneva, 2004.*
 14. *Ferrinho P, Omar MC, De Jesus Fernández M, Blaise P, Bugalho AM, Van Lerberghe W. Pilfering for survival: how health workers use access to drugs as a coping strategy. Human Resources for Health, 2004, 2:4.*
 15. *Dovlo D, Sagoe K, Ntow S, Wellington E. Ghana case study: staff performance management. In: Reforming health systems. 1998 (research report, <http://www.liv.ac.uk/Istm/research/documents/ghana.pdf>, accessed 12 May 2008).*
 16. *Macq J, Van Lerberghe W. Managing health services in developing countries: moonlighting to serve the public? In: Ferrinho P, Van Lerberghe W. Providing health care under adverse conditions: health personnel performance and individual coping strategies. Antwerp, ITG Press, 2000. Studies in Health Services Organisation and Policy, 16:177–186.*
 17. *McPake B, Asimwe D, Mwesigye F, Ofumbi M, Ortenblad L, Streefland P, Turinde An Informal economic activities of public health workers in Uganda: implications for quality and accessibility of care. Social Science and Medicine, 1999, 49: 849–865.*

18. Abuja, High-Level Forum on the Health Millennium Development Goals, 2004. Health workforce challenges: lessons from country experiences. <http://www.hlfhealthmdgs.org/Documents/HealthWorkforceChallenges-Final.pdf>.
19. Langenbrunner JC, Orosz E, Kutzin J, Wiley MM. Purchasing and paying providers. In: Figueras J, Robinson R, Jakubowski E, eds. *Purchasing to improve health systems performance*. Brussels, European Observatory on Health Systems and Policies, 2005: 236–264.
20. Gosden T, Forland F, Kristiansen IS, Sutton M, Leese B, Giuffrida A et al. Impact of payment method on behaviour of primary care physicians: a systematic review. *Journal of Health Services Research and Policy*, 2001, 6:44–55.
21. Wouters, A. *Alternative provider payment methods: incentives for improving health care delivery. Primer for policymakers*. Bethesda, MD. PHR, Abt Associates, Inc. 1998.
22. Arrowsmith J, French S, Gilman M, Richardson R. Performance-related pay in health care. *Review Article. Journal of Health Services and Research Policy*, 2001, 6:114–119.
23. Nityarumphong S, Srivanichankorn S, Pongsupap Y. Strategies to respond to manpower needs in rural Thailand. In: Ferrinho P, Van Lerberghe W, eds. *Providing health care under adverse conditions: health personnel performance and individual coping strategies*. Antwerp, ITG Press, 2000. *Studies in Health Services Organisation and Policy*, 16:55–72.
24. Rowe AK, de Savigny D, Lanata CF, Victora CG. How can we achieve and maintain high-quality performance of health workers in low-resource settings? *Lancet*, 2005, 366:1026–1035.
25. Brimberry R. Vaccination of high-risk patients for influenza: a comparison of telephone and mail reminder methods. *Journal of Family Practice*, 1988, 26:397–400.
26. Friedman RH, Kazis LE, Jette A, Smith MB, Stollerman J, Torgerson J et al. A telecommunications system for monitoring and counseling patients with hypertension: impact on medication adherence and blood pressure control. *American Journal of Hypertension*, 1996, 4:285–292.
27. Stekelenburg J, Kyanamina SS, Wolfers I. Poor performance of community health workers in Kalabo District, Zambia. *Health Policy*, 2003, 65:109–118.
28. Bossyns P, Van Lerberghe W. The weakest link: competence and prestige as constraints to referral by isolated nurses in rural Niger. *Human Resources for Health*, 2004, 2:1 (<http://www.human-resources-health.com/content/2/1/1>, accessed 12 May, 2008).
29. Kelly P. Local problems, local solutions: improving tuberculosis control at district level in Malawi. *Bulletin of the World Health Organization*, 2001, 79:111–117.

30. Davis DA, Thomson MA, Oxman AD, Haynes RB. Changing physician performance. A systematic review of the effect of continuing medical education strategies. *JAMA*, 1995, 274:700–705.
31. Davis D, O'Brien MA, Freemantle N, Wolf FM, Mazmanian P, Taylor-Vaisey A. Impact formal continuing medical education: do conferences, workshops, rounds, and other traditional continuing education activities change physician behavior or health care outcomes? *JAMA*, 1999, 282:867–874.
32. Hadiyono JE, Suryawati S, Danu SS, Sunartono, Santoso B. Interactional group discussion: results of a controlled trial using a behavioral intervention to reduce the use of injections in public health facilities. *Social Science and Medicine*, 1996, 42:1177–1183.
33. Herbert CP, Wright JM, Maclure M, Wakefield J, Dormuth C, Brett-MacLean P et al. Better Prescribing Project: a randomized controlled trial of the impact of case-based educational modules and personal prescribing feedback on prescribing for hypertension in primary care. *Family Practice*, 2004, 21:575–581.
34. Garcia P, Hughes J, Carcamo C, Holmes KK. Training pharmacy workers in recognition, management, and prevention of STDs: district-randomized controlled trial. *Bulletin of the World Health Organization*, 2003, 81:806–814.
35. Gormley GJ, Steele WK, Stevenson M, McKane R, Ryans I, Cairns AP et al. A randomized study of two training programmes for general practitioners in the techniques of shoulder injection. *Annals of Rheumatic Diseases*, 2003, 62:1006–1009.
36. Flores R, Robles J, Burkhalter BR. Distance education with tutoring improves diarrhea case management in Guatemala. *International Journal of Quality in Health Care*, 2002, 14(Suppl. 1):47–56.
37. Boyne GA, Walker RM. Introducing the “determinants of performance in public organizations symposium”. *Journal of Public Administration Research and Theory*, 2005, 15:483–488.
38. World Health Organization. *Working Together For Health, The World Health Report 2006*, Geneva
39. George A. *Accountability in health services. Transforming relationships and contexts*. Harvard Center for Population and Development Studies, Cambridge, MA, 2002 (Working Paper Series, Vol 13, No. 1).

FINANCING FOR EFFICIENT AND QUALITATIVE PRIMARY HEALTH CARE IN NIGERIA

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1.0 INTRODUCTION

The health system in Nigeria and the health status of Nigerians are in a deplorable state: Nigerian's overall health system performance was ranked 187th position among 191 members States of the world health Organization in 2001¹.

Diseases programmes, such as HIV/AIDS, Tuberculosis and malaria and other programmes, such as reproductive health are currently implemented within a weak health system and hence have little impact. Routine immunization coverage rate of 80% in the early 1990s has dropped to less than 20%. PHC facilities serve only about 5-10% of the potential load, public expenditure on health is less than \$10 per capital compared to the \$34 recommended internationally. Private expenditures are estimated to be over 70% of the total nationally health expenditure with most of its coming from out-of-pocket expenditure, in spite of the endemic nature of poverty in Nigeria. Consumer health knowledge and awareness of their rights to quality care are low. Partnership between the public and private sectors are mostly non-existent or ineffective. Donors and other development partners are poorly coordinated²

The Total Fertility Rate (TFR) in Nigeria has remained high. The results obtained from the 2003 Nigeria Demographic and Health Survey was 5.7 (NPC [Nigeria] & ORC Macro, 2004)³. One of the major reasons for the high fertility level is the pro-natalistic attitude of the population and low use of contraceptive methods. The total demand for family planning services remains low, while the ideal family size is high. As reported in the 2005 NARHS, only

¹ WHO report 2000

² Health Sector |Reform Programme Strategic Thrust with a logical framework and plan of Action 2004-2007 pg 7

³ Nigeria Demographic and Health Survey 2003; in (NPC) and (ORC Macro,2004)

24.1% of the respondents desired to have less than 5 children (FMOH, 2006a)⁴. Life expectancy in Nigeria has remained low, and this has declined in recent times, partially due to the effect of HIV and AIDS. The life expectancy at birth, which was 53.8 years for females and 52.6 years for males in 1991 (UNFPA, 2005)⁵, has declined to 46 years for females and 45 years for males (WHO, 2006)⁶.

The infant mortality rate generally worsens in the decade on 1990s. It rose from 85 per 1,000 live births in 1990 to 195 in 1994. The temporary decline to 114 in 1995/96 could not be sustained, as it significantly worsens by almost one-fold to 217 in 1997, though still remain high at estimated rate of 99 per 1000 live births while the under five mortality rate (U5MR) is 191 per 1000 live births (UNICEF, 2007)⁷.

Nigeria has one of the highest maternal mortality rates in the world estimated at 800 maternal deaths per 100,000 live births (WHO 2006). The health behaviour of Nigerian women regarding pregnancy related care remains poor and poses one of the greatest challenges to maternal mortality reduction in the country. As reported in NAHRS 2005; less than two – thirds of pregnant women received antenatal care; only about half were attended to at delivery by skilled attendants and less than half received post-natal care (FMOH, 2006a). The value of MMR is above the average for developing countries. The low level of the health indicators suggests that new efforts must be directed at the sector. At the centre of the improvement of the sector lies the trend and structure of financing over the years.

Health financing refers to the “function of a health system concerned with the mobilization, accumulation and allocation of money to cover the health needs of the people, individually and collectively, in the health system, the purpose of health financing is to make funding available, as well as to set the right financial incentives to providers, to ensure that all individuals have access to effective public health and personal health care” (WHO 2000). In

⁴ National HIV and AIDS and Reproductive Health Survey (NARHS) 2nd edn 2005

⁵ UNFPA, 2005 Report

⁶ WHO 2006, Report

⁷ UNICEF State of Health Report 2007

addition, the questions of who pays, how they pay and how much is paid determine the quality efficiency and access to better health care.

This paper aims at investigating the links between health financing and efficient, effective and qualitative PHC in Nigeria. It is therefore important to examine any gap in health financing and associated health spending on PHC that have been affecting the quality utilization and access to health care in Nigeria with a view towards improving health sector and thereby leading to improvement in the country's indicators.

2.0 ECONOMIC GROWTH AND INEQUALITY TREND ON MEAN PER CAPITAL CONSUMPTION

Nigeria is ranked as one of the fastest growing economies with a growth rate of 6.3 percent in 2007 and 9.1 percent projected for 2008. Nigeria's GDP per capita is \$2035 according to IMF estimates from 2007 improved growth and lower inflation are good signs for Nigeria though inflation is currently at risk due to increasing food prices. One of the main issues facing the country is balancing oil sector revenues and government spending⁸. Over the last years, the accrued oil revenues have not led to improvements in poverty. Poverty incidence in 2004 is shown in Table 2.1 with an overall rate of 54.4%. Sectoral differences are reflected in a contrast between rural areas with a rate of 63.3% and 43.2% in the urban sector. The poorest zones of the country are those in the North with the South East being the zone with the lowest incidence of poverty.

⁸ International Monetary Fund, World Economic Outlook Database, April 2008.

Table 2.1: Poverty Incidence in Nigeria by Sector and Zones (2004)	
%	
<i>Sector</i>	
Urban	43.2
Rural	63.3
<i>Geo-political Zone</i>	
South South	35.1
South East	26.7
South West	43.0
North Central	67.0
North East	72.2
North West	71.2
National	54.4

Inequality, as measured by the Gini coefficient has been rising since 1985, save for a slight decline in 1992 as can be seen in Table 2.2. Comparing across geo-political zones, we are able to see that the South West is the most unequal area of the country.

Table 2.2: Inequality Trend by Zones (Gini Coefficient)				
1985	1992	1996	2004	
<i>Geo-political Zone</i>				
South South	0.48	0.39	0.46	0.51
South East	0.44	0.40	0.39	0.45
South West	0.43	0.40	0.47	0.55
North Central	0.41	0.39	0.50	0.39
North East	0.39	0.40	0.49	0.47
North West	0.41	0.43	0.47	0.37
National	0.43	0.41	0.49	0.49

In Table 2.3, the NLSS data show mean per capita consumption to be 26,755 Naira or approximately 434 international dollars in 2003 with wide disparities between the poor and non-poor. In the top consumption quintile, individuals have an average mean consumption equal to nearly 10 times that of the poorest consumption quintile.

Table 2.3: Mean Annual Per Capita Consumption			
NGN	\$US*	\$Int'l (PPP)^	
Non-Poor	45697	392	742
Poor	13086	112	212
Quintile 1	6962	60	113
Quintile 2	13121	113	213
Quintile 3	19551	168	317
Quintile 4	29301	251	476
Quintile 5	67095	576	1089
Total	26755	229	434
* Exchange rate as of March, 2008 is 0.0086 NGN to 1\$US.			
^ 2004 \$International PPP.			
Source: Authors' calculations based on Nigeria Living Standards Survey (NLSS) 2003/2004.			

Table 2.4 gives mean annual per capita consumption in Nigeria poorest 10 states. Jigawa ranks number one as the poorest state and Kwara is the fourth poorest state. The richest state, Bayelsa has a mean per capita consumption of almost 45,000 Naira which is almost 5 times the mean per capita consumption in the poorest state.

Table 2.4: Nigeria's Ten Poorest States (Based on Mean Annual Per Capita Consumption)	
State	Per Capita Consumption
Jigawa	9856
Kogi	11795
Kebbi	12939
Kwara	13512
Yobe	14797
Sokoto	17308
Gombe	18084
Adamawa	18193
Zanfara	18456
Taraba	21099
Source: Authors' calculations based on Nigeria Living Standards	

3.0 Health financing trend and structure (Global, Africa-Nigeria where are we?)

Health spending in sub-Saharan Africa, at \$27 per capita, is lower than in any other region of the world. Governments in the region contribute a smaller portion of total health resources (46 percent) than in any other region except South Asia. The private sector accounts for 54 percent of total health spending, and most private spending (82 percent) comes from out-of-pocket spending by households – the most regressive form of financing and the most likely to impede access to healthcare by the poor. Donor assistance – which WHO includes as part of its estimates of both public and private sector spending, rather than tracking as a mutually exclusive third category – accounts for 17 percent of total health expenditures, a larger share than any other world region. These averages mask important country-level variations in health financing. In Western Africa, for instance, out-of-pocket spending on health accounts for 59 percent of total health expenditures, more than six times the proportion in Southern Africa. In Eastern Africa, external assistance as a share of total health expenditures

accounts for nearly three times the levels in all other sub-regions. The highest-income countries spend nearly six times more per capita on health (\$45) than the poorest countries (\$8), where donor financing for health accounts for nearly 40 percent of total health expenditures. The great diversity across the region in the sources and levels of resources for health implies that a wide menu of financing options should be considered⁹.

"...while there have been unprecedented levels of external resources for health in recent years, these resources are focused on short-term results, rather than sustainable long-term financing of health services."

A FEW KEY STATISTICS SUMMARIZE AFRICA'S HEALTH FINANCING SITUATION

- Total per capita spending on health in sub-Saharan Africa – excluding South Africa – is the lowest in the world, at US\$27.
- Private spending as a share of total health spending (54%) is higher than any other WHO region in the world, except Southeast Asia. This is predominantly out-of-pocket spending (at 44% of total) – the most regressive form of health financing and the most likely to impede access to needed health care among vulnerable groups.
- At 17% of Total Health Expenditures, Sub-Saharan Africa's dependence on external resources for health is greater than anywhere else in the world.
- The WHO Commission on Macroeconomics and Health (CMH) estimated in 2001 that a basic package of essential health services would cost \$34 per capita. In the same year, African leaders meeting in Abuja pledged to devote 15% of government budgets to health (the "Abuja target"). However, even if all governments were able to meet the Abuja target, this would allow only five countries to also meet the CMH target. Analysts have since questioned whether the \$34 figure is adequate in the African context.
- A projection analysis based upon optimistic assumptions indicates that financing gaps are unlikely to be closed by 2020, particularly among countries with GDPs of less than \$500 per capita. The great diversity across the region in the sources and levels of

9

resources for health mean that a "one-size- fits-all" approach to Africa's health financing challenges is not appropriate, and a wide menu of options should be considered.

The low utilisation of modern health services that lead to poor health outcomes for majority of the citizens of Nigeria is not only influenced by lack of knowledge and negative perception especially of publicly delivered health services, cost is a major factor as well. And poverty is a major issue behind people's decision on whether to access health services or not. The costs of drugs, consumables and even travel to health facilities act as significant barriers of access to services.

The Commission for Macroeconomics and Health, estimates that on the average, the set of essential interventions necessary to enable low income countries to meet the Millennium Development Goals (MDGs) would cost about US\$34 per person per year¹⁰. However, in Nigeria the total per capita health expenditure has been estimated at between \$10-15 at average exchange rates. But between 60 and 75% of this expenditure is from private out of pocket expenditure¹¹ and the poor spend a disproportionately higher percentage of disposable household income on healthcare. With no health insurance, social security or credible exemptions, the population has to find the money at the time of need to pay for services. This no doubt deters the poor from seeking care in time or deepens their impoverishment when they are compelled to make health expenditure. Access to medicines is particularly constrained by this - for example, the cost of the new first line anti-malarial drugs.

African leaders at a special session of the OAU in Abuja in 2001 considered the dismal situation of health care delivery and recommended that health be allocated 15% of total budget. Subsequently, the National Council on Health recommended that Governments in Nigeria – Federal, States and LGAs commit at least 15% of their annual budgets to the health

¹⁰ Commission for Macroeconomics and Health

¹¹ Soyibo et al (2005) National Health Accounts

sector. Meanwhile, between 1999 and 2008 the average allocation to the health sector by many State governments and at the federal level is about 5% of the total budget¹².

Currently, healthcare is financed in Nigeria from a mixture of budgetary allocations from the Federal, States and LGAs, private out-of-pocket expenditure, external development funding, grants from corporations and charities and a small but growing social health insurance contributions. Lately, many States have also commenced programmes aimed at protecting vulnerable groups from the financial risk of ill-health. Nonetheless, in order to achieve the level of funding required for meeting the health needs of the whole population, the country has to put in place mechanisms for increase funding both in absolute terms and as a proportion of the total budget as well as the coordination of all the resources available to the sector from all sources. The Draft National Health Bill, if enacted into law will assure significant improvement in health care financing in the country as the Bill earmarks 2% of the consolidated federal revenue for health, with a large proportion of it assigned for PHC¹³.

3.0 METHODS OF HEALTH FINANCING

In Nigeria, major methods of financing health care, includes public sector financing (through Government Revenue/Public Budget/General tax), out-of-Pocket/User Fees/Charges, Community Financing, Health Insurance (Social and Private) and Financing by development partners and donors.

3.1 Public sector health financing

Public expenditures, budgeted and actual (capital and recurrent)

If asked, a lay person could most likely tell you that health expenditures would be higher in rich countries compared to poor countries. This fact has been well documented using data from around the world and is one of the main challenges faced when trying to address the disproportionately large disease burden that poor countries face¹⁴. Health expenditures also make up a bigger share of a GDP in richer countries. In addition, health expenditures, which are made up of the government and private outlays, tend to consist of a heavier government

¹² Nigeria health review ; Financing Primary Health Care in Nigeria, pg 75 Health Reform foundation of Nigeria

¹³ Draft National Health Bill

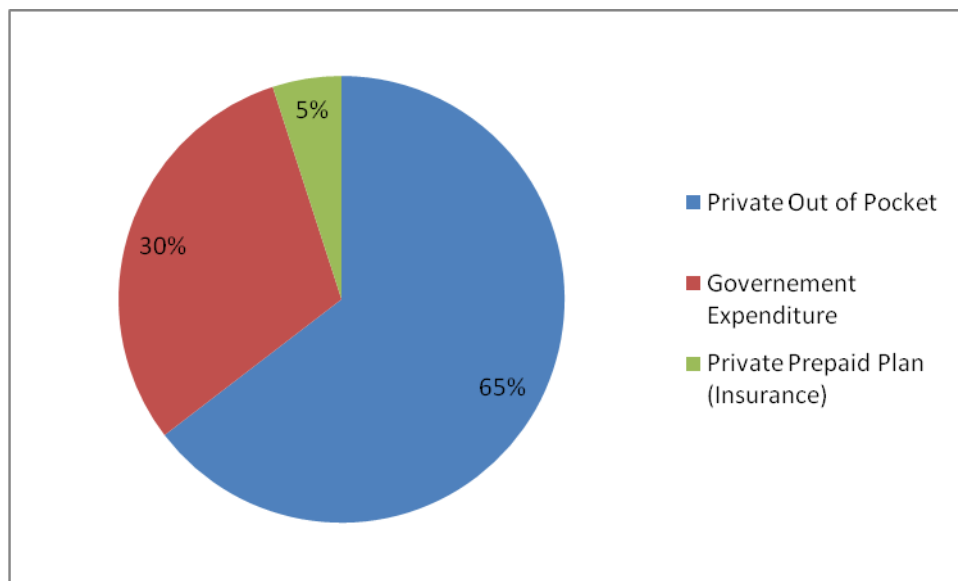
¹⁴ Newhouse (1977) and van der Gaag and Stimac (forthcoming, 2008)

share in richer countries. This implies that in poor countries, private payments dominate. Prepaid payments (insurance) as share of private payments are also relatively higher for richer countries meaning that out-of-pocket payments make up a very large share of private payments for individuals in poor countries. This fact has dire consequences for poor individuals in such countries. Evidence shows that households without health insurance suffer severe financial consequences after experiencing negative health events. Among other things, the relatively high vulnerability to negative health events, the lack of government spending on health care and not having health insurance results in further impoverishment and even death for many poor individuals¹⁵.

Between 2000 and 2004, there were some shifts in the composition of the total health expenditures (THE) in Nigeria. First, THE as a percentage of GDP increased from 4.3 to 4.6 percent. There was a decrease in government health expenditure (GHE) as percentage of THE from 33.5% to 30.4% and an increase in public health expenditure (PHE) as a proportion of THE by almost 5%. Out-of-pocket spending decreased while prepaid and risk-pooling plans went from 5.1% to 6.7% of private health expenditures –a 31% increase. External resources as a percentage of THE decreased by one-third from 16.2% to 5.6%. While the increase in prepaid plans is a positive change for the Nigerian health sector, government resources dedicated to health are extremely low and as can be observed in Figure 3.1 below, private health spending represents the largest proportion of THE in Nigeria. In 2004 private expenditures were equal to nearly 70% of THE. Prepaid plans represent around 5% of total health spending.

¹⁵ WHO reports 150 million individuals impoverished as a result of out-of-pocket health expenditures. World Health Statistics Report, 2008.

Figure 3.1: Composition of Nigerian Health Expenditures % (393 Million Naira in 2004)



Source: Authors' calculations based on WHO/WHOSIS 2004¹⁶.

For the past five years, give breakdown according to major line items (salary, drugs, maintenance, etc) and level of intervention (as far as data availability can permit) and by type of service (curative, preventive, promotive and rehabilitative) and types of facility (hospitals, health centre etc), by urban and rural and by geographical region.

¹⁶ Authors' calculations based on WHO/WHOSIS 2004

Table 3.1 Current Revenue and total expenditure of all tiers of Government in Nigeria 1997 – 2006 (billion naira)

Source	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Federal Govt. Retained Revenue	351.3	353.7	662.5	597.3	797	716,8	1,023.20	1.253.6	1,660.70	1,836.60
Total Expenditure	428,2	487.1	947.6	701.1	1.018.2	1.226.0	1.822.1	1.938.0		
Summary of State Governments' and Federal Capital Territory (FCT) Finances										
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Current Revenue	96.9	143.2	168.9	359.0	573.5	669.8	854.9	1,113.9	1,419.6	1,543.7
Total Expenditure	92.6	143.1	167.8	359.6	596.9	724.5	921.1	1,125.0	1,478.5	1,586.7
Summary of Local Governments' Finances										
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CURRENT REVENUE	31.2	44.9	60.8	151.8	171.5	172.1	370.1	468.2	597.2	674.2
TOTAL EXPENDITURE	29.9	44.0	60.4	153.8	171.3	169.8	361.7	461.0	587.9	665.8

Source: CBN Statistical Bulletin, 2007 yearbook¹⁷

3.2 Trends of Public health expenditure as % of total government expenditure

The sources of financing for poverty reduction go beyond the government. It includes funds from private organisations, NGOs and development partners among others. Other various ways by which poverty is being financed in Nigeria include; adequate public expenditure mix for the social sector, reduction and elimination of wasteful spending by government, privatisation and debt relief funds.

Figures from the Central Bank of Nigeria reveals that the proportion of federal government's total expenditure spent on the social sector between 2001 and 2005 is between 12 and 19 percent (CBN, 2006). The proportion initially increases between 2001 and 2002 before dropping more than 6 percentage points in 2003. The proportion has had a slow but steady

¹⁷ CBN Statistical Bulletin, 2007 year book

growth since then and by 2005 the proportion of federal; government spending on the social sector had risen to 14.4 percent of total government expenditure. However, the proportion of health expenditure declined from more than 4% in 2000 to less than 2% of federal government's total expenditure in 2005. Despite this decline in proportion, it should be noted that the absolute figure of expenditure in the health sector witnessed increases over the period 2001 to 2005. In fact the data reveals that over the period 2001 – 2005, actual expenditure into the health sectors of the economy had increased by more than 150 percent.

Table 3.2: Percentage Distribution of Federal Government's Total Expenditure (Recurrent and Capital)

DESCRIPTION	2001	2002	2003	2004	2005
GRAND TOTAL	100	100	100	100	100
ADMINISTRATION	21.68	33.88	32.29	36.24	39.29
General Administration	9.72	15.33	18.99	17.14	24.71
National Assembly	1.87	1.81	1.99	2.71	2.38
Defence	5.98	9.04	5.03	6.93	5.73
Internal Security	4.11	7.7	6.27	9.46	6.47
ECONOMIC SERVICES	33.55	23.51	15.83	12.01	15.29
Agriculture	6.12	3.75	1.31	4.07	4.97
Road Construction	2.7	3.77	2.81	4.53	6.93
Transport & Communications	5.01	4.49	2.39	1.23	1.53
Others	19.72	11.51	9.32	2.19	1.86
SOCIAL & COMMUNITY SERVICES	12.53	19.18	12.91	13.4	14.45
Education	5.63	9.15	6.48	6.98	7.43
Health	4.21	5.91	3.24	4.27	5.02
Others	2.69	4.12	3.2	2.15	1.99
TRANSFERS	32.25	23.43	38.98	38.98	30.97
Domestic	14.67	14.26	13.84	13.84	12,98

Foreign	0	2.78	15.79	15.79	12.55
Contingences	2.83	5.94	2.79	5.88	5.45
Pension & Gratuity	7.62	0.44	0	1.28	0
Others	7.12	0	6.55	0	0

Source: CBN Annual Report and Statement of Accounts (Various Issues¹⁸)

It is interesting to note that despite the fact that the proportion of health expenditure out of total federal government expenditure is low, an examination of the component of federal government health expenditure reveals that a large proportion of the expenditure is spent on personnel and overhead expenses taking the smallest proportion of the expenditure (see Table 3.3).

Table 3.3: COMPONENTS OF FEDERAL MINISTRY OF HEALTH EXPENDITURE (2001 – 2005)

	Personnel	Overhead	Capital	Total
2001	45.3	26.4	28.3	100.0
2002	70.6	10.9	18.5	100.0
2003	75.5	4.5	20.0	100.0
2004	39.6	23.1	37.3	100.0
2005	61.8	6.0	32.2	100.0

Table 3.4: Components of Health Expenditure in Kano State

	Personnel	Overhead	Capital	Total
2002	55.5	1.9	42.6	100.0
2003	35.1	10.1	54.8	100.0
2004	15.6	0.7	83.7	100.0
2005	23.0	3.5	73.4	100.0
2006	33.7	4.7	61.6	100.0
2007	14.5	2.0	83.5	100.0

¹⁸ CBN Annual Report and Statement of Accounts (Various Issues

Table 3.5: Annual PC Health Expenditures as % of PC Total Expenditures –Top Ten States

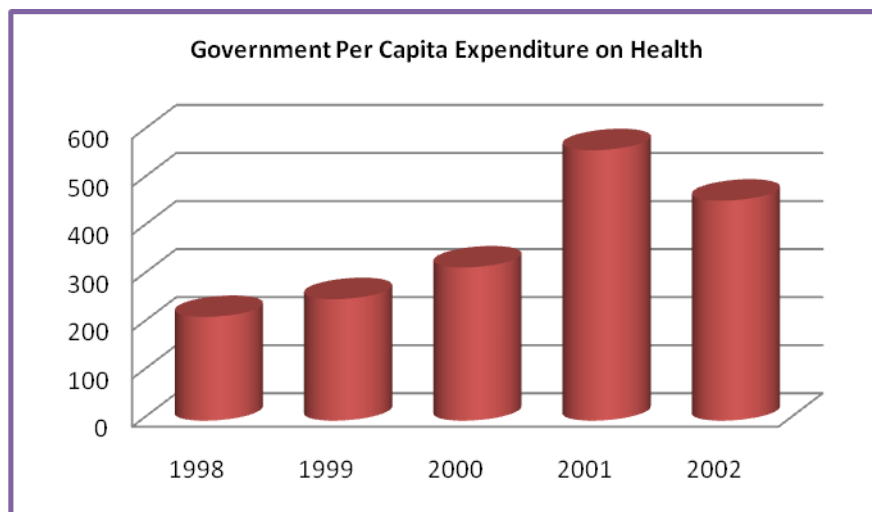
State	%
Kogi	31.04
Imo	29.47
Adamawa	22.35
Taraba	21.86
Kwara	20.57
Enugu	19.89
Rivers	19.14
Cross Rivers	19.13
Lagos	18.73
Katsina	18.03

Source: Authors' calculations based on Nigeria Living Standards Survey (NLSS) 2003/2004.

3.3 Trends of public health expenditure per capita per annum

The per capita health expenditure was taken from the National Health Accounts (Soyibo, 2005). The figures indicate that per capita health expenditure of government increased between 1999 and 2001 before declining slightly in 2002 (See figure 3.2)

Figure 3.2



3.3.1 Health Funding Through the Debt Relief Gains Virtual Fund

One of the recent sources of financing health in Nigeria is through the Virtual Poverty Fund which was developed in 2005, when the Paris Club group of government creditors wrote off about US\$18 billion of Nigeria's debt. As part of the deal, the debt service payments no longer had to be made, and the federal government agreed to spend the debt-relief gains as additional funding for projects and programs geared toward achieving the MDGs. The Virtual Poverty Fund is being managed by the Office of the Senior Special Assistant to the President on the MDGs (SSAP, MDGs),

The OSSAP-MDG disburses DRG to various ministries and agencies for projects that are directly pro-poor and can improve the performance of the country in relation to the achievement of the MDGs. The table below presents the disbursements for 2006 and 2007¹⁹

¹⁹ Virtual Poverty Fund Office of the Senior Special Assistant to the President on the MDGs (SSAP, MDGs), MDG report 2008

Table 3.6: Top-up Revenue Allocated to MDAs from the Debt Relief Gains (Billion Naira)

	2007			2006		
Ministry	Allocation	Appropriated	% appropriated	Allocation	Appropriated	% appropriated
Education	18.00	15.35	85.29	20.79	18.22	87.65
Health	15.00	15.35	102.32	20.79	21.29	102.4
Agriculture	15.00	15.00	100.00	9.90	9.40	94.95
Water Resources	10.86	13.85	127.51	19.80	19.02	96.04
Power and Steel	10.00	10.11	101.09	14.85	16.96	114.22
Housing	3.00	3.00	100.00	0.50	0.50	100
FCT	2.00	1.80	90.00	-	-	
Youth	1.00	1.00	100.00		0.99	
Women Affairs	1.00	1.02	101.50	0.99	1.00	101.01
NACA	1.00	1.00	100.00	-	-	
WORKS				9.90	9.86	99.55
Environment				1.49	1.49	100
Conditional Grants	22.00	20.00	90.91			
Safety Nets	10.00	10.00	100.00			
Monitoring and Evaluation	2.00	2.00	100.00	1.00	1.00	100
	110.86	109.47	98.75	100.00	99.71	99.71

3.3` Private Sector health financing

3.3.1 Private health expenditures

Nigeria is one of those countries where the individual incurs the largest out-of-pocket expenses on health as a percentage of private expenditure on health. The contribution of out-of-pocket expenditure towards private expenditure on health is more than 64 percent (see Soyibo, 2007)²⁰ unlike in many other low income and lower middle-income countries as well as upper middle income and high-income countries. In these countries, where the out-of-pocket expenses as a percentage of private health expenditure is less than 100, the remaining part of the private expenses is borne by insurers, mandated employer health services, other enterprises provided health services etc.

Some of the in exhaustive reasons cited for high out of pocket expenditure as a percentage of private expenditure in Nigeria are, higher usage of private facilities, unregulated private sector, inadequate healthcare financing and inadequate public healthcare facilities. The current situation of high preference for private facility and lack of adequate insurance mechanism along with insufficient government facility is likely to imply that the poor in Nigeria will bear the brunt of higher healthcare costs.

Household out-of-pocket expenditure as a proportion of total health expenditure (THE) averaged 64.59% over the period 1998-2002 with the least value of 60.35% recorded in 2000 and the highest value of 69.21% in 1999. This shows that households bear higher burden expenditure than other sources. The burden contrasts sharply with the situation in the Eastern and Southern African countries reported by Nabyonga and Munguti (2001) where the corresponding value varied between the least of 26% in Mozambique and the highest value of 63% in Kenya²¹. It is also much higher than the range of 40-50% in non-socialist low-income countries reported by Berman (1999)²².

²⁰ Soyibo A, Olaniyan A, Lawanson AO. Estimation of National Health Accounts of Nigeria: Where are We and What are Future Direction. Paper Presentation, West African Health Economics Network Inaugural workshop. Enugu, August 2007

²¹ Berman ,Shultz and Schulte cost effectiveness of selected Interventions aimed at conditions specific to women various site in 1992.

²² Janet Nabyonga-Orem, Humphrey Karamagi, Oladapo Waker; Maintaining quality of health services after abolition of user fees. BMC health services research 2008; 8-102.

3.3.2 Household Financial Burden of Diseases Using NLSS, 2004

Using data from the NLSS, Gustafsson-Wright and van der Gaag (2008) found that out-of-pocket health expenditures can represent a large and sometimes catastrophic burden on a household. An overall trend on OOPs is that consultations and medications are the most costly to individuals relative to other health related expenses. However for the non-poor hospitalization is on average more costly than medications. The study further reveals that the non-poor spend far more than do the poor out-of-pocket on health care and this is true for all categories of out-of-pocket spending but with the largest difference in out-of-pocket spending on hospitalization where the poor spend on average 78 Naira per year per capita compared to 2034 for the non-poor (Table 3.7). Those in the top consumption quintile pay ten times what individuals in the bottom consumption quintile on hospitalization. This raises concerns that poor individuals needing hospital care are either not seeking care due to prohibitive costs or are receiving care which may be sub-standard in terms of quality.

	Consultations	Hospitalization	Medication	Transport	Total
Non-Poor	2567	2034	1963	837	7402
Poor	379	78	507	129	1092
Quintile 1	136	30	279	43	488
Quintile 2	376	34	477	156	1044
Quintile 3	641	132	736	213	1723
Quintile 4	1181	465	1203	393	3242
Quintile 5	4301	3974	2993	1370	12637
Total	1296	898	1117	425	3737
Source: Calculations by Gustafsson-Wright and van der Gaag (2008)					

Gustafsson-Wright and van der Gaag (2008) further compares average out-of-pocket health spending to average per capita consumption and found that the bottom three quintiles

spend between 7 and 9 percent of their mean per capita consumption while the wealthiest quintile spends on average 19 percent of their income on out-of-pocket health expenditures.

Table 3.8: Annual Per Capita Health Expenditures (NGN) as Percentage of Per Capita Consumption

	Total Per Capita Health Expenditures (NGN)	Mean Per Capita Consumption (NGN)	% of Per Capita Consumption
Non-Poor	7402	45697	16.2
Poor	1092	13086	8.3
Quintile 1	488	6962	7.0
Quintile 2	1044	13121	8.0
Quintile 3	1723	19551	8.8
Quintile 4	3242	29301	11.1
Quintile 5	12637	67095	18.8
Total	3737	26755	14.0
Gustafsson-Wright and van der Gaag (2008)			

Financing by Development Partners and Donors

One of the major sources of finance for the health sector in Nigeria is grants from development partners and donors. Between 1999 and 2007, Nigerian received more than 6 billion naira in both credits and grants. Out of this, 3.2 billion dollars were credit while 2.8 billion were grants. Although the sectoral and zonal distribution of the grants was uneven, and without any clear criteria for the choice of the areas of intervention, the health sector had been the largest recipient.

Figure 3.3 shows the proportion of donor credit and grant out of total that has been given to various sectors of the Nigerian economy.

Figure 3.3

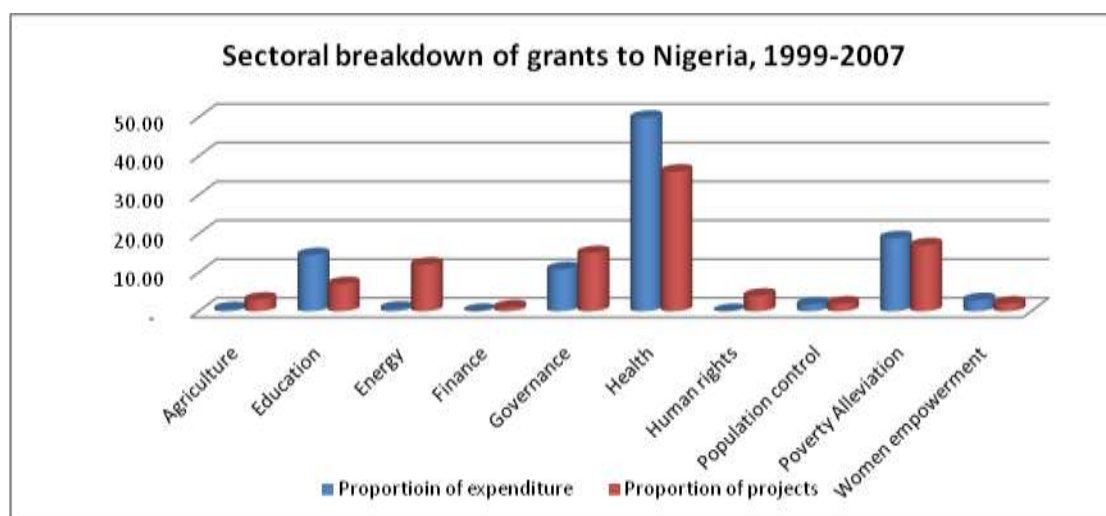


Table 3.10 gives the breakdown of the grants given to the health sector is given as follows. The UN system is the biggest donor to the country accounting for about 90 percent of all donor funds in Nigeria. It is also interesting to note that UNICEF is the largest contributor. In fact UNICEF accounts for 41 percent of total disbursed grants to the healthy sector between 1999 and 2007 in Nigeria²³

Table 3.10: Amount of Funds spent in the Health Sectors by Donors (1999-2007)

Donor		Focus	Amount (US Dollars)	TOTAL
Bilateral and Multilateral grants	EU	Immunization	83,572,896.00	
	UNDP	HIV/AIDS	8,785,773.00	
	USAID	HIV/AIDS	246,138,791.00	
		Malaria	11,678,124.00	
		Maternal Health	16,937,947.00	
		Reproductive Health	44,991,427.00	
	WHO	HIV/AIDS	3,969,368.00	
		Malaria	1,361,216.00	
		Other	64,672,862.00	

	UNICEF	HIV/AIDS	120,000.00	
	UNICEF	Unspecified	578,737,141.00	
	CIDA	Unspecified	129,120,000.00	
	DFID	Unspecified	84,100,000.00	
	TOTAL			1,274,185,545.00
NGOs				
	Oxfam, Africare and Water Aid	Unspecified	8,517,477.00	8,517,477.00
GRAND TOTAL				1,282,703,021.81

Source: NPC 2008. A review of Official development Assistance to Nigeria 1999-2007 Abuja, National Planning Commission²³

3.3.4. Recommended Community Health Insurance for PHC Health Insurance Fund/Pharm Access Programs (Example of community health insurance in Nigeria)

Among all states Nigeria, Kwara has among the highest OOPs in the country with health expenditures representing over one-fifth of total per capita expenditures. Average per capita out-of-pocket health expenditures in Lagos are 4730 Naira and in Kwara State, 2800 Naira²⁴. For the poor however, they are considerably lower, as can be seen in Table 3.11 with 1453 Naira in Lagos and 895 Naira in Kwara State. For the poor, this represents up to 11 percent of income in Kwara and over 13 percent of income in Lagos. The poorest quintile in each state spends 798 and 510 Naira for Lagos and Kwara respectively. The differences between the first and last quintiles, in the proportion of total expenditures that health expenditures represent, are much more dramatic in Kwara State than in Lagos.

²³ NPC 2008. A review of Official development Assistance to Nigeria 1999-2007 Abuja, National Planning Commission

²⁴ Note that these data are from 2003/2004, in the years to follow Nigeria experiences high inflation rates according to IMF data from the period 2003-2007.

Table 3.11: Mean Annual Per Capita Out-of-Pocket Health Expenditures and as % of Per Capita Consumption

KWARA STATE				LAGOS STATE		
PC Health Expend.	PC Consum	%	PC Health Expend.	PC Consum	%	
Non-Poor	11551	37763	30.6	11551	55131	21.0
Poor	895	8300	10.8	1453	10893	13.3
Quintile 1	510	6080	8.4	798	6006	13.3
Quintile 2	1742	12630	13.8	2061	12574	16.4
Quintile 3	2473	19123	12.9	3294	19643	16.8
Quintile 4	7707	28664	26.9	3713	29866	12.4
Quintile 5	26819	71636	37.4	16499	73311	22.5

The first PharmAccess/HIF program was started in Nigeria in early 2007 under the name Hygeia Community Health Plan (HCHP). President Obasanjo the then president of federal republic of Nigeria (1999-2007) stated that he would match the program funds and provide support to additional target groups in the informal sector. He emphasized that this approach would cover workers in the informal sector for whom such facilities are not yet available. Since the launch of the scheme, an active enrollment campaign is underway to mobilize and enroll target group members. Enrollment in the program is voluntary; registration is done per family. The program targets a potential 115,000 individuals. This includes 10,000 market women and their families in Lagos (total target group 40,000 persons) and 7,500 farmers and their families of the rural Shonga Community in Kwara State (Total Target Group 75,000). Annual premiums are \$60 per person per year in Lagos and \$27 per person per year in Kwara State. In the first year, the insurance scheme members pay 5-10% of these annual premiums themselves; the remaining 90-95% is subsidized by HIF. The benefit package provides coverage for the most common medical problems found among the target groups and includes primary care, limited secondary care and medication, including HIV/AIDS voluntary counseling and treatment (VCT).

Table 5.4: Low Cost Health Insurance Packages offered by Hygeia in Kwara and Lagos			
1. Community Health Package Lagos		Naira	Euro
Yearly Fee Market Women Lagos Hygeia package	800	€ 5,29	a person a year
Real price Market Women Lagos Hygeia package	7885	€ 45,88	a person a year
2. Community Health Package Kwara		Naira	Euro
Package Hygeia Kwara	200	€ 1,18	a person a year
Real price		3348	
3. Standard insurance packages Hygeia for middle and higher income			
Standard Insurance package Hygeia	16000	€ 94,12	a person a year
Silver Insurance package Hygeia	35000	€ 205,88	a person a year
Gold Insurance package Hygeia	100000	€ 588,24	a person a year

14 Note that these data are from 2003/2004, in the years to follow Nigeria experiences high inflation rates according to IMF data from the period 2003-2007.

WHAT ARE THE MAIN CHALLENGES FOR HEALTH FINANCING IN NIGERIA?

There is a paramount need to focus on the *efficiency* of domestic and donor health spending. Because currently available resources are not being used efficiently, financing gaps are exacerbated. Specifically, attention must be paid to how domestic resources are pooled and spent, not just how much money is raised; and improvements in the efficiency of international aid flows may also generate "fiscal space" for additional health financing. Also the issue of *sustainability* in health financing and the extent to which it is important to begin working now to reduce dependence on foreign assistance over the long term. Though reducing dependence was of key importance, while in reality significant reductions in donor funding in the near future were unlikely. Largely sustainability should not simply be defined

as domestic self-reliance in health financing. Other key health financing challenges include:

- Low levels of coverage provided by risk pooling schemes
- Corruption and poor public financial management
- Disease-specific external assistance that fails to strengthen health systems.

"Broken health services delivery systems will not work better if more resources are dumped in without encouraging more effective use of domestic health resources and promoting equity and financial protection."

WHAT ARE THE MOST PROMISING HEALTH FINANCING INNOVATIONS FOR NIGERIA?

Approaches for most promising health financing innovations include the following:

- Community Health Insurance (Hygeia example ; We can have state support for rolling and expanding community health insurance scheme)
- Revenue from taxes Alcohol, Smoking etc(a legislative backing for inclusion of 5%-10% to be for PHC)
- Taxes deduction from federal government tertiary health institution be appropriated to PHC
- Establishment of PHC Board/ Agency for possible easier accessibility from basket fund as stated in the health bill
- *Increase sustainability through on-budget health financing and accountability mechanisms:* Donor health financing that is "on-budget" is an important way to foster sustainability, accountability, and transparency. This would clarify how money is actually being spent and improve coordination among donors and governments.
- *Strengthen civil society oversight to improve the effectiveness of health spending:* Civil society actors should be encouraged to play a greater role in demanding equity in government spending, monitoring budgets, and advocating domestically for transparency and accountability.
- *Increase efficiency of spending through improved public financial management:* Without monitoring how money has been spent, it is impossible to evaluate program effectiveness and to hold leaders accountable. Improved public financial management would reduce corruption and have spillover effects to other sectors.

- *Link levels of international assistance to domestic health financing performance:* Donor support to Nigeria could be linked to the ability to generate resources and use the resources effectively.
- *Realign incentives to encourage efficient use of resources:* Demand-side financing, where payments go directly to consumers (through vouchers or conditional cash transfers) rather than to service providers, can encourage more efficient and equitable use of resources. Results-based or performance-based payments, where resources are linked with the achievement of specific outcomes, have also proven to be feasible and effective in Nigeria.
- *Strengthen risk pooling and insurance mechanisms:* The importance of better risk pooling systems, and a possible "Health Insurance Challenge Fund" [(creating a mechanism for donors to support the expansion of insurance systems in developing countries (e.g Hygeia in Kwara State)]. Donor support for equity funds or social funds could increase sustainability by building up domestic institutions for risk pooling and purchasing. Donors could also support reinsurance for catastrophic expenditures.
- *Apply known strategies to roll out new health technology products rapidly and efficiently:* New health technologies with the potential to transform health outcomes in Nigeria are in the product pipeline. However, they are likely to be costly and will need support from innovative financing mechanisms (such as Advance Market Commitments for vaccines, e- medicine etc).
- *Improve the evidence base for health financing:* Donors should enhance the quality and availability of empirical data on health financing through household and facility surveys, and strengthen country-owned routine health information systems as well.
- *Link resources for HIV/AIDS, malaria, etc. to health systems strengthening:* Structures and institutions developed for disease-specific initiatives should be leveraged for wider health systems strengthening.

WHAT IS THE BEST USE OF RESOURCES TO STRENGTHEN HEALTH FINANCING IN NIGERIA?

A framework such as National Strategic Health Development Plan (NSHDP) for prioritizing the innovations based on whether the approach directly or indirectly addressed health financing challenges in the Nigeria.

In order of priority, the leading options to **directly** address health financing challenges were:

1. Improve the efficiency of donor spending (better donor coordination, on-budget spending, longer-term commitments)
2. Implement results-based/performance-based payment systems
3. Develop and strengthen health insurance systems
4. Leverage successful disease-based programs to strengthen the wider health system.

The leading options **complementary** to the direct financing approaches above were:

- Strengthen civil society oversight of health financing – develop accountability mechanisms which engage civil society, media, and think tanks around the analysis of budget allocations and results
- Build the health financing evidence base, including household and facility-based data
- Strengthen public financial management
- Facilitate the uptake of new health technologies.

THE CHALLENGES OF MAKING QUALITY ESSENTIAL DRUGS AND SUPPLY AVAILABLE FOR PHC SERVICES IN NIGERIA

By

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INTRODUCTION

It is a pity that 30 years after Alma Ata, Nigeria's health statistics have not shown any significant changes and in deed in some cases have become worse. Life expectancy for example has declined from about 52 years in 1978 to 48 years in 2008. It is true that many more Primary Health Centres have been built and much more money budgeted and spent for PHC in Nigeria, the results have not justified the overall investment, except in the area of immunization against the 6 common childhood diseases. Even here, recent decline in coverage and loss of momentum has become worrisome.

Certainly, the reasons for this unsatisfactory outcome of PHC services in Nigeria are many but the inadequate supply and availability of essential drugs and supply represent a critical reason. Why is this so? A review of several causative factors will help illuminate the problem.

POOR BUDGETARY ALLOCATION

From the analysis of the scanty data available, it is evident that the allocation of financial resources for the purchase of essential drugs and supply for the Primary Healthcare Centres has been generally on the decline. In some cases, there have been some increase in the total allocation, but when this is adjusted for inflation and exchange rate deterioration, the general trend is a decline. In all cases, this decline is accentuated by the population explosion leading to a dismal Per Capita allocation.

With the increased focus on the immunization of children through the National Programme on Immunization (NPI), much of the spending resided in this area, buoyed by International donor contribution. As a consequence, there has been insufficient budget allocation to other essential medicines. In most of the health centres and other Primary Health Care Centres, many of the essential drugs remain out of stock. Except for dressings and Iodine tincture and some tins of analgesic tablets, not much else could be found. In some instances, the workers at the centres complained that the drugs bought by LGA's were too few and got quickly exhausted. The overall impression has been that the local government authorities did not pay enough attention to providing essential medicines and supply to the health centres. There was greater focus on meeting personnel emoluments and not much left for essential medicines. Our investigation revealed that many patients including pregnant women were asked to go and buy their drugs and other supplies from the private pharmacies and patent medicine shops. And usually, many never returned to the health centres or maternity centres either to continue treatment or to be delivered of their babies.

DIVERSION OF PRODUCTS

It has been established that a significant proportion of essential medicines and supplies meant for the PHC are misappropriated or diverted. This diversion is at two levels; at the

local government drug store level and at the primary health care level. Health workers especially the store keepers and those at the dispensaries divert some of these items either for personal use or by outright theft as some of the items delivered to the health centres have been found in the open drug markets. The matters is worsened by poor supervision because in many cases, there are no Pharmacists to provide supervisory oversight and even the other health care staff assigned with such duties sometimes is negligent or even collude to divert the medicines and supplies. Similar situation exists in some State medical stores and general hospitals.

POOR VALUE FOR MONEY

Because of the poor procurement procedure adopted by the local government authorities in the purchase of these medicines and accessories, the scanty budget is sub optimized. In many instances, there is no tendering system and no bidding. The local government authorities just select party members or friends and ask them to supply these items. These people then go to the open markets or to the local medicine dealers, including the itinerant hawkers and procure these items, with heavy mark ups to accommodate a long chain of interested parties.

Again, instances abound where fake or substandard drugs are purchased either out of ignorance or a desire to maximize personal gains. In a number of health care centres, we find a lot of expired medicines and investigations reveal that some of the items were only recently supplied, which suggests that they were already short dated at the time of purchase. Once more, the paucity of supervision by appropriate pharmaceutical or healthcare professional gives room for this unsavoury practice which short changes the system.

We found that in a few States where Drug Revolving Fund Scheme operates, some of the LGA authorities refuse to buy from them because, opportunities for “lading” and “cladding” do not exist. This happens even in States, where there is a law that compels all to patronize the Central Medical Stores. Thus, these corruptive tendencies became a major stumbling block for the availability of quality essential drugs and supplies for PHC services in Nigeria.

CONCURRENT GOVERNMENTAL ACTION

Ideally and perhaps constitutionally, the PHC services are essentially the responsibility of the 3rd tier of government – Local Government Councils. But we all know that for a long time, the local governments did nothing else but pay teachers salaries and other local government staff. Because of several interruptions in the flow of LGA funds, many local government Chairmen and their Councilors (when possible) did not have proper control of their funds. The Constitutional requirement to operate joint accounts with the states left them at the mercy of the State governments.

Until the EFCC began to enquire on how the States ran these joint accounts, the local governments were entirely at the mercy of the States. Today, many of the Local Government Councils have begun to take control of their resources and in fairness to them, some improvement has been noticed in their statutory responsibilities.

But perhaps because of our own political history, where the military more or less operated a unitary system of government, and the subsequent ‘hangover’ even during the constitutional democratic governance, responsibility for Primary Health Care services has

been diffuse and sometimes conflicting. It has been seen that all tiers of government in one-way or the other venture into PHC services. Some State governments have been known to undertake to build and supply medicines and consumables to Primary Health Care Centres. They have either done it as an extension of their budget plans or they have claimed to do it on behalf of the local governments, justifying sometimes, the seizure of local government funds. The Federal Government on its own perhaps irked by the poor performance of the local governments have tended to intervene. The recent compulsory deduction of money from LGA's to build new health centres across the country by the Federal Government is a case in point. As I write this, the building of the health centres is stalemated as the local governments under the auspices of ALGON, with subtle nudging by the State governments have challenged the 'illegal' deductions while the contractors have gone to the court to ask to be paid for work done.

In my opinion, there is nothing wrong with both the Federal and State Governments supporting Primary Healthcare Services as PHC has been shown all over the world to be the foundation of a good healthcare system. For example, it is certain, that the level of coverage of immunization achieved by the NPI would have been almost impossible for the local governments to achieve alone. But the problem is that some of the interventions are not well coordinated. Sometimes, it creates vacuum and gives the local governments opportunity to evade responsibility as they hesitate to provide drugs and other supplies to the health centres, hoping that others would do so. At other times, they hope on donor agencies and voluntary organizations to come to their aid. As a result, we have seen situations of supply extremities. There is a high level of supply, once in a while as drugs and consumables arrive from different sources, then followed by a long spell of poor or no supply as each tier hopes or expects that the other is maintaining supply. It is therefore apparent that some level of coordination is necessary to determine who does what and when, so that supply is maintained at an optimum level. Perhaps, the National Primary Health Care development agency will have a role to play here.

LOCAL AVAILABILITY OF ESSENTIAL DRUGS

In the best of times, a major challenge for the optimum performance of the PHC services in Nigeria is the local availability of Quality Essential Drugs by the Pharmaceutical Industry. Whereas no nation can be self sufficient in the production of all drugs, given that new diseases are emerging by the day, and some of the older ones are making a remarkable come back, it is important that nations seek self sufficiency in the production of ESSENTIAL DRUGS. By WHO standards, Essential drugs are those drugs which the nation must have in sufficient quantities at all times for the management of the most common ailments that afflict the greater number of its population. The Essential Drugs list programme is derived from this concept. It is understandable that the essential drug classification is unique to each country. What may be regarded as non-essential in Nigeria may be essential in the United States of America due to each country's disease patterns and level of development.

The Nigerian Pharmaceutical Industry has grown from a state of mere importation in its early years to when rudimentary manufacturing began in the 1958 to 1971 time frame. By the early 1990's the drug manufacturing companies had reached 50 and today, there are nearly 150 manufacturers. About 70% of the pharmaceutical industries in Nigeria are engaged in secondary manufacturing, which involves the processing of medicinal substances with formulated additives into pharmaceutical dosage forms of all types. The rest 30% are engaged mainly in tertiary manufacturing which primarily embraces the packaging of

finished dosage forms of all types in manners appropriate for their intended use and in conformity with the nature of the preparation involved, the expected condition of their transportation, storage and subsequent handling. There is virtually no primary manufacture or bulk production going on in Nigeria today, though our sister country Ghana now has a company that is into primary manufacture.

As far back as 1990, available capacity for producing essential drugs especially the solid and liquid non-sterile has been considerable. Up to 50% of national drug requirements could be produced by the local industry. The government of Nigeria had recognized this fact, hence the National Drug Policy of 1990 stated amongst other things, a cardinal objective on page 11, Chapter 4, Section 2, Subsection 4: "To improve local capacity in drug manufacturing" and went on to state one of its targets on page 12, Chapter 4, Section 3, Subsection 7 "...to increase patronage of local industry when procuring drugs so that by 1995, 50% of our procurement would come from local manufacturers and 75% by the year 2000".

However, low capacity utilization has dogged the industry from the late 1980s when production remained consistently below 40% capacity due to several oscillating factors. Beyond the national industrial malaise of perennial inadequacies in industrial infrastructure and utilities such as electricity, diesel, LPFO, water and transportation, the industry has faced stiff competition from importation of finished products from all over the world particularly India and China. The introduction of the World Trade Agreement (WTO) agreements and the globalization of Trade have made Nigeria to become a major destination for drugs and supplies from all over the world. What is more, a substantial part of these imports are sub-standard and some are outright fakes.

The local industry has thus faced severe competition and was really in decline until the advent of the revamped NAFDAC in 2001, which waged a relentless war against sub-standard and fake drugs. Today, the incidence of fake drugs has declined considerably and the ability of the local industry to supply Quality Essential Medicine to the PHC has been largely restored. But three problems still persist.

Firstly, capacity for production of sterile products like injections, infusions and vaccines is low and the country still depends on large scale imports for these, creating challenge of speed of delivery and product integrity.

Secondly, is that we still have a poor distribution system for drugs. Drugs still pass through many channels before they get to the final consumer and in some cases they pass through unqualified hands. The danger here is that they could be mishandled, for example, exposed to too much heat or too much moisture. Also, the multiple intermediaries could lead to cost escalation.

Thirdly, the patronage of locally made drugs by the governments is still below par, certainly below the 75% envisaged by the 1990 Drugs Policy document. Governments still import drugs from abroad, drugs, which are locally available. Sometimes, they claim it is the condition imposed by the donors. But how do we justify those bought with the national wealth. Purchasing drugs direct from local manufacturers or accredited distributors of those drugs not locally manufactured will achieve many positive things for the PHC services in Nigeria:

1. The quality of the products can be guaranteed since there will be no intermediaries and possible manhandling.
2. Speed of supply is assured as the drugs are already in the finished goods warehouses.
3. Better pricing is assured as multiple mark ups are eliminated. Even then prices can still be negotiated downwards.
4. Jobs are created and taxes are paid, helping the national economy.
5. In the event of any problems with efficacy or safety, it will be easy to locate the local supplier and recalls can be much easier.

WHERE DO WE WANT TO BE

In all sincerity, I am appalled that our health statistics have not shown much improvement over the years. Malaria is still ravaging us with vehemence. Infant and maternal mortalities remain amongst the worst even in Africa, not to talk of the world. Despite the very strong efforts on immunization of children, Nigeria remains one of the very few countries still harbouring the wild polio virus. Every year, our children die unnecessarily due to meningitis. It is my submission that if we must truly change this awful picture, Nigeria must truly focus on Primary Healthcare and do all that it takes to make it functional and successful. We must take healthcare to the people, waiting for them in hospitals or even in the health centres may not yield the result. We need to move to the communities and into their homes. Many Nigerians still do not appreciate what they must do to keep themselves healthy due to ignorance, poverty and low esteem. Many in the rural areas cannot find transport to the hospitals. Some indulge in criminal self-medication until they run out of steam. Others think it is a waste of time and effort, it will take a whole day to see a Doctor (if you find one) and then when they prescribe the drugs, the Pharmacist (if you find one) or the Nurse tells you it is out of stock or encourages you to visit him or her at home. What then is the need to waste time going to the hospitals? If we must transform Primary Health Centres services and ensure that we overcome the challenges of making quality essential drugs and supply available, I recommend as follows:

1. The Federal, State and Local Governments need to agree on pooling funds together for the execution of PHC services. The National Council on Health should work with ALGON to work out the contribution of each tier and the specific role of each contributor. An agreed formula should be implemented in a consistent manner. It should be made clear to all that unless we have a functioning Primary Health Care system across the nation, our teaching and specialist hospitals will remain glorified health centres.
2. Many more health centres should be built, close to where the people live and work. Nigeria may borrow from the Redeemed Christian Church that has a vision that every worshipper should have a Redeemed Church within 5 minutes of walk from their homes or offices. If a non-governmental organization that does not receive oil revenue or tax can do this, I believe Nigeria can do it, if we have the will.
3. Drug procurement for the PHC must be adequately budgeted for using the pooled resources advocated above. The donor contributions will be additional.
4. Procurement of essential drugs and supplies should be tendered for and purchased as much as in practicable direct from the manufacturers or accredited representatives of overseas manufacturers. No more open purchases or patronage of itinerant drug hawkers.

5. Professional Pharmacists and other appropriate healthcare workers must be involved in the development of the list of drugs; purchase, storage, distribution and dispensing of the drugs and necessary supplies.
6. Proper record keeping must be established with adequate supervision.
7. Regular Financial Audit must be undertaken to ensure cost effective utilization of the drugs and supplies. Additional outcome audits must also be undertaken to assess impact on the health of the community.
8. A high level of Enlightenment Campaign must be undertaken to achieve the following.
 - a. *Bringing health consciousness among the People*
 - b. *Teaching simple ways of keeping healthy*
 - c. *Inviting the People to visit the Primary health Centre - Indicating the locations and assuring that health care professionals are on duty and that there are sufficient drugs.*
 - d. *Preparing the people to adopt preventive measures before the outbreak of several epidemics like meningitis.*
9. The health care workers that provide the PHC services must be trained retrained and equipped to carry out the very basic but very essential service. They also must be well remunerated and motivated. They should be paid special allowances to keep them in the rural areas and their make to assignment attractive.
10. All the Health Ministers, Commissioners for Health in States, Councillors for Health in LGA's must be made to undergo training to enable them understand the concept of PHC and its critical role in reversing our current National Health Status. It must not be assumed that they understand that the PHC Services should take precedence over secondary and tertiary health care services.

CONCLUSION

It is medicines that make health care delivery credible. Many people who go to health institutions and see the best doctors or undertake the most rigorous tests and investigations go home unhappy if they do not have medicines prescribed or recommend for them. They feel very sad when drugs are prescribed and they cannot receive them either because the drugs are out of stock or they cannot afford them.

It is therefore critical that any health care system must take the issue of making quality drugs and essential hospital consumables available in the right qualities and right pricing very seriously. It becomes even much more important in the primary health care service set up. It is here that the disease progression must be stopped and people enabled to return to work speedily. In addition, it is here that the expectation of the people to take drugs home after a visit is highest and it is here in many cases that the people cannot afford to pay for expensive medicines or other high hospital costs.

In this discourse we have identified that poor and inadequate budgetary allocation, diversion of products, poor value for money, uncoordinated governmental actions and the local availability of quality essential medicines constitute the major challenges affecting the sustained availability of essential medicines and supply for PHC Services in Nigeria. To deal

with the challenges and enable Nigeria run a PHC service level that will reverse our poor health statistics we have proposed ten remedies. It is our hope that our leaders in the health sector – both political and professional will pursue these recommendations for the good of all.

REFERENCES

1. *Betwixt and Between: Adventures in Higher Education & Tertiary Health.* O. O. Akinkugbe, 2003
2. *Counterfeit Medicines – A Global Perspective – Ifeanyi Atueyi, 2005*
3. *Health Care: What Hope*
European Conference, 2000, Edited by L.C. Steyn, 2003
4. *National Drug Policy, Federal Ministry of Health, 1990*

SUB THEME FOUR
OTHER DETERMINANTS OF HEALTH

SOCIO - CULTURAL FACTORS INFLUENCING PRIMARY HEALTH CARE (PHC) SERVICES IN NIGERIA

By
Dr. Festus Iyayi

Abstract

There is now general acceptance that Primary health care (PHC) constitutes the fundamental strategy for meeting the health needs of the population. For this reason, there is considerable interest in analyzing the factors that shape the performance of the PHC system and how these factors may be moderated or regulated to ensure a high level of performance of the health system at this and other levels. In this regard, economic, political and socio-cultural conditions are of special significance because of their tendency to shape the context or foundation for the operation of any other set of factors that operate upon and within the health system. This discussion analyses the core socio-cultural factors that affect the performance of PHC in Nigeria. Given the fact that the understanding of what constitutes PHC has not only changed over time but tends to vary between regional contexts, this discussion commences with a brief statement on what constitutes PHC. It then goes on, based upon this understanding, to review the current situation of PHC in Nigeria. The review is then used as the basis for the analysis of the socio-cultural, political and economic factors that impact upon the functioning and performance of the PHC system in Nigeria. Following the analysis of the identified factors, a number of measures are suggested for bringing about change and improvement in the functioning and performance of PHC in Nigeria).

1 Introduction

The 1978 Alma – Alta declaration on the role and contents of primary health care indicates that it constitutes the fundamental strategy for delivering public health. As the declaration noted, PHC *'forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social economic development of the community'*. The general acceptance of the Alma Alta declaration and its reaffirmation in the Riga Conference of 1998 by various governments of the world, including the Nigerian government, confirms the pre-eminence of this level of health care within the overall strategy of meeting the health needs of the population. The pre-eminence of the Primary Health Care system suggests that how the health needs of the population are met at this level largely determines the overall effectiveness and performance of the entire health system. For this reason, there is considerable interest in analyzing the factors that shape the performance of the PHC system and how these factors may be moderated or regulated to ensure a high level of performance of the health system as a whole and of PHC in particular. Among the various factors that affect the PHC system, socio-cultural conditions are of special significance.

2 The current status health care system in Nigeria

Recent assessments of the health care system in Nigeria indicate that it is not only dismal; efforts to improve it over the years have been insignificant (Ogunkelu, 2002). Indeed, Nigeria lags behind many other African countries on various health indicators. A World Health Organisation evaluation of the health situation in different parts of the world placed Nigeria 187 out of 191 countries that were surveyed in 2000 (FMOH, Health Sector Reform Program:

2004 -2007). Indeed UNDP's 2005 Human Development Report (2005) ranks Nigeria 158 out of 177 countries in the world in terms of overall human development. Ghana is ranked 138 while South Africa is ranked 120 on the HDI. Compared with South Africa and Ghana, the indices for life expectancy, infant mortality and maternal mortality rates are much higher in Nigeria than in these other countries.

Given the fact that PHC has been accepted in Nigeria as the *central function and main focus* of health delivery, the overall performance of the health system in Nigeria can be seen as a direct consequence of the dismal situation at the level of Primary Health Care. As Gupta et al (2004:75) reported in a survey of the situation in some primary health care facilities in Nigeria, 'simple treatments for easy to diagnose conditions such as childhood diarrhea, that is oral rehydration solution (ORS) sachets, were not available in 70% of the facilities surveyed. Strengthening of policies on preventive health care is also urgent in light of evidence that public health surveillance may be particularly poor in rural areas. Lack of cold storage equipment meant that vaccines were not available in a majority of locations.' The survey also found that morale was typically low among PHC staff. These findings support the observations from an earlier study by Ogundeji (2001) who reported acute staff shortages in PHC facilities in several states across the country. While the poor performance of the health system in general and PHC in particular in Nigeria can be attributed to different factors, socio-cultural factors play a predominant role. For this reason, efforts to improve the performance of PHC must understand the nature of the contribution of these factors and how they can be more adequately managed.

3 Health and Socio-cultural Conditions

There is now a large body of literature on the social and cultural determinants of health (SDOH) which 'refer to both the specific features and pathways by which societal conditions affect health and that potentially can be altered by informed action'(Washington State Department of Health (2002:1). The WHO has, for example, identified a number of specific SDOH factors and conditions. The list of factors includes (i) the social gradient, (ii) stress, (iii) early life, (iv) social exclusion, (v) work, (vi) unemployment, (vii) social support, (viii) addiction, (ix) food, and (x) transport.

Discussions of the socio-cultural conditions of health recognise that the specific features and pathways that affect health will differ between societies and even within sub-cultures within the same society. Thus the SDOH factors in a developed society will tend to differ from those that are operative in a backward, underdeveloped society. This relationship has in fact been recognised by the international community and has come to be expressed in the Millennium Development Goals (MDGs) established by the United Nations. The MDGs not only explicitly recognised that poverty and underdevelopment are matters that call for action on the part of the developed world but mapped out action in which both rich and poor countries would have to be jointly involved. Although three of the eight goals, half of the sixteen targets and one third of the 48 indicators directly focus on health, all the eight MDGs have health implications. As endorsed by 189 participating countries in September 2000, the MDGs commit both the advanced and the underdeveloped world to take action by 2015 to:

- Eradicate extreme poverty and hunger
- Achieve universal primary education for all
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health

- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

As can be seen, the three MDGs on health are not only framed within a compass that explicitly recognises the social forces that impact upon health; they also implicitly call attention to primary health care as the foundation for achieving the MDG health – related goals.

For this reason, a number of recent discussions have identified various social determinants of health in general and at the PHC level in particular in Nigeria. Factors such as urban-rural migration, unemployment, education, gender inequality, lack of money, transportation, distance to health facility, cultural inhibition, fear of going alone to health facilities, inability to make informed choices and the need to obtain permission from some authority figure such as the husband in the case of some married women have been cited (Social Determinants of Health: Nigerian Perspective: 2005). Other discussions have identified the epidemic of ethnic and religious conflicts and poor road infrastructures (Aliyu, 2002), social cultural taboos and social meanings attached to certain diseases and their causes (Ladipo, Ankomah, Anyati and Omoregie, 2003), biology, culture, education, employment and working conditions, the state of health services, the physical and social environment, social support, social infrastructure and climatic conditions (Lambo, 2005).

While the discussions present an increasing list of factors, the present discussion suggests the following as the most important current social and cultural factors that affect PHC services in Nigeria: (i) cultural beliefs and taboos, (ii) illiteracy (iii) unemployment (iv) poverty and income inequality, (v) gender inequality, (vi) the urban-rural divide, (vii) community participation, (viii) availability and distribution of health human resources, (ix) motivation and conditions of services for health professionals, (x) Discrimination in conditions of service across geo-political zones, (xi) politics in the administration of the health system, (xii) the quality of infrastructures and social services, (xiii) social conflicts and, (xiv) corruption.

4 Cultural beliefs and taboos

Cultural beliefs and taboos impact upon the performance of the PHC system in several ways. First, they shape forms of behaviour that lead to certain health outcomes. As an example, consider beliefs about fertility and family planning in Nigeria. People living in rural areas tend to want to have more children and not to want to use the more modern methods of family control (PHC, NDHS:2004). This has implication for population growth, the incidence of child and maternal mortality and the number in the population seeking access to health care. As another example, we can also consider the case of beliefs about HIV/AIDS. Quoting a UNESCO Report, Kickbusch et al (2002:4-5) have observed that in some parts of Africa, ‘people believe that clean and well-dressed individuals cannot become infected or that having sexual intercourse with a virgin will cure AIDS’. Ladipo et al (2003) have also reported a study on the perceptions of gatekeepers about sexuality and HIV/AIDS in Nigeria. Gatekeepers were defined in the study as the custodians of cultural beliefs and moral norms. Using in-depth interviews with teachers, media representatives, religious, political and traditional leaders and focus group discussions among parents the study reported that the culture downplayed the sexual mode of transmitting the disease; ‘condom promotion was not accepted on religious grounds by most participants.

Cultural beliefs not only also shape how individuals respond to forms of disease and illness but also choices about which forms of care should be accessed. For example, cultural beliefs about certain forms of disease may lead to silence and denial thus creating veritable grounds for the continuation of behaviours and actions that promote the disease (Human Rights Watch, 2002). Studies of the social meaning of infertility in Nigeria have shown that beliefs about infertility play a determinant role in

interpretation and treatment of infertility. Following these beliefs, most people used three treatment outlets: 'churches (spiritualists), traditional healers and hospitals (orthodox medical treatment)' (Okonofua et al 1997:211).

5 Illiteracy

Illiteracy impacts upon the performance of the PHC system through its contribution to the higher incidence of ill-health among the uneducated and their lower capacity to take advantage of existing health facilities. For example, illiteracy is not only related to poverty; it also has implications for malnutrition, high infant and child mortality. It has been suggested, for example, that the probability of death among children born to illiterate mothers is two times as high as those born to literate mothers (Social Determinants of Health- Nigerian Perspective, 2005). There is also a strong correlation between education and life expectancy at birth (UNDP, 2000).

In Nigeria, the education of a mother affects the type of antenatal care provider, neonatal, postneonatal, infant, child and under five mortality rates and type of person providing assistance during delivery (NPC:NDHS, 2003). All these indicate that uneducated people tend to have more health problems and therefore to experience the need to access primary health care facilities. Uneducated people also tend to have a lower capacity to access existing health care facilities. Thus the percentage of women who report 'big problems in accessing health care' is higher among uneducated women (Table 1). As can be seen whereas 22.4% among women with no education may not know where to go in case of illness only 1.7% of women with education higher than secondary school face a similar problem. More women with no education have problems obtaining permission to go for medical treatment (16.9%), taking transport (31.8%), going alone (20.8%) and worrying that there may not be a female health provider at the medical facility (28.3%).

Table 1: Percentage of women who reported they have big problems in accessing health care for themselves when they are sick, by type of problem and background characteristics, Nigeria 2003

Back-ground Characteristic	Knowing where to Go for Treatment	Getting Permission To go for Treatment	Getting Money For Treatment	Distance to health facility	Having to Take transport	Not wanting To go Alone	Concern there may Not be a female provider	Any of the specified problems	Number of women
No education	22.4	16.9	34.1	32.0	31.8	20.8	28.3	58.6	3,171
Primary	10.7	6.6	37.1	25.9	25.5	13.1	12.3	48.8	1,628

Secondary	6.5	4.5	24.6	16.1	14.8	8.2	8.5	34.3	2,370
Higher	1.7	0.3	11.4	9.0	8.1	4.1	2.8	18.5	451

Note: Total includes 26 cases with missing information on education

National Population Commission: Nigeria Democratic and Health Survey 2003: 2004:140

The evidence indicates that increasing literacy among the population is a viable strategy for improving all major health indices for members of the population. This is precisely the idea behind the Millennium Development Goals which mandate governments in the Third World to achieve universal basic education for all boys and girls by 2015. While primary school enrolments have increased in Nigeria in response to the MDGs on education, it has also been acknowledged that progress has been below set targets (FGN, Millennium Development Goals Report, 2004: 2005).

6 Unemployment

Unemployment affects not only access to health but also the health status of individuals. It has been established, for example, that 'job security increases health, well-being and job satisfaction. Higher rates of unemployment cause more illness and premature death' (WHO, The Social Determinants of Health: The Solid Facts, 2005:20). For this reason, unemployment impacts upon PHC because not only are unemployed people more likely to suffer from ill-health but also because they are also likely to have a reduced capacity to access health care when they need it. On the one hand, this places greater pressure on PHC services; on the other hand, PHC facilities may be not be accessed because of the inability of the unemployed to do so. These facts explain why in Nigeria, the percentage of women who report that they have problems accessing health care when they are sick varies by employment status (Table 2). Compared to women who are 'working for cash' more unemployed women have problems 'knowing where to go for treatment' (16.1%), 'getting permission to go for treatment' (11.9%), 'getting money for treatment' (31.2%) and 'having to take transport' (24.7%). The overall implication of the relationship between unemployment and PHC is that the health indices of the population are likely to be much worse than they should be.

Table 2: Percentage of women who reported they have big problems in accessing health care for themselves when they are sick, by type of employment, Nigeria 2003

Back-ground Characteristic	Knowing where to Go for Treatment	Get-ting Permi-ssion To go for Treatment	Get-ting Money For Treat-ment	Dis-tance to health Faci-lity	Ha-ving to Take trans- port	Not want- ing To go Alone	Concern there may Not be a female provider	Any of the speci- fied pro- blems	Num- ber of wo- men
Employment									
Not employed	16.1	11.9	31.2	24.6	24.7	17.5	19.9	48.4	3,177
Working for cash	11.5	8.5	26.4	22.2	21.1	11.2	15.2	42.3	3,744
Working not for cash	13.8	7.9	49.1	35.1	34.6	14.9	14.2	60.4	673

While government claims to have recognised the problem by taking a number of measures such as the introduction of micro credit banks and employment generation schemes through the National Directorate of Employment to reduce unemployment, these efforts have not been significant enough to produce the desired impact. Indeed, the gains of these efforts have been than offset by the collapse of the textile industry, the massive lay-off of employees in the public sector following the public sector reforms and the general parlous state of the underdeveloped economy.

7 Poverty and Income Inequality

Illiteracy and unemployment are related to poverty; indeed poor people tend to be illiterate and unemployed. In 2003, Nigeria was estimated to have the 3rd largest population of the poor in the world. The depth and severity of poverty also more than doubled during the period (UNDP, 2000; the Nigerian Government's Interim Poverty Reduction Strategy Papers, 2001; Shehu, 2002; Olowonefa, 2001). According to the National Policy on Poverty Eradication of the Federal government of Nigeria, the depth and severity of poverty were respectively 0.160 and 0.080 in 1980, the figures had increased to .358 and .207 in 1996. Nigeria also has one of the highest income inequalities in the world (Human Development Report, 2005:272).

The National Policy also shows that poverty has been higher over the years in rural as compared to the urban areas. In 1980, the levels of poverty in urban and rural areas were respectively 17.2 percent and 28.2 percent; by 1996, the figures for the two areas were 58.2 per cent and 69.8 per cent. At the same time, health facilities tend to be in a much worse state in the rural areas than in the urban areas (Gupta et al, 2003). Given the fact that the poor also tend to use the health services provided at the primary health care level, it can only be imagined the level of pressure that large numbers of poor people with a higher disease burden will place on the resources of primary health care facilities. It is thus not surprising as we have shown in Table 3 that health outputs are much lower in those health facilities such as health posts, dispensaries and primary health centres that are located in the rural areas than those located in semi-urban and urban areas.

Table 3: Neonatal, postneonatal, infant, child, and under five mortality rate (1993 -2003) by wealth status in Nigeria*

Background Characteristic	Neonatal mortality (NN)	Postneonatal Mortality (PPN)	Infant mortality (1q0)	Child mortality (4q1)	Under-five mortality (5q0)
Wealth quintile					
Lowest	59	74	133	143	257
Second	70	70	140	178	293
Middle	56	54	110	118	215
Fourth	48	39	87	101	179
Highest	23	30	52	29	79
Total	53	56	109	121	217

Note: figures in parentheses are based on 250 to 499 exposed persons.

Computed as a difference between the infant and the neonatal mortality rates

8 Gender inequality

Gender inequality impacts the Primary Health Care system through its contribution to lower status, lack of empowerment, higher rates of illiteracy, and higher levels of poverty for women. As in the case of illiteracy, these factors translate into higher incidence of ill-health for women and paradoxically, their lower capacity to access health care. For example, women with less education have less control over their sexual activities and therefore also more affected by sexually transmitted diseases. For example, HIV/AIDS which is transmitted largely through sexual activities is more prevalent among women than among men in Nigeria. The relative lack of control over their sexual choices also means that many more women get pregnant than should be the case. This has implications for fertility and maternal mortality rates. Women therefore have a higher need to access health care especially at the PHC level. Only women generally tend to need the permission of men to access health facilities. Poverty is also higher among women in the population than men. These factors suggest that women will also have a lower capacity to meet their health needs even when facilities exist to provide for those needs. A clear implication of this is the need to reduce gender inequality by recognizing and acting on the factors that contribute to it. These factors include the social class to which women belong, poverty, illiteracy, the ideological reproduction of women, and the role assigned to women in the domestic and organisational labour processes.

9 The urban – rural divide

The urban – rural divide is implicated in the differences in living conditions between urban and rural areas, in the distribution of the population between the two areas and in several other factors. Differences in these factors impact upon the performance of PHC in a number of ways. First, it imposes different challenges on PHC in urban and rural areas. It has been observed for example, that living conditions, especially with respect to the availability of electricity, good roads, water, transportation, communication, poverty and quality of life tend to be much higher in urban than rural areas (Imoudu, 1995). The implication of this is the tendency for PHC units to be better staffed and equipped in urban areas than rural areas. It is thus not surprising to find that storage facilities for drugs are better in urban areas than rural areas (Gupta et al, 2004). Professional health personnel are also more reluctant to accept postings to rural areas. Another implication is the pattern and distribution of the disease burden between urban and rural areas. Given the fact that urban areas have more PHC facilities and that other secondary and tertiary health care facilities tend to be located in them, the health needs of urban populations tend to be better served than those of rural areas. There will therefore tend to be more pressure on PHC facilities in rural areas. If we take into consideration the additional factor of higher poverty in the rural areas, the lower capacity of rural communities to access health care when they need it will translate into worse health indices in the rural areas than urban areas. These factors may explain the finding that productivity of PHC tends to be higher in urban than rural areas in Nigeria.

10 Community participation

The philosophy of PHC is founded on the idea that it is not only community based; for it to be effective, it must function with the 'full participation' of the community. Community participation indicates that while the health needs of community members will drive the activities of PHC, community members will be involved in monitoring the quality of services provided, participate in solving some of the problems of the centres in their communities and provided with the education, orientation and capacity to adopt behaviours and practices that promote desirable health outcomes, especially through preventive and promotive health methods. Available evidence indicates that higher levels of community participation in PHC produce better health outcomes for the community. Thus it has been shown that community participation affects the level of antenatal care, inpatient deliveries, BCG immunizations, out-patient consultations, home visits, availability of equipment and supplies such as blood pressure gauge, antiseptic and sterile gloves, availability of essential drugs, cleanliness of facilities and productivity of health personnel. For example, 'facilities with higher community participation have 3 additional deliveries per staff in the last three months, which is about the average number of deliveries in the study; they have 32 more vaccinations per staff, which is about the average number of vaccinations in the sample; they have 19 more out-patient consultations which is about half the average number of out-patient consultations in the sample. In summary, the most striking result is that community participation is significantly associated with greater productivity per staff' on various performance indices (Gupta et al, 2004:65, 66).

Given the centrality of community participation not only in the conceptualization but also in the performance of PHC, it is a matter of interest how much community involvement actually occurs in PHC in Nigeria. Although no extensive study has been conducted into the issue, available evidence (Wunsch and Olowu, 1996; Gupta et al, 2004) indicates that the level of community involvement in PHC is generally low. Wunsch and Olowu (1996) conclude from a study of democratic – governance strategies in Nigeria in the 1980s and 1990s that, 'there were substantial shortfalls in local participation and program performance' in primary health care.

11 Availability and distribution of Health Human Resources in PHC

Although the availability of various resources – funds, drugs, materials and facilities impact upon the performance of the primary health care system, the availability, distribution, quality, mix and motivation of human resources has greater impact upon PHC than any of the other factors. The number of professional health personnel available also has a great impact upon access to different types of care and therefore to desired health outcomes. It determines the workload of health professionals and their ultimate level of productivity. Available data shows that there are shortages of health professionals across most of the professional categories with the shortage being highest among doctors, nurses, laboratory scientists and radiologists in Nigeria. For example, Nigeria has far fewer number of births attended to by health professionals than Ghana and South Africa (UNDP, 2005). In fact, the number of MDG Births attended by skilled health personnel in Nigeria was 35% and below the average for sub-Saharan Africa (41%) and Ghana (44%) as well as South Africa (84%) over the period of 1995 – 2003 (Iyayi, 2007). Nigeria also has far fewer doctors per 100,000 of the population than South Africa.

Apart from the problems of numbers, health professionals also tend to be more concentrated at the higher levels of care than at the PHC level. It is thus not surprising to

find that access to antenatal and postnatal care by type of provider as well as attendance of a mother during birth by type of health personnel varies across the geo-political zones of the country. The data (Table 4) shows that the North East and the North West geo-political zones had the lowest rates (NPC, NDHS: 2004). In the case of access to antenatal care, only 5.4% of women in the North West were attended to or had access to a doctor. A large number of women (59%) were not attended to by anyone. These figures are in sharp contrast with the South West zone where 56.0% of the women had access to a doctor and another 35.9% had access to nurse / midwife. Health outcomes in terms of maternal mortality rates also vary in relation to level of access to health personnel across the geo-political zones.

Table 4: Access to antenatal care by type of ANC provider by geo-political zones in Nigeria*

Background Characteristic	Doctor	Nurse/ midwife/ auxiliary midwife	Community Health extension worker	Traditional birth attendance	Others	No One	missing	Total	Number of women
Region									
North Central	23.8	50.0	0.5	0.0	0.1	25.3	0.2	100.0	575
North East	10.9	36.4	5.3	0.2	0.1	47.1	0.0	100.0	862
North West	5.4	31.5	1.9	1.6	0.6	59.0	0.0	100.0	1,341
South East	50.8	45.4	0.2	0.9	0.8	0.8	1.2	100.0	222
South-South	38.8	33.3	0.7	10.0	0.3	16.8	0.0	100.0	544
South West	56.0	35.9	0.8	5.0	0.0	2.3	0.1	100.0	367

*Source: Compiled from National Population Commission: Nigeria Democratic and Health Survey 2003: 2004:116

Note: If more than one source of ANC was mentioned, only the provider with the highest qualification is considered in this.

12 Motivation and conditions of service of Health Human Resources for PHC

The level of staff motivation is largely a function of the available conditions of service. The level of motivation tends to be lower at the PHC level than at the secondary and tertiary levels of care because of poor conditions of service; salaries tend to be lower for health professionals with the same qualifications and payment of salaries tends to be more irregular at the primary level of care (Gupta, Gauri and Khemani, 2003). This has obvious implications for commitment and dedication to work as well as productivity of health professionals. As a result of the combination of all the above factors, performance is consistently lower on all major health outputs at the Primary Health Care level than at the other levels of care (Table 5). As the data shows, whereas antenatal consultations in the survey period were 214 at the tertiary level and 219 at the CHC (Community Health Centre or Type III Facility that are equipped 'as mini – hospitals and serve as referral centres for the facilities below them' – Gupta et al, 2004: 13), the figure for the Primary Health Centre was 105 and 11 for the Health post / Dispensary. One clear implication of the data is that health concerns that could have been addressed at the Primary Health Care level end up at the other levels of care.

Table 5: Average number of health outputs for 3 months by type of facility*

	Health post/ Dispensary	PHC (n=)	CHC (n=)	Tertiary (n=)	(n=)	Unspecified (n=)
Antenatal consultations	11		105	219	214	134
Family planning visits	5		52	65	143	20
In-patient deliveries	4		4	26	45	32
BCG immunizations	38		160	257	56	150
Outpatient consultations	56		283	371	326	443
Health educ. group sessions	17		71	214	57	117
Homes visited	32		46	53	63	0

* Source: Gupta et al, 2003:51

13 Discrimination in conditions of service across geo-political zones

There are over 350 ethnic groups in Nigeria that are organised politically into 36 states and a Federal Capital Territory. The 36 states are now further organised into six geo-political zones while the six geo-political zones are also further differentiated into the Northern and Southern zones. It has been observed, for example, that health indices are worse in some geo-political zones of the country than others (Table 6). This is particularly the case when we compare the North East geo-political zone with that of the South-West.

Table 6: Early childhood mortality rates by Geo-Political Zone in Nigeria*

Region	Neonatal Mortality	Postneonatal mortality	Infant Mortality	Child Mortality	Under-five Mortality
North Central	53	49	103	70	165
North East	61	65	125	154	260
North West	55	59	114	176	269
South East	34	32	66	40	103
South-South	53	68	120	63	176
South West	39	30	69	47	113

* Compiled from National Population Commission (2004), Nigeria Demographic and Health Survey 2003, Calverton, Maryland: ORC Macro

The differences are largely accounted for by differences in the quantum and quality of health resources available in each of the geo-political zones with the South West having the highest concentration of resources. Thus whereas the South – West has about 7,300 doctors, the North – East has only 639* (ref). Similarly the number of nurses and community health officers are more in the South-West than in the North-East geo-political zone*(ref). Even taking into account the differences in population between the two zones, the data indicates that the South-West has far more human resources for health than the North – East zone*(ref) and that some of the health human resources in the South – West could be encouraged to seek employment in the North-East zone.

However, major difficulties are encountered in this regard because of the relations between the different ethnic groups in the country. For example, it is part of employment practices of some states in the geo-political zones in the North to place on contract professionals from

the geo-political zones in the South who are seeking employment with them. Many of such professionals decline appointment on such terms because they see it as a form of discrimination in employment conditions. The result is that existing shortages at all levels of the health care system but especially at the PHC level continues in the states in these zones while others are characterised by surpluses.

14 Politics in the administration of the health system

The system of health administration in Nigeria involves the three levels: the Federal Government, the state governments and the local government authorities. These levels of administration also have relationships with a variety of interests in the health sector such as the private sector, pharmaceutical companies, NGOs, international donor agencies, health professional associations and community groups. The assessment of FMOH (2004) shows that the relationships between the various groups are characterised by conflict and 'absence of collaboration between the various government departments whose activities intersect with those of the FMOH. Although a policy exists, there is no synergy between the various levels of government in health matters. Mutual suspicion exists between the operators of the health system at the various levels of government. The PPP framework in the health sector is ineffective as the role of Federal Minister of Health in elaborating, health goals for the nation has been ineffectively performed' (Iyayi, 2007).

While this situation has obvious implications for the effectiveness of all levels of the health system, the implications tend to be the most serious at the level of PHC because it is the lowest level of administering the system. Its ability to respond to conflicts and politics at higher levels will therefore tend to be seriously constrained. Other discussions (Ogundeji, 2000) also indicate high levels of conflict between professional groups in the health teams dedicated to PHC. One major source of conflict in the situation is the struggle for status and power between the different categories of health professionals. Whatever the sources of conflict, the overall implication is to reduce the level of collaboration, communication, team work and learning between members of the health team. These factors in turn imply lower levels of productivity for health teams than would otherwise be the case.

15 The quality of infrastructures and social services

Infrastructures such as the state of transportation and transportation systems have major implications for the performance of the PHC system. The existence of a good network of transportation that is diversified and covers even the most remote areas of the country creates accessibility for those who provide as well as others who need health services. Unfortunately, Nigeria lacks a viable transportation system. The system depends largely on roads while the rail and water transport systems are either highly undeveloped, are ineffective or severely limited in terms of coverage. Unfortunately, even the network of roads which is the mainstay of the system is in a parlous state in many parts of the country. Where the road network exists in any good state, especially in the large cities, road usage is often highly congested and chaotic. These create huge problems for those who need to provide or access health care. These problems are particularly acute in rural areas where a large number of people need to access the primary health care facilities that exist.

Apart from transportation, the parlous state of energy supply and consumption is also a major contribution to public and private health problems in Nigeria. Chronic and frequent power outages contribute to loss of productivity in PHC facilities. The ability of health centres within the PHC system to store certain forms of drugs and therefore meet the health

needs of community members is negatively affected by the unavailability of energy supply. In a study of PHC facilities in Lagos and Kogi states, Gupta et al (2004:76) found for example that 'lack of cold storage equipment meant *(for) vaccines were not available in a majority of facilities (80%) in Kogi, and in more than 30% of facilities in Lagos, despite facilities in that state having greater access to cold storage.

16 Social conflicts

Wars and violent conflicts produce debilitating consequences for the health of the population as health institutions may be destroyed, health professionals may relocate from or refuse to accept positions in the affected areas. Apart from the increase in death rates and incidence of disease that usually accompany wars and violent social conflicts, individuals and communities may find their ability to cope with disease greatly reduced. As we have documented elsewhere, 'from the political crisis in the Western Region of Nigeria from 1963 – 1966 through the full blown civil war of 1967 – 1970, the series of military coups, the massive social unrests in the early 1990s, the inter-communal wars in different parts of the country, the continuing ecological and bush wars in the Niger Delta to the tensions over the Third Term Agenda of the Presidency, (and the monumental crisis that has trailed the 2007 general elections) Nigeria has stumbled from one political and social crisis to another.' The situation of war and violent armed conflicts in Nigeria's Niger Delta which occupies much of the South – South geo-political region of the country has resulted in the 'dislocation of social life' (Iyayi, 2007) and therefore undermined in a very real sense the ability of primary health care institutions to function in that part of the country.

17 Corruption

As has already been indicated, Nigeria ranks as one the poorest countries in the world; yet estimates of revenues earned from oil exports alone over the period indicated that the country made well over USD 600 billion (ThisDay, 2008). The fact that the huge revenues earned have not translated to development has been attributed largely to corruption. It is therefore not surprising to find that Nigeria is rated as one of the most corrupt countries in the world*(ref). Corruption indicates that public resources are illegally appropriated or stolen by individuals for personal use. In the case of the public health system, it would mean that resources allocated to the system are either misapplied, or misappropriated or even stolen. This would make fewer resources available for the functioning and performance of the public health system.

The evidence indicates that the management of the public health system is characterised by corruption. In a comprehensive review of the health system in Nigeria, the Federal Ministry of Health (2004:10-12) arrived at the damning conclusion that 'the management (of the public health system) is characterized by 'a culture of corruption and self- interest'. A 'culture of corruption and self-interest' would mean as the FMOH document admits 'accountability, responsibility and transparency problems', 'an absence of collaboration between the various government departments whose activities intersect with those of the FMOH', lack of 'synergy between the various levels of government in health matters, 'mutual suspicion between the operators of the health system at the various levels of government', inaccurate or even ambiguous data on 'the real cost of health services', absence of 'viable data on the combined expenditure of the various levels of government, the private sector and donors on health in Nigeria', chaos in 'the production and distribution of pharmaceutical and medical products' with a high incidence of fake drugs, 'erratic supplies, and non-availability of some basic essential and specialized drugs and other

materials'. It would also explain why, as admitted by the FMOH document, 'the management capacity for the health care system is weak, inefficient and ineffective' (Federal Ministry of Health, 2004:10-12).

The impact of this range of problems on the primary health system is obvious. It would explain the paucity of resources and hence poor performance of the PHC system. It also explains the surprising finding reported by Gupta et al (2003) that there is no correlation between the level of funding and the incidence of non-payment of the salaries of health workers in Nigeria. As Khemani (2004:16) notes in this regard, 'the problem on non-payment of staff salaries may not be lack of budgetary allocations for this purpose but rather leakage in resource flows at the LGA level. Misuse of public resources by local agents might be particularly rampant when these resources are obtained as transfers from higher tiers of government, and about which local citizens might not be well informed since they are not the direct tax-payers. Conversations with local officials and health workers during field work for the survey revealed a widespread opinion that local revenues are siphoned off for private gain by local politicians'.

18 Policy and reform implications

The analysis of the impact of the various socio-cultural conditions on PHC indicates that several measures are needed to increase the effectiveness and performance of PHC. In this regard, the starting point has to be a return to the conception of primary health care as a health system that is community based and that is the pivot of meeting the health needs of individuals and communities in the country. Being community based means that it must be designed to have and must actually function with the required level of community participation. Although the design of PHC in Nigeria took into account the need for the system to be community based, our discussion shows that the participation of communities in PHC is low in Nigeria. This fact indicates the need to adopt measures that will make the arrangements work as designed. One of such measures must be the mobilisation of communities around PHC as a programme of change in health care delivery that sees access to health care as a right. The example of The People's Health Movement in India (Jan Swasthya Abhiyan) which launched a 'Right to Health Care' campaign in 2003 shows that dramatic improvements in public and private health can be achieved when the people come to see health as a fundamental right and take actions to realise that right.

Given its obvious impact upon the PHC system, there is a clear need to deal with cultural beliefs and taboos. The major tool in this regard is education. Education must be provided to community members that address beliefs about HIV/AIDS, fertility and family planning and the power of orthodox as compared to traditional medicine. However, it must also be clear that unless high infant mortality rates are reduced and children survive to live the lives that they value in adulthood, programmes aimed at changing beliefs about the value of more children will be difficult to change. The current measures being adopted to reduce the rate of new HIV infections such as public enlightenment campaigns and others aimed at reducing mother to child transmission must be maintained and improved upon while efforts must also be increased to make drugs available at little or no cost to those already affected. The increasing rate of rural –urban migration can also only be reduced by reducing the 'idiocy of village life' and ensuring that the disparities between rural and urban life are greatly reduced and subsequently eliminated.

Another measure is the need to deal with the current alienation of the people from government and its institutions because of lack of transparency in the system of politics and elections. The obvious solution to this problem is the creation of a political culture that empowers individuals and communities not only to make informed political choices but also that guarantees that those choices will be respected once they are made. Fortunately, the current regime has indicated that it is committed to the rule of law. It has also embarked upon a process of electoral reform that promises to change the current mindset about politics and elections in Nigeria. The outcome of these changes should be decisions at the level of government that reflects the health needs of the community.

As we have already emphasized in this discussion, human resources constitute the bedrock of the health care system. This means that appropriate policies must be in place and measures must be adopted to ensure that the right numbers in the right quality of health professionals must not only be produced; they must be distributed and motivated in ways that will lead to effective performance of the system. More importantly, however, the distribution and motivation of HRH at all levels of the health system must reflect the emphasis that needs to be placed on PHC as the foundation of the health system. Towards this end, the complement of health staff at the PHC level needs to be strengthened by adopting the personnel mix provided in the Jamaican example. This example provides for five different types of health centres, each with an ascending number of categories and number of health personnel (Campbell, 2007).

Although there are concerns that personnel costs already account for a larger share of the expenditure on PHC, there are also concerns that the level of remuneration of health professionals in general and in PHC in particular is inadequate. The consequence of this problem as we have observed is the low level of motivation among the health professionals in PHC. The answer to the question of poor motivation of health personnel appears obvious; more funding needs to be provided. Action also needs to be taken to ensure that state governments do not pilfer the statutory allocations from the Federation Account to LGAs. However, it is also necessary to place emphasis on more rational use of existing financial resources and reducing the level of corruption in the system. For this to happen, members of more communities need to be trained in budget advocacy and monitoring as NGOs like ActionAid (Nigeria) have been doing in a number of communities across the country. A system of determining actual health costs also need to be in place so that the difference between what is needed and what is provided can be known. LGAs and the various types of primary health care facilities must thus be assisted to capture all their expenditure on health. The Federal Ministry of Health (FMOH) has observed, for example, that the budgetary process for health is not only ineffective but totally unreliable as 'the truth (of) the real cost of health services is not known, there is no system for National Health Accounts (NHA)' and no viable data exist on the combined expenditure of the various levels of government, the private sector and donors on health in Nigeria (FMOH, 2003). The establishment of the NHA system must thus also have priority if the share of the different levels of health care in the financial allocations to health is to be properly established.

In addition, there will be need to encourage states to abolish policies and practices that discriminate in employment conditions against health professionals from states other than their own. Furthermore, policies must be adopted that provide for the same conditions of service for all health professionals with the same qualifications at all levels of the health

system and irrespective of where they serve in the country. This policy could also be tilted to favour health professionals engaged at the PHC level with additional incentives to make this level of care the most attractive for health professionals.

To reduce the negative impact of poverty on the performance of the primary health care system, there is need to make real effort to eradicate poverty in Nigeria. This effort will require a conceptualization of poverty that is different from the current ones and based upon this new understanding a re-ordering of the actions that are being currently pursued such as those contained in the NEEDS documents and the Poverty Strategy Reduction Papers of the Federal Government. The efforts to reduce poverty must have a mass character; they must deal with the roots of poverty such as the unequal distribution of economic and political resources across social groups.

The neo-liberal policies of government must also be abandoned especially in the light of their acknowledged failure even in the core capitalist countries. This crisis confirms that the state has to play a greater, rather than less, role in providing for the health needs of the people. While public / private partnerships and the private sector may be encouraged in providing for the health needs of the population, the state must at the current level of Nigeria's development, abandon the philosophy of 'less government' or of a private sector – led development process for Nigeria. The truth of the matter is that there is no indigenous Nigerian private sector in the true sense of the word that can be counted upon to play the desired role. The government must lead the process of delivering on the health needs of the people, especially in terms of meeting the Millennium Development Goals on health. This role will see greater emphasis on PHC as the foundation for providing for the health needs of the population, a role already accepted from the Alma Declaration onwards.

The gender dimension of the poverty problem must also be acknowledged in measures that place more resources and education in the hands of women. While schemes such as micro – credits may be continue to be pursued, these must be considered adjuncts, rather than the main thrusts of the efforts. There is no doubt that the eradication of poverty will reduce pressure on the primary health care system as individuals and communities acquire the capacity, competencies and opportunities to reduce the incidence of disease and illness and a greater ability to cope with them when they occur.

Although government signaled its intention to combat the problem of corruption by the creation of a number of institutions such as the Economic and Financial Crimes Commission (EFCC), the Independent Corruption Commission (ICPC) and the actual arrest and prosecution of a number of public officers on the grounds of corruption, the effort has been undermined by public perceptions that it has been selective, half hearted and designed to target only enemies of those at the centre of power. The mockery recently evidenced in the trials of some former governors acknowledged to have blatantly looted the public treasuries of trillions of Naira has added to the public perception that the effort by the state to combat corruption is dead. For these reasons, there is need for the public to become actively involved in the effort to combat corruption. Thus NGOs, CSOs and the Labour movement need to assume leadership of the process to make the effort objective, to ensure that its current particularistic orientation is reversed and that severe sanctions are provided and enforced.

19 Conclusions

The effectiveness and performance of PHC in Nigeria have not met expected targets. Child mortality rates and maternal mortality rates continue to rise while malaria and, to a lesser extent, tuberculosis continue to be primary causes of child mortality. While many factors are responsible for the situation, the most important are socio-cultural in nature. To ensure that PHC functions and constitutes the key strategy for meeting the health needs of the Nigerian people, there is need to take actions on these factors. However, the key requirement has to be the perception of communities that PHC operates in their interests and that they have an important stake in its success. The communities must therefore be mobilised to come to see health as a social right that can be delivered through PHC.

References

AdeyeOluwa, B. (1997) cited in (delete) Ogundeji, M.O. (2002) Background and Status of PHC Activities in Nigeria, Ibadan: XANFUN Limited, p.72*

Ake, C. (2001) Democracy and Development in Africa, Ibadan: Spectrum Books

Asuzu, M.C. (2007) The concept and content of primary health care.

Campbell-Forrester, S. (2007) 'Strengthening Primary Health Care – The Jamaican Perspective: Rights, Facts and Realities', Dr. Sheila Campbell-Forrester, Chief Medical Officer, Ministry of Health- Jamaica, 2007 August 13

Chukwuma, C. (1994) 'Health Concepts, Issues, and Experiences in the Abakaliki Area, Nigeria,' Environmental Health Perspectives, 102(10): pp. 854-856

EQUINET and MEDACT, UK (2007) Health Personnel in Southern Africa: Confronting maladministration and brain drain

FGN, (2007) National Human Resources for Health Policy 2006, Abuja: FMOH

FMOH (2004) Health Sector Reform Program – Strategic Thrusts; Key Performance Objectives; and Plan of Action, 2004 – 2007, Abuja: FMOH

FMOH (2005) Revised National Health Policy, Abuja: FMOH

Global Health Watch (2004) Global Health Action, edited by Whyte, A., McCoy, D and Rowson, M, Russell Press

Gupta, M.D., Gauri, V. and Khemani, S. (2004) Decentralised Delivery of Primary Health Services in Nigeria: Survey Evidence from the States of Lagos and Kogi, Washington: The World Bank

Health Sector Reform (June, 2005) 'Lower costs do not mean better health care in Nigeria', www.id21.org.

Huddart, J, Picazo, A.O. et al (2003). 'The Health Human Resources Crisis in Africa: An Issues Paper. USAID, Bureau for Africa. Harare: Benaby Printers

Imoudu, P.B. (1995) 'Attaining Sustainability of Human Health and Poverty Reduction in Rural Nigeria: Challenges and Opportunities', www.gemini.de/global-health

Interim Poverty Reduction Strategy (2001) prepared by The National Core Team For The PRSP project Office of the Vice President

Iyayi, F. (2007) 'The Social Determinants of Health In Nigeria' in Nigeria Health Review, (Lucas, ed.) 2007, Chapter 13, HERFON, Abuja

Kaplan, G.A., Pamuk, E.R., Lynch, J.R., Cohen, R.D., and Balfour, J.L., (1996) Inequality in Income and Mortality in the United States; analysis of mortality and potential pathways, *BMJ* 312:1004-1007;

Kennedy, B.P., Kawachi, I, Glass R., Prothrow-Smith, D., (1996) Income distribution and mortality, cross sectional ecological study of the Robin Hood Index in the United States, *BMJ* 1996, 312:1004-1007

Kennedy, B.P., Kawachi, I, Glass R., Prothrow-Smith, D., (1998) Income Distribution, social economic status and self rated health in the United States: multilevel analysis. *BMJ*, 317:917-921

Khemani, S. (2004) 'Local Government Accountability for Service Delivery in Nigeria' World Bank, Preliminary Draft, skhemani@worldbank.org

Kickbusch, I., Caldwell, A., and Hartwig, K. (2002) Health Literacy, Empowerment and HIV/AIDS: Striking a Balance on an Uneven Playing Field, White Paper prepared for UNESCO, the US National Commission on Libraries and Information Science, and the National Forum on Information Literacy, for use at the Information Meeting of Experts, Prague, The Czech Republic.

Kickbusch, I. and Payne, L. Research (2005) Challenges for Global Health in Public Health in the 21st Century, *Global Forum Update on Research for Health*, pp.18-21.

Ladipo O, Ankomah A, Anyanti J and Omoregie G. (2003) Perceptions of Gatekeepers about Sexuality and HIV/AIDS in Nigeria and the Implications for Designing Youth Programs, Harvard Centre for Population and Development Studies, Working Paper Series. 13(9):

Lambo E 'Linkages Between Poverty, Health and Sustainable Development in Africa'.

Lee, Jong-wook (2006), 'Message from the Director-General' in Working Together for Health: The World Health Report, 2006:xiii

Lethbridge, J. (2004) 'Public sector reform and demand for human resources', *Human Resources for Health*, 2:2-15

Lochner K, Pamuk E, Makuc D, Kennedy BP, and Kawachi I. (2001) State level income inequality and individual mortality risk: a prospective multilevel study, *American Journal of Public Health*, 91;285-391

Lucas, A.O. (2007) 'Primary Care Versus Primary Health Care: Clarifying the Confusion, and Resolving the Conflict'

Mackenbach, J.P., Kunst, A.E., et al., (1999) Socio-economic inequalities in mortality among women and among men: an international study, *American Journal of Public Health*. 89(12):1800-1806

Maiga, Z., Nafo, F.T., and Abassi, A.E. (2003) *Health Sector Reform in Mali, 1989 -1996*, Antwerp: ITG Press.

Martineau, T., Decker, K. and Bundred, P. (2002) Briefing note on international migration of health professionals: 'Levelling the playing field for developing systems', *International Health Division School of Tropical Medicine, Liverpool*, www.liv.ac.uk/lstm/hsrhome.html

Ogundeji, M.O. (2002) *Background and Status of PHC Activities in Nigeria*, Ibadan: XANFUN Limited.

Ogunkelu, B. (2002) 'The State of Health in Nigeria: A Focus on Women and Children', *Statement on Advocacy Day, 29th Annual Conference, Global Health Council, Washington D.C., USA, by the Minister, Cooperation and Integration in Africa, Federal Government of Nigeria*

Ojo, G. U. (2007) *Participatory Budgeting and the Rights Based Approach: Case Studies in Four Local Government Areas of Akwa Ibom State, Benin City: Environmental Rights Action Okonofua, F.E., Harris, D., Odebiyi, A., Kane, T., and Snow, R.C., (1997), The Social Meaning of infertility in Southwest Nigeria, Health Transition Review, 7 pp.205-220*

Olowonefa, B (2001), "Thought On Poverty Eradication", *The Anchor*, Friday, November, 23

Oxfam (2002) *Poverty in Nigeria (2002): An overview of The Underlying Causes, a Draft Report By Oxfam*

Physicians for Human Rights, 2003, *Health Intervention for Sub Saharan Africa, Draft Report. Physicians for Human Resources*

Shehu, D.J. (2002) 'Poverty Alleviation in Northern Nigeria', *Paper presented at CDD Meeting, Abuja, October, 2002*

Turrel, G., and Mathers, C., (2001) Socio-economic inequalities in all – cause and specific mortality in Australia: 1985-1987, *International Journal of Epidemiology*. 30(2):231-9

UNAIDS/WHO (2002) *Epidemiological fact sheets 2002 update, Sub-Saharan Africa: <http://www.unaids.org>*

UNAIDS (2001) *HIV/AIDS and Communication for Behaviour and Social Change: Programme Experiences, examples and the Way Forward, Geneva, Switzerland: WHO/UNAIDS*

United Nations Economic and Social Council, (2002) Substantive Issues Arising in the Implementation of the International Covenant on Social and Cultural Rights: Background Paper submitted by the Centre for Reproductive Law and Policy

UNDP (2000) Human Development Report, Oxford: Oxford University Press

UNDP (2005) Human Development Report, Oxford: Oxford University Press

Wilkinson, R.G. (1992). Income Distribution and Life Expectancy BMJ, 304:165-168

Wilkinson, R. and Marmot, M. eds., (2003) Social Determinants of Health: The Solid Facts, Second Edition, Copenhagen: WHO

WHO, Constitution, 1948

WHO (2006a) Working Together for Health: The World Health Report, 2006

WHO (2006b) Global Atlas of the Workforce, <http://.who.int/globalatlass>

Wunsch, J.S. and Olowu, D. (1996) 'Regime transformation from below: Decentralisation, local governance, and democratic reform in Nigeria', Studies in Comparative International Development'.31(4):66-82.

ROLE OF COMMUNITY PARTICIPATION IN PHC SERVICES IN NIGERIA

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The concept of community participation defies any single attempt at definition or interpretation; in many ways participation has become an umbrella term for a new and more people centered approach to development intervention. The following distinct interpretations of people's participation in development have been identified (WHO 1999)

Participation as collaboration: in this interpretation, people in less developed countries voluntarily, or as a result of some persuasion or incentive, agree to collaborate with an externally determined development project, often by contributing their labor and other resources in return for some expected benefit. While local people may participate, in that they collaborate with the government or donor program, they have less direct involvement in the program design, control or management. This is the most dominant interpretation in practice. It gave rise to the 'stakeholder' concept, where individuals or groups who could affect, or be affected by, the outcome of the project activities are identified and included in its implementation.

Participation as specific targeting of project benefits: increasingly, development activities are specifically targeted at previously excluded groups. However, to reduce the perception that "participation = benefit" the beneficiaries are involved in different stages of the project such as "participatory assessment".

Participation as empowerment: increasingly, participation as an exercise in empowering people has gained widespread public support and the term has entered the development vocabulary. For example the United Nations Research Institute for Development during the 1980s took, as its working definition of participation, the empowerment of excluded groups in order to increase their access to and control over development resources. There is however, difficulty in defining 'empowerment'; it has been described as the process and outcome of those without power gaining information, skills, and confidence and thus control over decisions about their own lives, and can take place on an individual, organisational, and community level (Rifkin and Pridmore, 2001).

Generally, two broad definitions of community participation are identifiable, those that view participation as a means and those that view it as an end.

Community participation in health has evolved alongside the changes in its interpretation in the wider development sector. At its general meeting in December, 1989, a WHO study group on community involvement in health reviewed a range of interpretations and agreed that "community participation in health is essentially a process whereby people both individually and in groups, exercise their right to play an active and direct role in the development of appropriate health services, in ensuring the condition for sustained better health and in supporting empowerment of communities for health development" (WHO 1991). A more pragmatic definition of community participation in health development is "the process of initiation and sustaining dialogue with various members of a particular community in a structured manner with the view to genuinely consulting them as equals in a program of activities that aim at building a team between program managers and

community members, to jointly understand health problems in the community, to find common solutions to such problems and to act together to solve these problems using as much human and material resources as possible from the community (MoH Ghana 1997).

Benefits (WHO 1985)

Community involvement in health is a basic right of all people. Involvement in the decisions and actions that affect people's health builds self-esteem and encourages a sense of responsibility. As a principle, community participation is of intrinsic value in general community development and should be promoted as the basic approach to health development.

Many health services, especially in developing countries, depend on limited resources. Community participation can, therefore, help make the available health resources more responsive to basic needs of the people. Local knowledge and resources can be used to compliment those provided by the formal health services. Furthermore, community participation in health can help to extend the coverage of health services and ultimately intensify the impact of health sector investments. However, it is important to emphasize that community participation does not imply that local population has to absorb the costs of healthcare.

Community participation in health increases the possibility that health programs and projects will be appropriate and successful in meeting the health needs defined by local people, as opposed to those defined by the health service. Health programs will have a better chance of success when health services are consistent with local perceptions of health needs and managed with the support of local people.

Community participation in health breaks the bond of dependence that characterizes much health development work and generally creates awareness among local people of their potential involvement in development.

Impact (Rifkin 1996)

People would make better use of existing health services and would ensure that sustainability of new services by being involved in decisions about their development.

People would be able to contribute resources of money, labor and materials to support the scarce resources allocated to health care.

People would change their poor health behavior if they had been involved in exploring its consequences.

People would gain experience and information which would help them to gain control of their own lives and thus challenge existing social, political and economic systems which had deprived them of control.

Factors influencing community participation (WHO 1991)

Political commitment: that is the political support needed at all levels especially at the local level where resistance from established interests will have the greatest impact on implementation.

Structure of the health system: the formal health sector and other development organizations need to support devolution and delegation of authority down to the levels at which community participation will operate.

Economic situation: this will largely dictate the emphasis and resources made available to health development.

Capacity of the health system: the level of development of the local structures and organizations which can serve as basis for community participation as well as the managerial and other skills that may be available in the community to enable the population to play a greater role in health development.

Community participation and PHC

The most crucial problems in the organization of national health systems based on PHC occur at the district level, close to where people live. Conventionally, most national health services are divided into national, provincial (state) and district (local) health service. In order to effectively implement PHC the district level must be strengthened in order to provide service at that level and provide the platform for linkage with the other levels of the health system. Additionally, this is the level where community participation in planning and utilization of services can take place. Clearly, community participation is at the heart of PHC and the latter cannot be implemented on any large scale unless community participation is recognized as a fundamental operational principle. Community participation should therefore not be seen as a program or project on its own or a mere component of a PHC approach, but it is the strategic framework within which health development should take place at the local level. It is the key to a viable health system irrespective of how the system is organized. Community Participation in PHC can be measured in terms of the community providing resources like money, material or personnel and also the utilization of services.

Community Participation in PHC services in Nigeria

Nigeria is one of the few countries in the developing world that has systematically decentralized the delivery of basic services in health to locally elected governments and community based organizations. In recent years, public revenues in Nigeria have increased substantially due to the boom in world oil prices, and some of this windfall is being channeled into increased spending on primary health care. Yet, there remains a concern whether the institutions of public accountability in the country will effectively allow these large spending programs to translate into improved services and outcomes. A major channel through which increased public resources are expected to impact basic health services in Nigeria is that of spending by local governments that are largely responsible for these services. The relative roles of the three tiers of government— federal, state, and the local government authorities (LGAs)—in public service delivery has emerged as one of the most important topics of open and vigorous debate in the new democratic climate in Nigeria.

There have been increasing calls for intergovernmental fiscal relations to be reassessed in light of a widespread belief that although the states and local government authorities are assigned primary responsibility for the delivery of basic public services, they are not equipped with adequate revenue resources to fulfill their expenditure obligations because the bulk of government revenues is retained by the federal government. This has culminated in an amendment to the revenue-sharing formula in the Federation which increases resources available to the decentralized levels of governments. In addition to the constitutional provisions for decentralization to locally elected governments, health policy in Nigeria has been guided by the Bamako initiative of encouraging and sustaining community participation in primary health care service delivery. Community participation has been institutionalized through the creation of Village Development Committees and District Development Committees that are grass-roots organizations expected to work closely with local governments in monitoring and supporting primary health care services. Recently there have been several governmental initiatives to strengthen these institutions of community participation to improve health services (World Bank 2003).

The National Health Policy in Nigeria emphasizes active community engagement in the provision of PHC services in the spirit of the Bamako Initiative of 1987, when Health Ministers from various African nations adopted resolutions for promoting sustainable primary health care through community participation in financing, maintenance, and monitoring of services. Community participation was institutionalized in Nigeria through the creation of development committees at the level of the district—District Development Committee (DDC)—and the village—Village Development Committee (VDC), with explicit guidelines for their respective duties and responsibilities.

A recent survey by the World Bank showed that District or Village Development Committees are existing and engaging in various aspects of service provision. Some activities they were found to conduct included meeting regularly to discuss facility operations either once a month or a few times a year, the committee members visit the facility either once a month or a few times a year and in some places the Development Committees are particularly active in supporting service provision in the areas of carrying out repairs on facility structures, providing drugs to the facility, and resolving administrative and personnel management issues (World Bank 2003).

Challenges

- Lack of awareness of populace at the community level
- Vulnerability of services at the local level to external shocks e.g. fall in oil prices
- Role ambiguity in the health systems between different tiers of government

Conclusion

There is a large and growing body of evidence that certain types of service delivery are enhanced with the active participation of the communities they serve. As end-users of the services, communities have a stake in ensuring that services are well-provided, and also are well-positioned to monitor the quality of services. With the benefit of local information, they can assess the specific obstacles facing facilities in providing services and they can seek to ensure that facilities have the necessary infrastructure, supplies and staff motivation to provide the services they are supposed to provide. Some of this can be done through volunteer efforts, such as donations for buying supplies, but most of the benefits of community participation can only be harnessed if there are specific mechanisms in place to

enable them to do so. For example, whether or not they are allowed to raise local resources will affect their ability to ensure a smooth flow of supplies. Similarly, whether or not they have a say in the evaluation and rewards/sanctioning of facility staff will affect the extent to which they are able to translate their observation of staff behavior into improved staff responsiveness to local needs.

References

Ministry of Health, Ghana, 1997: Five Year Work Plan of the Ministry of Health (1997 – 2001) of Ghana.

Rifkin, S.B., 1996. Paradigms Lost: Towards A New Understanding of Community Participation in Health Programmes. Acta Trop. 61, pp. 79–92.

Rifkin, S.B. & Pridmore, P. 2001. Partners in Planning: information, participation and empowerment. London and Oxford: Macmillian/TALC.

WHO 1985: Community Involvement for Health Development: A Report of the Interregional Meeting in Brioni, Yugoslavia, 9 -14 June 1985, SHS/85.8, WHO, Geneva, 1985.

WHO 1991: Community Involvement in Health Development: Challenging Health Services. Report of the WHO Study Group; (WHO Technical Report Series No. 809) Geneva, World Health Organization.

WHO 1999: Community Involvement in Health Development: A Review of The Concept and Practice / edited by Haile Mariam Kahssay and Peter Oakley.

World Bank, 2003: Decentralized Delivery of Primary Health Services in Nigeria: Survey Evidence from the States of Lagos and Kogi, African Region Human Development Working Papers Series. Monica Das Gupta, Varun Gauri, and Stuti Khemani, 2003., Development Research Group, The World Bank.

HEALTH PROMOTION IN PRIMARY HEALTH CARE IN NIGERIA

By

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1.0 Introduction

The understanding that health is not synonymous with absence of disease or infirmity, led the World Health Organisation (WHO) to define health as a state of complete physical, mental and social well-being. This definition has been broadened to one that recognises and incorporates the complex interaction of factors which operate at the individual and population levels, including the social, economic and cultural environments (Oladepo, 2008). Whether a person or population is healthy or not is determined by equity/inequity and social justice/social injustice. Thus, the variation in health status can be explained by factors such as income and its distribution, quality of early childhood, employment and working conditions, as much as by improvements in health systems. The Alma Declaration makes it clear that health must be considered in a wider social, economic and political context. This is a two-way process wherein social, economic and political inequalities can be seen as causes of poor health status and in turn, poor health status incapacitates individuals and communities from achieving social, economic and political development. As noted by the World Health Organization (WHO) Commission on the Social Determinants of Health (2008) “the poor health of the poor, the social gradient in health within countries, and the marked health inequities between countries are caused by the unequal distribution of power, income, goods, and services, globally and nationally, the consequent unfairness in the immediate, visible circumstances of peoples lives – their access to health care, schools, and education, their conditions of work and leisure, their homes, communities, towns, or cities – and their chances of leading a flourishing life. This unequal distribution of health-damaging experiences is not in any sense a ‘natural’ phenomenon but is the result of a toxic combination of poor social policies and programmes, unfair economic arrangements, and bad politics”. Health is therefore, a resource or capacity for everyday life 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). In view of this, lasting health for all people in a nation depends on creating conditions for good health. Primary Health Care (PHC) should contribute to Health by identifying and addressing the social and economic determinants of health. This is better achieved by using the recommended actions of the WHO commission which include (a) improving the conditions of daily life – the circumstances in which people are born, grow, live, work, and age (b) tackling the inequitable distribution of power, money, and resources – the structural drivers of those conditions of daily life – globally, nationally, locally and (c) measuring problems, evaluating action, expanding the knowledge base, developing a workforce that is trained in the social determinants of health, and raising public awareness about them. All these have to be done within the recognition that health is to a large extent created in policies well beyond those of health.

2.0 Meaning of Health Promotion

Health Promotion (HP) has been defined as 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). Thus, within the definition of Health promotion, people must be empowered to take social, political and

economic actions to ensure good health. In this regard, they need to ensure political inclusion on all decisions on health matters through advocacy, take strategic decisions to reduce vulnerability to health problems, participate in actions that will create peace, employment, housing, good nutrition, security and infrastructure and provide basic services including access to quality health care; targeted health promotion for specific risks to health; integration of health, welfare and education services; and using the principles of sustainable development to improve environmental health. The above definition incorporates the content and context of earlier definitions of HP which include “a process of enabling people to increase control over and to improve their health” (WHO, 1986) and “the science and art of helping people change their lifestyle to move toward a state of optimal health” (Optimal health is defined as a balance of physical, emotional, social, spiritual and intellectual health).

Health Promotion is one of the cornerstones for health development of the people (WHO, 2006) and for the achievement of the Millennium Development Goals (MDGs). The key goals of health promotion is to address broad determinants of health, improve quality of service delivery, empower communities to break the vicious circle of poverty and ill health, and establish virtuous circle of wealth and good health (Federal Ministry of Health(2008)-National Health Promotion Policy, 2008). To ensure the goals of health promotion, the Ottawa Charter for Health Promotion(1986) called for countries and international organisations to reorient health services, fundamental conditions, and their resources towards the promotion of health (WHO, 1986). The 2005 Bangkok Charter also urges all countries to make promotion of health a core responsibility of the governments, by giving priority to investments in health, within and outside the health sector. The charter further states that Health Promotion should be a core responsibility of all governments, a key focus of communities and civil society and a requirement for good corporate practice. Thus, policies and programmes for health promotion must embrace all the key sectors of society and not just the health sector, with all sectors contributing to developing healthy public policy, creating supportive environments for health, strengthening community action in various settings (schools, workplace, health facilities and communities) and developing personal skills and re-orientating health services.

Although health education has been in the forefront of improving health over the years, the observation is that it is a biomedical, individually-centred intervention approach applied to modern epidemiology- the pre-occupation of which has been with clinical and biological risk factors for disease (Oladepo, 2007). While health education addresses individual risk factors, it fails to consider the social and economic disparities affecting health outcome. Secondly, it assumes that individuals’ decisions about health behaviours is disentangled from the social, economic, and environmental constraints and pressures from which these behaviours emerge and in which individuals are nested. Health Promotion on the other hand takes into cognisance macro-social characteristics such as poverty, discrimination, inequity and injustice that contextually shape behaviour and regulate the probability of exposure to proximal risk factors that determine population health and uses multi- sectoral interventions in addressing these challenges.

Over the last 2 decades, considerable acceleration in the development of health promotion has occurred in the African region. These developments have evolved steadily through a slow but steady acceleration from the use of health education to health promotion for addressing the problems in the society, within countries and regions through the combined use of diverse approaches to health promotion. The development of health promotion can

be seen, for example, in the comprehensive actions aimed at addressing the underlying causes of health problems, in the large number of professionals both inside and outside the health sector who describe themselves as practitioners, through professional associations which in one way or another include health promotion in describing their work, and by the review and adjustment of structures and policies in health systems to accommodate these developments (Nyamwaya, 2003).

Overall, Health Promotion as a concept and a function has a major role to play in addressing social determinants of health, the weaknesses of the health system, improving the quality of service delivery, empowering communities to break the vicious circle of poverty and ill health, and establish the virtuous circle of wealth and good health.

3.0 The Pivotal Role of Health Promotion in the Provision of Primary Health Care (PHC) Services

In 1979, the World Health Assembly adopted a resolution on “Health for All” by the year 2000 and PHC was declared as the strategy for achieving this goal (WHO/UNICEF, 1978). The Alma-Ata Declaration on PHC (WHO/UNICEF, 1978) located Health Education, a component of Health promotion as the focal activity in the development of acceptable and accessible PHC (Tones and Tilford, 1994). Standard and Kaplan (1983) wrote that: it is not accidental that health education features prominently in the Declaration of Alma – Ata; nor is it by chance that Global Strategy for attaining health for all constantly refer to educational activities as the means “per excellence” for encouraging and making people and communities true artisan of their health and development. The passing of the resolution on Health Education and Information, education and communication (IEC) by the World Health Assembly (WHA) stimulated several countries in Africa to pursue rigorous health education programming to deal with large scale ‘ignorance’ and low literacy which were regarded as obstacles to health and health seeking behaviour. In this regard, wide-scale public information on the causes of specific diseases and conditions to facilitate prevention and control were embarked upon largely organised by public health planners and development agencies. Such dissemination of knowledge was also justified on account of the low levels of formal education among the majority of the population (Nyamwaya, 2003). While some evidence exists that health education has contributed to the high level of awareness and knowledge about health in the countries of the region, significant knowledge- practice gaps exist because the root causes of the health problems for which risk behaviours are targeted by health education were not addressed holistically.

This observation and other evolving events have stimulated a change from Health Education to Health Promotion at the global level. In 1989, the WHA shifted to Health Promotion through the passage of resolution WHA 51/12 stimulating a paradigm shift. This was followed by the development and release of the Regional Health promotion strategy in 2001. The strategy comprises of the guidelines for review of Health promotion policy, structures, staffing and support for review of policy and curricula. With this evolving change, the shift from focussing on general issues of infectious diseases to environmental risk factors becomes inevitable. Communicable diseases (e.g. malaria, sexually transmitted diseases/ HIV/AIDS) and non -communicable health problems (e.g. automobile accidents, drug addiction, obesity, many cancers and heart diseases) are primarily attributed to living conditions, ignorance and risk taking behaviours. Others include high fertility, scarcity of food, inadequate water supply, overcrowding and poor sanitation (Hassan, 2000). All these continue to be major sources of morbidity and mortality in developing countries which are

easily preventable (WHO/UNICEF, 1978; Gunaratne, 1980; FMOH, 1988; Egwu, 1990; Achalu, 1993) but are further worsened by the poor health systems. In most developing countries, nearly 80% of the population live in rural areas where health services are very scarce or inadequate (WHO, 1978; UNICEF, 1987; WHO, 1988). Several global dialogues held through International Health promotion conferences further stimulated change.

These events increased the awareness of the Nigerian government on Health Promotion as a rapidly emerging approach to health development. Convinced of the ability of health promotion in making a positive contribution to the improvement of human health, the government developed the first National Health Promotion policy thus making "Health Promotion" one of the priority issues in public health. This started with a consultative meeting between the WHO I, the Federal Ministry of Health and the African Regional Health Education Centre (ARHEC) at the University of Ibadan, Nigeria (Oladimeji Oladepo and Faozat Awelenje, (2008a)). The policy articulates what is required in the way of systems, infrastructures, institutions, resources and skills for effective action to deliver public health policy and effectively address determinants of health and the control of communicable disease and non communicable diseases including other determinants of Health. The Policy contains guidelines to assist in creating positive outcomes such as empowerment for health action and increased community involvement. It also prescribes an institutional framework for the organization and coordination of the Health Promotion programme nationally which is relevant for improving Health promotion delivery in PHC.

In recent times, there has been serious attempts to revitalize the Primary Health care (PHC) concept and PHC has been placed high on the agenda of several international fora (e.g. African Review of the Implementation of PHC in Ouagadougou). PHC is also the main theme in the recently launched World Health report (2008), which addresses issues of poverty, equity and access to health care in rural areas. The revitalisation of PHC calls for universal coverage reforms—to improve health equity, service delivery—to make people-centered health systems, healthy public policies to promote and protect community health and leadership governance to make health authorities more reliable. This indicates that PHC not only reflects, but is also responsive to the socio-economic and political conditions of the community, from which it emerges. Thus, health promotion within the revitalised PHC has more crucial roles to play to ensure the implementation of these reforms.

The concept, Primary Health Care denotes the provision of essential health care services without compromise of quality and efficiency. In this regard, comprehensive and quality health promotion services are essential. Implementers of Primary Health programmes have a great responsibility in ensuring the delivery of quality health promotion services as the first component of PHC and cross cutting for other components. Health promotion services should be broadened from disease prevention to a concern on "causes of the causes" (determinants or causes of health) including inequity, human rights, gender discrimination and dis-empowerment and using a multi- pronged approach to addressing these issues in the context of the broader participation beyond the health sector. Some examples of potential areas in health promotion which should be focused upon in PHC include but is not limited to the following -Development of Health Policy such as tobacco control, sale of junk and contaminated foods, free ante-natal, delivery and postnatal services, and policies related to system change at PHC level including the enactment/enforcement of laws that promote health such as stricter pollution standard for refuse, sewage, vehicular smoke, toxic waste and consumer rights etc).

Other actions that can be taken by individuals, groups and communities include:

- Adoption of life style changes (Diet, exercise, reduction of smoking and reduction in alcohol intake)
- Improved child care practices (Uptake of immunization, exclusive breastfeeding, complementary feeding, uptake of child health and school health services, and meeting the needs of physically challenged children).
- Adoption of measures to prevent the spread of HIV and promote reproductive health. (Family planning, improved antenatal care, prevention of female genital mutilation, safer sex behaviours and utilization of STI services).
- Appropriate use of health services in the early stages of disease (Malaria, TB and leprosy).
- Adherence to treatment regimen prescribed by health workers
- Support for actions to control the sale of counterfeit drugs.
- Participation in screening programmes for disease prevention (hypertension and cancers)
- Adoption of appropriate behaviours and safety measures to reduce injuries (Work, home and on the roads).
- Participation in other health-related programmes within and outside the health sector.
- Strengthening of networks in families and communities to provide support and care to members, maximise potentials to participate in health development, promote mental health and enhance social capital.
- Support for introduction/improved health laws and public safety measures for reduction in injuries, food hygiene measures, housing, water supply, sanitation and other environmental measures.

One crucial role of health promotion is to facilitate the acceptability of these actions through interactive communication between staff in biomedical and social sciences working in PHC programmes that would enable a better understanding of the relationship between the social context and health, illness and healing. The other aspect is the consistent dialogue with community members on the need to be part of “Health for all, all for health”.

PHC is not a service for the poor but for all people, therefore, all people irrespective of age, sex, tribe or socio-economic status should be involved in PHC programmes and obtain services from PHC centres and clinics, with extended access to the rural populations and at lower cost.

Participation of the persons and communities concerned is a key feature of PHC .The effective delivery of PHC services to ensure universal coverage calls for renewed efforts in respect of community participation and involvement not only for disease prevention and control but in the control of other health determinants. The role of health promotion in this regard is to ensure that PHC workers fully understand the factors that influence active involvement of individuals in the decisions and activities that take place in their communities. Secondly it also motivates communities to identify their health problems, select solutions, set targets and translate these into simple and realistic goals that they can monitor (Gunaratne, 1980; Hassan 2000). The action plan of the 1986 Ottawa Charter recommends that health promotion strategies and programmes should be adapted to the

local needs, and individual countries and regions need to take account of differing social, cultural, political and economic systems in planning and implementing health programmes.

The health problems perceived by the community may differ from those perceived by 'experts' and thus an understanding of local culture is essential. In line with the above recommendation, health promotion advocates and empowers community members to play active roles in planning, implementing and evaluating health programmes at the community level rather than be provided with pre-determined frame-work of health care (Deeds, 1992; Brieger, 1996). In this regard, health promotion places high emphasis on fostering community participation and involvement as a process of empowerment which promotes self reliance and sustainability. Fostering self-reliance is a political process and Health promotion's role in PHC is to ensure that health workers and community members understand local organizational and leadership processes and to advocate with policy makers to ensure that national economic and political conditions (e.g. resource distribution) do not hinder the ability of communities to be self-reliant.

The PHC strategy further calls for multi-sectoral collaborative action. Inter-sectoral functioning is key to health promotion effectiveness in PHC. Therefore, considerable partnerships within and across sectors through various PHC programmes is required since communities often set priorities which can only be achieved through political, economic, environmental changes and many collective actions concerning health need to be taken in cooperation with communities and with other sectors (WHO, 1986) which opens the door for intersectoral collaboration. The fact is that many health problems cannot be addressed by the health sector alone but require support outside of the health sector such as agriculture, education, public work, water supply and sanitation, housing, transport, rural development and communications. To achieve meaningful intersectoral collaboration in PHC requires the identification of synergies among health and other policy sectors. The role of Health promotion in this regard is to coordinate this multi-sectoral collaborative effort (National Health Promotion Policy, 2008) and ensure that all sectors understand the necessity and benefit of multi-disciplinary team work (WHO, 1986) and commit themselves to partnering for health advancement.

Promoting the use of appropriate technology not only by PHC health workers including village health workers but also by community members is an important role of health promotion in PHC. Although different forms of technology are appropriate at different stages of development, Health promotion in PHC not only advocates for use of technology that is simple, low-cost and easy to maintain but is also responsive to the needs and aspirations of the people and takes into consideration the culture of the community concerned (WHO/UNICEF, 1978; Brieger, 2000). Culture plays a central role in the identification of appropriate health care technologies and service delivery methods. In light of this, policy makers and programme managers need to be constantly reminded of the need for PHC technology to be scientifically sound, responsive to the local culture, acceptable to those who apply it and to those for whom it is used with the capability of undergoing modifications and further development if necessary.

The other role of Health promotion in ensuring quality and efficient PHC delivery is the provision of evidence-based data for improved programming and policy through high quality research. This is crucial particularly in the face of the ever changing health needs and priorities of a dynamic society. Proven research methods in Health Promotion to solve

problems arising from the delivery of Primary Health Care services in a scientific manner are strongly needed and need to be employed. Growing evidence has shown that Health Promotion is making positive and unique contributions to the improvement of human health through empowerment of health action, healthy public policies and community involvement. Studies around the world have provided convincing evidence of the effectiveness of Health Promotion strategies in modifying risk factors and providing practical approaches to pursuing health equity.

Evidence exists that health promotion in PHC has made an impact. Three examples of efficacy of health education in Nigeria are illustrated in Boxes 1, 2 and 3 below.

Box 1: Health Promotion approach to addressing health problems in Rural Communities.

The study was carried out in Araromi community, located 100km North of Lagos State, Nigeria. Multiple health promotion approaches such as formation of health committees and sub-committees, public enlightenment campaigns and community organization in identifying and solving of the community priority health problems were used. Through these approaches, the community was able to construct six pit latrines, fence the main stream of the source of drinking water to prevent pollution and increase the utilization of the former health facilities in Araromi and its satellite communities. The project also led to the successful integration of the Traditional Birth Attendants (TBA's) and Traditional Healers into the formal health system of the district. General improvement in the level of sanitation of the community through clearing of bushes was also one of the results of the intervention.

Source: Laoye (1981).

Box 2: Community involvement in Guinea worm control through the use of Volunteer Village Health Workers (VVHWs).

The study demonstrated the vital health promotion role of village health workers in Guinea worm control in Idere community using basic community organization principles to involve villagers in the selection and supervision of their own VHWs in target communities. The VHWs were exposed to a series of training sessions on a variety of local concerns including guinea worm control. After training, follow-up supervision and encouragement was provided to the village health workers and communities by health educators. The result was a significant gain in knowledge about Guinea worm transmission in intervention hamlets compared with baseline and control villages. The VHWs mobilized co-villagers to dig wells, construct barriers and filter their drinking water through clean cloth sieves. Guinea worm prevalence in target hamlets dropped to 100% compared to 40% or higher in surrounding communities. A follow up survey the following year found that residents of Idere hamlets with resident VHWs were significantly more likely to be aware of and use cloth filters for drinking water than villages and hamlets with no VHWs. This is a classical example of the efficacy of community health promotion if well designed and implemented.

Sources: Akpovi, 1979; Brieger and Akpovi, 1982 – 1983; Brieger, Ramakrishna, Akpovi and Adeniyi 1984-85; Akpovi, Johnson and Brieger, 1991).

Box 3: Community-Directed Interventions for Major Problems in Africa: Ibadan Team 1.

The goal of this study carried out in Oyo State of Nigeria between 2005 and 2007 was to determine the extent to which Community Directed Intervention (CDI) process can be used for the integrated delivery of health interventions with different degrees of complexity (i.e. Ivermectin treatment, Vitamin A (Vit.A), insecticide treated nets (ITNs), Directly observed treatments (DOTS), Home-management of malaria (HMM)). The final results at the end of the project showed a 23% increase in Vitamin A coverage for children less than five years in CDI districts (99%) compared with the control (73%). A two and a half-fold increase was recorded in the percentage of under-fives diagnosed with a fever who received appropriate treatment between the CDI districts (40%) and the control (15%). A ten-fold increase in Household (HH) net ownership was recorded between CDI districts (20%) and comparison district (2%). Under-fives who slept under a net the night before the interview increased eight-fold between CDI districts (8%) and control district (0.%) while a ten-fold increase in the number of pregnant mothers sleeping under a net the night before the interview was recorded between CDI districts (10.0%) and control district (0%). However, no difference was recorded for case detection of TB between CDI districts (100%) and the control (100%). A 35% increase in ivermectin coverage was recorded between CDI districts (80.0%) and control district (45%). The differences between the CDI districts' performance and the control for all interventions except DOTS were statistically significant ($P < 0.01$). The mean economic cost of integration at the district level was significantly different between CDI districts (US\$22,589) and the control (US\$28,590). In conclusion, CDI approach is much more effective than current conventional delivery approach for all studied interventions except DOTS. And the co-delivery of these interventions through the CDI process is more cost-efficient. CDI is recommended for an integrated, community level delivery of appropriate interventions against diseases that affect neglected populations eg. onchocerciasis control.

Sources: Oladepo et al (2008b)

Overall, health promotion in PHC should facilitate the achievement of indirect health related goals in respect of poverty reduction, promotion of education, especially for the girl child and addressing the issues of inequity, discrimination, gender equality and women empowerment, loss of environmental resources, and sustainable development through their integration into country policies and programmes such as:

- (a) Within health services: This encompasses main health promotion actions aimed at individuals and families including monitoring the development of children, immunization, vaccination mobilization, effective pre-natal examination, supporting breastfeeding, promoting personal hygiene as well as improving water resources, sewage conditions and waste disposal in health service sector.
- (b) Within public policies, inter-sectoral and community action; This involves several inter-sectoral health promotion initiatives involving the participation of various

Government areas and the civil society in the development, refining and adoption of healthy public policies, and policies related to health system changes and enactment/enforcement of laws that promote health and consumer right

- (c) Within development policy: This includes improving health promotion at key settings including communities, schools, work places and health facilities (healthy cities/communities initiatives, health promoting schools, and health promoting work places) not only to improve coverage but also to provide a holistic approach to the cultivation of healthy life styles and reduction of risk factors and other health promotion initiatives. Community action which individuals, families and communities in collaboration with the government can take for the promotion of health which take into account prevailing health problems and health risks relating to social determinants are also crucial. It also includes actions taken in respect of prerequisites for health such as peace, shelter, education, food, adequate income, a stable eco system, social justice, respect for human right and equity.

Consistent implementation of all of these would reflect a demonstrated commitment of member countries in the Alma Ata Conference to implement Primary Health Care by upholding the value of equity or social justice through the adoption of principles of universal coverage, multi-sectoral collaboration, community participation and use of appropriate technology in health development,

Challenges

Although some progress has been made in respect of regional strategy for Health Promotion to contribute to the attainment of the MDGs, there are several challenges to be overcome if health promotion is to play a significant role in accelerating PHC outcomes.

First, Health promotion in PHC has been largely constrained by the fact that a majority of programmes and activities are in most cases planned, managed and controlled exclusively by professionals, especially from within the health sector. The social and economic determinants of health did not, by and large, form the basis for the current health promotion practice in PHC or its policy. Rather a 'medical paradigm' was the norm in which the treatment of common illnesses rather than attention to its prevention is the main focus. The main actors are specialists whose concept of health is based on the public health model with interventions revolving around curative services. Ordinary people usually participate only passively in the health promotion process.

Furthermore, PHC Alma Ata declaration in 1978 attributes a larger role to health education, but a smaller role to Health Promotion. Besides, the state and local governments are not legally mandated for health promotion even in the presence of Health promotion policy.

Secondly, Healthy public policy, a key health promotion strategy which aims to put health on the agenda of policy makers across sectors and levels of government has not been given due attention in PHC. Healthy public policies are equity-oriented, with explicit concerns for impacts on population health, promoted through intersectoral action and collaborative partnerships (WHO, 1988; Milio, 2001). The rationale is that such an upstream approach

accounting for the socio-political context and the larger forces impacting on health will avoid the continuous lifesaving of individual-based approaches (McKinlay, 1993). Macro-economic policy in many countries has not adequately captured the attention of health promotion researchers in PHC. Thus policy advocacy is not well established within all sectors working in PHC programmes.

Thirdly, the lack of access to documented evidence of health promotion effectiveness in PHC is a problem which is particularly acute in the African region. In most cases, available evidence is based on projects and studies conducted by researchers in academic institutions which are typically published in learned journals, but unfortunately, not accessible to most of the PHC workers operating in the frontline. Consequently, health promotion practitioners and others involved in HP do not have ample opportunity to share experiences regarding factors that are crucial to the success of health promotion programmes (FMOHSS/USAID, 1992).

The lack of adequate financing as a resource constraint to adequate implementation of Health Promotion component of PHC programmes constitutes the fourth factor. PHC is placed squarely in the context of social and economic development where it is to be given its fair share of resources. Despite advocacy on more financial resource to Health promotion by several charters, public and private financing for strategies for promoting health in PHC is largely unknown. Information on the level and sources of spending on health promotion is scarce. Assessment of financing healthcare indicates that poor countries in Africa, facing resource constraints, spent merely US\$ 55.3 per capita respectively on the health of their population in 2003 and a mere US\$ 1.6 per capita on health promotion (World Health Organisation, 2005). It is not surprising that health promotion activities cannot be adequately implemented to make high impact on the health of the population. Many countries outside Africa have had innovative health promotion financing strategies that conformed to WHO directions during the last two decades (WHO, 1986; WHO, 1997).

To fully implement the initiatives, governments in some countries have, through legislation, introduced the Health promotion financing mechanism by means of dedicated portions of their revenues. Instead of transferring to the general revenue of the government, some portions, for example tobacco excise tax, are earmarked for the HP Fund. As a result, financing of HP is 'ring-fenced' and does not compete either within the health sector priority or between other social sectors in the general budgetary process, which is usually on an annual basis. An earmark of 'sin' taxes from tobacco or alcohol has been commonly applied to fund the HP activities in many countries, such as the Health Promotion Foundations in Australia since 1987 (VicHealth (2005), Republic of Korea since 1995 (Jung, Park et al. 2005), and Thailand since 2001 (Thai Health Promotion Foundation, 2002). Some countries have also introduced additional levies on health insurance premiums to support HP activities such as the case in Switzerland (Health Promotion Switzerland 2005). In Austria, the health promotion foundation is funded by an appropriation from treasury budgets (Fonds Gesundes Osterreich, 2005). Several funds are administered and disbursed by non-governmental entities, especially in the form of health promotion foundations (Australia); though in some countries they are managed or governed by governmental agencies (Korea, USA). (World Health Organisation, 2005, WHO 1997).

The management of change from Health education to Health promotion constitutes another challenge. Many health educators, communication officers, and other health staff in PHC and

within the sectors and other stakeholders especially within government still do not understand the concept of Health promotion, consumer rights, the need for multi-sectoral action and the promotion of supportive environments for health behaviour change and addressing social determinants of health.

The Way Forward

The way in which Health promotion is presently being delivered in PHC is unable to bring about robust changes to the health of the people. This further justifies the clarion call for PHC to be revitalised.

In this context, the following are critical for action.

1. Increased capacity building in health promotion for both health and non-health professionals to enable them deliver quality and comprehensive health promotion activities in PHC are crucial. This would enhance their knowledge and skills in health promotion and generate strong professional leadership for achieving sustained practice, thus empowering them to address more effectively the root causes of ill health that would lead to improving peoples' health. Retraining PHC workers and re-orientation of policy makers and community members is crucial. Enhancing the capacity of training institutions to offer courses in health promotion to all health workers is also desirable and so are fora for focussed debate on existing Health promotion and health policies.
2. Excellent health promotion infrastructure is essential for the provision of quality service. Health promotion practitioners working in PHC settings should be provided with basic minimal infrastructure such as offices, chairs and tables; equipment for media design and information technology, vehicles or motorcycles and statutory funds. These will contribute immensely to their effective performance.
3. Healthy public policy, a key health promotion strategy, needs to be vigorously pursued. This pace needs to be accelerated by challenging Health promotion researchers to put considerable attention on evidence for health promotion. In this regard, there is a strong need to strengthen the collection, analysis and dissemination of the evidence associated with the effectiveness of health promotion interventions in PHC so as to apply such evidence in influencing healthy public policies and intervention programmes. Dialogue to facilitate understanding and synergy and increased capacity in the use of tools that support inter-sectoral planning are needed and so is common performance management system that requires all sectors to deliver core health promotion strategic goals based on joint planning and action.
4. For PHC to bring about a turn around in the health of the people including socio-economic development that benefits all sections of society, equity must be made the cornerstone of PHC health promotion thinking and practice. Beyond the collection of epidemiological data which has characterised PHC's current management information system, it is expedient for health promotion practitioners to routinely monitor the level of health equity including gender equity, using predetermined indicators and report the achievements of the health-related MDGs.
5. Dealing with the weak research thrust in health promotion in PHC requires increased theory building on one hand and collaboration of health promotion researchers with epidemiologists, statisticians and other health systems researchers in other to

improve indicators for measuring health promotion effectiveness. Through this action, an increasing distinct body of knowledge, principles and methodology would further emerge. Therefore, improving the quality of data by establishing standard criteria for comparability and setting up a new research agenda for Health promotion that engages parts of society outside the health sector is recommended for improving PHC. It is also essential to ensure the documentation of health promotion best practices based on rigorous research outcomes.

6. There is a strong need to build sustainable mechanisms for financing health promotion activities. Ensuring sufficient fund allocation from government budget, corporate taxation of industries and financial institutions and dedicated taxes from alcohol and tobacco are promising areas that demand full scale advocacy.
7. The development of professional standards for Health promotion practice is urgently needed to ensure the delivery of high quality health promotion services in PHC and at other levels. This requires the development and assessment of health promotion competencies for professional practice.

References

- Achalu O.E. (1993) *“The role of Health Education in Developing Nation: The Nigerian Example”*. In: Udoh, C.O.; Ajala, J.A.; Adeniyi J.D.; Oladimeji B.Y. (Eds) *Nigerian School of Health Journal* 8(2) African link Communication Ltd., Ibadan. Pg 1-8
- Akpovi, S.U. (1979) *Impact of a community Involvement Approach on Guinea Worm Control Practices: an MPH dissertation in the Department of Health Promotion and Education, University of Ibadan, Ibadan*
- Akpovi, S.U., Johnson, D.C. and Brieger, W.R. (1991). *Guinea Worm Control: Testing the Efficacy of Health Education in Primary Health Care. Int. Journal of Health Education. 24 (4) pg 229 – 237*
- Bangkok Thailand (2005): Charter Addressing health determinants: health in a globalised world. 6th Conference of Health Promotion.*
- Brieger, W.R. (1996): *Health Education to promote Community involvement in the Control of Tropical Diseases. Acta Tropica, 61 Pg 93-106.*
- Brieger, W.R. (2000) *CHANBE PROCESS: an introduction to Health Education and a cross-cultural approach to understanding health behavioural ARHEC, Ibadan (Unpublished Lecture note).*
- Brieger, W.R. and Akpovi, S.U. (1982-83): *A Health Education Approach to Training Village Health Workers. Int. Quarterly of Community Health Education 3 (2): pg 145-152.*
- Brieger, W.R; Ramakrishna, J. Akpovi, S.U. and Adeniyi, J.D. (1984-85) *Selecting alternative Strategies for Community Health Education in Guinea Worm Control. Int. Quarterly of Community Health Education. 5(4) pg 313 – 320.*

Deeds, S.G. (1992) *The Health Education Specialist: A study guide for professional competence*. Loose Canon Publications Box 5538, Los Alamitos, California.

Egwu, I.N. (1990): *Policy: Practical and research challenges and options for health education in Nigeria*. *International Quarterly of Community Health Education*, 10, pg 65-83.

Fonds Gesundes Österreich (2005). *Annual Report 2004*. Wien, Fund for a Healthy Austria.

Federal Ministry of Health (1988) *The National Health Policy and Strategy to Achieve Health for All Nigerians*. FMOH, Lagos, Nigeria.

Federal Ministry of Health and Social Services and US Agency for International Development (FMOHSS/USAID) (1992): *The Efficacy of Health Education in Nigeria. A selected Review of Field Work Research Activities in Nigeria*. ABOLOP Nig. Ltd. Lagos.

Gunaratne, V.T.H. (1980): *Health for All by the year 2000: The role of Health Education*. *Int. Journal of Health Education*. Supplement to 23 (1).

Health Promotion Switzerland (2005). *Annual Report 2004 - Executive Summary*. Bern, Health Promotion Switzerland.

Hassan, S.H. (2000) *Health Education in Primary Health Care: Regional Advise WHO Ring Road, New Delhi 110002 India*.

Health Canada (1998). *Taking action on population health: A position paper for Health Promotion and Programs Branch Staff*.
<http://www.uel.ac.uk/ihhd/programmes/documents/CommunityDevelopmentApproachestoHealthPromotion.doc>

Laoye, J.A. (1981): *Selling Health in the Market- Place*. *World Health Forum* 2 (3): 367- 372.

McKinlay, J. B. (1993). *The promotion of health through planned sociopolitical change: challenges for Healthy public policy in poor countries*.

Milio, N. (2001) *Glossary: healthy public policy*. *Journal of Epidemiology and Community Health*, 55, 622–623.

David Nyamwaya (2003) *Health promotion in Africa: strategies, players, challenges and prospects EDITORIAL*. *Health Promotion International*, Vol. 18, No. 2, 85-87, June 2003© [Oxford University Press](#)

Federal Ministry of Health (2008). *National Health Promotion Policy, 2008, Nigeria*.

Oladepo O. (2007) *Paper presented at Capacity Enhancement Workshop for the Faculty of Institutions conducting courses in Health Promotion and Education titled "Health Promotion Concepts, Principles & Practices. AGOI/WHO Collaborative Programme 10th – 14th September, 2007*.

Oladimeji Oladepo and Faozat Awelenje (2008a) Evolution Of Health Promotion In Nigeria. The Workshop Presenting the National Health Promotion Policy to Staff Of FCSC & Others. 27th -28th February 2008. Royal Dream Hotel, Mararaba, Nassarawa state

Oladimeji Oladepo, Ademola Ajuwon, Fred Oshiname, Funke Alaba, Busola Oyeyemi and Titiloye Musibau (2008b) Community Directed Interventions for major Diseases in Africa. Ibadan Team 1 Report. WHO/TDR Geneva

Ottawa Charter (1986) World Health Organization. Geneva.

Standard, K. and Kaplan, A. (1983) Health Education new task, new approach. WHO Chronicle 372 (6): 64.

Tones, K. and Tilford, S. (1994): Health Education: Effectiveness, Efficiency and Equity. 2nd edition, Chapman & Hall, London.

Thai Health Promotion Foundation (n.d.). Thai Health annual report 2004. Bangkok [in Thai], Thai Health Ranson, M. K., P. Jha, et al. (2002). The effectiveness and cost-effectiveness of price increases and other tobacco-control policies. Tobacco Control in Developing Countries. P. Jha and F. Chaloupha. Oxford, Oxford University Press.

UNICEF Annual Report, (1987): A Publication of UNICEF 3 UN Plaza, New York.

VicHealth (2005). Annual Report 2004-2005. Melbourne, The Victorian Health Promotion Foundation.

WHO and UNICEF (1978) Alma-Ata Declaration Report of the International Conference on Primary Health Care WHO, Geneva.

World Health Organisation (1978) Health Education with Special reference to the Primary Health Care. Int. Journal of Health Education, 21 (2)

World Health Organisation (1986) Ottawa Charter for Health Promotion, An International Conference on Health Promotion, November 17-21. WHO Regional Office for Europe Copenhagen

World Health Organization (1997). Jakarta Declaration on Leading Health Promotion into the 21st Century, World Health Organization. .

World Health Organisation (1988): The World Health Organisation Expert Committee on Training of Personnel for Health Education Services. WHO, Geneva.

World Health Organisation (2005). The 2005 World Health report. Make every mother and child count. Geneva, World Health Organization.

World Health Organization (2006). Health Promotion: milestones on the road to a global alliance, World Health Organization.

ROLES OF WATER AND SANITATION IN ACHIEVING PRIMARY HEALTH CARE OBJECTIVES IN NIGERIA

Professor M. K. C. Sridhar and Dr A. O. Olowu

1.0 Preamble

Last Millennium had witnessed four major achievements: improvements in hygiene practices, food handling through the use of refrigeration, water and sewage treatment (significantly in the industrialized countries), and vaccination practices. Small pox has been eradicated and plague and other deadly diseases were contained to a great extent. This has injected a very high level of confidence in the application of science and technology for improved health and well-being of humans.

Primary health care (PHC) which was enthusiastically started in late 1977 requires a change in socioeconomic status, distribution of resources, a focus on health system development, and emphasis on basic health services. Considered too idealistic and expensive, it was replaced with a disease-focused, selective model. After several years of investment in vertical interventions, preventable diseases remain a major challenge for developing countries. Water, sanitation and hygiene, collectively termed WASH play very important role in PHC. Two of the eight PHC components - adequate supply of safe water and basic sanitation, and prevention and control of endemic and epidemic diseases embrace various components of Environmental Health including the more recent climate change issues. In the past, however, environmental health was given only a lip service by the various tiers of the Federation. Not much progress or impact have been visible due mainly to lack of commitment by the Government, conflicts among the three tiers of the Government, low level of funding, and lukewarm attitude of the government machinery. Most of the initiatives were through community based organizations and civil societies and selected development partners. The UN initiatives on the Water Decade, International Year of Sanitation and Millennium Development Goals (MDG) and other global campaigns have triggered renewed interest and continued awareness that has resulted in some level of improvement globally. This has also stimulated various International Development Partners who have come out with pledges of funding and technical support which has sustained the interest even among the developing and the least developed countries. This chapter summarizes the update on the role of water and sanitation in achieving PHC in Nigeria.

2.0 Nigeria's Revised National Health Policy

The Revised National Health Policy was brought out in September 2004 (Federal Ministry of Health, 2004) and was aimed at developing a comprehensive health care system, based on primary health care (Figure 1) that is promotive, protective, restorative and rehabilitative to every citizen. The overall policy objective would be "to strengthen the national health system such that it would provide effective, efficient, quality, accessible and affordable health services to improve the health status of Nigerians through the accelerated achievement of the health related UN MDGs". It was formulated within the context of New Partnership for Africa's Development (NEPAD), United Nations Millennium Development Goals (MDGs), and the New Economic Empowerment and Development Strategy (NEEDS). PHC remained the basic philosophy and strategy for national development as health is

considered as an integral part of overall development. Intersectoral cooperation and collaboration was sought between the different health related Ministries, development partners, and other relevant institutions. Gender was also mainstreamed into the programme with defined targets (Box 1).

The major thrusts of Health Policy are: National Health Systems and management, National Health Care Resources, National Health interventions, National Health Information System, Partnerships for Health Development, Health Research, and National Health Care Laws.

Various strategic plans have been developed to revitalize PHC which is focusing on the priority health problems (Roll Back Malaria, HIV/AIDS, Reproductive health, Polio eradication and routine immunization, Tuberculosis and leprosy). The following indicators of health-related MDGs received the major focus:

- Prevalence of underweight children under 5 years of age;
- Under 5 mortality rate;
- Infant mortality rate;
- Proportion of 1-year old children immunized against measles;
- Maternal mortality ratio;
- Proportion of births attended by skilled health personnel;
- HIV prevalence among young people aged 15 to 24 years;
- Number of children orphaned by HIV/AIDS;
- Prevalence and death rates associated with malaria;
- Proportion of population in malaria-risk areas using effective malaria prevention and treatment measures;
- Prevalence and death rates associated with tuberculosis;
- Proportion of tuberculosis cases detected and cured under DOTS, and
- Proportion of population with access to affordable commodities on a sustainable basis.

**Box 1. National Health Policy -
Targets**

1. Reduce by two-thirds, between 1990 and 2015, the under-5 mortality rate;
2. Reduce by three-quarters, between 1990 and 2015, the maternal mortality rate;
3. To have halted, by 2015, and begun to reverse the spread of HIV/AIDS;
4. To have halted, by 2015, and begun to reverse the incidence of malaria and other major diseases.

In order to ensure the comprehensive monitoring and evaluation of health care, the minimum categories of indicators to be used are:

- Health policy indicators: Political commitment, allocation of financial resources in terms of the proportion of GNP spent on health specifically to PHC and per capita government expenditure at State and LGA level;
- Health status indicators: birth weight 2500 g or above, % of under 5 malnourished;
- Socio-economic indicators related to health and living standards: rate of population increase, GNP/GDP income distribution, work conditions, adult literacy rate by sex, food availability, housing condition, basic sanitation and access to safe water, school enrolment by sex, integrated transport system, unemployment rate, and poverty index;
- Provision and utilization of health care indicators: coverage by PHC and referral support which are education in relation to health, mass media outlets, food and nutrition, water supply and sanitation, family health, immunization, prevention and control of epidemic and endemic diseases (specific incidence and prevalence rates), treatment of common diseases and injuries, provision of essential drugs, coverage by referral system, proportion of two-way referral, and promotion of school health services,

In spite of all these efforts, in the words of Professor Ashiru, Chief Medical Director of Medical Art Centre Maryland, Ikeja, Lagos, the Healthcare system as of 2008 - “has failed to provide even the most basic services for most people especially the poor. Some of those factors lacking in our health system include poor management, the quality of manpower supply, lack of up dated infrastructure and planning” (Muanya, 2008).

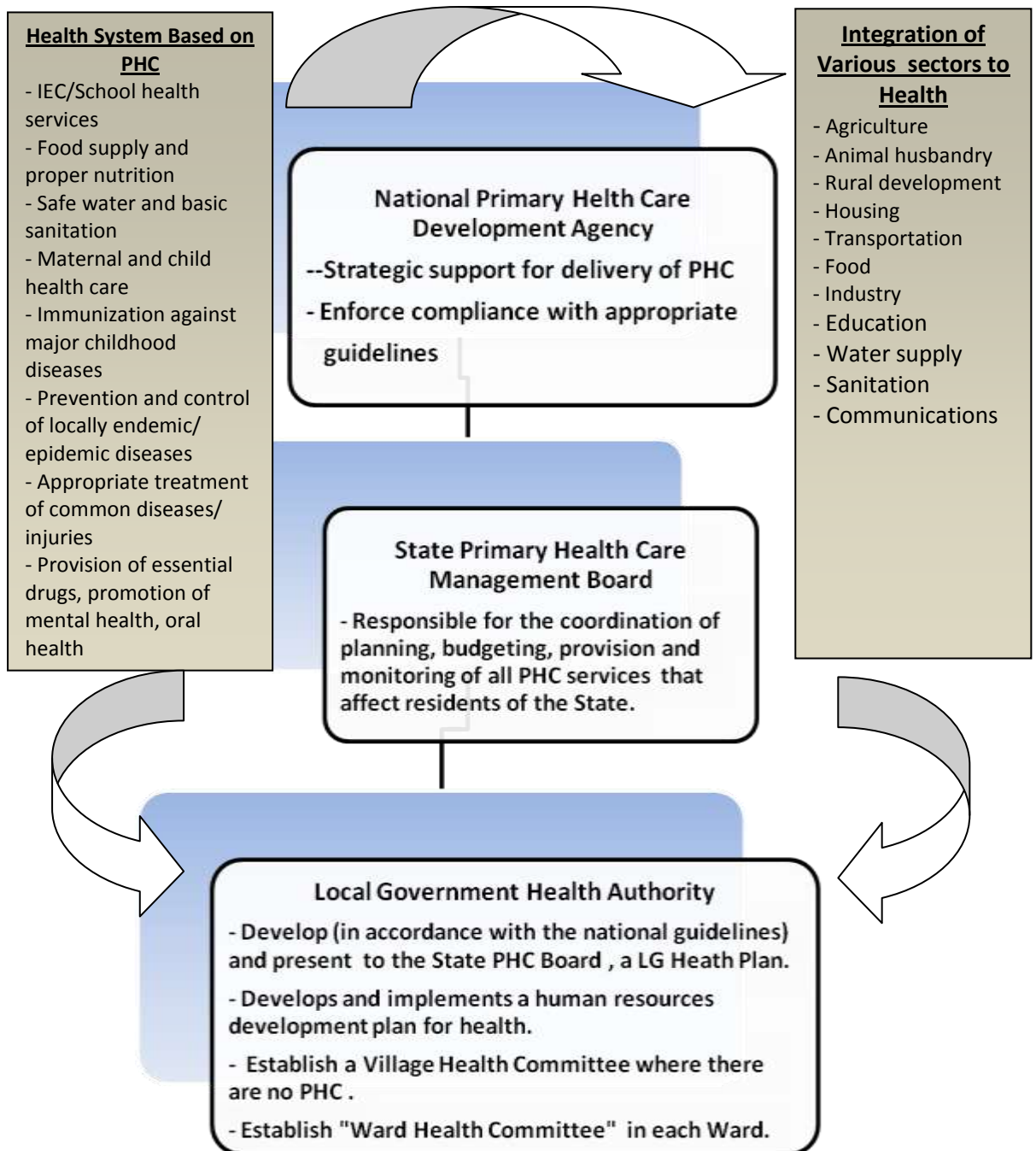


Figure 1. Primary Health Care in an integrated National Health Care System

3.0 Trends and Milestones in PHC

In the past, disease specific and more technologically dependent strategies have failed seriously. A typical example- malaria eradication programme which has started in 1950s and ended in 1970s has paved way for new thinking. People-centred, community-based strategy which is the core component of primary health care, with its goal of health for all by the year 2000, was adopted by the World Health Assembly in 1977. In August 1987, the Federal Government of Nigeria launched its PHC plan, as the cornerstone of health policy. Intended to affect the entire national population, its main stated objectives included accelerated health care personnel development, improved collection and monitoring of health data, ensured availability of essential drugs in all areas of the country, implementation of an Expanded Programme on Immunization (EPI), improved nutrition throughout the country, promotion of health awareness, development of a national family health programme, and widespread promotion of oral rehydration therapy for treatment of diarrheal disease in infants and children. Implementation of these programmes was intended to take place mainly through collaboration between the Ministry of Health and participating local government councils, which received direct grants from the Federal Government. Launched in March 1988, the programme by August 1989 was said to have been established in more than 300 of 449 LGAs. However, its goal of 90 per cent coverage was probably excessively ambitious, especially in view of the economic strains of structural adjustment that permeated the Nigerian economy throughout the late 1980s.

PHC has broadened the focus of health services by emphasizing programmes instead of specific diseases. Accordingly, “the provision of universal services for maternal and child health, family planning, improved water supplies, and environmental sanitation became objectives; these were to be achieved through an equitable distribution of resources, community involvement”. These have an emphasis on prevention instead of clinic-based curative interventions, with a multisectoral approach (Claeson and Waldman, 2000).

The mid to late 1980s saw worsening economic performance which was followed by the enforcement of structural adjustment programmes, sociopolitical instability, man-made and natural disasters and the beginning of the HIV/AIDS pandemic. All these wrecked havoc on plans countries had for implementation of PHC. Within this context, the elaborate policies and plans were not fully implemented. Furthermore, there appears to have been a general underestimation of the resources required. Health for all was not achieved by any of the countries including Nigeria (Rufaro and Tumusime, 2004).

On current health care in Nigeria, Hargreaves (2003) commented “Government-run health-care services barely function: half the population are unvaccinated for routine diseases, and a burgeoning epidemic of HIV/AIDS, only now being adequately addressed, leaves 3.5 million already infected and without access to the most basic of care. A poorly structured health service that relies on vertical programmes for HIV, tuberculosis, and malaria, means that coordination is chaotic, and already scant resources fail to reach the lower levels in which they are needed most. Nigeria—a country that is more than capable of providing effective services --, even now, political priorities are being put ahead of the population's basic needs” such as water, sanitation etc.

4.0 Water, Sanitation and Hygiene (WASH), and the Disease Episodes

It is being increasingly recognized that access to water and sanitation improves the health in general (Sridhar, 2008). Practice of WASH also prolongs the lives of those people living with AIDS. Schools with WASH attract more student intake, particularly girls. Absence of sanitation is known to kill 6,000 children a day. Currently, 2.6 billion people (4 in 10) have no toilet, and not even a bucket. Since 1970s, some 40 new diseases have been identified and in the last five years, 1,100 epidemics were recorded by WHO. Some of these are preventable if only water and sanitation were targeted. WHO also maintains an online registry of notifiable diseases up to the minute (Box 2). A study by Olaitan and Adeleke (2007) involving 5 Day-Care centres in the city of Abeokuta showed 11 species of enteric bacteria which are known to cause morbidity in children. Swabs from the floor, cots of the baby, the toilet and the hands of the nurses involved in their care showed the presence of *Staphylococcus aureus*, *Bacillus sp.*, *Klebsiella sp.*, *Pseudomonas aeruginosa.*, *Escherichia coli*, *Streptococcus faecalis*, *Proteus sp.*, *Shigella dysenteriae*, *Enterobacter aerogenes*, and *Micrococcus* suggesting the need for hygiene improvement in such places. It is also estimated that diarrhoea kills more children under five than TB, HIV and malaria combined.

Box 2. Watsan related diseases reported globally to WHO in the last 30 days (Accessed on December 10, 2008)	
Cholera	241
Dengue fever	69
Diarrhoea	26
Malaria	26
Hepatitis	24
Salmonella	23
Typhoid	11
Gastroenteritis	9
<i>E. coli</i>	5
Legionnaires	4
Polio	3
Chikungunya	2
Dysentery	2
Cryptosporidium	1
Scabies	1
Water-borne illnesses	1
Yellow fever	1

(This online service is most current, but do all countries report promptly?)

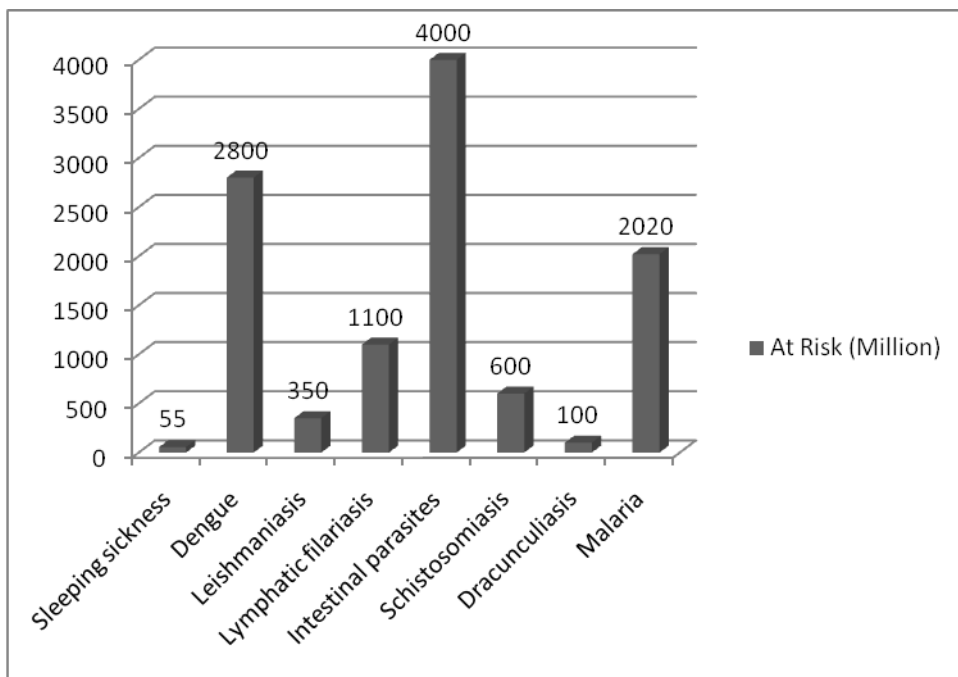


Figure 2 Estimates of population risk due to water related diseases (Adopted from Gopalan and Saksena, 1999)

4.1 Diarrhoea and gastro-intestinal infections

The 1993 World Development Report (Water and Sanitation Programme, 2004) estimated that diarrhoea and intestinal worm infections, account for 10 per cent of the total burden of disease in developing countries. This represents an annual loss of 117 million Disability Adjusted Life Years (DALYs). A survey on the morbidity pattern of a rural population in Nigeria among 1091 households in the Kainji Lake area indicated fevers, gastro-enteritis and chest infections, with prevalence rates of 50.2%, 37.1% and 10.0% respectively (Adekolu-John, 1991). Poor sanitation was found to be responsible. Besides these, cholera, typhoid and poliomyelitis have been posing challenges in the region.

4.2 Cholera

Cholera is recurring and cyclical in nature in Nigerian cities. The summer of 2005 has been marked by a wave of cholera outbreaks in West Africa. Several outbreaks of varying intensity occurred in Senegal, Burkina Faso, Mali, Guinea, Guinea-Bissau, Niger, Mauritania, Liberia and Nigeria (Tarantola, 2005). The outbreaks are a continuation of the seventh world cholera pandemic, which began in 1961, and is due to *V. cholerae* serogroup O1 biotype El Tor. The pandemic reached Africa in 1970 and had spread to all countries of the continent by 2001. In 2004, 56 countries officially notified 101,383 cases (including 2345 deaths) to the World Health Organization, of which 95,560 cases were notified by 31 African countries.

In Ibadan, cholera struck in 1970 (Lawoyin et al 199). In this outbreak, 1384 persons were seen, diagnosed and treated for the disease at the cholera unit, Ibadan from January to December 1996. Cholera cases were clustered within the densely populated and poorly planned areas of the city. Though significantly more cases were seen during the rainy season than during the dry season ($p < 0.01$), the deaths were not seasonally related ($p = 0.67$). Contamination of otherwise potable sources of water, late presentation to the cholera treatment unit and low levels of knowledge about diseases need to be addressed for effective control.

In Kano city, the number of cholera cases were 2 630; 847 and 2 347 in 1995/96, 1997 and 1999, respectively. The State Epidemiological Unit which is responsible for surveillance detected epidemics using set thresholds and activated multi-sectoral emergency responses. Control measures encompassed accurate diagnosis at the reference laboratory, Kaduna, registration of cases, case management and public health measures targeting personal hygiene and water treatment. The cholera epidemics attracted worldwide attention with emergency responses from many agencies including WHO, UNICEF and Medicins San Frontiers (MSF). Case fatality rates decreased from 15% in 1995/6 to 5% in 1997 and 2% in 1999. The organism responsible for all the outbreaks was *Vibrio cholerae*, el-tor of Inaba serotype. Water contamination of all sources was the principal cause of the epidemics. There were statistically significant differences in levels of faecal contamination of water sources, wells being most affected, followed by piped water, $\chi^2 = 11.556$, ($p < 0.02$). Boreholes were relatively safer sources of water. Point source epidemics always started from Kano City before fanning out to the rest of the State (Usman, 2005).

4.3 Poliomyelitis

The only countries where polio is still present are: Afghanistan, Egypt, India, Niger, Nigeria and Pakistan. Polio eradication is no longer a health issue, but became political issue. The

Global Polio Eradication Initiative, spearheaded by national governments, WHO, Rotary International, the US Centers for Disease Control and Prevention and UNICEF, has seen an international investment of US\$ 3 billion over 15 years and the involvement of 200 countries and 20 million volunteers. UNICEF provided 40% of the vaccines (al) in disease prevention. In 2002 it provided 2 billion doses of vaccines for over 100 developing countries. Rich countries, which must vaccinate their populations against polio, would benefit greatly from global eradication. However, given polio 's low prevalence and the many other pressing public health concerns that poor countries face, polio eradication may not be a high priority for individual developing countries. More recently in 2003, a change in vaccination policy in Nigeria led to an outbreak of polio, which had been virtually eliminated. The outbreak paralyzed thousands of children in Nigeria and spread the disease to 19 previously polio-free African countries (World Health Report, 2007). The Ministers have now agreed to an all-out effort to immunize every child against polio from early 2004, particularly in Nigeria, India and Pakistan, which together account for 95% of all polio cases worldwide. The first milestone toward global polio eradication may well come from Egypt, according to epidemiologists, followed closely by India.

4.4 Helminthic infections

In Nigeria, studies ([Wagbatsoma](#) and [Aisien](#), 2005; Ekundayo et al, 2007) showed intestinal helminth ova seen in order of prevalence include *A. lumbricoides*, 23 (11.1%); hookworm, 12 (5.8%); *T. trichiura*, 8 (3.8%); *Schistosoma mansoni*, 2 (1.0%); *Strongyloides stercoralis*, 1(0.5%) while multiple infection was recorded in 11 (5.3%) patients. Intensity of infection was low. In a study by Oyerinde et al (1979) in Lagos showed prevalence of *Entamoeba histolytica* was 11.2%. Prevalence increased rapidly in younger age groups and there were no significant differences between males and females. Prevalence was high among families who ate together from the same plate, among those who ate with their fingers and among those who ate away from home. Prevalence was not associated with type of water supply but was seemingly influenced by storage of household supplies. A low infection rate was associated with the availability of water closets and toilet habit.

4.5 Climate change impacts

A survey of 95 countries published earlier in 2006 by the Global Water Partnership found that only 20% of countries have Integrated Water Resources Management (IWRM) plans in place. IWRM seeks to “promote the coordinated development and management of water, land and related resources, and so maximize the resulting economic and social welfare in an equitable manner, without compromising the sustainability of ecosystems” (House of Commons International Development Committee, 2007). Besides man-made effects, climate change also plays a dominant role on water quality and health. It occurs in stages: “First there is a drop in water level in reservoirs or rivers in areas where rainfall drops. Then the quality of water goes down because sewage and industrial effluents become more concentrated, thereby exacerbating water-borne diseases and reducing the quality and quantity of fresh water available for domestic use.”

4.6 Maternal mortality

The estimated maternal mortality ratio in Nigeria ranges from 240 to 1700 per 100,000 live births. Studies have also reported these deaths to be associated with factors, which include lower proportion of skilled birth attendants, poor health infrastructure; lack of efficient referral systems, poverty and cultural/religious factors. Presently, maternal health is one of the key priority areas for the federal and state governments of Nigeria and the adopted

action plan includes capacity building of policy and programme managers, health care providers and community members (Oguntala, 2009).

4.7 Infant mortality and child health

Amobi (1983) lamented that the 10 most common diseases in Africa from four sampled countries (Ethiopia, Nigeria, Uganda, and Kenya) are: malaria, gastroenteritis, measles, respiratory tract infections, malnutrition, intestinal worm, anaemia, tetanus, meningitis, and tuberculosis. All these diseases are preventable, but prevention is more difficult because there are few health workers and inadequate facilities. In Nigeria there were 80 pediatricians and a few unrecognized pediatric trained nurses to look after about 40 million children. The situation in the new millennium is still gloomy. In addition, some 443 million school days are lost annually worldwide due to diarrhoeal diseases.

The MDGs aim to reduce inequality in infant mortality rates among and within countries. According to 2006 WHO statistics, rural infants, infants of uneducated others, and infants in the poorest households continue to have higher mortality risks than more advantaged infants. A comprehensive review by Ogbolu (2007) gave a succinct picture of infant mortality in present day Nigeria where cultural, economic, and regional differences are key factors in determining the status. Infant mortality in the northern (rural) region is almost twice that of the southern (urban) areas: 133 per 1,000 and 74 per 1,000, respectively. Similarly, there is also a disparity among the affluent Nigerians (68.6) and the poorest (102). The disparity in various indicators of infant mortality rates between northern and southern Nigeria are glaring: total fertility rate (children per woman), 7 and 4.9; infant mortality rate per 1,000 live births, 133 and 74; percentage of births attended by a health Professional, 13 and 59; and percentage of births in a health facility, 10 and 54, respectively. Poverty is the key factor contributing to lack of infrastructure, lack of education, poor nutrition, and poor health outcomes. The country's low GDP also affects maternal-child health because it limits access to adequate nutrition, quality health care, medications, safe water and adequate sanitation.

Although considerable advances in the reduction of global child morbidity and mortality have been made since 1970, when more than 17 million children died, the burden of child mortality is still intolerably high today. An estimated 10.5 million younger than the age of 5 years died in the year 2002 from largely preventable diseases, such as those having infectious, parasitic, and perinatal causes. The reductions in rates of mortality observed did not take place uniformly across time and regions of the world, but the success stories in developing countries demonstrate clearly that low mortality levels are achievable in those settings (Stein et al, 2003).

Nigeria has adopted and implemented a number of programmes to decrease infant mortality (including neonatal). Most of these are related to safe motherhood and infant survival: Safe Motherhood Initiative and its follow-up, Making Pregnancy Safer, Baby friendly Hospital Initiative, and Integrated Management of Childhood Illness. These programmes are backed by several policies and procedures: National Health Policy, 1988; Maternal and Child Health Policy, 1994; National Immunization Policy and Standards of Practice; Breast Feeding Policy, 1999; National Nutrition Policy; and Water Supply and Sanitation Policy, 2000. The outcome from these efforts is still poor.

4.8 Health problems associated with disasters and internally displaced people

Sub-Saharan Africa experienced heavy rains throughout July, August and September 2007 which resulted in severe flooding, leading to loss of life and extensive displacement of families. In Nigeria, the 9 most seriously affected states were: Lagos, Ogun, Plateau, Nasarrawa, Bauchi, Sokoto, Yobe, Borno and Kebbi. More than 46 people had lost their lives and about 2,500 families had been displaced. The National Red Cross Society came into action in providing food and shelter and undertaking hygiene and sanitation promotion, and health education activities - including HIV/AIDS awareness-raising campaigns. Other NGOs and CBAs assisted in controlling possible epidemics. However, it was observed that the basic infrastructure and minimal supplies for such emergencies are inadequate (International Federation of Red Cross and Red Crescent Societies, 2008). Similarly, emergency preparedness during fire, toxic spills, blasts, accidents and other calamities are grossly inadequate.

4.9 Health problems of special groups

A study on nomadic and semi nomadic pastoralists (Abdi-Kareem and Johan, 1999) showed that they make optimal use of scarce water and pasture in the arid regions south of the Sahara desert, spreading from Mauretania in the west to Somalia in East Africa. Drought forces nomads to concentrate near water sources or even into relief camps, with often disastrous consequences for their health. Nomads often avoid exposure to infectious agents by moving away from epidemics such as measles. Infant mortality is higher among them as compared to neighbouring settled populations. Childhood malnutrition is less frequent but Guineaworm is common. Trachoma is highly prevalent due to flies attracted by cattle. The high prevalence of tuberculosis is ascribed to the presence of cattle, crowded sleeping quarters and lack of health care. Treatment compliance is generally poor. Helminthic infections are relatively rare as people leave their waste behind when they move. Malaria is usually epidemic, leading to high mortality. Sexually transmitted diseases spread easily due to lack of treatment. Leishmaniasis and onchocerciasis are encountered. Brucellosis occurs but most often goes undetected. Existing health care systems are in the hands of settled populations and rarely have access to nomads due to cultural, political and economic obstacles. A primary health care system based on nomadic community health workers is a way forward.

4.10 Diseases during the human life cycle

The various disease risks in the human life cycle are given in Fig. 2. While WASH related infections do not discriminate age or gender, many others can be controlled or reduced through PHC initiatives.

4.11 Disease projections

Worldwide, the annual mortality from communicable maternal, perinatal, and nutritional disorders (Group 1) is predicted to decline from 17.2 million in 1990 to 10.3 million in 2020. In developed regions, osteoarthritis, dementia, and breast cancer are all expected to be among the ten leading causes of burden for women in 2020. DALYs due to all Group 1 disorders are expected to decrease substantially by 2020: infectious and parasitic diseases from 22.9% of DALYs worldwide in 1990 is expected to decrease to 12.9% (10.4 and 18.0) in 2020; DALYs due to maternal disorders are expected to fall from 2.2% to 0.3% (0.3 and 0.9) and those from respiratory infections to fall from 8.5% to 3.2% (3.0 and 4.8). Conversely, major increases in DALYs are expected for some of the leading non-communicable diseases: cancers from 5.1% to 9.9% (10.5 and 18.0); neuropsychiatric disorders from 10.5% to 14.7%

(15.7 and 12.2); 2020, and cardiovascular diseases, to rise from 11.1% to 14.7% (15.4 and 13.7), and chronic respiratory infections from 4.4% to 7.3% (6.5 and 6.7). Both unintentional and intentional injuries are projected to increase from 11.1% to 13.0% (13.8 and 11.3) and from 4.1% to 7.1% (7.6 and 5.7), respectively (Murray and Lopez, 1997).

5.0 MDGs -- A Timely Strategy for Achieving PHC Targets

Through MDGs, UN has attempted to secure a pledge from developed countries to halve the number of people without any form of sanitation—whether basic outdoor latrines or indoor toilets—by 2015. A review of progress in Sub-Saharan Africa indicated the following per cent differences (by 2006) since the MDGs started in 1990 (United Nations, 2006):

- Marginal decline in poverty : 44.5 to 44.0 (-);
- Hunger: 33 to 34 (+);
- Universal Primary Education: 53 to 54 (+);
- Educational gender gap: 42 to 33 (-);
- Gender equality: 32 to 35 (+);
- Women in politics: 7 to 16 (+);
- Under 5 mortality: 185 to 163 per 1000 live births (-);
- Protection against measles: 56 to 65 (+);
- Maternal mortality (Assisted deliveries): 42 to 46 (+) urban areas better covered;
- HIV spread and deaths : still on the increase;
- New cases of TB: 143 to 281 (+);
- Malaria awareness increased; people using ITN increased (+);
- Deforestation(Environmental sustainability): 29 to 27 (-);
- Energy use and CO₂ emissions: 360 to 363 Kg of oil per US\$ 1000 equiv. (+);
- Safe water and basic sanitation: 32 to 37 (+); urban-rural disparities are large;
- Growth of urban and slum populations: 4.5 to 4.6 (+);

A comprehensive evaluation by UNDP, of progress made by Nigeria so far (as by June 2006) is perhaps indicative of the trends (Box 3). A Joint Monitoring Programme for Water and Sanitation Coverage (WHO/UNICEF, 2006) however, estimated that by 2004, Nigeria has covered improved sanitation only by 53% (sewer connections 23%) in urban areas and 36% (sewerage coverage 6%) in rural areas. The Seven point Agenda of the President of Nigeria is aimed at poverty alleviation and include: power and energy, food and security, wealth creation, transport sector, land reforms, security, and education which will aid in further improving the health care.

6.0 Economics of WASH Interventions in PHC and Disease Control

The largest economic burden of disease in Nigeria has been identified as communicable diseases, including malaria, tuberculosis, and HIV/AIDS. Improvements in water supply and sanitation figured prominently in the recent 'Copenhagen Consensus', at which a panel of leading economists ranked water and sanitation projects among the top ten most cost-effective ways to advance global welfare (www.copenhagenconsensus.com; accessed in December 2008). The reasons given were: these interventions result in quantifiable benefits with substantial direct economic value, cost-effective, with benefits outweighing costs by a factor of more than ten, reduce the need for public expenditures in other sectors (e.g. curative health services), and make expenditures in others, such as education, more

effective, stimulate a chain reaction of economic growth and poverty alleviation, and are highly valued by the poor.

A review of available literature and country experiences reveal that improvements to water supply and sanitation provide benefits from: (a) improving health, and therefore worker productivity, (b) increasing life expectancy and earning capacity over the life span; (c) ensuring more children attending school; (d) facilitating additional revenue generating activities (e.g. small industry, backyard farming etc.) for food security; (e) reducing the cost of individuals spending on basic needs; and offering dignity, privacy and social status. Thus water supply and sanitation are both strategic tools in poverty alleviation, and also reduce the amounts that governments must spend in.

On health benefits, diarrhoea and intestinal worm infections, account for 10 per cent of the total burden of disease in developing countries. This represents an annual loss of 117 million Disability Adjusted Life Years (DALYs). Improved water supply and sanitation services would reduce the diarrhoeal and worm disease burden by 40 per cent, or 11.4 DALYs for every 1000 people annually.

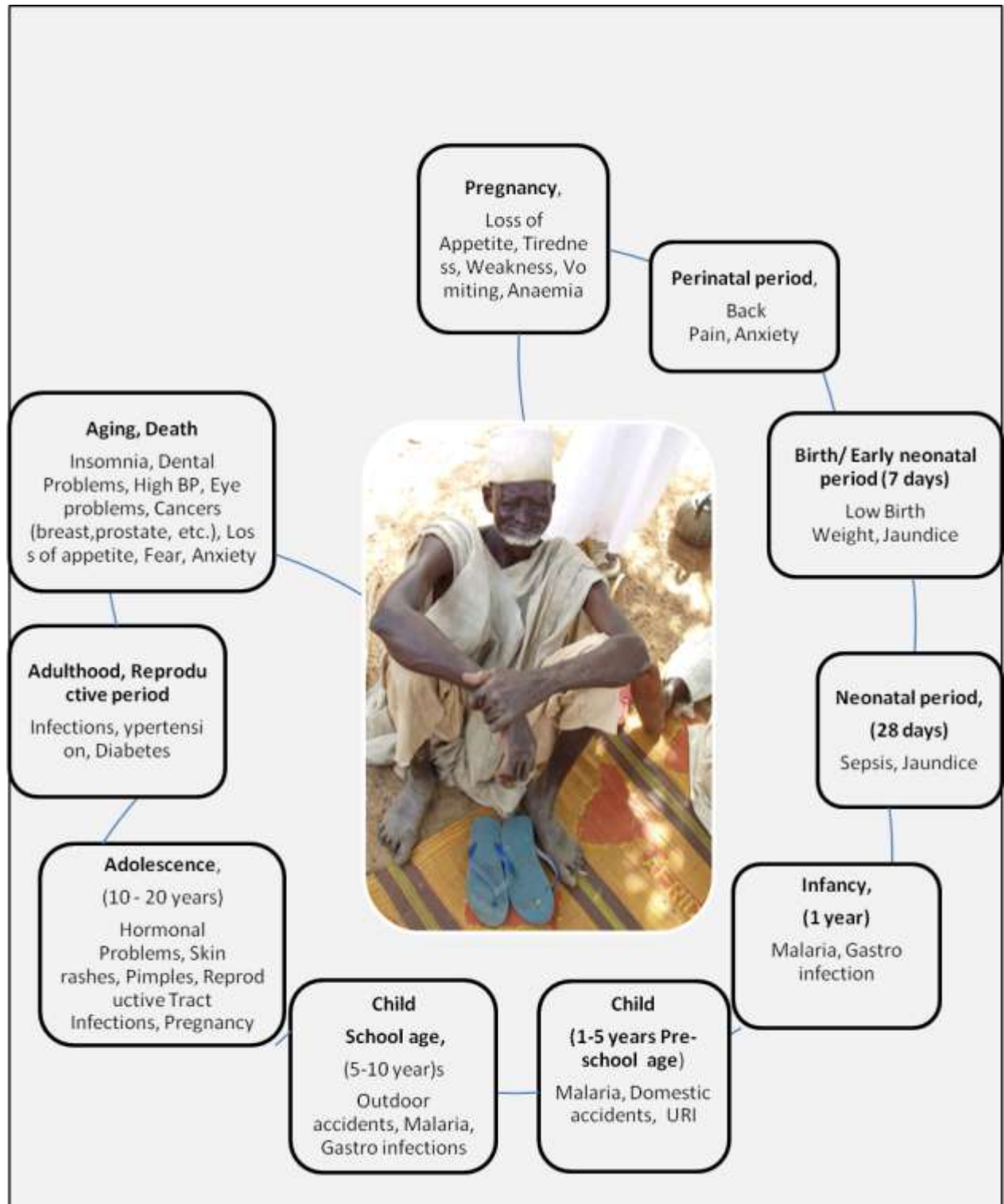


Figure 2 Disease risks in the human life cycle

Box 3. MDGs: Nigerian Scenario (Relevant to PHC) as at 2004 (UNDP, 2006)

Goal 1: Eradicate Extreme Poverty and Hunger

- Percentage of population living in relative poverty declined from 65.6 % in 1996 to 54.4 % in 2004.
- Percentage of population living in extreme poverty (i.e., those that cannot afford 2900 calories per day) stood at 34.9 % in 2004.
- Unemployment declined from 14.8 % in 2003 to 11.8 % in 2004. Percentage of underweight children fell marginally from 35.7 % in 1990 to 30.7 % in 2004.

Goal 2: Achieve Universal Primary Education

- Primary school enrolment (gross) rose steadily from 67.7 % in 1990 to 93 % in 2001 before rising appreciably to 123.0% in 2003; girl enrolment declined to 79 % in 2004.

Goal 3: Promote Gender Equality and Empower Women

- Women appear to have become increasingly favoured in wage employment in the non-agricultural sector. It increased from 62% in 2000 to 79.4% in 2003/2004.

Goal 4: Reduce Child Mortality

- Against a target of about 30, infant mortality (per 1000 live births) worsened from 91 in 1990 to 100 in 2003.
- Under-five mortality rate (per 1000 live births) also worsened from 191 in 1990 to 201 in 2003.
- The proportion one-year-old children immunized against measles declined from 46 in 1990 to 31.4 in 2003.

Goal 5: Improve Maternal Health

- Maternal mortality ratio per 100,000 still remains at abysmally high level remaining at 704 as at 1999.
- Proportion of births attended by trained health personnel worsened from 45 in 1990 to 36.3 % in 2003.

Goal 6: Combat HIV/AIDS, Malaria and other diseases

- HIV prevalence among 15 - 24 years old women declined from 5.9 % in 2001 to 5.2 % in 2003 while the national prevalence rate fell from 5.8 % to 5.0 % during the same period of analysis. Regional prevalence varied significantly from 7.0 % in the North Central to 2.3 % in the South West in 2003.
- Only 40.4 % of Female and 58.4 % of Male had adequate knowledge of HIV/AIDS prevention in 2003.
- AIDS- Orphans are estimated to have reached 1.8 million in 2004. Deaths resulting from malaria rose from about 1.1 million in 1990 to about 1.8 million in 1998.
- Susceptibility to tuberculosis is increasing because of declining immunity resulting people living with HIV/AIDS.

Goal 7: Ensure Environmental Sustainability

- Proportion of land area covered by forest increased from 10% in 1990 to 12% in 2004.
- Proportion of gas flared declined from 68% in 1990 to 40 % in 2004. There is high hope for meeting zero flaring by 2008.
- Proportion of households with access to safe drinking water has been improving due to significant allocation of resources to water resources, which had resulted into the establishment of many dams and water reservoirs in the country.
- Proportion of households with access to basic sanitation improved from 56.5 % in 1990 to 72 % in 2003.

Goal 8: Develop a Global Partnership for Development

- Debt servicing, as a proportion of GDP is high, but will be lower with debt forgiveness by the Paris Club.
- Per capita overseas development assistance (in US\$) remains abysmally low at USD2.3.

Since each DALY represents a year in which a worker cannot work due to sickness or premature death, this means that every 1000 people would include 11 additional healthy and productive persons. The WHO estimates that meeting the MDGs would save almost US\$1.7 billion annually in Africa in treatment costs for diarrhoea alone, or more than US\$1.60 per capita. For every US\$ spent, a benefit of \$11 is realized. The WHO Commission examined the growth rates of several dozen countries, with a range of infant mortality rates, between 1965 and 1994. Those which started out with lower infant mortality rates experienced higher economic growth. For example, among the poorest countries, those with an initial infant mortality rate of between 50 and 100 per live births recorded an average growth rate of 3.7 per cent per year, while those with an infant mortality rate >150 recorded an average growth rate of only 0.1 per cent per year (Water and Sanitation Program-Africa, 2004)).

7.0 Water and Sanitation Interventions

Improvements in WASH activities are the major interventions in sustaining PHC. UNICEF championed this through water supply interventions in 2007 (UNICEF, 2007) where Nigeria obtained support for over 1.2 million beneficiaries, followed by Sudan (420,000), Indonesia (350,000) and Afghanistan (200,000). Barriers to global sanitation coverage have been inadequate investment, water availability, poor or nonexistent policies, poor governance, poor resources and gender disparities, and choice of water and sanitation technologies.

a) Technologies for Water and Sanitation Improvement

Table 1 gives various technologies to provide water which can work in Nigeria at reasonable investment among communities.

Table 1. Water supply technologies suitable for Nigerian conditions

Serial No.	System	Choice / Features
1.	Tube well with hand pump	a tube well is chosen when: · The water level is too deep for a Dug Well · Strata are too hard for hand digging · The seasonal fluctuation of the water table in the area exceeds 2 m/year · In highly densely populated areas, where it is not possible to identify a suitable location far enough from contamination sources -Design period 10 years; -water demand 25lcpd; -Yield >16litres/40 strokes -Suitable for 25 families but not less than 17 families utilizing 70% of capacity;
2.	Dug well with hand pump	Hand dug well will have a hand pump, a concrete apron and drain; · It is appropriate when the seasonal fluctuation of the water table is < 2m in a normal year and the water table is higher than 50 m. · If the well is dug during the dry season and a sludge-pump is used the well can be made deep enough to provide water during dry season; · An improved dug well is hand dug and costs much less than a tube well and enables more people to have a safe water supply. (Cost of 1 tube well equals 2 hand-dug wells). -Suitable for 25 families but not less than 17 families utilizing 70% of capacity;
3.	Piped supply (with gravity flow)	Components: Intake, Collection Chamber/ Distribution Chamber, air valve/washout Break Pressure Tank, disinfection, Storage tank; -Design period 20 Years; -Demand 25lcpd; -Surface sources need to be disinfected;
4.	Other options depending on situations: -Spring -Infiltration gallery -Rain water harvesting	-Needs protection from human contact and pollution -Roof gutters, leaf screens and storage tank; disinfection optional

- A proper well design includes, determining the depth and diameter for the best yield, sanitary protection, procedures for well cleaning/development, testing, and disinfection; choice of pumps: <15 m deep Afridev Kabul, 15 – 45 m Afridev Indus, 45 m – 60 m Afridev Pamir; Perform chemical and microbiological analyses of the water to determine the characteristics of the water in the aquifer; this helps predict the susceptibility of the well to encrustation or erosion, provide information on the water quality, and serve as a baseline record to detect any change in water quality or contamination;
- At the beginning quality of water from the well should be checked for physical, chemical and bacteriological parameters. At least turbidity, taste, color, pH and fecal coliform/ bacteriological parameters should be checked;
- There are a number of ways of improving the quality of drinking water. The most common are sedimentation and filtration followed by disinfection. Disinfection is through the addition of chlorine. Chlorine will only work correctly, however, if the water is clear; storage can also destroy pathogens;
- Storage capacity:75% of the total daily demand or Total water available from the source; Ferro-cement tanks are cheaper;

- Moving water by tankers should be avoided if possible. It is expensive and difficult to organize. It should be seen as a temporary measure to allow for the development of a more sustainable solution

Sanitation may be achieved using on-site or off-site technologies (Table 2) which have been accepted by the Nigerian populations (Oluwande et al, 2008). Where there is no adequate water, on-site technologies are preferred.

Table 2. Sanitation technologies suitable for Nigerian conditions

Serial No.	System	Choice / Features
1.	'SanPlat' or Sanitary Platforms	<ul style="list-style-type: none"> • Durable squatting slabs which can be placed on existing pit latrines; a fitting lid covers the opening; • The opening is safe for children as it is small enough; • More than a million people in 22 States in Nigeria preferred this design;
2.	Pit latrine	<ul style="list-style-type: none"> • Consists of a 2 m or more deep pit, 1.0 to 1.5 m wide, covered with a raised slab with a squat hole supported on all sides; it should be lined; • Low cost; can be built by the householder; needs no water to operate; no skills required; • Fly nuisance, mosquito breeding, smell may be problems
3.	Borehole latrine	<ul style="list-style-type: none"> • A borehole excavated with a hand auger or by machine; diameter is about 400 mm and the depth is 6-8 m; • Easy to excavate; suitable for short term use, e.g. disaster situations. • Sides may be fouled, fly problem, short life span, risk of groundwater pollution
4.	Ventilated Pit latrine -- Single pit -- Double pit	<ul style="list-style-type: none"> • Pit is ventilated by a pipe extending above the latrine roof with a fly-proof wire net across the top; • The inside of the superstructure is kept dark. • Low cost; can be built by the householder; needs no water for operation; no skills required; flies are under control; no smell. • does not control mosquitoes, extra cost of providing vent pipe, need to keep interior dark
5.	Pour-flush latrine	<ul style="list-style-type: none"> • A latrine fitted with a pan providing a water seal; water is poured to flush out into the pit; water seal prevents flies, mosquitoes and odours. Very useful culturally where people use water for anal cleaning. • Low cost; control of flies and mosquitoes; absence of smell; users enjoy the convenience of a WC; can be upgraded into a sewerage system in due course; • Reliable water supply is needed though limited quantity, unsuitable if solid material is used for anal cleaning.
6.	Aqua privy	<ul style="list-style-type: none"> • It consists of a tank filled with water into which excreta drop through a pipe or chute hanging from the latrine floor. It undergoes biological decomposition, reduces in volume and flows into a soakaway; it has 4 parts—a tank with a seat and drop pipe, a roof, and a soakaway; preferred for water logged areas; • More aesthetic, little or no odour, simple, inexpensive, can be near dwellings • Less amenable for abuse, preferred where water table is high; • Cost higher than pit latrine, need for some water (about 40 l per day is adequate) • Needs daily upkeep, desludging needed at intervals
7.	Septic tank	<ul style="list-style-type: none"> • Useful in low-density households, institutions, schools and hospitals. It is usually designed to take waste water from toilets, kitchen, bathroom and others. The waste water stays for at least 1 day but up to 3 days and stabilized before entering into a soakaway; • Here settlement of heavy solids, flotation of oil and grease as scum and partial decomposition; • of organic matter takes place. Hook-worm and Ascaris eggs are destroyed to a great extent; • Need to be desludged once in 1-4 years; too much accumulation of scum and sludge will reduce the volume of liquid; Fresh sludge may still contain pathogens;

There are technologies to tackle the sanitation problems but we lack the technologies on the community mobilization, the community participation and involving the private sector. The World Bank estimates that progress against child mortality has so far been so slow that no sub-Saharan country in Africa is on target to reach this goal. Currently only 16% of developing countries are on track for achieving the child mortality target. The maternal mortality goal is faring little better: only 17% of developing countries are likely to meet this target. In Latin America and the Caribbean, for example, just 4.2% of countries are on track for reducing maternal mortality to levels set by the MDGs for 2015. In addition, 60% of developing countries will fail to adequately reduce malnutrition.

Among environmental interventions, hand washing and point-of-use water treatment both reduce diarrhea, although more needs to be learned about ways to encourage households to take up these behavior changes. In contrast, there is little evidence that providing community-level rural water infrastructure substantially reduces diarrheal disease or that this infrastructure can be effectively maintained.

b) New Approaches for Sanitation Improvement

Sanitation is one of the most off-track MDGs, with the crisis focused on Sub-Saharan Africa and South Asia, both of which have very low coverage. A survey conducted in UNICEF Zone C States in Nigeria (Sridhar et al 2008, unpublished data) indicated that health is not the primary reason that people want latrines—self esteem, privacy, and convenience rank higher than health concerns.

DFID considers “Sanitation needs international champions to reverse decades of neglect”—and, with some re-prioritization and staff reconfiguration, DFID volunteered to be one of these champions. Sanitation should be pushed far higher up the global political agenda. If progress towards the sanitation MDG target is not rapidly stepped up, the attainment of all the other MDGs will be compromised” (House of Commons International Development Committee, 2007).

A new concept in improving sanitation is ‘socially-driven marketing’. Typical examples include

- i) Public-Private Partnership for hand washing in Ghana, through which government, donors, universities and soap companies are trying to prevent the 9 million episodes of diarrhoea which account for a quarter of child deaths in Ghana each year. Use of soap for hand washing has increased from 4% to 13% in a short period of time (*Scott B., Schmidt W., Aunger R., Garbrah-Aidoo N. and Animashaun R., Marketing Hygiene Behaviours: The Impact of Different Communication Channels on Reported Handwashing Behaviour of Women in Ghana, Health Education Research (forthcoming)*).
- ii) Another highly successful example of socially-driven behaviour change can be found in the Community-Led Total Sanitation Scheme (CLTS) pioneered by Water Aid and the Village Education Resource Centre in Bangladesh. CLTS does not seek to provide latrine infrastructure but facilitates self and community analysis of defecation habits. Empirical evidence has shown that when individuals understand the health risks of open defecation, disgust and shame tend to provoke communities into a collective decision to reject the practice. Community success is then broadcast on billboards outside the villages. Through CLTS, Bangladesh will meet the MDG target for sanitation. Coverage is reported to have increased from 33% in 2003 to 70% in 2006

and is set to reach 100% by 2010. CLTS is being experimented in Nigeria in the middle belt States.

8.0 Conclusions and Recommendations

From the available information it is evident that water and sanitation together with hygiene practices play a significant role in the practice of PHC and in achieving the MDGs. Sanitation is still off the track in reaching the Millennium Goals. The preventable diseases diarrhea, malaria, Helminthic infections and polio are still in the communities at a high level. Cholera, typhoid and gastroenteritis are recurring in all age groups. Maternal mortality and child mortality are still at very high level. Communities are willing to change their behaviour. Poverty is a stumbling block. Government should inject a renewed sense of confidence in the communities so that they can play a vital role in achieving the goals. The President's seven point agenda is a way forward if the words are backed by actions. To achieve the Millennium Development Goals, the pace at which the Government is moving is not sufficient. There should be a more aggressive approach. More funding and involvement of Local Governments with appropriate checks for accountability and transparency will go a long way.

The following recommendations are thus made:

1. There should be policies without frequent changes. Policies should be tagged on to achievable targets rather than personal interests.
2. The major impact of PHC is in the provision of adequate and safe water supply and sanitation. Access to water and sanitation should be considered as human rights.
3. In the provision of water and sanitation, a more aggressive approach should be made with an annual target.
4. Communities who have achieved the stipulated targets should be identified and rewarded for others to follow.
5. Effective monitoring and evaluation should be implemented on the projects during progress and at the time of conclusion. Transparency and accountability should be the watch words.
6. Local Governments should be adequately involved in all the projects and indeed they should be in the forefront with the assistance of CBOs and NGOs.
7. In many communities, particularly in the northern States, women should be empowered to participate in the WASH activities.
8. Even though there is reduction in abuse of school going child sending on errands in procuring water and other domestic needs, they should be encouraged to go to school.
9. Hygiene practices at home, school or business places should always be encouraged with more ICT materials and enlightenment programmes.
10. Some newer approaches such as picking up champions and initiating CLTS as tried in Ghana and Bangladesh should be tried in communities to make the WASH activities more interesting and to build confidence among the communities who are lagging behind.
11. In spite of various agencies and government arms, the data base is still very poor. The only reliable sources are from Development partners or research institutions. Good Data gathering mechanism, storage and retrieval should be made a priority for any meaningful programmes to yield results.

12. Polio is on its way out. More rigorous immunization activity should be pursued to achieve success.
13. Banking and Insurance sector may be involved in raising soft loans for water and sanitation programmes at community level. Some of the environmental management activities should be viewed as revenue generating activities (e.g. use of waste water for farming, converting waste to wealth etc.).
14. While controlling traditional diseases, the country should be prepared for emerging diseases, resistant diseases and those that may emerge as a result of climate change.
15. More funding should be made available as prescribed by the WHO for health care as development can only be realized with the healthy citizens.

9.0 References

Abdikarim Sheik-Mohamed and Johan Velema, P. (1999). *Where health care has no access: the nomadic populations of sub-Saharan Africa*, *Tropical Medicine & International Health*, 4(10):695-707.

[Adekolu-John, E. O.](#) (1991). A health examination survey of morbidity in rural Nigeria, *African Journal of Medicine and Medical Sciences*, 20 (1): 15-22.

Amobi, I. (1983). [Nigeria: child health](#), *Nursing Times*, 79 (5): 51-3, 56.

Claeson Mariam and Waldman, Ronald J. (2000). *The evolution of child health programmes in developing countries: from targeting diseases to targeting people*, *Bull. World Health Organization*, Vol.78: No.10, pp. 1-23.

Ekundayo, O. J., Aliyu M. H. and Jolly, P. E. (2007). *A review of intestinal helminthiasis in Nigeria and the need for school-based intervention*, *Journal of Rural and Tropical Public Health* 6: 33-39.

Federal Ministry of Health (2004). *Revised National Health Policy*, Abuja, September, pp.1-57.

Gopalan, H. N. B and Saksena, S. (1999). *Domestic Environment and Health of Women and Children United Nations Environment Program*, (cited by Lada Kochtcheeva and Ashbindu Singh, in a Report 'An Assessment of Risks and Threats to Human Health Associated with the Degradation of Ecosystems', UNEP, UNEP/Division of Environmental Information, Assessment & Early Warning -North America, USGS EROS Data Center, Sioux Falls, SD 57198-0001 USA, ISBN:92-807-1834-7, pp 1-28.

Hargreaves, S. (2003). *Time to right the wrongs: improving basic health care in Nigeria*. *The Lancet*, 359: Issue 9322, 2030 – 2035.

House of Commons International Development Committee (2007): *Sanitation and Water, Sixth Report of Session 2006–07, Volume I, Report, together with formal minutes*, Authority of the House of Commons, London: The Stationery Office Limited, April 17.

International Federation of Red Cross and Red Crescent Societies (2008). *Nigeria: Floods, Disaster Relief Emergency Fund No. MDRNG 004*, May, pp. 1-7.

Lawoyin, T. O., Ogunbodede, N. A. Olumide, E. A. A. and Onadeko, M. O. (1999). *Outbreak of cholera in Ibadan, Nigeria*, [European Journal of Epidemiology](#), 15 (4): 365-368.

Muanya Chukwuma (2008), *A woeful health sector performance in 2008*, *The Guardian, Nigeria*, December 29, 1.

Murray, C. J. L and Lopez, A. D. (1997). *Alternative projections of mortality and disability by cause 1990–2020: Global Burden of Disease Study*, *Lancet*, 349: 1498–1504.

Ogbolu Yolanda (2007). Neonatal Mortality: A Critical Global Health Issue, Neonatal Network, Vol 26: 1-4.

Oguntala, S. (2009). UI, Bill and Melinda Gates collaborate on maternal health problems, Nigerian Tribune, January 6.

Olaitan, J. O. and Adeleke, O. E. (2007). Bacteria in Day Care Environment. The Internet Journal of Microbiology, 3 No 1: pp. 4., ISSN 1937-8289.

Oluwande, P. A., Sridhar, M. K. C. and Oyediran, A. B. O. O. (2008). Water, Sanitation and Hygiene: A Manual, Published by Nigeria Network for Awareness and Action for Environmental Health (NINAAFEH), Ibadan, Bookbuilders, pp. 1-29.

Oyerinde, J. P. O. Alonge, A. A., Adegbite-Hollist, A. F. and Ogunbi, O. (1979). The Epidemiology of *Entamoeba histolytica* in a Nigerian Urban Population, International Journal of Epidemiology, Vol. 8: 55-60.

Rufaro, R. C. and Tumusime, P. (2004). Primary health care: a review of its implementation in sub-Saharan Africa, Primary Health Care Research and Development (2004), 5 (4): 296-306.

Sridhar, M. K. C. (2008). Sanitation. Chapter 9 in Nigerian Health Review 2007-Primary Health Care in Nigeria: 30 Years after Alma Ata, published by Health Reform Foundation of Nigeria (HERFON), Abuja, Nigeria, pp 1-45.

Stein, C., Inoue, M. and Fat, D. (2003). The global mortality of infectious and parasitic diseases in Children, Seminars in Pediatric Infectious Diseases, Volume 15 (3): 125 – 129.

Tarantola, A., loos, S. and Lapidus, N. (2005). Current cholera epidemics in West Africa and risks of imported cases in European countries. Euro Surveill. 2005; 10(35): pii-2785.

UNICEF (2007). Water, Sanitation and Hygiene Annual Report 2007, WES Section, Programme Division, UNICEF New York, pp. 1-49.

United Nations (2006). The Millennium Development Goals Report 2006, Published by the United Nations Department of Economic and Social Affairs, New York, pp. 1-32.

Usman, A., [Sarkinfa, F.](#), [Mufunda, J.](#), [Nyarango, P.](#), [Mansur, K.](#) and [Daiyabu, T. M.](#) (2005). Recurrent cholera epidemics in Kano --Northern Nigeria, [Cent Afr. J. Med.](#), 51(3-4): 34-8.

[Waqbatsoma, V. A.](#) and [Aisien, M. S.](#) (2005). Helminthiasis in selected children seen at the University of Benin Teaching Hospital (UBTH), Benin City, Nigeria, [Nigerian Postgraduate Medical Journal](#), 12 (1): 23-27.

Water and Sanitation Program –Africa (2004). The Case for Water and Sanitation, Nairobi, pp. 1-13.

WHO / UNICEF (2006). *Joint Monitoring Programme for Water Supply and Sanitation Coverage Estimates : Sanitation, Nigeria, Wssinfo.org, June, pp. 1-6.*

World Health Report (2007). *A Safer Future: Global Public Health Security in the 21st Century, cited by Crystal Davis, Earth Trends Environmental Information, World Resources Institute,*