National Policy

and

Strategic Plan of Action

on
Prevention and Control of
Non-Communicable Diseases
(NCDs)

Non-Communicable Disease Control Programme
Federal Ministry of Health
Abuja, Nigeria.
May 2013

Foreword

I am indeed delighted to write the foreword to this maiden edition of the National Policy and strategic plan of action on Non-Communicable Diseases (NCDs). As we are all aware, Nigeria is currently undergoing both epidemiological and demographic transition from Communicable Diseases to Non-Communicable Diseases (NCDs) and as a result, NCDs are increasingly becoming an important contributor to the national disease burden and therefore a major public health problem. Major NCDs in Nigeria include hypertension, diabetes mellitus, coronary heart disease, stroke, sickle cell disease, cancers, asthma, oral health diseases, mental health, alcohol, and substance use disorders, and road traffic injuries and violence. The modifiable risk factors for NCDs are unhealthy diet, physical inactivity, use of tobacco and harmful use of alcohol. Other risk factors include climate change, occupational exposure, advancing age and unhealthy reproductive or sexual behaviour. In 2005, NCDs accounted for about 35 million (60%) deaths worldwide of which 80% occurred in developing countries including Nigeria. Death toll from NCDs is projected to increase by a further 17% over the next decade unless something positive is done urgently. NCDs are virtually without a cure, extremely expensive to treat and notorious for causing debilitation, discomfort, morbidity, disability and premature deaths.

As part of our commitment to the fight against NCDs, Nigeria was signatory to the political declaration at the UN General Assembly High Level Meeting on NCDs in September 2011. Thus, the purpose of this document is to develop and ensure the implementation of policies and programmes that will engender and guarantee a healthy lifestyle and quality health for all Nigerians. The core sections include background, scope of the policy, policy goal, strategic thrusts for implementation, programme management and coordination, roles of stakeholders and partnership coordination. It is expected that with the adoption of this policy, the control and prevention of NCDs and their associated risk factors will be well integrated at all levels of government and health care delivery system in Nigeria. This policy document is therefore a stepping stone towards the development of guidelines for the prevention and management of NCDs.

In conclusion, I would like to express my profound appreciation to experts and stakeholders on NCDs for their commitment throughout the development stages of this policy. Their effort is warmly and heartily acknowledged. I am assuring you that this policy document would be circulated at all levels of government including private organizations for immediate implementation.

Professor C.O. Onyebuchi Chukwu
Honourable Minister of Health
May 2013

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S/N	NAME	DESIGNATION	ORGANIZATION
1	Prof. C.O. Onyebuchi Chukwu	Honourable Minister	Federal Ministry of Health
2	Dr. Muhammad Ali Pate	Honourable Minister of State	Federal Ministry of Health
3	Mrs. Fatima Bamidele	Permanent Secretary	Federal Ministry of Health
4	Dr. Mansur Kabir	Former Director Public Health	Federal Ministry of Health
5	Dr. Bridget Okoeguale	Director Public Health	Federal Ministry of Health
Members of National Experts Committee on NCDs			
6	Prof. Ima-Obong A. Ekanem (Chairman)	Consultant Pathologist	University of Calabar Teaching Hospital, Calabar
7	Prof. Ambrose O. Isah	Consultant Clinical Pharmacologist	University of Benin Teaching Hospital, Benin
8	Mrs. Sherifat A. Abari	Former National Coordinator NCD	Lagos
9	Dr. Jacintha E. George	Former National Coordinator NCD	Lagos
10	Dr. David Okello	Former WHO Country Representative	WHO Country Office Nigeria
11	Dr. Rui Gama Vaz	WHO Country Representative	WHO Country Office Nigeria
12	Dr. Emmanuel Musa	MO/DPC	WHO Country Office Nigeria
13	Prof. Owoidoho Udofia	Consultant Neuropsychiatrist and President	University of Calabar Teaching Hospital, Calabar
14	Prof. Oye Gureje	Consultant Neuropsychiatrist	University College Hospital, Ibadan
15	Dr. Victor Makanjuola	Consultant Neuropsychiatrist	University College Hospital,

			Ibadan
16	Dr. J.O. Lawson	Consultant Paediatrician	Zankli Medical Centre, Abuja
17	Dr. Ogugua Osi-Ogbu	Consultant Geriatrician	National Hospital Abuja
18	Dr. Biodun Ogunbo	Consultant Neurosurgeon	National Hospital Abuja
19	Dr. Obiageli E. Nnodu	Consultant Haematologist	University of Abuja Teaching Hospital
20	Dr. Mustapha Jamda	Public Health Physician	University of Abuja Teaching Hospital
21	Dr. Emmanuel C. Otoh	Consultant Dental Surgeon	Regional Centre for Oral Health Research and Training Initiatives (RCORTI) for Africa Jos
22	Dr. Bashiru O. Ismaila	Consultant General Surgeon	Jos University Teaching Hospital
23	Dr. Peter U. Bassi	Consultant Clinical Pharmacologist	University of Maiduguri Teaching Hospital
24	Mrs. Mnena S. Lan	Pharmacist/Programme Officer	Nigerian Academy of Science
25	Dr. Sunny Chinenye	Consultant Physician and President DAN	Diabetes Association of Nigeria (DAN)
26	Dr. Mijinyawa Bashir	Consultant Endocrinologist	Diabetes Association of Nigeria
27	Dr. Bawa A. Abimiku	Consultant Pathologist/ President NCS	Nigeria Cancer Society
28	Dr. Kingsley K. Akinroye	Executive Director	Nigerian Heart Foundation
29	Mrs. Adanma Odefa	Chief Executive Officer	Diabetes and Hypertension Help Society
30	Dr. Olanrewaju O. Onigbogi	Consultant Public Health Physician	College of Medicine University of Lagos/ Global Actions, Lagos
31	Mrs. Lola Kola	National Consultant Mental Health	WHO Country Office, Nigeria
32	Dr. Luka M. Ibrahim	NFELTP Resident	Federal Ministry of Health
33	Miss Faith O. Ezinwa .	Industrial Trainee in FMOH	Enugu State University of Science and Technology
Staff Non-Communicable Diseases Control Programme			
34	Dr. Anthony Usoro	Divisional Head NCD/NTD/OH	Federal Ministry of Health
35	Mrs. Jummai J.C. Balami	CNO/NCD	Federal Ministry of Health
36	Mr. Joseph O. Nwokocha	CEHO/NCD	Federal Ministry of Health
37	Dr. Mangai T. Malau	SMO/NCD	Federal Ministry of Health
38	Dr. Jibrin B. Suleiman	MO/NCD	Federal Ministry of Health

39	Dr. Alayo Sopekan	SMO/NCD	Federal Ministry of Health
40	Dr. Benard A. Bene	MO/NCD	Federal Ministry of Health
41	Mrs. Veronica S. Augustine	MLT /NCD	Federal Ministry of Health
42	Mrs. Bosede Kehinde	SO	Federal Ministry of Health
43	Mrs. Nneka Etta	ACSO/NCD	Federal Ministry of Health
44	Mrs. Fortune Udott	MLS	Federal Ministry of Health
45	Miss Funmi Areola	CCO/NCD	Federal Ministry of Health
	Associations and other Stakeholders		
46	Nigerian Cardiac Society		
47	Nigerian Association of Nephrology		
48	Diabetes Association of Nigeria		
49	Nigeria Cancer Society		
50	Nigerian Heart Foundation		
51	Nigerian Hypertension Society		
52	Christian Association of Nigeria		
53	Supreme Council of Islamic Affairs		
54	National Council for Women Society		
55	Federal Road Safety Commission		
56	Sickle Cell Disease Network of Nigeria		
57	States Ministry of Health		
58	Federal and States Ministry of Education		
59	Federal and States Ministry of Information		
60	National Primary Health Care Development Agency		
61	National Health Insurance Scheme		
62	Health Management Organizations		
63	Regional Centre for Oral Health Research and Training Initiatives for Africa		
64	Directors of PHCs in all local government areas		
65	Community and Religious Leaders		

66	Regulatory and Professional Bodies of Primary Health Care and Allied Health Workers
67	Conglomerates Involved in Manufacturing of Oral Health Products
68	National Assembly
69	Regulatory Agencies – MDCN, Dental Therapists Registration Board
70	Schools of Health Technology
71	Federal Ministry of Finance
72	Federal Ministry of Agriculture
73	Federal ministry of Internal Affairs
74	Nigerian Customs Services
75	Standard Organization of Nigeria
76	Anti-tobacco Coalition Group
77	Export Promotion Council
78	Media (Nigerian Television Authority, dailies, newspaper houses etc.)
79	National Orientation Agency
80	Broadcasting Organization of Nigeria

Dr Bridget Okoeguale
Director, Public Health
May 2013

Abbreviations and Acronyms

Abbreviations/acronyms	Meaning
AIDS	Acquired Immuno-deficiency Syndrome
ACEHO	Assistant Chief Environmental Health Officer
ACSO	Assistant Chief Scientific Officer
CCO	Chief Clerical Officer
CNO	Chief Nursing Officer
CEO	Chief Executive Officer

CSO	Civil Society Organization
CBN	Central Bank of Nigeria
CHD	Coronary Heart Disease
CBO	Community Based Organization
DALYs	Disability Adjusted Life Years
DHS	Demographic Health Survey
DM	Diabetes mellitus
DAN	Diabetes Association of Nigeria
DPC	Disease Prevention and Control
EBV	Epstein Barr Virus
FBOs	Faith Based Organizations
FCT	Federal Capital Territory
FMOH	Federal Ministry of Health
FRSC	Federal Road Safety Commission
FCTC	Framework Convention on Tobacco Control
GDP	Gross Domestic Product
GNP	Gross National Product
GYTS	Global Youth Tobacco Survey
Hg	Haemoglobin
HHV-8	Human Herpes Virus 8
HIV	Human Immune deficiency Virus
HBV	Hepatitis-B Virus
HCV	Hepatitis-C Virus
HPV	Human Papilloma Virus
IDSR	Integrated Disease Surveillance and Response
ISH	International Society of Hypertension
LGA	Local Government Area
LGHD	Local Government Health Department
MO	Medical Officer
MLT	Medical Laboratory Technologist
MSG	Monosodium Glutamate
MDGs	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
NBS	National Bureau of Statistics
NFELTP	Nigerian Field Epidemiology and Laboratory Training

	Programme
NCS	Nigeria Cancer Society
NHS	Nigerian Hypertension Society
NHF	Nigerian Heart Foundation
NGOs	Non-Governmental Organizations
NPHCDA	National Primary Health Care Development Agency
NPC	National Population Census
NCDs	Non-Communicable Diseases
NE	North East
NCWS	National Council of Women Society
NDHS	National Demographic Health Survey
NC	North Central
NW	North West
NHIS	National Health Insurance Scheme
NHMIS	National Health Management Information System
NEEDS	National Economic Empowerment Development Strategy
NAPEP	National Poverty Eradication Programme
NTDs	Neglected Tropical Diseases
OH	Occupational Health
PHC	Primary Health Care
PLCC	Primary Liver Cell Carcinoma
PSA	Prostate Specific Antigen
RCORTI	Regional Centre for Oral Health Research and Training Initiatives for Africa
SMOH	State Ministry of Health
SCD	Sickle Cell Disease/Disorder
SHC	Secondary Health Care
SE	South East
SW	South West
SS	South South
SURE-P	Subsidy Re-investment and Empowerment Programme
THC	Tertiary Health Care
UN	United Nations
UNDP	United Nations Development Programme
UCTH	University of Calabar Teaching Hospital

UCH	University College Hospital
UBTH	University of Benin Teaching Hospital
VIA	Visual Inspection of Cervix Stained with Acetic Acid
WHA	World Health Assembly
WHO	World Health Organization

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SECTION A: POLICY

1.0. Background

1.1. Introduction

Nigeria has an area of 923, 768 square kilometers and is located along the west coast of Africa. It lies between latitudes 4^0 and 14^0 North of the equator and between longitudes 2^0 and 14^0 East of the Greenwich Meridian. The land mass covers the mangrove swamp lands, creeks along the coast, tropical forest, savannah woodland and grassland in the middle part stretching to the Sahel in the far north. There are two marked seasons: the dry season lasting from November to March and the rainy season lasting from April to October. The climate is drier further north with extremes of temperatures, sometimes reaching as high as 44^0C and falling as low as 14^0C. Temperatures at the coast seldom rise above 32^0C but humidity is high. There are mountainous areas with rocky belts which stretch from the northwest and northeast through the middle belt to the south.

The country is a Federation of 36 states and the Federal Capital Territory, Abuja and is divided into 774 Local Governments Areas (LGAs). According to the 2006 National Population Census

figures the average population of a Local Government Area ranges from 13,660 (Bakassi in Cross Rivers State) to 1,319,571 (Alimosho in Lagos State). Nigeria is a heterogeneous country made up of about 380 ethnic groups. The three main spoken languages are Hausa, Igbo and Yoruba, while English is the official language.

The population of Nigeria is estimated at over an estimated 167 million[1]. The male to female ratio is 1.1:1 (105:100). The population has a pyramidal structure characterized with those less than 15 years old accounting for 41.8% while 3.2% of the population is over 65 years of age. The population growth rate is 3.2% with a fertility rate of 5.7 births per woman. The life expectancy of Nigerians at birth is 53.2 years, 52.6 years for males and 53.8 years for females**.** This has been attributable to both communicable and non-communicable diseases. Maternal Mortality ratio is 545 per 100,000 live births while infant mortality rate is 75 per 1000 live births, the under-five mortality rate is 157 per 1000 and neonatal mortality rate is 40 per 1000 live births.
Nigeria is experiencing rapid urbanization with rural to urban migration, particularly by the youths and the unemployed. The rate of urbanization is 4-10% nationally. The country is undergoing a demographic transition with concomitant increase in risk factors for Non-Communicable Diseases (NCDs). The 2008 National Demographic and Health Survey (NDHS) indicates that the literacy level has improved with specific higher levels in males (74.4%) than females (53.7%); in urban areas (90.9% males and 76.6% females) than the rural areas (68.3% males and 40.9% females) and in the South (90.9% males and 79.6% females) than in the North (63.3% males and 30.5% females).

Nigeria's main source of revenue is the crude oil and this accounts for over 90% of the value of export. The Gross Domestic Product (GDP) per capita for 2012 is $1,555[2] and the Gross National Income (GNI) per capita for 2012 is $2,420[3]. The human development index in Nigeria in 2013 is 0.471[4] which shows that poverty level is still high, and this significantly drives and sustains NCDs.

1.2. Health Services

Nigeria has three levels of health care delivery system comprising tertiary, secondary and primary which are provided by federal, state and local governments respectively. The private sector and NGOs complement health care delivery at all levels.

[1] http://www.population.gov.ng/index.php/
[2] http://data.worldbank.org/indicator/NY.GDP.PCAP.CD
[3] http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD
[4] http://hdrstats.undp.org/en/countries/profiles/NGA.html

The country is experiencing a double burden of communicable and non-communicable diseases with an increasing demand on the health services.

1.3. Situation Analysis

Non-Communicable Diseases are increasingly becoming major causes of morbidity and mortality in Nigeria. Based on the 1990-1992 national survey, the prevalence of hypertension was 11.2% (4.3 million Nigerians aged 15 years and above) while that of diabetes mellitus was 2.7% (1.05 million Nigerian 15 years and above). However, with the shift in paradigm using a cut-off point of 140/90 mmHg in 1999 by World Health Organization and International Society for Hypertension**,** the prevalence of hypertension now exceed 20%. The prevalence of sickle cell disease was 0.5% and that of the sickle cell trait (AS) was 23.04%. There was a survey on NCDs and risk factors in the 6 geopolitical zones and the results are being analyzed. If nothing is done, the projected cumulative annual economic loss for the period 2005-2015 from deaths due to heart diseases, stroke and diabetes would be $ 7.6 billion (12.2 trillion naira) which currently amounts to $0.8 billion (128 billion naira) average annual loss in income for Nigeria[5]

1.3.1. Factors Driving Non-Communicable Diseases

The current forces of globalization, urbanization and industrialization have not only brought about development but also imposed new lifestyles and risky behaviours with the emergence and sustenance of chronic diseases. Infections e.g. viral (HBV, HCV, HPV, EBV, HIV, HHV8), some bacterial and parasitic diseases are also known to cause NCDs including cancers. Occupational health hazards, some harmful cultural practices and beliefs in Nigeria can also sustain NCDs. Trade, foreign investments and promotional marketing involved in the economic development of the country may encourage unhealthy lifestyles.

The lack of up-to-date evidence for decision making and misconception by the community are important factors hampering the drive for NCDs prevention and control. There is poor awareness by the general public on the knowledge of NCDs and the need for routine medical checkup. NCDs prevention and control is further compounded by inequitable distribution of NCD care delivery services especially at the primary health care level.

[5] World Health Organization, 2006. An estimation of the economic impact of chronic noncommunicable diseases in selected countries
www.who.int/chp/working_paper_growth%20model29may.pdf

The main modifiable risk factors for NCDs include physical inactivity, unhealthy diets, tobacco use and harmful consumption of alcohol.

1.3.2. Risk Factors

There are clustering of risk factors in individuals and communities as a result of adoption of new and harmful lifestyles. These modifiable shared risk factors include tobacco use (smoke and smokeless forms), harmful use of alcohol (local and factory brewed), unhealthy diets (such as excessive consumption of red meat, salt, saturated fat, refined sugars in foods and drinks, suboptimal consumption of the following - fibre, micronutrients [such as zinc, iron, selenium, molybdenum, etc], vitamin A, folic acid, vegetables, fruits etc), and physical inactivity

Other risk factors include hereditary conditions such as sickle cell carrier status, albinism, G-6 PD deficiency, etc., use of illicit drugs, unsafe sex, unsafe water, poor sanitation and hygiene, outdoor and indoor smoke from solid fuels,. Exposure to harmful radiation (domestic or industrial), infectious agents such as bacteria, viruses and parasites as well as climate change contributes to an emerging increase in NCDs.

1.4. Priority Non-Communicable Diseases

Non-Communicable Diseases are responsible for significant morbidity, disability and mortality in Nigeria and are considered priority diseases for intervention. The common NCDs in Nigeria include the following: cardiovascular diseases (including hypertension, stroke, rheumatic heart disease, cardiomyopathies, coronary heart disease) cancers, diabetes mellitus, sickle cell disease, bronchial asthma, mental health, alcohol and other substance use disorders, violence and injuries (including road traffic injuries) and oral health disorders. Diabetes, hypertension (and other heart diseases) and sickle cell disease in pregnancy are among the major causes of maternal mortality in Nigeria.

1.4.1. Cardiovascular Diseases

1) Hypertension

People are usually not aware of a raised blood pressure hence the use of the term a ‘silent killer’ for hypertension. The national data from the survey on NCDs in Nigeria between 1990 and 1992 revealed that only 33% of hypertensives were aware of their condition. Using a blood pressure (BP) greater than 160/95 mmHg criterion, the study identified hypertension in 11.2% (4.3million) of Nigerians aged 15 years and above. With the shift in paradigm using a cut-off point of 140/90 mmHg, the prevalence of hypertension is now in excess of 20% in the population. There was an observed higher prevalence in the urban than rural areas. People at both extremes of socio-economic spectra had higher prevalence of hypertension. Overweight and

obesity, cigarette smoking, harmful alcohol intake as well as physical inactivity were associated with increased prevalence of hypertension.

2) Stroke

Stroke is a major cause of neurological admissions in Nigeria. Its prevention has been reported to be dependable on public knowledge of stroke, warning signs and risks factors. The main risk factors for stroke are hypertension, diabetes, obesity, smoking and sickle cell disease. The mortality rate for stroke is as high as 40-50% within the first three months of diagnosis. Hospital based data are highly selective, incomplete and unreliable as only brain scan and post mortem studies can give accurate diagnosis. About 20% of stroke is misdiagnosed as the condition often mimics other clinical entities like hypoglycaemia, seizure disorders, chronic subdural haematomas and encephalopathies. Dedicated stroke units and comprehensive rehabilitation centres should be established in Nigeria.

3) Coronary Heart Disease (CHD)

Coronary heart disease (CHD) appears to be an uncommon entity in Nigeria, probably as a result of lack of data and insufficient autopsy studies on sudden deaths. However, it is pertinent to note that there are increasing reports of angina and myocardial infarction in hospital settings.

1.4.2. Diabetes Mellitus (DM)

Diabetes Mellitus is associated with urban living, overweight, physical inactivity, alcohol use and parental family history. In 1990-1992 survey, the prevalence of Diabetes Mellitus was 2.7% (1.05 million Nigerians over 15 years). Only 21% (225,000) were aware of their condition and 18% (198,000) were on treatment. The prevalence was higher in the urban than rural areas (Lagos metropolitan, 7.2%, semi-urban area of Portharcourt, 6.8% and rural Mangu in Plateau state, 0.65%). In a recent large general population survey in Lagos state, the prevalence of diabetes was reported to be 4.3%.

Common complications of diabetes include diabetic gangrene, chronic renal failure, hypertension, visual impairment/blindness, and multiple organ damage associated with atherosclerosis.

A landmark prospective study was conducted by Diabcare Study Group in 2008 across seven tertiary health centres in Nigeria. The objective of study was to assess the clinical and laboratory profile as well as evaluate the quality of care of Nigerian diabetic patients. Diabetes

complications found were peripheral neuropathy 59.2%, retinopathy 35.5%, cataracts 25.2%, diabetic foot ulcers 16.0%, cerebrovascular disease 4.7%, and nephropathy 3.2%.

The survey clearly showed that diabetes care in terms of glycaemic control, control to goal of other cardiovascular risk factors, management practices as well as prevention of complications were below standard.

1.4.3. Cancers

Cancers are major contributors of morbidity and mortality in Nigeria and are linked to tobacco use, excessive consumption of alcohol, unhealthy diet, obesity, physical inactivity, chronic infections, exposure to radiation, chemical agents and family history. The prevalence of cancer is on the increase. About 100,000 incident cases of cancers are currently reported annually and it is estimated that by the year 2015 the burden would have increased fivefold if nothing is done. The problem is further compounded by the lack of integration of routine screening into the primary health care. Majority of cancers in Nigeria are diagnosed at a very late stage and there are very few centres offering radiotherapy and other oncology services.

There is an ongoing effort to establish a national population-based cancer registry in Nigeria. However, data from the 11 hospital-based cancer registries located in Abuja, Calabar, Enugu, Ile- Ife, Ilorin, Ido-Ekiti, Maiduguri, Nnewi, Port Harcourt, Zaria, Lagos, show that the 5 commonest cancers in Nigeria are as follows:

A. In females;

1. Breast (40%)
2. Uterine cervix (17.9%)
3. Ovary (3.7%)
4. Lymphomas (3.1%)
5. Skin excluding malignant melanomas (2.3%)

B. In males;

1. Prostate (27.2%)
2. Colorectal (7.1%)
3. Lymphomas (6.6%)
4. Liver (4.2%)
5. Skin excluding malignant melanomas 4.2%)

In children, Burkitts lymphoma, retinoblastoma and nephroblastoma (Wilms tumour) are common. EBV in association with immunosuppression by malaria contributes to high proportion of Burkitts lymphoma in children.

HIV associated cancers e.g. Kaposi sarcoma, Non-Hodgkin's lymphoma and invasive squamous cell carcinoma of the conjunctiva are also on the increase. Hepatitis B and C viruses are associated with hepatocellular (PLCC) carcinoma and there is a high carrier rate of hepatitis B in Nigeria with a reported prevalence rate of 10 to 20% from some hospital based survey. High risk HPV serotypes such as 16, 18, 52 etc. are associated with cervical cancer in Nigeria. Routine screening for cancers is not being provided at primary health care level and majority of cancers in Nigeria are diagnosed at a very late stage. There are also few centres offering radiotherapy and other oncology services.

1.4.4. Chronic Respiratory Diseases (CRDs)

Chronic Respiratory Diseases (including bronchial asthma, chronic bronchitis, emphysema, chronic occupational lung diseases) affecting both children and adults are common in Nigeria. There are limited data on the national prevalence on CRDs. There is a strong association with house dust mites, fungi, exposure to tobacco smoke and smoke from domestic sources as well as industrial and environmental pollutants (fumes from solid fuels, airborne allergens, diesel exhaust gases, asbestos dust)

1.4.5. Mental, Neurological and Substance use Disorders (MNS)

Mental, Neurological and Substance use Disorders (MNS) together contribute 25% to years of potential life lost due to premature mortality and the years of productive life lost due to disability (DALYs) in Nigeria. Mental health has a major impact on quality of life as well as social and economic viability of families, communities and the nation. A large community study in Nigeria estimates around 1 in 5 persons would experience a significant mental health problem in their lifetime requiring long-term commitment to treatment. The proportion receiving any treatment, orthodox or otherwise, within the previous 12 months is about 10%. As a result of the high prevalence, relatively low mortality rate, low identification rate and poor utilization of treatment, the MNS disorders are the largest single group, among NCDs contributing to disability.

Psychotic disorders-the most easily identifiable form of mental illness which include the Schizophrenias, Manic illness and organic psychosis affect about 1% of the population. Depression, Anxieties and Somatoform disorders are far more prevalent. At least 10% of the population will be suffering from those poorly identifiable disorders. These conditions run a chronic course and are responsible for more morbidity. There is evidence that depression is

particularly common among Nigerian elderly, with over 7% reporting major depressive disorder in a 12-month period and over 25% reporting same in the course of a lifetime

Drug use disorders are relatively common especially among young male adult population where Cannabis is the most used. Studies from several student population and the military show a large prevalence. Reports from various state capitals show a large pocket of Cocaine, Opiates use. Evidence of injectable drug use are also emerging in some of these state capitals.

Largely because of poor obstetrics practices in the country Seizure disorders are common in Nigeria. Committee bases studies in part of the country show rates as large as 6% among the children.in some rurual population. Many of the children with seizure disorders are discriminated against many hardly allowed in school.

At the moment health services for these disorders are provided mainly in large tertiary institutions (Federal Neuro-psychiatric Hospitals, University Teaching Hospitals, Psychiatric and Federal Medical Centres). A few States have psychiatric hospitals. These hospitals and services are situated in urban centers which make access to care difficult for the majority of the population.

There are still less than130 psychiatrists in the country (less than 1 per 1 million population) and very few neurologists, with many newly trained specialists leaving the country to work abroad. There are around 5 psychiatric nurses per 100,000 population and only very few other mental and neurological health professionals like clinical psychologists, social workers, neuro-physiotherapists, and occupational therapists. The systems that support delivery of services are currently weak, with poor availability of psychotropic drugs and lack of incorporation of mental and neurological health measures in health information systems.

Good quality community-based services with hospital support has been shown to be the most effective form of comprehensive mental health care. The Federal Ministry of Health is committed to the provision of evidence-based care through the expansion of accessible and decentralized services in Nigeria, which will address the mental health access gap that currently exists in the country.

No countrywide studies have been conducted to verify the prevalence of these MNS disorders but the large scale study on Health and wellbeing and estimates from the global burden of disease by WHO in 2008 include Depression, Drug use disorders, Epilepsy, Schizophrenia, Bipolar Affective Disorders and Anxiety disorders as the most prevalent disorders.

1.4.6. Sickle Cell Disease (SCD)

Available data shows that sickle cell disease (SCD) affects nearly 100 million people in the world and is also responsible for over 50% of deaths in those with the most severe form of the disease. Sickle Cell Disease (SCD) is the commonest genetic disorder in Nigeria and Nigeria is ranked 1st as the sickle cell endemic country in Africa with an annual infant death of 100,000 representing 8% of infant mortality in the. According to WHO, Nigeria accounted for 75% cases of infants SCD in Africa with a prevalence of over 19 abnormal haemoglobins per 1000 live births. Nigeria is ranked 1st as the sickle cell endemic country in Africa with an annual infant death of 100,000 representing 8% of infant mortality in the country.

About 200,000 babies are born each year with SCD, more than half of whom will die before their fifth birthday, 90% before attaining adulthood if poorly managed in childhood. SCD is thus contributing to childhood under-five mortality which will affect the achievement of the MDGs 2, 4 and 6 if efforts at control are not instituted.

In 1990-1992 national survey, 0.5% of adult Nigerians of age 15 years and above had SCD compared to prevalence rates in newborns due to loss of affected sufferers in early childhood. In that survey, 23% of adults had the Sickle cell trait (AS), however the recent national community survey carried out in 2011 across the six geo-political zones of the country revealed that Sickle Cell Trait (AS) varied from 24 to 25%.

The problem of SCD has not yet been addressed in a systematic manner primarily because more emphasis has been on the control of childhood communicable diseases. Secondly, the scale of the SCD problem and the limited available financial and technical resources has tended to inhabit the planning of national control programme. The falling infant and childhood mortality rates, especially in the urban areas along with improved primary health facilities, have enhanced the survival and the presence of individuals with SCD in adulthood. This makes the need to provide relevant, well organized clinical and related services more compelling. Failure to provide services would only magnify and compound the adverse effects of SCD by encouraging inappropriate treatment, myths, prejudices as well as stigmatization.

1.4.7. Violence and Injuries

Violence: There is an upsurge of violence in Nigeria which is linked to attitude, social pressures, stress, frustration, poverty, unemployment and political uprising. Religious and ethnic conflicts also contribute to growing scourge of violence in the country.

Injuries: The following forms of injuries occur in Nigeria:

- Road traffic injuries
- Injuries from sports
- Injuries from communal clashes amongst cult/rival groups, ethno-religious and political conflicts etc.
- Harmful traditional practices such as unorthodox tonsillectomy, uvulectomy, circumcision, female genital mutilation etc.
- Injuries sustained from torture by security agents such as the police, state security service, military etc
- Domestic violence from child, spouse battering
- Injuries from sexual abuse

1) Road Traffic Injuries: Road Traffic Crashes (RTCs) are the leading cause of death in adolescents and young adults in the world. Data from the World Bank and World Health Organization (*World Report on Road Traffic Injury Prevention)* show that road traffic injuries are a major but neglected public health challenges that requires concerted efforts for effective and sustainable prevention. According to the report, of all the systems with which people have to deal every day, road traffic systems are the most complex and the most dangerous. Worldwide, an estimated 1.2 million people are killed in road crashes each year and as many as 50 million are injured. Projections indicate that these figures will increase by about 65% over the next 20 years unless there is new commitment to prevention.

   According to data from Federal Road Safety Commission (FRSC), over 26,000 injuries and 7,000 deaths are recorded annually from road traffic crashes (FRSC). As at 2001, Nigeria ranked second on the weighted scale of countries with very high road traffic crashes (WHO, 2004)**.** According to FRSC between 1990 and 2001 a total of 81,657 deaths and 238,573 people injured. From 2000-2002, the annual death toll from road crashes in Nigeria stood at more than 8,400 from about 17,000 road crashes. Nationwide, a total of 208,361 cases of road traffic crashes were recorded by FRSC from 1990-2001. In the year 2006, a total of9,972 deaths and 38,067 injuries were reported[6]. FRSC annual reports from 2008 to 2011, show a total of 6,661, 5,693, 4,065, 4,372 deaths and 27,980, 27,270, 18,095, 17,464 Injuries respectively[7].There is an observed reduction over the 4 years period probably as a result of the campaign by the FRSC. In 2011, this figure translates to approximately 49 injuries per day. Road Traffic Injuries contribute to an economic cost of 3 billion naira annually (3% of GNP).

[6] FRSC, 2006.
[7] FRSC, 2012.

2) Gender-based Violence: There are gender issues of domestic violence spread across the country and an upsurge of reported cases of violence against women. The Beijing declaration states that violence against women violates and impairs the fundamental rights of women in all societies. Women and girls are subjected to sexual, physical and psychological abuse which cut across lines of income, class and culture. These issues include sexual abuse of children, rape, domestic violence, sexual assault and harassment, trafficking of women and girls, and harmful traditional practices including genital mutilation. These leave deep psychological scars and also damage reproductive and sexual health and in some instances result in the death of the victim. The United Nations Resolution 1325 of October 2000 was adopted by member countries to ensure access to peace and security by women. The key provisions of the resolutions are captured in the three P's:

1. *Protection* of the human rights of women and girls during times of conflict
2. *Prevention* of gender-based violence and;
3. Equal *Participation* of women in peace building and reconstruction.

3) Injuries in Childhood and the Elderly: Childhood injuries are significant cause of hospital admission in Nigeria and mostly occur in children under the age of 10. The common causes of childhood injuries are road traffic accidents, domestic accidents, burns, accidental poisoning (kerosene, caustic soda, rat poisons, prescription drugs, and carbon monoxide from generators), aspiration or ingestion of foreign bodies.

There is a growing population of the elderly in Nigeria (above the age of 65). In the 1991 population census they constituted 3.37% of the population and by the year 2020(update from NBS), this proportion is expected to increase to 5.2%. In the elderly, there is an increased risk of falls related to their multiple co-morbidities including disabling osteoarthritis, and orthostatic hypotension from drugs, peripheral neuropathy and sensory impairments such as hearing loss and blindness. An average of The presence of osteoporosis which this group of adults are susceptible to increase their risk of more complications even from minor falls.

1.4.8. Oral Health Diseases

Oral health problems of high priority in Nigeria are oral cancers, dental fluorosis, cancrum oris (noma), dental caries and periodontal diseases. Others include oro-facial malformations (clefts of the lip and palate), oral manifestations of HIV/AIDS and maxillofacial trauma. Globally, and more specifically in Nigeria, various studies have reported the following about NCDs and more specifically oral diseases: (i) a rising mortality and morbidity indices; (ii) increasing treatment costs, with the resultant delay in reporting to health facilities; (iii) inadequate oral health facilities, and where available, these are mostly non-functional; (iv)

dearth of skilled oral health manpower, with a skewed distribution where available; (v) existing national health system is "treatment-oriented", despite being a primary health care system in principle.

1) **Oral cancers:** Are among the most common cancers of the head and neck region and each year, about 30 new cases are recorded. The risk factors for oral cancers include use of tobacco and/or kolanut, use of alcohol and immuno-suppression from nutritional deficiency factors and HIV/AIDS. In Northern Nigeria 70 – 90% of oral cancers present in adults while 50 – 65% in 15 – 40 years old. At least 80% of cases usually present in advanced stage of the disease.

2) **Dental fluorosis:** Is dependent on factors such as fluoride concentration, climatic conditions (ambient temperature, altitude) and body weight especially during the developmental period and mineralization of teeth. In children below 10 years, the lower the body weight, the greater the burden. In most part of the country, fluoride concentration is less than 0.6 ppm, and mostly less than 0.3 ppm particularly in the southern parts of Nigeria. However this concentration is greater than 1.5 ppm in some parts of Nigeria especially in the North Central and parts of the North East zones and this result in high prevalence of severe brownish discolouration of teeth.

3) **Noma:** Is an acute devastating oro-facial gangrene that occurs mainly among children. The incidence in Noma Children Hospital, Sokoto in North Western Nigeria is 6 per 1000 children. Noma is an urgent public health problem that is most prevalent in communities ridden with poverty, poor implementation of preventive health as well as poor nutritional status.

4) **Dental caries (tooth decay):** This is high in Nigeria with a national prevalence of 30 – 44% for ages 12 – 44 years according to the 1990 – 1991 National Pathfinder Oral Health Survey. Recent survey in Northern Nigeria showed that the prevalence of caries ranged between 15.7% – 26.6% for all age groups.

5) **Periodontal diseases:** Are very high in Nigeria**.** Majority of cases have dental calculus, shallow and deep pockets. However, the percentage of healthy gums is very small, about 4% in all age groups. A survey conducted in Northern Nigeria in 2005 show a prevalence of 95% (5-6 year olds) and 100% for all other age groups.

A new National survey is about to commence on oral health disorders.

Training of primary health care workers on oral health has been ongoing in Plateau, Nasarawa, Gombe and Ogun states with a plan to cover the whole country.

1.5. Notable risk factors for NCDs

To limit the burden of these NCDs, definite measures should be put in place to reduce the following modifiable risk factors:

1. Tobacco use (smoked and smokeless forms) and exposure to second hand smoke
2. Harmful use of alcohol
3. Unhealthy diet
4. Physical inactivity
5. Other modifiable risk factors including genetic disorders such as sickle cell gene carrier status, albinism, G-6PD deficiency, Communicable diseases (including bacteria, viruses and parasites) environmental pollutants (outdoor and indoor smoke from solid fuels), exposure to harmful radiation (domestic or industrial) and climate change

1.5.1. Tobacco use

Tobacco is increasingly associated with NCDs and it is one of the preventable causes of death. Tobacco is a risk factor for six of the eight leading causes of death globally. In the 20th century, there were 100 million tobacco related deaths. If unchecked, this figure will be up to 1 billion in the 21st century and 80% of these deaths will be in the developing world. In 2008, the Global Youth Tobacco Survey in Nigeria involving a total of 5459 students, put the prevalence rate of tobacco use at 2.6 – 6.2%. There is an increasing prevalence of cigarette smoking among the youths especially the girls. The above survey also suggested significant exposure of youths to tobacco smoking and exposure in public places to be high. Recent study among university students in Abuja, Nigeria show 33.3% prevalence of current smokers and 32.8% prevalence of life-time smokers. According to the WHO report on global tobacco epidemic, the current smoking rate for adult Nigerian males is 9.0% and 0.2% in females**.** If nothing is done to check this high prevalence of tobacco use among youths, the clustering of risk factors that have been observed with tobacco smoking would reach an epidemic proportion resulting in NCDs such as – diabetes mellitus, hypertension and high blood cholesterol with attendant high morbidity and mortality.

1.5.2. Harmful alcohol use

Harmful use of alcohol is one of the main risk factors for NCDs contributing significantly to premature deaths and avoidable disease burden and has a major impact on public health and socio-economic status. It was estimated by WHO[7] that per capita consumption of alcohol in

Nigeria is 10.57 litres (ranking among the highest in Africa)[8]. It ranks close to tobacco and is responsible for a high disability-adjusted life years (DALYs) lost, with mental health disorders and violence and injuries from road traffic crashes, burns, drowning and falls accounting for most DALYs lost. (check up more recent DALYS with figures WHO, 2005)**.** Among the disease conditions associated with harmful alcohol use are hypertension, diabetes mellitus (type 2), liver cirrhosis, cancers (e.g. liver and stomach), aspiration pneumonitis, malnutrition, diseases of the pancreas, Mallory-Weiss Syndrome (vomiting, excessive wretching and haematemesis), neuropsychiatric conditions (e.g. dependence, psychoses and depression), violence and injuries (e.g. deaths/disability from road traffic crashes, burns, drowning and falls). Harmful use of alcohol also contributes to the burden of infectious diseases, including sexually-transmitted infections and HIV infection, through association with unsafe sexual behaviour and interference with effective treatment regimens and procedures.

1.5.3. Physical inactivity

Sedentary life style from increasing urbanization and mechanization is progressively reducing our levels of physical activity. The World Health Organization studies showed that 60% of the global population is not sufficiently active[9].

Physical activities, at any age protect against a multitude of chronic health problems including obesity, osteoporosis, certain cancers (breast, endometrial and bowel), premature aging and all forms of cardiovascular diseases. It has been found that two hours of moderate physical activity or an hour of fairly vigorous physical activity every week or at least half an hour daily will not only promote mental well being but also reduce the risk of coronary heart disease by about 30% (Ref?? Dr Malau). Physical activities

1.5.4. Unhealthy diet

Unhealthy diet contributes to the development of NCDs. There is increasing patronage of fast food outfits by the population. In Nigeria consumption of proteins, fruits and vegetables is low while excessive intake of salt and refined sugars is common. Excessive salt intake is a recognized risk factor for CVDs in Nigeria. This results from additional salt at table, salty pastries, canned foods, dried fish and local delicacies (such as suya, kilishi, isi-ewu, ngwo-ngwo) Another source of excessive sodium intake includes Monosodium glutamate (MSG) products. There is need to reduce salt intake to less than 5g (1 teaspoonful) of sodium chloride per day.

[8] World Health Organization, 2009. Global status report on road safety: time for action. Geneva. www.who.int/violence_injury_prevention/road_safety_status/2009

[9] http://www.world-heart-federation.org/fileadmin/user_upload/Healthy_diet___Physical_activity/Walking___Heart_Booklet_-_English_-_FINAL.pdf

There is increasing intake of sweetened products – carbonated drinks, pastries, candies, and other refined sugars all of which predispose to the development of NCDs. Of interest, is the high caloric intake resulting from these sugars promoting overweight and obesity. There is need to lower the consumption of sugar contents of foods to acceptable levels (which is equivalent to 40 – 50g per person per day or 6 – 10% energy intake per day).

Women and children constitute a vulnerable group in the development of nutritional disorders.. Micronutrient deficiencies (iron, folate, vitamin A, iodine) during pregnancy predisposes to the development of anaemia, low birth weight and congenital malformations. Childhood malnutrition could also have an effect on mental and physical development of the children later in life. The acceptability of exclusive breastfeeding is not yet optimised thus limiting the benefits of breast feeding. A back up policy is expected to promote exclusive breast feeding. (

1.5.5. Other modifiable risk factors

These include:

I. **Hereditary conditions** such as:
   - **Sickle cell carrier status.** About 24-2% of our population have the sickle cell trait and union of two individuals with the trait is responsible for the 2% prevalence of sickle cell disease in our population (3.34 million) This disorder manifests early in life and has divers clinical complications including cardiovascular and renal diseases, thus fueling major NCDs.(WHO, 2002).
   - **Albinism** is a known risk factor for skin cancer following exposure to UV radiation. The problem is currently being addressed by the National policy on albinism in Nigeria
   - **G-6 PD deficiency** is a known risk factor for CVDs which causes chronic haemolytic anaemia.

II. **Unhealthy sexual practices** such as unprotected sex, early sexual debut, multiple sexual partners are risk factors for HIV associated malignancies including cervical cancer. Other sexually transmitted viruses such as HPV and HBV which cause cervical and liver cancer respectively.

III. **Other communicable diseases** such as Helico-bacter pylori, gastritis, schistosomiasis, Epstein barr virus causing cancers of the stomach, bladder, lymphomas including Burkitts lymphomas and Kaposi sarcoma. .

IV. **Exposure to harmful radiation** such as radiation from medical equipments, nuclear reactors, volcanic eruptions which are associated with anaemia, leukaemia, skin cancers, thyroid cancers, etc. (domestic or industrial),

V. **Environmental pollutants** such as domestic and industrial toxic wastes including outdoor and indoor smoke from solid fuels, domestic stoves, car exhaust fumes, generators, pesticides and herbicides, oil spillages, heavy metal poisoning, gas flaring, etc.

VI. **Climate change** that results from depletion in the ozone layer leading to an emerging increase in NCDs such as skin cancers, stress related CVDs and CRDs.

2.0. Scope of Policy

Nigeria is a member state of the WHO and is signatory to the resolution and conventions adopted at the World Health Assembly (WHA) and other meetings related to NCDs such as the Regional WHA NCD strategy for Africa region FR/RC50/10 April 2011; Framework Convention on Tobacco Control (FCTC) 2003; UNGA 66/2 Sept 2011). Concerted efforts had been made since 1988 by the Federal Ministry of Health with national surveys on NCDs in 1990-1992, publication of documents for health professionals, integration of NCDs into the Primary Health Care (PHC), surveillance of NCDs risk factors in the six geopolitical zones, ongoing domestication process for the WHO FCTC and integration of NCDs into the IDSR system of reporting.

In recognition of the huge contribution of NCDs to the burden of disease in Nigeria, this policy document has been developed. There is therefore the need to raise awareness, sensitize policy-makers and commit the country to action using a multi-sectoral approach for the reduction of NCDs in Nigeria. The policy shall address the following areas: awareness creation, prevention, control, early detection, prompt referral and management (treatment/palliation and rehabilitation) of NCDs. The policy shall provide the enabling environment and promote capacity building for effective implementation.

2.1. Vision

A healthy Nigerian population with reduced burden of NCDs and enhanced quality of life for socio-economic development.

2.2. Mission

To promote healthy lifestyle in Nigeria and provide a framework for strengthening the health care system using a multi-sectoral approach for the prevention and control of NCDs.

2.2.1. Specific Objectives

1) To provide relevant information and guidelines for lifestyle changes that promote healthy living.
2) To integrate NCDs prevention and control into the national strategic health development plan and into relevant policies across all tiers of government.
3) To reduce NCDs by engaging agencies and stakeholders that provide services impacting on the social determinants of health.
4) To serve as a guide for other national policies and programmes on NCDs prevention and control.
5) To provide guidance for the determination of prevalence of risk factors for NCDs, and the attendant morbidity, disability and mortality.
6) To specify roles and responsibilities to all tiers of government including parastatals and other stakeholders.
7) To provide framework for research on NCDs prevention and control.
8) To strengthen partnerships with stakeholders and development partners.
9) To monitor and evaluate the progress made at all levels of NCDs prevention and control.

2.3. The Guiding Principles

The policy shall be based on the following guiding principles:

1) To ensure the protection of the rights of individuals and communities.
2) To ensure gender equity.
3) To acknowledge the existence of cultural and religious sensitivities.
4) To use evidence – based information and best practices.
5) To encourage a consultative, participatory and multi-sectoral approach.
6) To involve partnerships with stakeholders and development partners.

3.0. Legal Framework

This policy is set within the framework of the National Health policy and is subject to the provisions of the National Health Act. The policy shall be reviewed every five years or as may be requested by the Honourable Minister of Health or new state of the art knowledge as it affects NCDs. Relevant laws affecting control of NCDs with regard to their causation, prevention, early detection, management including palliative care and availability of essential drugs for the terminally ill and the elderly need to be revised, evolved and enacted.

The NCD policy shall be supported by the following: Child Rights Act, Women Trafficking Act, Disability Act, Road Safety Act, Federal Road Safety Commission's Act, Tobacco Control Law (when enacted) , and Decree No.45 of 1988 Occupational Health Law etc. This policy endorses the implementation of WHO FCTC 2003 and ratified in Nigeria in 2005, the recommendations of the Global Strategy for NCDs of 2008 – 2013, 2013 – 2020, the Global Strategy on diet, physical activity and health as well as the Global Strategy for infant and young child feeding

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3.1. Legislation/Legal Considerations

The legislation/Legal Considerations shall be addressed by reviewing, harmonizing, enacting and enforcing National laws and adapting/domesticating international conventions and resolutions to which Nigeria is a Signatory which would enhance the control of NCDs.

This shall be achieved by:

1. Enforcing existing national laws e.g. Tobacco Smoking (control/elimination) Act No 20 of 1990 and other related laws on smoking in public places; road traffic and safety laws to reduce injuries etc.
2. Integrating public service regulation designating all Government buildings as no smoking buildings into existing legislation to eliminate second hand smoking.
3. Legislating on fiscal policies requiring price and tax increases on tobacco products to reduce demand for tobacco products.
4. Enacting and enforcing laws requiring disclosure of contents and inclusion of bold health warnings and messages on packages of tobacco products, and prohibition of the sale of tobacco and alcohol to youths especially minors.
5. Revising all obsolete laws relevant to NCDs e.g. Lunacy law of Nigeria (which was enacted in 1916 as the lunacy ordinance after amalgamation of the two protectorates. It was adopted as lunacy the regional laws in 1958. This obsolete law is still being used till today without any modification).
6. Ensuring that the national development plans, policies, programmes and strategies e.g. National Economic Empowerment and Development Strategies (NEEDS), Subsidy Re-investment and Empowerment Programme (SURE-P), National Poverty Eradication Programme (NAPEP), Health Sector Reform Plan (HSRP) give prominence to NCDs and tobacco control.
7. Ensuring that manufacturers and operators in the food industries adequately display the quantities of alcohol, salt, fat, sugar and preservatives on products' labels with enforcement by relevant government agencies.
8. Ensuring fortification of identified food items with vitamins as may be determined by current knowledge of derivable benefits.

9. Educating the population on the need to adopt appropriate behaviours and safety measures to reduce injuries at work, home and on the road through the use of personal protective devices as well as seatbelts, and car seats for children.
10. Encouraging States including FCT and local governments to enact and enforce legislation that impacts positively on the control of NCDs.
11. Providing appropriate friendly environment and infrastructures or modification of such where they exist to cater for the need of the elderly, physically and mentally challenged individuals.

3.2. Policy Declaration

The FMOH recognizes the increasing burden of NCDs in Nigeria and the need for a policy framework for their control. The policy will ensure that the increasing prevalence of NCDs and their risk factors are reversed in order to significantly increase the life expectancy of Nigerians. This would be based on evidence and best practices, with special emphasis on an integrated approach involving existing structures at all tiers of Government, the private sector, NGOs and CBOs, communities and individuals.

All tiers of Nigerian Government, the private sector, CSOs, NGOs, CBOs, FBOs, the communities, the people and all other stakeholders therefore make the following declaration in line with the National Health Policy, and hereby adopt this policy document and affirm the following:

i. That all the tiers of government recognize and agree that the control, prevention, early detection and proper management of NCDs would contribute to a better quality of life for Nigerians, leading to a reduction in illnesses, disability and deaths related to NCDs.
ii. That all the States and Local Government health personnel shall participate actively in the control, prevention, early detection, and management of NCDs and also in the monitoring and evaluation of NCDs/Health promotion activities.
iii. That the people of Nigeria strongly agree that the National Policy on NCDs shall be complementary to the National Health Policy and its strategies to achieve quality health care for all .
iv. That the people of Nigeria wish to address the leading causes of major NCDs such as tobacco use and exposure to tobacco smoke, unhealthy diet, harmful use of alcohol, physical inactivity and other modifiable NCDs risk factors.
v. That sustainable framework that will enhance the control, prevention, early detection and management of and research on NCDs shall be established.

vi. That compliance by all the tiers of government and individuals with all relevant policies and laws that support healthy lifestyles and prevention of NCDs shall be ensured.

vii. That the policy when adopted shall be made available to all the States, LGAs, the private sectors, include medical and health institutions for implementation without delay.

viii. That the policy when adopted shall be fully funded through adequate budgetary allocations at the three tiers of Government, supported by the private sector, major stakeholders and other partners for effective implementation.

4.0. Policy Actions

Deriving from above declaration, Government shall:

i. Establish a sustainable framework to facilitate the implementation of effective control mechanisms for prevention, early detection and management of NCDs in the country.

ii. Establish a mechanism to reduce risk factors for NCDs arising from among others tobacco use and exposure to tobacco smoke, unhealthy diets, harmful use of alcohol, physical inactivity and other modifiable risk factors.

iii. Ensure compliance by all tiers of government, civil society, private sector, communities and individuals with all policies supporting the establishment and implementation of a sound and effective control of NCDs.

iv. Establish appropriate mechanism for the review of relevant curricula and training manuals of medical and health institutions at all levels of education in order to incorporate the prevention and control of NCDs.

v. Provide adequate budgetary allocation for the control of NCDs through increased support (financial/technical) by the FMOH.

vi. Provide the necessary framework to encourage private sector participation in the control of NCDs in Nigeria.

vii. Strengthen the capacity of the existing National Health Management Information System (NHMIS) to adequately address the dearth of data on NCDs and make provision for the inclusion of NCDs in the national regular demographic health survey (NDHS).

viii. Strengthen the capacity of NHIS to expand its coverage to include all the NCDs.

ix. Ensure the incorporation of NCDs into the surveillance system as part of the Integrated Disease Surveillance Response System (IDSR).

x. Include vaccination against known carcinogenic viruses such HBV, high risk HPV serotypes, pneumococcal vaccination of children and the use of simple and cost effective techniques for early detection of cancers e.g. visual inspection of cervix stained with acetic acid (VIA), clinical/self breast examination, digital rectal examination, faecal occult blood test, oral examination at all levels of health care facilities

xi. Ensure the availability of screening facilities for early detection of certain cancers in specialized centres. Mammography/USS for breast cancer, pap smear for cancer of the cervix, PSA for cancer of the prostate, check for evidence to include PSA for prostate cancer, colonoscopy for colonic cancers and velscope for mouth cancers.

xii. Ensure the establishment of appropriate units for the management and training of health professionals in alcohol and drug addiction as well as tobacco cessation.

xiii. Establish sustainable research framework to facilitate basic and translational research in NCDs prevention and control.

xiv. Establish an effective and efficient monitoring and evaluation mechanism for NCDs programme.

xv. Ensure the availability of facilities for newborn screening for detection of haemoglobinopathies e.g. sickle cell haemoglobin and enrolment into comprehensive care for affected individuals.

5.0. Strategic Thrust for Implementation

The NCDs prevention and control policy covers several disease entities and to achieve its goals and objectives through the following key strategies:

1) Social mobilization
2) Screening and early detection of NCDs and their risk factors
3) Surveys, surveillance, data management and operational research.
4) Integration of NCDs management into primary health care services
5) Monitoring and Evaluation
6) Capacity building
7) Resource mobilization
8) Multisectoral collaboration and partnerships
9) Legislation.

5.1. Social Mobilization

Advocacy and sensitization on NCDs shall be carried out at all levels of Government (the Executive and Legislature), the civil society, non-government organizations, community based, faith based organizations (FBOs) and the private sector on NCDs control. This would involve the following:

- Creating awareness and community mobilization for NCDs prevention, control, early diagnosis and management.
- Sensitizing the general public on NCDs control through knowledge of risk factors and risk reduction.

- Creating awareness among health workers on the proper treatment of NCDs and their complications.
- Promoting advocacy at the highest political and traditional leadership groups, including both executive and legislative arms of government, media organizations, and important members of the public (opinion leaders).
- Encouraging communities and individuals to maintain healthy dietary practices and regular physical exercise as well as avoidance of obesity, sedentary lifestyle, harmful use of alcohol and tobacco use
- Active involvement of the media and all other stakeholders (trade and commerce, Industry, Youths and Sports, Women Affairs, National Orientation Agency and Justice) in all advocacy and social mobilization issues elaborated in this policy.

5.2. Health Promotion

The policy shall ensure that health promotion activities using appropriate information, education and communication packages shall be employed. This shall be achieved by:

- Mobilizing and Involving a wide range of organizations and people in health promotion action at all levels.
- Supporting the consumer rights thrust of health sector Reform and Health Bill by:
  i. Informing the people of their rights to health and health care.
  ii. Encouraging community participation in the decision about their health.
  iii. Advocating for the enforcement of existing health protection laws and the promulgation of new ones.
- Strengthening health promotion in key sectors of the communities that can reach a large section of the community: community, schools (including primary, secondary and tertiary institutions), Health facilities, Workplaces, Unions, Trade Unions, Market women, etc.
- Assessment of information needs of different target population shall be carried out.
- Information, education and communication materials including guidelines shall be reviewed, adapted or developed and regularly updated and disseminated to different target groups of the population (with translation into local dialect where necessary).
- Information and education of the general public on adoption of lifestyle changes including diet, physical exercise, reduction of alcohol consumption, total cessation of tobacco use and avoidance of other risk factors for the control of NCDs.
- Education of the population on the need to participate in NCDs screening programmes e.g. hypertension, cancers, diabetes mellitus, Sickle Cell Disorder and obesity.
- Mandatory routine screening for hypertension, diabetes, cancers, sickle cell disorder (pre-marital, newborn).

- Training a core of health promotion personnel.
- Training of Journalists on health promotion.

5.3. Reduction of risk factors

Priority shall be given to strengthening the implementation of key interventions to reduce the main shared modifiable risk factors that mainly contribute to the burden of NCDs. The risk factors are:

- Tobacco Use
- Unhealthy diets
- Physical inactivity
- Harmful use of alcohol

5.3.1. Tobacco Use

To address the pandemic of tobacco use, the World Health Organization (WHO) created the Framework Convention on Tobacco Control (FCTC). This was adopted by the World Health Assembly on 21st May 2003 and presently has 167 parties and covers more than 86% of the world's population [5]. This framework addresses different components of tobacco control at the same time.

The regional priorities are:

1. Primary prevention
2. Management at PHC level
3. Monitoring and evaluation + research

Nigeria passed the National Tobacco Control Bill in March 2011 [6], but it is yet to become functional because the president did not sign it up to six months after the assembly passed it. The bill regulates tobacco use in Nigeria by banning sales to people below the age of 21; prohibiting smoking in public places; regulating advertising, manufacturing and distribution of tobacco products and making printing health warnings on tobacco product mandatory [6]. This is a much-needed positive step in Nigeria.

In the health facility setting, smoking cessation is the main method of control. There are various options of smoking cessation available with varying effectiveness. These include unassisted (going cold turkey and gradual reduction); health care provider and system interventions; medications; community interventions; competitions and incentives; psychosocial; self-help groups; telephone counseling or quit lines; mass media campaigns; use of cigarette substitutes and alternative approaches like acupuncture, aromatherapy, hypnosis and herbs [8, 9, 10, 11]. A

lot of times, combination of methods are used. It has been shown that health practitioners have a unique role to play in initiation and supporting clients through smoking cessation These roles range from identifying smokers for initiation, psycho-social support and provision of medication. [10].

The reduction of Tobacco use shall be pursued through the implementation of the articles and obligations of the WHO FCTC, to which Nigeria is a signatory. A practical and cost-effective way to scale up the implementation of the demand reduction provisions of the WHO FCTC will be through the use of the **"MPOWER"** strategy. Key actions to be pursued include:

1. **M**onitor tobacco use and prevention policies
2. **P**rotect people from tobacco smoke
3. **O**ffer help to quit tobacco use
4. **W**arn about the dangers of tobacco
5. **E**nforce bans on advertising, promotion and sponsorship
6. **R**aise tobacco taxes on tobacco

5.3.2. Unhealthy diets

Key interventions to promote healthy diets shall be pursued. These include:

1. Promotion of breast feeding and ensuring optimal feeding for infants and young children including in schools.
2. Provide information, and establish dietary guidelines:
   - reduce dietary salt levels
   - promote iodization of salts etc
   - eliminate industrially produced trans-fatty acids
   - decrease saturated fats
   - limit free sugars
   - to increase consumption of fruits and vegetables as well as legumes, whole grains and nuts
3. Promote responsible marketing of foods and non-alcoholic beverages to children
4. Ensure provision of accurate and balanced information for consumers

5.3.3. Physical inactivity

Key interventions to be pursued to prevent physical inactivity include:-

1. Development and implementations of national guidelines on physical activity for health
2. Implement school-based programmes in line with WHO health-promoting school initiative.
3. Ensure that the physical environment support safe active commuting, and create space for recreational activity by:
   - ensure that the environment for physical activity are accessible to and safe for all

- introduce transport policies that promote active and safe methods of travelling
- provide and improve sports, recreational and leisure facilities in educational institutions, workplaces and communities
- increase the number of safe spaces available for active play

5.3.4. Harmful use of alcohol

The following key interventions shall be pursued to reduce the harmful use of alcohol:

1. Prevent underage alcohol consumption
2. Discourage use of alcohol by women in reproductive age-group
3. Prevent driving or operating machinery under the influence of alcohol
4. Discourage binge drinking including consumption of toxic local brew
5. Identify and manage alcohol use disorders
6. Prevent consumption of illegally brewed and distributed alcoholic beverages

5.3.5. Other risk factor in Nigeria: Sickle Cell Trait

In Nigeria, another risk factor that constitutes an important cause of NCD is a hereditary disease (e.g. Sickle Cell Trait). The effect of this disease can be reduced through:

1) Proper genetic counseling and health education for pregnant women
2) Newborn/pre-school genetic screening for sickle cell trait
3) Pre-marital counseling and testing for sickle cell traits

5.2 Capacity building and development

Capacity building and development shall be encouraged to enhance effectiveness and efficiency at National, State, LGA and community levels for the implementation of this policy.

In this regard, the following shall apply:

- Training for pre-service, in-service and informal sector shall be encouraged for all health care providers in private and public institutions as well as community based organizations
- Establishment of a core of trainers at the national level who would periodically conduct training for health workers, programme officers as NCDs focal persons at all levels. The core facilitators would be utilized to provide technical support for states, LGAs and health facility training activities.
- Capacity building workshops on risk factor reduction, smoking cessation/WHO FCTC, control of harmful use of alcohol, diet and physical exercise/activity shall be conducted for states and LGA health workers from time to time.
- Training of health workers in the areas of palliative care of the terminally ill and the care of the elderly.

- Training of the laboratory workers in utilizing the facilities for the screening and early diagnoses of NCDs.

5.4. Prevention of Complications due to NCDs

- In order to ensure that patients diagnosed with NCDs receive appropriate treatment, guidelines for the proper management of patients shall be developed and disseminated to appropriate health workers to prevent complications. The FMOH shall organize seminars and workshops for Doctors, Nurses and other relevant health workers on the guidelines. The FMOH shall update the guidelines regularly.
- Government shall as a matter of policy, provide adequate facilities in our centers of excellence for the treatment of patients who develop complications, particularly those with end organ damage e.g. kidney failure. Government shall pursue the establishment in each of the six geopolitical zones one organ transplant center for this purpose.
- Government shall ensure that NCDs are included in the benefit package of the National Health Insurance scheme so that it will reduce the cost to the patient.

5.5. Palliative and Rehabilitative Care

- The FMOH shall provide palliative and hospice care for terminally ill NCDs' patients.
- Provide rehabilitative care for patients with disabilities from complications of NCDs.
- Detoxification/drug treatment and tobacco cessation centers.

5.6. National Survey of NCDs and Risk Factors

The Federal Ministry of Health, NCDs Control Programme shall carry out a national survey of NCDs and the risk factors at least once every five years to elaborate the burden of NCDs and monitor trends to enable informed policy review.

5.7. Research

The policy recognizes the importance of research in the overall attainment of its goal and objectives on a sustainable basis, and shall cover various aspect of research on NCDs and their risk factors.

These would include but not limited to research in the following areas:

- Research on the implementation of the policy on NCDs
- Basic research on the prevention and control of NCDs in Nigeria.

- Epidemiological, clinical and operational research on nutrition and healthy diet for policy review.
- Research into tobacco control programmes: viz price and tax measures, supply and demand measures, tobacco sales, advertising, tobacco and poverty, prevalence of tobacco use among adults, women and children etc.
- Research on trends of NCDs and NCDs risk factors for policy review
- Research on the impact on health care burden such as chronic renal failure, congestive heart failure and disabilities from stroke.
- Other research that will have impact on NCDs and the risk factors shall be supported and carried out.

5.8. Monitoring and Evaluation

Monitoring and evaluation of the implementation of this policy shall be carried out at various levels as appropriate. The key activities and tasks that shall be carried out for a successful programme implementation are:

- Monitoring and evaluation at the national levels shall be the responsibility of the Federal Ministry of Health.
- All NCDs programmes at the state and LGA levels shall be periodically monitored and re-assessed to ensure compliance with national policy and guidelines on NCDs.
- The Federal Ministry of Health shall regularly monitor NCDs and risk factors nationwide and evaluate the impact of interventions.
- Standard monitoring and evaluation tools shall be used

5.9. Supervision

Supervision shall be a continuous process designed to ensure that programme operations at all levels, are proceeding according to plan. Supervision is also necessary in order to assess the efficiency and effectiveness of NCDs control programmes.

In this regards Federal Ministry of Health shall:

- Develop supervisory schedules and checklists for NCDs control activities for all tiers of the programme with a view to attaining the targets as set in the implementation plan.
- Support supervision which shall be carried out at community and facility levels.
- Establish a mechanism to provide regular feedback at all levels.

6.0. Programme Management and Coordination

Coordination of the implementation of this policy shall be streamlined to ensure effective involvement of all stakeholders, make maximum use of resources, provide guidance and set standard for achievements as follows:

- A focal unit for NCDs control shall be identified in all health facilities, LGA PHC Departments, and State Ministries of Health.
- At the national level, the NCDs Control Programme, Federal Ministry of Health shall be the coordinating mechanism or focal point for NCDs control activities.
- At the state level, the state NCDs Control Programme shall coordinate the implementation of this policy.
- At the LGA level, the coordination of the implementation of this policy shall rest on the LGA PHC Department.

7.0. Roles of Stakeholders in the National Policy

7.1. Stakeholders

For the purposes of this policy, the key stakeholders include:

- Federal, State, Local Government and their Ministries, Departments and Agencies.
- Communities
- National, State and Local Assemblies
- Development partners;
- Organized private sector including food beverages and pharmaceutical industries;
- Non-Governmental organizations (NGOs), Faith Based Organizations (FBOs), and Civil Society Organizations (CSO).
- Relevant Professional Bodies and Associations
- Media organizations and Practitioners of Journalism.
- Community, religious and traditional leaders
- Academia and research institutions.
- Line Ministries.
- Funding agencies (both internal and external)

7.1.1. Roles of the Federal Ministry of Health

The Federal Ministry of Health shall:

1. Develop a national plan of action and coordinate implementation of this policy.
2. Designate and strengthen a focal point for the prevention and control of NCDs;

3. Establish a multisectoral technical advisory committee with representation from relevant stakeholders for the NCDs Prevention and Control Programme.
4. Provide adequate budgetary allocation for the NCDs Prevention and Control Programme at the national level;
5. Facilitate and support capacity building at all levels for the implementation of this policy;
6. Facilitate advocacy and social mobilization at all levels for the prevention and control of NCDs.
7. Set standard, provide indicators and develop guidelines for prevention and control of NCDs. This shall be in collaboration with other relevant agencies.
8. FMOH shall adopt the community based health planning services system as the National model for Community Health Care in collaboration with National Primary Health Care Development Agency (NPHCDA), State Ministry of Health (SMOH), Local Government Health Department (LGHD) and communities to integrate NCDs control into Primary Health Care (PHC) services with community plans according to local need with a view to ensuring community ownership.
9. Expand access to essential medicines, basic technologies, consumables and services for the prevention and control of NCDs
10. Promote local and international partnerships in control and prevention of NCDs
11. Facilitate research on the prevention and control of NCDs.
12. Maintain a data base for NCDs including integration with integrated disease surveillance and response (IDSR).
13. Conduct supervision, monitoring and evaluation of NCDs programmes at all levels

7.1.2. Roles of State Governments

State Government shall:

1. Through its Ministry of Health with a designated focal point be responsible for the coordination of NCDs Prevention and Control Programme.
2. Provide a budgetary line and allocate adequate resources to support NCDs Control Programme
3. Facilitate and support capacity building at state and local government levels for the implementation of this policy;
4. Facilitate advocacy and social mobilization at state and local government levels for the prevention and control of NCDs.
5. Ensure access to essential medicines, basic technologies, consumables and services for the prevention and control of NCDs at state and local government levels
6. Ensure effective linkages and referrals between Primary Health Care and higher levels of care.

7. Promote appropriate partnerships in consultation with the Federal Ministry of Health to prevent and control NCDs.
8. Ensure data management on NCDs including integration with integrated disease surveillance and response (IDSR)
9. Provide effective implementation, supervision, monitoring and evaluation of this policy at state and LGA levels.

7.1.3. Roles of Local Government Areas

Local Government Areas (LGAs) shall:

1. Ensure through its health department with a designated focal point, the coordination of NCDs Prevention and Control Programme.
2. Provide a budgetary line and allocate adequate resources to support NCDs Control Programme.
3. Facilitate and support capacity building and provide adequate human resources at Primary Health Care level for the implementation of this policy.
4. Facilitate advocacy and social mobilization at community level for the prevention and control of NCDs.
5. Ensure access to essential medicines basic technologies consumables and services for the prevention and control of NCDs at Primary Health Care level.
6. Ensure effective linkages and referrals between PHC and higher levels of care.
7. Support data collection on NCDs including IDSR.
8. Provide effective implementation, supervision, monitoring and evaluation of this policy at Primary Health Care level.

7.1.4. National Primary Health Care Development Agency

The National Primary Health Care Development Agency (NPHCDA) shall:

1. Partner with the NCDs Control Programme in the integration of NCDs into the PHC system;
2. Assist in the collection and collation of NCDs surveillance data in the LGA;
3. Assist in the mobilization of the community for NCDs control activities;
4. Assist in the training and supervision of LGA staff.

7.1.5. Multisectoral Technical Advisory Committee

Under the leadership of the FMOH a multi-sectoral technical advisory committee shall be set up comprising but not limited to the academia, research institutes, line ministries, organized private sectors, international organisations and other relevant agencies and stakeholders:

Multi-sectoral technical advisory committee shall:

1. Provide technical advice for the implementation of the NCDs policy.

2. Support advocacy and resource mobilization efforts for NCDs prevention and control.

7.1.6. Roles of Development partners

Development partners shall:

1. Provide technical, financial and infrastructural support to governments at all levels in capacity building, advocacy, social mobilization and service delivery for the successful implementation of this policy in consultation with the FMOH.
2. Support research on NCDs at all levels of health care.
3. Support monitoring and evaluation of NCDs programmes at all levels of health care.

7.1.7. Roles of Private Sector

Private sector shall:

1. Support for the effective implementation of this policy;
2. Partner with relevant stakeholders including public-private partnership in the implementation of this policy;
3. Comply with laid down Government guidelines and regulations regarding NCDs prevention and control.
4. Transmit relevant data generated from their facilities to the LGA Health Department.
5. Support resource mobilization for the implementation of this policy.

7.1.8. Roles of Pharmaceutical and other health related industries

1. Local manufacturing and provision of affordable essential medicines and vaccines for management of NCDs
2. Involvement in research for NCDs prevention and control
3. Access to quality pharmaceutical products for the treatment of NCDs

7.1.9. Roles of Civil Society Organizations

Non-Governmental Organizations (NGOs), Community Based Organizations (CBOs) and Faith Based Organizations (FBOs), shall support awareness creation, community mobilization, advocacy, capacity building and resource mobilization for NCDs prevention and control.

7.1.10. Roles of Professional Bodies

The professional bodies shall:

1. Sensitize and mobilize their members for effective implementation of this policy;
2. Participate in capacity building activities involved in the implementation of this policy;
3. Support advocacy and community mobilization
4. Support and participate in research.

7.1.11. Roles of Traditional, Religious and Opinion Leaders

1. They shall support and facilitate effective implementation of this policy
2. Shall sensitize and mobilize their subjects and members for effective implementation of this policy

7.1.12. Roles of Media Organizations

Media organizations and practitioners of journalism shall:

1. Engage in advocacy and community mobilization
2. Sensitize and mobilize their members for effective implementation of this policy;
3. Disseminate information to the public on NCDs prevention and control at all levels.

8.0. Partnership Coordination

The Federal Ministry of Health shall be responsible for the coordination of the activities of all partners involved in NCDs policy implementation and resource mobilization.

SECTION B: STRATEGIC PLAN OF ACTION

1.0. Cardiovascular Diseases

Cardiovascular diseases are a major cause of morbidity and mortality in Nigeria. The main ones are hypertension, stroke, rheumatic heart disease, cardiomyopathies and coronary heart disease.

1.1 Hypertension

Objective 1: To carry out advocacy and awareness among 80% of the general population using IEC materials in the next 5 years. This will be achieved by engaging the media (print and electronic), community leaders, FBOs, CBOs, schools, NGOs.

Strategies:

1. Carrying out advocacy at all levels.
2. Marking global related days annually e.g. World Hypertension Day, World Heart Day, World Diabetes Day, World Kidney Day and World No Tobacco Day. Days would be used to highlight the problems associated with these diseases.
3. Identifying National champions for heart related diseases.

Objective 2: To screen 50% of adults ≥18 years in the next 5 years.

Strategies:

1. Screening for early detection of hypertension and risk factors.
   Target group: Pre-higher Institutions, Pre-employment, Pre-vehicle License Issuance, Markets and Motor Parks, Professional Associations, Legislators and Policy Makers
2. Encouraging self measurement of blood pressure.

3. Increasing availability of BP measuring apparatus in health care facilities.

Objective 3: To modify risk factors for hypertension.

Strategies:

1. Encouraging smoking cessation (see section on tobacco).
2. Encouraging those who drink alcohol to reduce alcohol intake to ≤2 units for women and ≤4 units for men per day (1 unit of alcohol is equivalent to about 8g).
3. Encouraging reduction in salt intake with a view to achieving 30% relative reduction in mean population intake of salt/sodium (WHO recommendation is less than 5g of salt or 2g of sodium per person per day).

   Target groups: Food vendors, confectionaries, bakeries, fast food outlets, and local delicacies with high salt contents ('ngwongwo', Isi-ewu, suya, 'kilishi', local cheese [wara]).
4. Enforcing food labeling (as recommended by NAFDAC and Foods and Drugs Department).
5. Encouraging physical activity with a view to achieving a 10% relative reduction in prevalence of insufficient physical activity.
   - Encouraging aerobic exercise during work hours.
   - Establishing gymnasium in workplaces.
   - Encouraging government to build pedestrian friendly roads with walkways.
   - Encouraging the use of bicycles.
   - Encouraging school-based physical activities.

Objective 4: To strengthen the structures and capabilities for control of hypertension.

Strategies:

1. Training and continuing education of PHC personnel in the detection and management of hypertension (nurses, midwives, community health workers).
2. Promoting educational activities: conferences, workshops, seminars etc. for health care personnel in the management of hypertension.t
3. Promoting seminars and workshops in local languages at community level.
4. Increasing availability of generic essential medicines and basic technologies for treating hypertension at healthcare settings to ≥80% in the next 5 years.
5. Promoting the local manufacturing of antihypertensives.
6. Developing, printing and dissemination of consensus document (including guidelines and job aids) for the management of hypertension.

Objective 5: To promote surveillance and research on hypertension.

Strategies:

1. Carrying out study on salt, unhealthy diet, physical inactivity, tobacco and harmful use of alcohol.
2. Carrying out prevalence and risk factors survey for target groups e.g. Primary School Children, Secondary school, Adolescents and Youths.

1.2. Stroke

Objective 1: To carry out advocacy at all levels and awareness among 50% of the general population in the next 5 years using IEC. This will be achieved by engaging the media (print and electronic), community leaders, NGOs, FBOs, CBOs, schools etc.

Strategies:

1. Carrying out advocacy at all levels.
2. Marking World Stroke day and other global related days.
3. Identifying of National champions for stroke.

Objective 2: To screen 80% of adults ≥18 years for risk factors of stroke (e.g. hypertension, diabetes mellitus, dyslipidaemias, sickle cell disease) in next 5 years.

Target group: Pre-higher Institutions, Pre-employment, Pre-vehicle License Issuance; Markets and Motor Parks; Professional Associations; Legislators and Policy Makers.

Strategies:

4. Screening for early detection of hypertension, diabetes mellitus, dyslipidaemias, sickle cell disorder at PHC settings.
5. Encouraging self measurement of blood pressure.
6. Increasing availability of screening equipments in health care facilities.

Objective 3: To modify risk factors for stroke.

Strategies:

6. Encouraging those who drink alcohol to reduce alcohol intake to ≤2 units for women and ≤4 units for men per day (1 unit of alcohol is equivalent to about 8g).
7. Encouraging reduction in salt intake with a view to achieving 30% relative reduction in mean population intake of salt/sodium (WHO recommendation is less than 5g of salt or 2g of sodium per person per day).

   Target groups: Food vendors, confectionaries, bakeries, fast food outlets, and local delicacies with high salt contents (‘ngwongwo’, Isi-ewu, suya, ‘kilishi’, local cheese [wara]).
8. Enforcing food labeling (as recommended by NAFDAC and Foods and Drugs Department).
9. Encouraging physical activity with a view to achieving a 10% relative reduction in prevalence of insufficient physical activity.

Objective 4: To strengthen the structures and capabilities for management of stroke.

Strategies:

1. Establishing effective referral system at the PHC level.
2. Establishing dedicated stroke units at the secondary and tertiary health care levels.
3. Establishing comprehensive rehabilitation centres for chronic stroke cases at the community level with models at the tertiary health centres.
4. Training and continuing education of health personnel working in stroke unit.
5. Promoting seminars and workshops in local languages at community level.
6. Increasing availability of generic essential medicines and basic technologies for management of stroke.
7. Developing, printing and dissemination of consensus document (including guidelines and job aids) for the management of stroke.

Objective 5: To promote surveillance and research on stroke.

1.3 Rheumatic Heart Disease

Objective 1: To define the baseline burden of disease, implement surveillance and establish targets for control
Strategies:

1. Conduct a pilot program of echocardiographic screening to better define burden of disease and explore feasibility of a broader screening program
2. Make rheumatic fever a notifiable disease
3. Collate burden of disease data to identify high risk populations and communities
4. Identify national and local targets for control of RF and RHD

Objective 2: To promote advocacy at all levels and awareness among the general population using IEC in the next 5 years. This will be achieved by engaging the media (print and electronic), community leaders, NGOs FBOs, CBOs, schools etc.
Strategies:

1. Carrying out advocacy at all levels
2. Marking World Heart Day and other global related days with emphasis on RHD annually.
3. Identifying of National Champions for RHD

Objective 3: To strengthen structures and capabilities for the management of RHD.
Strategies:

1. Establish an expert RF/RHD Advisory Committee to oversee guidelines development
2. Develop, print and disseminate of consensus document including (guidelines and job aids) for the management of RHD
3. Train PHC personnel in the diagnosis and management of RHD (nurses, midwives, community health workers).

4. Increasing availability of generic essential medicines (including benzathine penicillin G) for treating RF at healthcare settings to ≥80% in the next 5 years.

Objective 4: To identify and modify risk factors for RHD
Strategies:

1. Develop community education materials to improve health literacy about sore throats, RF and RHD
2. Quantify and address overcrowding in high risk communities
3. Understand and improve access to primary health services for high risk children aged 5 – 15 years

Objective 5: To develop a register of RF and RHD cases and deliver secondary prophylaxis
Strategies:

1. Develop local and state based registers for surveillance and care delivery
2. Provide more than 80% of scheduled secondary prophylaxis injections to more than 50% of register patients over the next 5 years

Objective 6: To develop national capacity for tertiary management of RHD
Strategies:

1. Establishing centres of excellence with the capacity of diagnosis, critical care including valvuloplasty at the secondary and tertiary health care levels.
2. Strengthen capacity for anticoagulation monitoring and delivery

1.4 Coronary Heart Disease (CHD)

Objective 1: To define the baseline burden of disease, implement surveillance and establish targets for control
Strategies:

1. Conduct a pilot program of electrocardiographic/echocardiographic screening to better define burden of disease and explore feasibility of a broader screening program
2. Make Coronary Heart Disease a notifiable disease

Objective 2: To carry out advocacy and awareness among 80% of the general population using IEC materials in the next 5 years. This will be achieved by engaging the media (print and electronic), community leaders, FBOs, CBOs, schools, NGOs.
Strategies:

1. Carrying out advocacy at all levels.
2. Marking World Heart Day and other global related days annually.
3. Identifying National Champions for CHD.

Objective 3: To screen 10% of adults ≥18 years for risk factors of CHDs (e.g. hypertension, diabetes mellitus, dyslipidaemias, SCD and tobacco use) in next 5 years.

Target groups: Pre-higher institutions, pre-employment, pre-vehicle license issuance; Markets and motor parks; Professional Associations.

Objective 4: To identify and modify risk factors for CHDs

Strategies:

1. Develop community education materials to improve Heart -health promotion about CHD
2. Understand and improve access to primary health services for high risk population

Objective 5: To strengthen the structures and capabilities for prevention and management of CHDs.

Strategies:

1. Establish an expert Committee to oversee guidelines development for CHD
2. Developing, printing and disseminating consensus document and guidelines for the management of CHDs.
3. Establishing of dedicated Cardiac Care Units at the secondary and tertiary health care levels.
4. Establishing effective referral system at the PHC level.
5. Encouraging linkage with the community based comprehensive rehabilitation centres.
6. Training and continuing education of coronary health care personnel and other paramedics in the community
7. Increasing availability of generic essential medicines for hypertension and Ischemic Heart Disease.

Objective 5: To promote of surveillance and research on CHDs.

1.5 Cardiomyopathies

Objective 1: To define the baseline burden of disease, implement surveillance and establish targets for control

Strategies:

1. Conduct a pilot program of echocardiographic sreening to better define burden of disease and explore feasibility of a broader screening program
2. Make Cardiomyopathy a notifiable disease

Objective 2: To promote advocacy at all levels and awareness among the general population using IEC to ≥10% in the next 5 years (See IEC section). This will be achieved by engaging the media (print and electronic), community leaders, FBOs, CBOs, schools, NGOs.

Strategies:

1. Carrying out advocacy at all levels on cardiomyopathy.
2. Marking World Heart Day and other global related days with emphasis on cardiomyopathy annually.

Objective 3: To screen for cardiomyopathy in the general population notably sports men and women, children, adolescent, youths, women in pregnancy and puerperium.

Objective 4: To modify risk factors for cardiomyopathy

Strategies:

1. Develop community education materials to improve Heart-health education about Cardiomyopathy
2. Understand and improve access to primary health services for high risk populations

Objective 5: To strengthen the structures and capabilities for prevention and management of cardiomyopathy.

Strategies:

1. Developing, printing and disseminating of consensus document and guidelines for the management of cadiomyopathy.
2. Establishing of centres of excellence with the capacity of diagnosis, critical care including transplantation at the secondary and tertiary health care levels.
3. Establishing effective referral system at the PHC level.
4. Training and continuing education on cardiomyopathy in the community.

Objective 6: To promote surveillance and research on cardiomyopathy.

Objective 1: To carry out advocacy and awareness among 80% of the general population using IEC materials in the next 5 years

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Creating awareness of heart diseases through radio; TV and News media; and through SMS (partnership with telecommunication companies	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs, private organizations and NGOs	Funds for radio/TV, News papers, SMS	500 M	FMOH, NGOs, Donor Agencies / partners	Awareness created through Radio, TV, Newspapers and telecommunication companies/organization	80% of Nigerian population in the urban areas and 70% in rural areas coverage	
2.	Producing and distributing IEC materials on management/care of various heart diseases • Information booklets • Posters in 5 languages (English, Yoruba, Hausa, Igbo, Pidgin)	Jan 2014-Dec 2018	FMOH, SMOH, LGAs, NHF, private organizations and NGOs	Materials, transport, honorarium	150 M	FMOH, NGOs, Donor Agencies / partners	IEC materials produced and distributed	80% of Nigerian population	
4.	Marking of UN Global related days e.g. World	Jan 2014-Dec	FMOH, SMOH, LGAs, NHF,	Logistics, Honorarium, printing of	50M	FMOH, SMOH, LGAs	Global days marked annually	80% of Nigerian population	

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
	Heart Day, World Hypertension Day, World No Tobacco Day	2018	NHS/NCS, NTCA etc.	IEC materials		and NGOs			
5.	Identifying and branding of natural champions for heart diseases	March 2014	FMOH	Funds, media, logistics, honorarium	10M	FMOH, donor Agencies	Champions identified and branded	At least one champion per geopolitical zone	

Objective 2a: To screen 10% of adults ≥18 years for risk factors of CHDs in the next 5 years

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Screening adults > 18years in rural/urban areas regularly	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	BP, BG & urinalysis equipment, weighing scale, Honorarium, transport	50M	FMOH, SMOH, LGAs.	1) Increased number of people that know their BP 2) Increased number of people that can do self measurement of BP 3) Increased number of BP apparatus in health care facilities.	10% of 18 years olds	

Objective 2b: To screen 10% of school children for risk factors of RHDs in the next 5 years

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Screening school children in rural/urban areas regularly	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Echocardiograph, ECG, BP equipment, weighing scale, Honorarium, transport	25M	FMOH, SMOH, LGAs.	1) Increased number of people that know about RHD 2) Increased number of school health clinics that are aware about RHD and prevention.	10% of school children	

Objective 3: To modify risk factors for heart diseases

ii. **Tobacco control**

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Supporting legislation of tobacco control law.	Jan 2014-Dec. 2015	FMOH, SMOH, LGAs	Funds, media, logistics	50M	FMOH, SMOH, LGAs, Partners	Tobacco control law enacted	All states and LGAs of the Federation	
2.	Enforcing compliance with FCTC • Ban smoking in public places. • High taxation. • Promote labeling. • Prohibition of sale to under age person.	Jan 2014-Dec. 2018	FMOH SMOH LGAs	Funds, media, logistics	150M	FMOH, SMOH, LGAs, Partners	Enforcement of the national tobacco control law	All states and LGAs of the Federation	

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
3.	Training health professionals (doctors, nurses, pharmacists, CHO) on tobacco cessation.	Jan 2014-Dec. 2018	FMOH SMOH LGAs	Funds, logistics, honorarium	200M	FMOH, Partners	Health professionals trained on tobacco cessation	At least 200 health professionals per State	
4.	Instituting counseling centers for tobacco cessation.	Jan 2014-Dec. 2018	FMOH SMOH LGAs	Funds, media, logistics	100M	FMOH, SMOH, LGAs, Partners	Centres offering counseling services on tobacco cessation	At least one per State	
5.	Including medical drugs in the essential drugs list for Tobacco cessation (Nicotine patch, Gum)	Jan 2014-Dec. 2018	FMOH SMOH LGA	Funds, media, logistics	300M	FMOH, Partners	Medicines for tobacco cessation included in the essential drug list	80% of smokers	
6.	Establishing partnership with telephone companies for SMS and quit lines.	Jan 2014-Dec. 2018	FMOH SMOH LGA	Funds, media, logistics	100M	FMOH, Partners	Customized SMS and quit lines established	90% of smokers	

ii. **Alcohol control**

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Creating awareness on dangers of alcohol through radio, TV, and News media, SMS, telephone.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics	300M	FMOH, SMOH, LGAs.	Awareness created through the media and telephones	80% of Nigerian population in the urban areas and 70% in rural areas coverage	
2.	Producing and Distributing IEC materials on alcohol abuse • Information booklets • Posters in 6 languages English, Yoruba, Hausa, Igbo, Efik, pidgin.	Jan 2014-Dec. 2018	FMOH SMOH LGA	Funds, media, logistics	150M	FMOH, NGOs, Donor Agencies/ partners	IEC materials produced and distributed	50% of Nigerian population	
3.	Marking UN global related days • World Health Days • World Hypertension Day • World Salt Day	Jan 2014-Dec. 2018	FMOH SMOH LGA	Funds, media, logistics	50M	FMOH, SMOH, LGAs	Related global days marked annually	60% of Nigerian population	
4.	Enforcing labeling of alcohol drinks in partnership with NAFDAC/ Breweries.	Jan 2014-Dec. 2018	FMOH SMOH LGA	Funds, media, logistics	100M	FMOH, Partners	Proper labeling of alcohol drinks	95% of all brewed alcoholic drinks properly labeled	

iii. **Salt reduction**

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Creating awareness on limiting of salt intake to less than 5g per day on radio, TV, News media & SMS.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics	200M	FMOH, SMOH, LGAs.	Awareness created on limit of salt intake per day	80% of Nigerian population in the urban areas and 70% in rural areas coverage	
2.	Producing and distributing IEC materials on salt levels of foods • Leaflets • Posters in 5 languages.	Jan 2014-Dec. 2018	FMOH SMOH LGA	Funds, media, logistics	150M	FMOH, NGOs, Donor Agencies/ partners	IEC materials produced and distributed	50% of Nigerian population	
3.	Enforcing food labeling in partnership with NAFDAC	Jan 2014-Dec. 2018	FMOH SMOH LGA	Funds, media, logistics	50M	FMOH, SMOH, LGAs, Partners	Proper labeling of foods and drinks	95% of all packaged foods and drinks properly labeled	
4.	Marking UN World NO- Salt Day.	Jan 2014-Dec. 2018	FMOH SMOH LGA	Funds, media, logistics	10M	FMOH, SMOH, LGAs, Partners	Global days marked annually	60% of Nigerian population	

iv. **Physical inactivity**

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Creating awareness on regular physical activity on radio, TV, Newsprint, SMS.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics	200M	FMOH, SMOH, LGAs.	Awareness created on regular physical activity	80% of Nigerian population in the urban areas and 70% in rural areas coverage	
2.	Producing and distributing IEC materials on regular physical activity and various activities (esp aerobic) • Leaflets • Posters in 5 Nigeria languages	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics	150M	FMOH, NGOs, Donor Agencies/ partners	IEC materials produced and distributed	50% of Nigerian population	
3.	Encouraging aerobic exercise during working hours in corporate Institutions	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs, Partners	Funds, media, logistics	500M	FMOH, NGOs, Donor Agencies/ partners	Increased aerobic exercise during working hours in corporate organizations	100% coverage	
4.	Encouraging construction of walk-ways in towns/ LGs headquarter	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics	-	FMOH, NGOs, Donor Agencies/ partners	Increased number of walk-ways in towns/LGs headquarter	20% coverage	
5.	Establishing partnership with schools on promotion of school-based physical activities.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics	150M	FMOH, NGOs, Donor Agencies/	Increased number of schools with improved	20% coverage	

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
						partners	school- based physical activities.		
6.	Encouraging of use of bicycle in city Estates especially weekends.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics		FMOH, NGOs, Donor Agencies/ partners	Increased use of bicycle in city Estates esp weekends	20% coverage	

Objective 4: To strengthen the structure and capability of the healthcare system

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Printing and dissemination of guidelines for the control and management of all CVDs	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, logistics	150M	FMOH, SMOH, NGOs, Donor Agencies/ partners	Guidelines for the control and management of CVDs produced and disseminated	80% coverage	
2.	Training of Health professionals at PHC, SHC and THC on the use of the guidelines for CVDs.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, logistics	100M	FMOH, NGOs, SMOH, LGs Donor Agencies/ partners	Health professionals trained on the use of guidelines for CVDs	50% coverage	
3.	Training of ECG technicians and ultrasound technicians on Electrocardiography	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics	100M	FMOH, NGOs, Donor Agencies/ partners	ECG technicians and ultrasound technicians on trained Electrocardiography	50% coverage	

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
3.	Equipping PHC/SHC with sphygmomanometers, ECG machines.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics	150M	FMOH, NGOs, SMOH, LGs, Donor Agencies/ partners	Sphygmomanometers, ECG machines available in PHC/SHC.	≥50% coverage	
4.	Equipping Tertiary centres with radiodiagnostic and Cardiac Screening/ Diagnostic Equipments.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics	800M	FMOH, NGOs, Donor Agencies/ partners	Tertiary centres equipped with radiodiagnostic and Cardiac Screening/ Diagnostic Equipmen	≥50% coverage	
5.	Increasing availability of generic essential drugs in all Health centers.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics	600M	FMOH, SMOH, LGs, NGOs, Donor Agencies/ partners	Increased in availability of essential drugs in health centers	≥50% coverage	
6.	Support for Local Pharmaceutical industries to produce anti-hypertensive drugs and other drugs for CVDs.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs	Funds, media, logistics	700M	FMOH, NGOs, Donor Agencies/ partners	Local Pharmaceutical industries supported to produce anti-hypertensive drugs and other drugs for CVDs.		

2.0. Diabetes mellitus

Objective 1: To carry out advocacy and awareness among 80% of the general population using IEC materials in the next 5 years. This will be achieved by engaging the media (print and electronic), community leaders, FBOs, CBOs, schools, NGOs.

Strategies:

Strategies:

1. Embarking on advocacy visits at all levels.
2. Marking World Diabetes Day annually.
3. Identifying National champions among opinion leaders and other stakeholders for heart related diseases.

Objective 2: To screen ≥50% of adults ≥18 years for early detection of pre-diabetes and diabetes mellitus and its associated risk factors in the next 5 years.

Strategies:

1. Screening for early detection of pre-diabetes and diabetes mellitus in PHC settings.
   Target group: school children, adolescents, youths, pregnant women and professional groups,
2. Increasing availability of point of care testing of blood glucose in all health facilities.

Objective 3: To modify risk factors for diabetes

Strategies:

1. Encouraging smoking cessation (see section on tobacco).
2. Encouraging weight reduction measures: Halt the rise in obesity population to ≥25% of the obese population in the next 5 years.
3. Encouraging physical activity with a view to achieving a ≥10% relative reduction in prevalence of insufficient physical activity.
   - Encouraging aerobic exercise during work hours.
   - Establishing gymnasium in workplaces.
   - Building pedestrian friendly roads with walkways.
   - Encouraging government to construct bicycles routes on roads to encourage the use bicycles.
   - Encouraging school-based physical activities.
4. Encouraging reduction in harmful use of alcohol.
5. Encouraging reduction in salt intake with a view to achieving ≥30% relative reduction in mean population intake of salt/sodium intake (WHO recommendation is <5g of salt or <2g of sodium per person per day).
   Target group: Food vendors, confectionaries, bakeries, fast food outlets, local delicacies e.g. ngwongwo, Isi-ewu, suya, ‘kilishi’, local cheese wara.

6. Enforcing food labeling programmes (as recommended by NAFDAC and Foods and Drugs Department).
7. Encouraging reduction in consumption of saturated fats with a view to achieving ≥15% relative reduction in mean proportion of total energy intake from saturated fatty acids in the next 5 years, with the view of achieving a recommended WHO target of <10% of total energy intake.
8. Encouraging reduction in the prevalence of raised total cholesterol with a view to achieving ≥20% relative reduction in the prevalence of raised total cholesterol in the next 5 years (total normal blood cholesterol is <5mmol/l).
9. Ensuring ≥20% reduction in albuminuria in the population over the next 5 years.

Objective 4: To strengthen the structures and capabilities for control.

Strategies:

1. Training, continuing education of PHC personnel in the detection and management of pre-diabetes and diabetes mellitus: target people to be trained: nurses, midwives, and community health workers.
2. Promoting educational activities: conferences, workshops, seminars etc. for health care personnel in the management of pre-diabetes and diabetes mellitus.
3. Promoting seminars and workshop in local languages at community level.
4. Establishing of a national diabetes centre with zonal coordinating centres.
5. Establishing of NCDs network involving diabetes, CVD, Cancers and chronic respiratory diseases
6. Making available generic essential medicines and basic technologies to ≥50% for treating diabetes at all levels.
7. Promoting the local manufacturing of antidiabetes drugs/consumables.
8. Establishing rehabilitation centres including appliance units for diabetes foots and renal replacement therapy at secondary and tertiary health centres.
9. Developing, printing and disseminating consensus document and guidelines for the management of diabetes at all levels.

Objective 5: To promote surveillance and research on pre-diabetes and diabetes.

Strategies:

1. Carrying out study on salt, unhealthy diet, physical inactivity, tobacco and harmful use of alcohol.
2. Carrying out prevalence and risk factors survey for target groups e.g. Primary School Children, Secondary school, Adolescents and Youths.

Objective 1: To promote advocacy at all levels and awareness among the general population using IEC to 80% in the next 5 years

S/N	Activities	Timing	Implementing Agency	Need For Resources	Cost	Sources of Fund	Expected Output	Target	Remarks
1.	Embarking on advocacy visits to the political, religious, traditional authorities, the media, FBO, CBO, Schools, and NGOs.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs, CSOs (including DAN) association of private medical practitioners, media (print & electronic).	Logistics IEC materials	N50M	FMOH, SMOH, LGAs, CSOs, UN Agencies, private sectors.	Authorities enlisted are mobilized, and awareness created.		
2.	Marking world Diabetes day with activities like: press briefing diabetes walk, screening, public lectures (in local languages)in all states and FCT.	Jan. 2014-Dec. 2018	FMOH, SMOH, LGAs, CSOs,	Logistics, IEC materials, Diagnostics consumables medications	N25M	FMOH, SMOH, LGAs, CSOs, UN Agencies, private sectors.	Awareness created, people with diabetes identified and counseled		
3.	Enlisting and reaching out for Diabetes Mellitus National Champions and opinion leaders e.g. past National leaders and owners of Diabetes Mellitus foundations.	Biannually from Jan. 2014-Dec. 2018	FMOH, SMOH, LGAs, DAN and other CSOs.	Logistics plaques	N50M	FMOH, SMOH, LGAs, CSOs, IDF, UN Agencies, Private sectors.	Diabetes Mellitus champions & opinion leaders identified, mobilized and encouraged.		

Objective 2: To screen for early detection of pre-diabetes and diabetes mellitus and its associated risk factors for adults ≥18 years to ≥50% in the next 5 years with a view to increasing to ≥80% in the next 10 years.

S/N	Activities	Timing	Implementing Agency	Need For Resources	Cost	Sources of Fund	Expected Output	Target	Remarks
1	Organizing regular screening exercise for the community targeting at risk groups (About 2 interventions/zone/year) School children, adolescents, youths, pregnant woman and professional groups.	Jan 2014-Dec. 2018	FMOH, SMOH, LGAs, DAN	Reagents, glucometers & logistics	N50M	FMOH, SMOH, LGAs, Donor Agencies.	Result of survey. At least 6000 people screened/zone/year.	Increasing detection rate of Diabetes Mellitus in the community to 50%	

3.0 Chronic respiratory diseases

Core diseases:

- COPD
- Asthma
- Interstitial lung diseases
- Occupational lung diseases
- Lung cancer

Risk factors:

- Direct and indirect exposure to tobacco smoke
- Exposure to indoor and outdoor air pollution
- Occupational exposure to toxic agents
- Exposure to common allergens
- Malnutrition and low birth weight
- Multiple early lung infections

1.1 COPD

Objective 1:

To increase awareness of COPD among the general population within the next 5 years. This will be achieved by engaging the media, community leaders, FBOs, CBOs, schools and NGOs.

Strategies:

1. Embarking on advocacy visits at all levels.
2. Marking world COPD day

Objective 2:

To screen ≥ 50% of adults ≥45 years for detection of early stages of COPD

Strategies:

1. Screening for early detection of COPD in the primary care setting. Target groups; cigarette smokers, women who cook with biomass fuels, occupational users of biomass fuels, occupational exposure to dusts.
2. Increasing the availability of point of care spirometry for the measurement of lung function.

Objective 3:

To modify risk factors for COPD

Strategies:

1. Encourage smoking cessation
2. Reduce the dependence on biomass for domestic fuel
3. Reduce the occupational use of biomass for fuel
4. Increase access to cleaner more efficient biomass stoves

5. Encourage the use of protective masks among workers exposed to dusts and biomass smoke

Objective 4:

To promote research on COPD

Strategies:

1. Carry out nationwide survey on the incidence and prevalence of COPD
2. Develop and test more efficient biomass stoves
3. Develop and test personal protective equipment for occupational exposure
4. Carry out cohort studies to evaluate the impact of recurrent childhood chest infections, low birth weight and early biomass smoke exposure on the development of COPD.

3.2 Asthma

Objective 1:

To increase awareness among the general population about asthma within the next 5 years. This will be achieved by engaging the media, schools and NGOs.

Strategies:

1. Embarking on advocacy visits at all levels
2. Marking world asthma day
3. Identifying national champions among stakeholders for asthma

Objective 2:

To screen ≥ 80% of children and ≥20% of adults for asthma

Strategies:

1. Symptomatic screening for asthma of children and adults for possible and probable asthma
2. Increasing the availability of point of care spirometry for the measurement of lung function and the detection of reversible airflow limitation.
3. Increasing access to more sophisticated tests such as airway hyperresponsiveness testing, exhaled nitrous oxide measurements etc. in secondary and tertiary facilities.

Objective 3:

To modify risk factors for asthma

Strategies:

1. Encourage smoking cessation especially among asthma patients and parents
2. Reduce the domestic use of biomass for fuel
3. Enact and enforce legislation against outdoor air pollution

Objective 4:

To promote research on asthma

Strategies:

1. To encourage research into the incidence and prevalence of asthma
2. To determine the influence of environmental air pollution from vehicular exhaust on asthma
3. To evaluate the impact of oil exploration activities on the pattern and presentation of asthma
4. To determine the role of hygiene on the development of asthma

3.3 Interstitial lung diseases (ILD)

Objective 1:

To carry out advocacy and awareness of ILDs among 80% of the general population using IEC materials in the next 5 years. This will be achieved by engaging the media (print and electronic), community leaders, FBOs, CBOs, schools and NGOs.

Strategies:

1. Embarking on advocacy visits at all levels
2. Marking world idiopathic pulmonary fibrosis (IPF) week
3. Identifying national champions among stakeholders for ILD

Objective 2:

To screen ≥ 50% of adults ≥ 18 years for risk factors for ILDs e.g. cigarette smoking, family history, air pollution, autoimmune diseases and SCD, in the next 5 years.

Strategies:

1. Symptomatic screening at the primary care setting for features of ILD such as inappropriate shortness of breath especially in middle aged women
2. Increasing the availability of point of care spirometry for the measurement of lung function.

Objective 3:

To modify risk factors for ILDs

Strategies:

1. Encourage smoking cessation
2. Reduce exposure to biomass smoke and air pollution
3. Identify and treat autoimmune diseases early

Objective 4:

To promote surveillance and research on ILD

Strategies:

1. To determine the incidence and prevalence of ILD in the population

2. To determine the risk factors associated with ILD

3.4 Occupational lung diseases (OLD)

Objective 1:

To carry out advocacy and awareness of occupational lung diseases among 80% of the general population using IEC materials in the next 5 years. This will be achieved by engaging the media (print and electronic), community leaders, FBOs, CBOs, schools and NGOs.

Strategies:

1. Embarking on advocacy visits at all levels
2. Marking the world day for safety and health at work with emphasis on respiratory diseases.
3. Identifying national champions among stakeholders for pneumoconiosis

Objective 2:

To screen ≥ 50% of adults ≥ 18 years for risk factors for pneumoconiosis e.g. occupational exposure, cigarette smoking, the use of protective equipment, in the next 5 years.

Strategies:

1. Symptomatic screening at the primary care setting for features of occupational lung diseases such as inappropriate shortness of breath especially and chronic cough.
2. Increasing the availability of point of care spirometry for the measurement of lung function.

Objective 3:

To modify risk factors

Strategies:

1. To propose and enforce legislation on the protection of workers in industries prone to exposure to occupational dusts
2. Early detection of sufferers of occupational lung diseases by the compulsory provision of staff clinics onsite
3. Frequent unannounced supervisory visits to work sites by regulatory authorities to monitor adherence to safety measures by workers
4. Frequent unannounced supervisory visits to work sites by regulatory authorities to monitor air quality to ensure compliance by organizations
5. Legislation on adequate compensation for workers who develop occupational lung diseases by their employers.

Objective 4:

To promote surveillance and research on occupational lung diseases

Strategies:

1. To determine the incidence and prevalence of occupational lung diseases in the population
2. To determine the risk factors associated with occupational lung diseases.

3.5 Lung malignancies

Objective 1:

To carry out advocacy and awareness of lung malignancies among 80% of the general population using IEC materials in the next 5 years. This will be achieved by engaging the media (print and electronic), community leaders, FBOs, CBOs, schools and NGOs.

Strategies:

1. Embarking on advocacy visits at all levels
2. Marking world cancer day with emphasis on lung malignancies
3. Identifying national champions among stakeholders of lung cancer

Objective 2:

To screen ≥ 50% of adults ≥ 18 years for risk factors for lung cancer e.g. cigarette smoking and occupational exposure in the next 5 years.

Strategies:

1. Symptomatic screening at the primary care setting for features of lung cancer such as coughing up blood and weight loss.
2. Increasing the availability of point of care chest radiography for ear detection of lung masses.

Objective 3:

Modify risk factors

Strategies:

1. Encourage smoking cessation
2. Reduce exposure to biomass smoke
3. Reduce occupational exposure to carcinogens

Objective 4:

To promote surveillance and research on lung cancer

Strategies:

1. To determine the incidence and prevalence of lung cancers in the population
2. To determine the risk factors associated with lung cancers

COPD Objective 1:

To increase awareness of COPD among the general population within the next 5 years.

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Embarking on advocacy visits to political, religious, traditional authorities, media houses, FBO, CBO schools and NGOs	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS) association of private medical practitioners and media	Logistics and IEC materials	N50M	FMOH, SMOH, LGAs, CSO, UN agencies, private sector.	Authorities enlisted are mobilized and awareness created.		
2	Marking world COPD day with activities like press briefing, public lectures, screening with spirometry.	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS)	Logistics, IEC materials, spirometers and medications	N25M	FMOH, SMOH, LGAs, CSO, UN agencies, private sector.	Authorities enlisted are mobilized and awareness created.		

COPD Objective 2: To screen ≥ 50% of adults ≥45 years for detection of early stages of COPD

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Screening for early detection of COPD in	Jan 2014 –	FMOH, SMOH, LGAs,	Logistics, spirometers,	N150M	FMOH, SMOH,	Results of survey; ≥	Increasing the detection rate	

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
	the primary care setting. Target groups; cigarette smokers, rural women, occupational exposure to dusts and biomass smoke.	Dec 2018		consumables		LGAs, UN agencies, NGOs	5000 people screened / zone / year.	of COPD in the community to ≥50%	
2	Increasing the availability of point of care spirometry for the measurement of lung function.	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs,	Logistics, spirometers, consumables	N500M	FMOH, SMOH, LGAs, UN agencies,	Spirometers procured and distributed to points of care.	Increasing the availability of spirometry ≥ 50% to general public.	

COPD Objective 3: To modify risk factors for COPD

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Encourage smoking cessation	Jan 2014 – Dec	FMOH, SMOH, LGAs,	Medications, logistics, media	N150M	FMOH, SMOH, LGAs, UN	Enhanced tobacco control,	Reduce the prevalence of smoking in	

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
		2018				agencies, NGOs	increased awareness of dangers of smoking	Nigeria by ≥50% per annum	
2	Reduce the dependence on biomass for fuel	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs,	Logistics, funds, media	N100M	FMOH, SMOH, LGAs, UN agencies,	Awareness created in media and telephones	Reducing the use of biomass fuels by ≥ 20%per annum	
3	Increasing access to cleaner fuels	Jan 2014-Dec 2018	FMOH, SMOH, LGAs,	Logistics, funds, media	N100M	FMOH, SMOH, LGAs, UN agencies,	Awareness created in media and telephones	Increasing the use of gas and electricity for energy by ≥ 20% per annum.	
4	Encourage the use of protective masks among workers exposed to dusts and biomass smoke	Jan 2014-Dec 2018	FMOH, SMOH, LGAs,	Logistics, media PPE	N100M	FMOH, SMOH, LGAs, UN agencies, private sector.	Awareness created in media and telephones	Increasing the use of PPE among exposed workers by ≥ 50% per annum	

COPD Objective 4: To promote research on COPD

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Carry out nationwide survey on the incidence and prevalence of COPD	Every year	FMOH, SMOH, LGAs,	Logistics and spirometers	N250M	FMOH, SMOH, LGAs, UN agencies,	Prevalence and incidence data of COPD in the community	Accurate epidemiological data for the country	
2	Develop and test more efficient biomass stoves			Logistics, laboratories, stoves	N500M	FMOH, SMOH, LGAs, UN agencies,	More energy efficient stoves	Produce stoves that use 75% less biomass and produce 90% less smoke.	
3	Carry out cohort studies to evaluate the impact of other risk factors on the development of COPD.	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, UN agencies	Laboratories, Logistics, researchers	N250M	FMOH, SMOH, LGAs, UN agencies,	Data on COPD risk factors		

Asthma Objective 1:

To increase awareness among the general population about asthma within the next 5 years.

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Embarking on advocacy visits to political, religious, traditional authorities, media houses, FBO, CBO schools and NGOs	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS) association of private medical practitioners and media	Logistics and IEC materials	N50M	FMOH, SMOH, LGAs, CSO, UN agencies, private sector.	Authorities enlisted are mobilized and awareness created.	Improving asthma awareness by ≥50% per annum	
2	Marking world asthma day with activities like press briefing, public lectures, screening with spirometry.	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS)	Logistics, IEC materials, spirometers and medications	N25M	FMOH, SMOH, LGAs, CSO, UN agencies, private sector.	Authorities enlisted are mobilized and awareness created.		
3	Identifying national champions among stakeholders for asthma	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS)	Logistics, media, funds, honorarium	N10M	FMOH, SMOH, donor agencies	Champions identified and branded	At least 1 champion per state	

Asthma Objective 2: To screen ≥ 80% of children and ≥20% of adults for asthma

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Symptomatic screening for asthma of children and adults for possible and probable asthma	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs,	Logistics, spirometers, consumables	N150M	FMOH, SMOH, LGAs, UN agencies, NGOs	Results of survey; ≥ 5000 people screened / zone / year.	Increasing the detection rate of asthma in the community to ≥50% per annum	
2	Increasing the availability of point of care spirometry for measurement of lung function.	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs,	Logistics, spirometers, consumables	N500M	FMOH, SMOH, LGAs, UN agencies,	Spirometers procured and distributed to points of care.	Increasing the availability of spirometry ≥ 50% to general public.	
3	Increasing access to more sophisticated asthma tests in secondary and tertiary hospitals	Jan 2014 – Dec 2018	FMOH, SMOH	Funds, laboratories	N500M	FMOH, SMOH, UN agencies,		≥80% of secondary and tertiary health facilities	

Asthma Objective 3: To modify risk factors for asthma

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Encourage smoking cessation especially among asthma patients and parents	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, UN agencies	Medications, logistics, media	N150M	FMOH, SMOH, LGAs, UN agencies, NGOs	Enhanced tobacco control, increased awareness of dangers of smoking	Reduce the prevalence of smoking in Nigeria by ≥50% per annum	
2	Reduce the dependence on biomass for fuel	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs,	Logistics, funds, media	N100M	FMOH, SMOH, LGAs, UN agencies,	Awareness created in media and telephones	Reducing the use of biomass fuels by ≥ 20%per annum	
3	Increasing access to cleaner fuels	Jan 2014-Dec 2018	FMOH, SMOH, LGAs,	Logistics, funds, media	N100M	FMOH, SMOH, LGAs, UN agencies,	Awareness created in media and telephones	Increasing the use of gas and electricity for energy by ≥ 20% per annum.	
4	Support legislation against outdoor air pollution	Jan 2014-Dec 2018	FMOH, SMOH, LGAs,	Logistics, media	N100M	FMOH, SMOH, LGAs, UN agencies, private	Legislations enacted	all states and LGAs	

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
						sector.			

Asthma Objective 4: To promote research on asthma

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Carry out nationwide survey on the incidence and prevalence of asthma	Every year	FMOH, SMOH, LGAs,	Logistics and spirometers	N250M	FMOH, SMOH, LGAs, UN agencies,	Prevalence and incidence data of asthma in the community	Accurate epidemiological data for the country	
2	To determine the influence of environmental air pollution from vehicular exhaust on asthma	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, UN agencies	Logistics, laboratories, spirometers	N500M	FMOH, SMOH, LGAs, UN agencies,	Estimates of the levels of environmental air pollution	Data to cover ≥90% of the country	
3	To evaluate the	Jan	FMOH,	Laboratories,	N250M	FMOH,	Estimates of the	Data to cover	

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
	impact of oil exploration activities on the development of asthma	2014 – Dec 2018	SMOH, LGAs, UN agencies	Logistics, researchers		SMOH, LGAs, UN agencies,	levels of environmental air pollution	≥90% of the Niger delta.	

ILD Objective 1: To carry out advocacy and awareness of ILDs among 80% of the general

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Embarking on advocacy visits to political, religious, traditional authorities, media houses, FBO, CBO schools and NGOs	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS) association of private medical practitioners and media	Logistics and IEC materials	N50M	FMOH, SMOH, LGAs, CSO, UN agencies, private sector.	Authorities enlisted are mobilized and awareness created.	Cover ≥80% of the community	

2	Marking world IPF week with activities like press briefing, public lectures, screening with spirometry.	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS)	Logistics, IEC materials, spirometers	N25M	FMOH, SMOH, LGAs, CSO, UN agencies, private sector.	Authorities enlisted are mobilized and awareness created.		
3	Identifying national champions among stakeholders for ILD	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, NTS	Logistics, media, funds, honorarium	N10M	FMOH,SMOH, donor agencies	Champion identified and branded	At least 1 champion per geo-political zone.	

ILD Objective 2: To screen ≥ 50% of adults ≥ 18 years for risk factors for ILDs

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Symptomatic	Jan	FMOH,	Logistics,	N150M	FMOH,	Results of	Increasing the	

	screening for ILD	2014 – Dec 2018	SMOH, LGAs,	spirometers, consumables		SMOH, LGAs, UN agencies, NGOs	survey; ≥ 5000 people screened / zone / year.	detection rate of ILD in the community to ≥50% per annum	
2	Increasing the availability of point of care spirometry for measurement of lung function.	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs,	Logistics, spirometers, consumables	N500M	FMOH, SMOH, LGAs, UN agencies,	Spirometers procured and distributed to points of care.	Increasing the availability of spirometry ≥ 50% to general public.	
3	Increasing access to more sophisticated tests in secondary and tertiary hospitals	Jan 2014 – Dec 2018	FMOH, SMOH	Funds, laboratories	N500M	FMOH, SMOH, UN agencies,	Procurement of imaging and histopathology equipment	≥80% of secondary and tertiary health facilities	

ILD Objective 3: To modify risk factors for ILDs

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Encourage smoking cessation	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, UN agencies	Medications, logistics, media	N150M	FMOH, SMOH, LGAs, UN agencies, NGOs	Enhanced tobacco control, increased awareness of dangers of	Reduce the prevalence of smoking in Nigeria by ≥50% per	

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
							smoking	annum	
2	Reduce the dependence on biomass for fuel	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs,	Logistics, funds, media	N100M	FMOH, SMOH, LGAs, UN agencies,	Awareness created in media and telephones	Reducing the use of biomass fuels by ≥ 20%per annum	
3	Increasing access to cleaner fuels	Jan 2014-Dec 2018	FMOH, SMOH, LGAs,	Logistics, funds, media	N100M	FMOH, SMOH, LGAs, UN agencies,	Awareness created in media and telephones	Increasing the use of gas and electricity for energy by ≥ 20% per annum.	
4	Support legislation against outdoor air pollution	Jan 2014-Dec 2018	FMOH, SMOH, LGAs,	Logistics, media	N100M	FMOH, SMOH, LGAs, UN agencies, private sector.	Legislations enacted	all states and LGAs	

ILD Objective 4: To promote surveillance and research on ILD

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Carry out nationwide survey on the incidence and prevalence of ILD	Every year	FMOH, SMOH, LGAs,	Logistics and spirometers	N250M	FMOH, SMOH, LGAs, UN agencies,	Prevalence and incidence data of ILD in the community	Accurate epidemiological data for the country	
2	To determine the influence of environmental air pollution from vehicular exhaust on ILD	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, UN agencies	Logistics, laboratories, spirometers	N500M	FMOH, SMOH, LGAs, UN agencies,	Estimates of the levels of environmental air pollution	Data to cover ≥90% of the country	
3	To evaluate the impact of oil exploration activities on the development of ILD	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, UN agencies	Laboratories, Logistics, researchers	N250M	FMOH, SMOH, LGAs, UN agencies,	Estimates of the levels of environmental air pollution	Data to cover ≥90% of the Niger delta.	
4	Carry out cohort studies to evaluate the	Jan 2014 – Dec	FMOH, SMOH, LGAs, UN agencies	Laboratories, Logistics, researchers	N250M	FMOH, SMOH, LGAs,	Data on ILD risk factors		

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
	impact of other risk factors on the development of ILD	2018				UN agencies			

OLD Objective 1: To carry out advocacy and awareness of ILDs among 80% of the general

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Embarking on advocacy visits to political, religious, traditional authorities, media houses, FBO, CBO schools and NGOs	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS) association of private medical practitioners and media	Logistics and IEC materials	N50M	FMOH, SMOH, LGAs, CSO, UN agencies, private sector.	Authorities enlisted are mobilized and awareness created.	Cover ≥80% of the community	
2	Marking world IPF week with activities like press briefing,	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS)	Logistics, IEC materials, spirometers	N25M	FMOH, SMOH, LGAs, CSO, UN agencies, private sector.	Authorities enlisted are mobilized and		

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
	public lectures, screening with spirometry.						awareness created.		
3	Identifying national champions among stakeholders for OLD	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, NTS	Logistics, media, funds, honorarium	N10M	FMOH,SMOH, donor agencies	Champion identified and branded	At least 1 champion per geo-political zone.	

OLD Objective 2: To screen ≥ 50% of adults ≥ 18 years for risk factors for ILDs

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Symptomatic screening for OLD	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs,	Logistics, spirometers, consumables	N150M	FMOH, SMOH, LGAs, UN agencies, NGOs	Results of survey; ≥ 5000 people screened / zone / year.	Increasing the detection rate of ILD in the community to ≥50% per annum	
2	Increasing the availability of	Jan 2014 –	FMOH, SMOH, LGAs,	Logistics, spirometers,	N500M	FMOH, SMOH,	Spirometers procured and	Increasing the availability of	

	point of care spirometry for measurement of lung function.	Dec 2018		consumables		LGAs, UN agencies,	distributed to points of care.	spirometry ≥ 50% to general public.	
3	Increasing access to more sophisticated tests in secondary and tertiary hospitals	Jan 2014 – Dec 2018	FMOH, SMOH	Funds, laboratories	N500M	FMOH, SMOH, UN agencies,	Procurement of imaging and histopathology equipment	≥80% of secondary and tertiary health facilities	

OLD Objective 3: To modify risk factors for ILDs

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Encourage smoking cessation	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, UN agencies	Medications, logistics, media	N150M	FMOH, SMOH, LGAs, UN agencies, NGOs	Enhanced tobacco control, increased awareness of dangers of smoking	Reduce the prevalence of smoking in Nigeria by ≥50% per annum	
2	Reduce the dependence on biomass for fuel	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs,	Logistics, funds, media	N100M	FMOH, SMOH, LGAs, UN agencies,	Awareness created in media and telephones	Reducing the use of biomass fuels by ≥ 20%per annum	
3	Increasing access to cleaner	Jan 2014-	FMOH, SMOH, LGAs,	Logistics, funds, media	N100M	FMOH, SMOH,	Awareness created in media	Increasing the use of gas and	

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
	fuels	Dec 2018				LGAs, UN agencies,	and telephones	electricity for energy by ≥ 20% per annum.	
4	Support legislation limiting occupational exposure to air pollution	Jan 2014-Dec 2018	FMOH, SMOH, LGAs,	Logistics, media	N100M	FMOH, SMOH, LGAs, UN agencies, private sector.	Legislations enacted	all states and LGAs	

OLD Objective 4: To promote surveillance and research on OLD

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Carry out nationwide survey on the incidence and prevalence of OLD	Every year	FMOH, SMOH, LGAs,	Logistics and spirometers	N250M	FMOH, SMOH, LGAs, UN agencies,	Prevalence and incidence data of OLD in the community	Accurate epidemiological data for the country	
2	Carry out cohort	Jan	FMOH, SMOH,	Laboratories,	N250M	FMOH,	Data on OLD		

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
	studies to evaluate the impact of other risk factors on the development of OLD	2014 – Dec 2018	LGAs, UN agencies	Logistics, researchers		SMOH, LGAs, UN agencies	risk factors		

Lung malignancies Objective 1: To carry out advocacy and awareness of lung malignancies among 80% of the general population in the next 5 years.

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Embarking on advocacy visits to political, religious, traditional authorities, media houses, FBO, CBO schools and NGOs	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS) association of private medical practitioners and media	Logistics and IEC materials	N50M	FMOH, SMOH, LGAs, CSO, UN agencies, private sector.	Authorities enlisted are mobilized and awareness created.	Improving lung cancer awareness by ≥50% per annum	
2	Marking world cancer day with emphasis on lung cancer.	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS)	Logistics, IEC materials, spirometers and	N25M	FMOH, SMOH, LGAs, CSO, UN	Authorities enlisted are mobilized and		

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
				medications		agencies, private sector.	awareness created.		
3	Identifying national champions among stakeholders for lung cancer	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, CSOs (including NTS)	Logistics, media, funds, honorarium	N10M	FMOH, SMOH, donor agencies	Champions identified and branded	At least 1 champion per state	

Lung cancer Objective 2: To screen ≥ 50% of adults ≥ 18 years for risk factors for lung cancer

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Symptomatic screening at the primary care setting for features of lung cancer	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs,	Logistics, consumables,	N150M	FMOH, SMOH, LGAs, UN agencies, NGOs	Results of survey; ≥ 5000 people screened / zone / year.	Increasing the early detection rate of lung cancer in the community to ≥50% per annum	
2	Increasing the availability of point of care	Jan 2014 – Dec	FMOH, SMOH, LGAs,	Logistics, X-ray and CT scan	N500M	FMOH, SMOH, LGAs, UN	Imaging equipment procured and	Increasing the availability of imaging ≥ 20%	

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
	chest radiography for ear detection of lung masses.	2018		machines, consumables		agencies,	distributed to points of care.	to general public.	
3	Increasing access to more sophisticated tests in secondary and tertiary hospitals	Jan 2014 – Dec 2018	FMOH, SMOH	Funds, laboratories	N500M	FMOH, SMOH, UN agencies,	Procurement histopathology equipment	≥80% of secondary and tertiary health facilities	

Lung cancer Objective 3: Modify risk factors

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Encourage smoking cessation	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, UN agencies	Medications, logistics, media	N150M	FMOH, SMOH, LGAs, UN agencies, NGOs	Enhanced tobacco control, increased awareness of dangers of smoking	Reduce the prevalence of smoking in Nigeria by ≥50% per annum	
2	Reduce the dependence on	Jan 2014 –	FMOH, SMOH, LGAs,	Logistics, funds, media	N100M	FMOH, SMOH,	Awareness created in media	Reducing the use of biomass	

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
	biomass for fuel	Dec 2018				LGAs, UN agencies,	and telephones	fuels by ≥ 20%per annum	
3	Increasing access to cleaner fuels	Jan 2014-Dec 2018	FMOH, SMOH, LGAs,	Logistics, funds, media	N100M	FMOH, SMOH, LGAs, UN agencies,	Awareness created in media and telephones	Increasing the use of gas and electricity for energy by ≥ 20% per annum.	
4	Support legislation limiting occupational exposure to carcinogens	Jan 2014-Dec 2018	FMOH, SMOH, LGAs,	Logistics, media	N100M	FMOH, SMOH, LGAs, UN agencies, private sector.	Legislations enacted	all states and LGAs	

Lung cancer Objective 4: To promote surveillance and research on lung cancer

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks

S/n	Activities	Timing	Implementing agency	Resources needed	Cost	Source of funds	Expected output	Target	Remarks
1	Carry out nationwide survey on the incidence and prevalence of lung cancer	Every year	FMOH, SMOH, LGAs,	Logistics and funds	N250M	FMOH, SMOH, LGAs, UN agencies,	Prevalence and incidence data of lung cancer in the community	Accurate epidemiological data for the country	
2	To determine the risk factors associated with lung cancers	Jan 2014 – Dec 2018	FMOH, SMOH, LGAs, UN agencies	Laboratories, Logistics, researchers	N250M	FMOH, SMOH, LGAs, UN agencies	Data on lung cancer risk factors		

4.0 Cancers

Cancers are major contributors of morbidity and mortality in Nigeria and are linked to tobacco use, excessive consumption of alcohol, unhealthy diet, obesity, physical inactivity, chronic infections, exposure to radiation, chemical agents and family history.

Important risk factors for cancer in Nigeria include:

- tobacco use
- advancing age
- alcohol consumption
- improper diet
- obesity
- unhealthy reproductive/sexual behaviour
- occupational exposure

Objectives:

1. To integrate cancer prevention and control into the national strategic health development plan and into relevant policies across all tiers of government.
2. To strengthen the Structure and capabilities for control and management of Cancer in Nigeria.
3. To strengthen the structure and capabilities of Cancer Registries for data collection on Cancers in Nigeria.
4. To specify roles and responsibilities to all tiers of government including parastatals and other stakeholders.
5. To provide framework for training and research on cancer prevention and control.
6. To strengthen partnerships with stakeholders and development
7. To monitor and evaluate the progress made at all levels of cancer prevention and control

Strategies:

Cancer Plan of Action will focus on:

a) Developing and distributing IEC materials to educate the people on cancer.
b) Strengthening the structures and capabilities for management of patients.
c) Improving quality of life of cancer patients and provision of palliative care.
d) Undertaking research on cancers and related risk factors

Objective 1: To integrate cancer prevention and control into the national strategic health development plan and into relevant policies across all tiers of government.

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Including cancer prevention and control into school curriculum at all levels	Jan 2014 – Dec 2018	FMOE, NUC FMOH SMOE,SMOH	Manpower, Curriculum Development, Training	50M	FMOH, Donor Agencies	Increased cancer awareness, screening and reduction in cancer burden	Cancer curriculum included in the 80% of schools	
2.	Including into curriculum for training of all HCWs, information on health promotion, (prevention, early detection, diagnosis treatment and palliative care for cancer)	Jan 2014 – Dec 2018	FMOH, SMOH	Facilitators, Healthcare workers, Logistics	100M	FMOH, Donor Agencies	Increased and improved detection rate of cancers	60% of health workers trained on cancer prevention and detection	
3.	Sensitizing /mobilizing the community to promote cancer awareness and early detection at all levels of healthcare in collaboration with political leaders and relevant CSOs, NGOs, FBOs, and CBOs etc	Jan 2014-Dec 2018	FMOH, SMOH, LGA	Consumables, Logistics	150M	FMOH, Donor Agencies	Increased awareness about cancers by the general public	Health care personnel at all levels Political leaders and general public are sensitized	

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
4.	Training for the screening, early detection/diagnosis and management of cancers at the PHC level	Jan 2014-Dec 2018	FMOH SMOH LGA	Facilitators, Manuals/guidelines, Equipments and consumables, logistics	50M	FMOH Donor Agencies.	PHC health workers are able to detect cancers early and refer to appropriate level for management	80% of PHC healthworkers would have acquired the skills necessary to detect common cancers early. .	
5.	Immunizing high risk group (health workers)	Jan 2013-Dec 2015	FMOH SMOH LGA	Vaccines, Consumables, Logistics	50M	FMOH Donor Agencies	High risk groups/ health workers, immunized	100% coverage achieved	
6.	Increasing the coverage of Hepatitis B Immunization (NPI) Commenced 2004	Jan 2014 -Dec 2018	FMOH SMOH LGA	Vaccines Logistics Consumables	150M	FMOH SMOH LGA Donor Agencies	Routine Vaccination against Hepatitis B &C alongside NPI for under 5 years	60% coverage	
7.	Undertaking survey/research into HPV subtype prevalence among target population and production of vaccines to cover identified serotypes	Jan 2014 – 2018	FMOH SMOH LGA	Vaccines Consumables Logistics	250M	FMOH Donor Agencies	Production of vaccines to the identified subtypes.	65% of target population covered.	

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
	HPV Vaccines Vaccination of adolescent girls against high risk serotypes of Human Papilloma Viruses for the prevention of cancer of the cervix commenced (2011)								
8.	Monitoring of HPV vaccination with intensive surveillance of safety studies(collaboration with NPC for vaccine pharmacovigillance)	Jan 2014 – 2018	FMOH SMOH LGA	Vaccines Consumables Logistics	70M	FMOH Donor Agencies	On-going monitoring of HPV vaccination with intensive surveillance of safety studies	100% monitoring of HPV vaccination with intensive surveillance of safety studies	

Objective 2: To strengthen the Structure and capabilities for control and management of Cancer in Nigeria.

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost	Sources of Fund	Expected Output	Target	Remarks
1.	Promoting self Breast examination	Jan 2013-Dec 2014	NGOs LGA FMOH SMOH	IEC Materials Personnel Logistics		FMOH Donor agencies NGOs	Women of Child bearing age to be able examine their own breasts regularly	80% of target population	

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost	Sources of Fund	Expected Output	Target	Remarks
2.	Training for detection of AIDS associated malignancies		FMCs THs	Algorithm in place for detection of these cancers on sites.			AIDS associated malignancies detected early	80% of patients on HAART screened.	
3.	(a). Training of health personnel in STD and FP clinics on preparation of Pap smear and VIA (b). Training of Histopathologists on interpretation of Pap smear and tissue diagnosis, radiologists and Ultrasonographers for early dtection c. Training of oncologists/haemotologist for management of cancers	Jan 2014-Dec 2018 May 2014 - Dec 2018	FMOH FMOH Teaching Hospitals	Training materials Logistics Reagents Provision of facilities for e-medicine to send clinical photographs and slides to experts to aid diagnosis.	100M	FMOH Donor Agencies -do-	Health staff trained in tertiary, Secondary Institutions and STD clinics e-medicine facilities in place/increased/established to aid diagnosis.	60% of target population trained	
4.	Providing mammography,ultrasound service and consumables in tertiary centres. at least one in the six Political zone	March 2014 - Dec 2018	FMOH	X-ray (equipment) specific for mammography Ultrasound Machines Consumables	250M	-FMOH - Donor Agencies	Mammograms installed in all FMCs and THs	40% of target population Services provided for female over 35 years once a year	
5.	Screening for	2014 –	FMOH	Training	250M	FMOH	Screening Test for	50% of cases	

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost	Sources of Fund	Expected Output	Target	Remarks
	Colorectal cancers.	2018	THs FMCs GHs PHCs Private Hospitals	FOBT kits Colonoscopes Endoscopes Manpower		Donor Agencies	colorectal cancers etc available.	detected early through screening and interventions instituted	
6.	Constituting a working group of experts to develop documents on acceptable minimum standard of care for cancer patients in Nigeria.	Jan-Feb 2014	FMOH	Meeting Honorarium logistics Cost of funding Expert meeting	10M	FMOH Donor Agencies Private sector Pharmaceutical Companies etc.	Draft documents on minimum standard of care for Cancer patients in Nigeria		
7.	Producing document	March -April 2014	FMOH	Printing	25M	-do-	Final document on minimum standard of care for Cancer in Nigeria	90% coverage	
8.	Disseminating document to HCWs at all levels of care (Tertiary, Secondary and primary).	June-Dec. 2014	FMOH SMOH LGAs	Logistics Advocacy meetings	10M	FMOH Donor Agencies Private Sector	Availability of documents to health workers Nationwide.	80% quality of care for Cancer patients enhanced at all levels	
9.	Providing functional radiotherapy services in 6 centres(in the six geopolitical zones)	Jan 2014-Dec 2015	- FMOH -Tertiary Institutions	X-ray Cobalt Unit Logistics	200M	FMOH IARC	Functional Unit In Ibadan, Zaria, Lagos and Enugu	60% coverage	
10.	Providing consummables	Jan 2014-	-do-	Consumables	50M	FMOH	Consumables available in 4 centres	60% coverage	

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost	Sources of Fund	Expected Output	Target	Remarks
		Dec 2015							
11.	Providing palliative care for terminal cases in primary, secondary and tertiary health institutions.	Jan 2013-Dec 2015	FMOH SMOH NGOs LGAs	Simple drugs Consumables Counselors	350M	FMOH NGOs HOSPICE	Collaborative effort with AIDS control programme (same counselors)	Compassionate terminal care achieved for 50% of patients	

Objective 3: To strengthen the structure and capabilities for data collection on Cancers in Nigeria.

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S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost	Sources of Fund	Expected Output	Target	Remarks
1.	Strengthening of existing Cancer registries in the country: Staff training and development on use of appropriate cancer registration soft wares, Annual budgetary provision	Jan - Dec. 2014	FMOH	Procurement of computers, Vehicles to collect Population based data. Stationery Annual subscription to IARC	200M	FMOH PTF Donor Agencies	Existing cancer registries strengthened a. Staff trained b. Active data collection	At least 200 staff trained in each of the 6 geopolitical zone	
2.	Networking of all Cancer Registries in the country	Jan-Dec 2014	FMOH	Software's Programming Creating websites Annual subscription for E-mail	100M	FMOH PTF Donor Agencies	All Cancer registries in the country connected to a network nationally and	100% networking	

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost	Sources of Fund	Expected Output	Target	Remarks
							internationally. (ii) Access to data on Cancer in Nigeria and Globally		
3.	Pursuing the development of a National cancer Institute for comprehensive cancer management research and training.	Aug 2014-Aug 2015	FMOH	Special investigatory Unit 100 beds Logistics Personnel Additional materials/equipment	250M	FMOH PTF Donor agencies	Centre gradually upgraded	One comprehensive NCI established	
4.	Increasing collaborative effort with development partners	Jan 2014-Dec 2014	FMOH	GIS software Secretarial support Logistics	15M	FMOH Donor Agencies	Incorporation of cancer report into GIS	Geographical mapping of Cancer prevalence in Nigeria	
5.	Collaborating with other international centres on Cancer control.	Jan 2014 – Dec 2014	FMOH	Exchange programme E-mail etc.	10M	FMOH Donor Agencies	Exchange visit with other Schools/institution of Oncology		
6.	Integrating Cancer control into PHC Services: Piloting training workshop for PHC workers on	Jan-March 2014	FMOH	Honorarium for facilitators, Training materials.	70M		PHC workers in 4 LGA trained in prevention and early detection of Cancers	100% of PHC manuals and standing orders will incorporate prevention and early detection	

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost	Sources of Fund	Expected Output	Target	Remarks
	prevention and early detection of Cancers in 4 LGAs and then applied to 6 LGAs/ zone/year							of Cancer.	
7.	Monitoring and Evaluating training workshops	March-Nov. 2014	FMOH	Honorarium Materials Travels	15M		Strength and weakness of training workshops determined.	100% effective planning workshops nationwide enhanced	

5.0 Mental, Neurological and Substance Use Disorders

Objectives 1: To establish the Prevalence and Pattern of Mental, Neurological and Substance use Disorders in Nigeria.

Strategy: Carrying out properly designed country wide community-based studies to establish prevalence of mental Neurological and Drug use disorders in Nigeria

Objective 2: To engage public enlightenment programmers to educate Nigerians on the causation of Mental Neurological and Drug use disorders in Nigeria to clarify the causation of illness and thereby reduce stigma

Strategies:

1. Producing IEC materials
2. Carrying out enlightenment programmes
3. Marking World Mental Health Day

Objective 3: To prevent Drug Abuse among Youths in the country Programmes should target both youths in school and out of school

Strategies:

1. Producing IEC materials
2. Carrying out enlightemment programmes
3. Introducing drug free clubs in schools

Objective 4: To improve the early detection and treatment of Mental Neurological and Drug use disorders in Nigeria

Strategies:

1. Improving training for CHEWs, CHOs and Schools of Nursing in Nigeria in Mental illness and use of the WHO mhGAP
2. Improving the “Index of Suspicion” of Medical doctors for mental illness through CME

Objective 5: To improve the referral system for mental, neurological and substance use disorders in the country

Strategies:

1. Identifying tertiary hospitals Secondary and primary centers
2. Training and establishing drug treatment centers in Zonal Mental health institutions
3. Training and establishing Community Psychiatric Units in secondary health centers

Objectives 1: To establish the Prevalence and Pattern of Mental, Neurological and Substance use Disorders in Nigeria.

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Constituting a working group of experts to plan a country wide community study on prevalence of Mental Neurological and Drug use disorders in Nigeria.	Jan-Feb 2014	FMOH/Association of Psychiatrists in Nigeria (APN)/National Bureau of Statistics (NBS)	Honorarium Logistics Transport Funds	3M	- FMOH - Donor Agencies - Private sector Pharmaceutical Companies etc.	Adopt a questionnaire For study		
2.	Producing Questionnaires	March-April 2014	FMOH/APN/NBS	Funds	20M	FMOH Donor Agencies Private Sector	Printed questionnaires		
3.	Training investigators and supervisors	June-2014	FMOH/APN/NBS	Honorarium Logistics Transport Funds	10M	FMOH Donor Agencies Private Sector	Trained Supervisors		
4.	Training interviewers	July- 2014	FMOH/APN/NBS	Honorarium Logistics Transport Funds	10M	FMOH Donor Agencies Private Sector	Trained Interviewers		
5.	Identifying households for study	August 2014	FMOH/APN/NBS	Honorarium Logistics Transport Funds	15M	FMOH Donor Agencies Private Sector	House list		
6.	Randomizing/ selecting household	September 2014	FMOH/APN/NBS	Honorarium Logistics Transport	-	FMOH Donor Agencies	Household list		

				Funds		Private Sector			
7.	Interviewing /supervising	October-November 2014	FMOH/APN/NBS	Honorarium Logistics Transport Funds	25M	FMOH Donor Agencies Private Sector	Completed questionnaires		
8.	Coding and analyzing data	December 2014	FMOH/APN/NBS	Honorarium Logistics Transport Funds	3M	FMOH Donor Agencies Private Sector			
9.	Writing up of result	March 2015	FMOH/APN/NBS	Honorarium Logistics Transport Funds	2M	FMOH Donor Agencies Private Sector	Written report		

Objective 2: To engage public enlightenment programmers to educate Nigerians on the causation of Mental Neurological and Drug use disorders in Nigeria to clarify the causation of illness and thereby reduce stigma

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Producing IEC materials on prevalence of Mental Neurological and Drug use disorders i.e.- information booklets - Posters, Stickers (in 5 languages-English, Pidgin, Hausa, Igbo, ,Efik & Yoruba). Target group is the general public. With special focus on Students and out- of-school youth	Jan-April 2014	FMoH/APN	Honorarium Logistics Transport Funds	5M	FMOH SMOH LGAs PTF Donor Agencies	Draft documents - Posters - Booklets - Stickers (in 5 languages i.e. English, Pidgin, Hausa, Igbo/Efik & Yoruba)		
2.	Pilot testing of materials in 12 LGAs from 6 health zones of the country (6 urban, 6 rural) and necessary amendments to be made	May – June 2014	FMOH/ APN	Honorarium Logistics Transport Funds	7M	FMOH SMOH LGAs Donor Agencies Private sector	Amended IEC materials		
3.	Printing of amended IEC material	July – Aug. 2014	FMOH	Honorarium Logistics Transport Funds	10M	FMOH SMOH LGAs Donor Agencies	Final production of materials - booklets - posters		

						Private Sector	- stickers		
4.	Distributing materials		FMOH		5M				

Objective 3: To prevent Drug Abuse among Youths in the country Programmes should target both youths in school and out of school

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Producing IEC materials on Drug abuse i.e.- information booklets - posters, Stickers (in 5 languages-English, Pidgin, Hausa, Igbo ,Efik & Yoruba). Target group is the general public. With special focus on Students Out of school youth	Jan-April 2014	FMoH/APN	Honorarium Logistics Transport Funds	5M	FMOH SMOH LGAs PTF Donor Agencies	Draft documents - Posters - Booklets - Stickers (in 5 languages i.e. English, Pidgin, Hausa, Igbo/Efik & Yoruba)		
2.	Pilot testing of materials in 12 LGAs from 6 health zones of the country (6 urban, 6 rural) and necessary amendments to be made	May – June 2014	FMOH/ APN	Honorarium Logistics Transport Funds.	7M	FMOH SMOH LGAs Donor Agencies Private sector	Amended IEC materials		
3.	Printing of amended IEC material	July – Aug. 2014	FMOH	Honorarium Logistics Transport Funds	10M	FMOH SMOH LGAs Donor	Final production of materials - booklets	-do-	

						Agencies Private Sector	- posters - stickers		
4.	Distributing materials	August 2014 – December 2014	FMOH	Logistics Transport Funds	5M	FMOH SMOH LGAs Donor Agencies Private Sector	Materials distributed	All the 36 States of the Federation	
5.	Pilot setting up drug clubs in secondry schools	Jan. 2015	FMOH /APN	Honorarium Logistics Transport Funds	10M	FMOH SMOH LGAs Donor Agencies Private Sector	Drug clubs in secondry schools piloted		
6.	Identifying teachers / star students to lead groups	Jan. 2015	FMOH/ APN	Honorarium Logistics Transport Funds	-	FMOH SMOH LGAs Donor Agencies Private Sector	Teachers / star students to lead groups identified		
7.	Setting up clubs in schools	Feb. 2015	FMOH/ APN	Honorarium Logistics Transport Funds	80M	FMOH SMOH LGAs Donor Agencies Private Sector	Clubs in secondry schools set-up	At least one school per State	

Objective 4: To improve the early detection and treatment of Mental Neurological and Drug use disorders in Nigeria

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Preparing, Translating and Validating the GHQ for use in Medical Schools	Jan – June 2014	FMOH/APN	Logistics Transport Funds	10M	FMOH SMOH LGAs Donor Agencies Private Sector	GHQ for use in Medical Schools prepared, translated and validated		
2.	Integrating use of screening Instruments during Medical students Psychiatric clerkship	2014-2019	FMOH/APN/Medical Schools	- Printing Honorarium Logistics Transport Funds	25M	FMOH SMOH LGAs Donor Agencies Private Sector	Screening instruments integrated for use during Medical students Psychiatric clerkship		
3.	Introducing Screening Instruments for use in Primary and Secondary health institutions	2014-2019	FMOH SMOH LGAs	Honorarium Logistics Transport Funds	20M	- FMOH - Donor Agencies - PTF	Screening Instruments introduced for use in Primary and Secondary health institutions		

Objective 5: To improve the referral system for mental, neurological and substance use disorders in the country

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost	Sources of Fund	Expected Output	Target	Remarks
1.	Establishing	Jan –	FMOH/APN	Honorarium	50M	-			

	Primary/Community Psychiatric Units in Tertiary/Psychiatric Hospitals	June 2014		Logistics Transport Funds		FMOH - Donor Agencies - PTF	Primary/Community Psychiatric Units in Tertiary/Psychiatric Hospitals established		
2.	Identifying Secondary facilities to liaise with Tertiary and Primary centres	Jan-June 2014	FMOH/APN/Medical Schools	Honorarium Logistics Transport Funds	10M	FMOH Donor Agencies PTF	Secondary facilities to liaise with Tertiary and Primary centres identified		
3.	Recruiting of Primary care centres in the catchment area	2014-2019		Honorarium Logistics Transport Funds	30M	- FMOH - Donor Agencies - PTF	Primary care centres in the catchment area recruited		
4.	Providing Drugs for patient care	2014-2019		Logistics Funds	100M	- FMOH - Donor Agencies - PTF	Drugs for patient care provided		

6.0 Sickle cell disorder

Objectives:

1. To increase public awareness about SCD and disease prevention
2. To enhance detection of individuals with sickle cell disorder and establish a national database on SCD.
3. To increase access to comprehensive care for individuals with SCD
4. To monitor and evaluate Intervention programmes
5. To monitor newborn screening which is meant to identify the newborns that are at risk of SCD complications and improve their quality of life.

The primary focus of this Plan of Action is to:

1. Ensure the best possible care for the patient and the affected family.
2. Provide an evidence based information and education through IEC materials, jingles and community mobilization on SCD to the general public.
3. Institute Universal Newborn Screening and Genetic Counseling for the general populace
4. Strengthen the structure and capabilities for management of patient and carry out research on Phenotypic pattern and natural history of SCD in Nigeria..
5. Carry out research to find newer and safer methods of treatment of people living with the disorder to improve the quality of life and life expectancy

Objective 1: To increase awareness in the community on the prevention, control and treatment of Sickle Cell Disease in Nigeria

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost (N)	Sources of Fund	Expected Output	Target	Remarks
1.	Production of policy document on SCD and Newborn screening	2014	FMOH Stakeholders	Experts forum/meetings	15M	FMOH MDG Sure-P Donor Agencies	Policy document on SCD and Newborn screening produced	60% of Health facilities	
2.	Commemorate annual World Sickle Cell Day.	2014 – 2018	FMOH SMOH Stakeholders	Materials Funds Human resources	15M	FMOH SMOH MDG SURE-P Development Partners Donor Agencies	Annual Global SCD day celebrated	General Population.	
3.	Community mobilization on SCD across Nigeria	2014-2018	FMOH SMOH Stakeholders	Materials Human resources Logistics	100M	FMOH SMOH MDG SURE-P Development Partners Donor Agencies	Communities across the country mobilized and sensitized on the scourge of SCD and its prevention and control	60% of Nigerians mobilized on SCD and its preventions and control	
4.	Production and distribution of IEC materials on Sickle cell Disease i.e.- information booklets	2014-2016	FMOH SMOH Stakeholders	- Honorarium - Materials - Meetings - Transport	40M	FMOH SMOH MDG SURE-P Development Partners	Draft documents - Posters - Booklets - Stickers (in 5		

	- posters, Stickers (in 5 languages- English, Pidgin, Hausa, Igbo/Efik & Yoruba).,Target group is the general public. With special focus on - School children,- Women groups - Religious leaders,- Traditional leaders					Donor Agencies	languages i.e. English, Pidgin, Hausa, Igbo/Efik & Yoruba)		

Objective 2: To strengthen the structure and the capabilities of the health care system to achieve control of Sickle Cell Disorders in Nigeria

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost	Sources of Fund	Expected Output	Target	Remarks
1.	Printing and dissemination of guidelines for the control and management SCD	March – Sept 2014 Sept 2014	FMOH SMOH	Fund Logistics	10M	- FMOH - Other donor Agencies	Guideline produced, disseminated and in use		
2.	Training HCW across all tires of HCS on the use of guidelines for the management of SCD	2014- 2015	FMOH SMOH	Logistics Manpower	20M	FMOH SURE_P MDG Donor agencies	HCW trained and ready to step down the training.		
3.	Training radiologists and radiographers on transcranial Doppler ultrasound screening for risk of stroke in	2014- 2018	FMOH	Non imaging probes for TCD ultrasound screening	20M	FMOH SURE_P MDG Donor agencies	Personnel trained and SCD screening available for all children	2 radiologists from all the SCD centers, Tertiary hospitals	

	children						with SCD as routine care	(THs) and FMCs.	
4.	Establishing comprehensive care for SCD in the MDG Sickle Cell Centres and in other tertiary health care centres in the country	2014-2015	FMOH and implementing partners	Health workers knowledgeable in SCD	30M	FMOH SURE_P MDG Donor agencies	Individuals with SCD able to access comprehensive care services in all the geopolitical zones of the country	All SCD Centers, THs FMCs	
5.	Training in genetic counseling on sickle cell disorders for HCws in SCD centers, THs And FMCs	2014 – 2015	FMOH Implementing partners(FBOs, CSOs, Court Registrars NGOs etc)	Manpower Manuals Logistics	20M		Genetic Counseling services available across the country		
6.	Training workshop on recognition of clinical phenotypes and use of data base (registry)	2015	FMOH	Manpower Manuals Logistics	30M	- FMOH - Donor Agencies	Health care workers in primary, secondary and tertiary health care centres trained and able to recognize individuals with SCD		
7.	Training by TOT on Sickle Cell Disorders in MCH facilities (integrated approach	2015	FMOH	Manpower Manuals Logistics	20M	- FMOH - Donor Agencies	A wide spread of MCH staff trained on SCDs	5000 MCH (PHC) staff trained	

	to PHC services						management		
8.	Training and equipment of HCWs in the diagnosis of hereditary haemoglobin disorders and in Newborn screening.	2014 2015	FMOH	Manpower Manuals Logistics	10M	- FMOH - Donor Agencies	Training and equipping of 6 laboratory in each of 6 zones in Nigeria		
9.	Integration of SCD control into school health programme	2014 2015	FMOH FMEdu FMInfor	Curriculum development Logistics	15M	FMOH FMEdu FMInfor Donor Agencies	Effective Integration of SCD control into School health programme		

Objective 3: To determine the birth prevalence and natural history of Sickle Cell Disorder

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost	Sources of Fund	Expected Output	Target	Remarks
1.	Training HCWs in the MDG and other centers on Newborn screening	2014-2019	FMOH with implementing partners	Equipments Consumables Funds	10M	FMOH SURE-P MDG	HCWs in the MDG centers and other centers trained	All healthcare workers trained on NBS	
2.	Integrating Neonatal screening into the PHC to determine birth prevalence of SCD in the MDGs centres in 6 zones of the country.	2015	FMOH	Funding of equipment, materials and reagent	15M	- FMOH - Donor Agencies	Accurate birth prevalence in Nigeria. Acquisition of skills in neonatal screening.		

3.	Establishing registry of SCD in the MDG SCD centres and in all PHCs in their catchment areas	2014 – 2017	FMOH MDG SCD Centres/ PHC	Funds	10M				

Objective 4: To determine the influence of prior knowledge of haemoglobin genotypes on reproductive choices in Nigeria

S/N	Activities	Timing	Implementing Agency	Resources Needed	Cost	Sources of Fund	Expected Output	Target	Remarks
1.	Introducing screening & Counseling Programme for SCD in Primary, Secondary and Tertiary institute across the country	2014- 2015	FMOH	Funding of research personnel, tools, equipment, and materials.	30M	-FMOH - Donor Agencies	People should know about their Hb type while 9n school & before marriage		
2.	Establishing collaborative center for SCD research	2014-2019	FMOH and UATH and other teaching hospitals	Manpower Logistics	50M	MDG SURE-P IDAs	.Research into epidemiology, natural history, new therapies on SCD strenghtened through collaboration.	50% of research on SCD completed	

7.0 Oral health diseases

National pathfinder studies conducted in Nigeria have identified the following as priority oral health diseases, oral cancers, cancrum oris (Noma), periodontal diseases and dental caries.

Goal:

To reduce the morbidity and mortality from oral health diseases in Nigeria

Objectives:

1. To raise awareness about oral health and oral health diseases in the general population and among policy makers, with emphasis on the avoidance of the associated risk factors;
2. To enhance the capacity of health workers at primary and secondary levels of health care delivery system at early diagnosis and treatment of oral diseases;
3. To implement intervention programmes aimed at risk factor reduction and the prevention of complications of oral diseases; and
4. To sustain the potential gains of these interventions by advocacy to policy makers, using findings from evidence-based researches

Strategies:

1. Sensitizing policy makers on oral health and oral health diseases using findings from evidence-based researches.
2. Preventing risk factors through oral health education programmes on various topics including tobacco use prevention and cessation, harmful alcohol use, oral hygiene, oral health diseases through schools and communities oral health education programmes and through the mass media;
3. Training of available health care personnel
   i. **Task Shifting**. This is the training of primary health care (PHC) workers in the diagnosis and screening for priority oral diseases. It could be formal or on-the-job training. ***Formal training*** would be conducted through the incorporation of oral health and its related disorders into the curriculum of training institutions for PHC workers in order to increase the knowledge of oral health and its related problems.
   Practicing PHC workers would be *trained on-the-job* through organized hands-on training workshops using standardized training manuals.
   ii. Educating the local community members on oral health through public gatherings, e.g. at religious gatherings, schools' PTA meetings, town meetings, etc through health talks.
   iii. Developing a standard manual for the diagnosis and treatment of oral health diseases for primary health care workers.
4. Increasing the number of rural oral health professionals through manpower re-distribution **(Rural Pipeline)**. This would be achieved by:

i. encouraging contacts between rural secondary schools and oral health professionals through career talks
ii. encouraging rural exposure during formal training of oral health professionals
iii. encouraging the selection of rural students into the dental program
iv. ensuring the willing deployment of corper dentists and dental therapists to the rural communities, by the upward review of the rural posting allowances
v. initiating policy advocacy measures to address the retention of the rural dental workforce in the rural areas.

5. Promoting advocacy for the improvement of health care financing through the review of the current "limited and treatment-oriented" (NHIS) financing policy for oral health services to a "prevention-oriented" policy.
6. Promoting advocacy for the increase in the number (at least one in every LGA) and adequacy of oral health facilities at the secondary level of oral health care for the adequate management of cases referred from the PHC clinics.
7. Establishing a database for oral health diseases, manpower and facilities with the regular collation of data on the status of the diseases, manpower and facilities using standard indices and the WHO-STEPS.
8. Publishing annual reports on the oral health disease, manpower and facilities status for the purpose of advocacy and policy development.

Targets:

1. To increase early stage (I & II) oral cancer presentation from 20% to 60% by 2017
2. To reduce the prevalence of cancrum oris or Noma (presently 6 cases per 1000) by at least 50% by 2017
3. To reduce prevalence of periodontal diseases from 96% to at least 60% by 2017; and
4. To reduce the prevalence of dental caries from 44% to at least 20% by 2017.

Objective 1: To raise awareness about oral health and OH diseases in the general population and among policy makers, with emphasis on the avoidance of the associated risk factors**.**

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Conduct Oral Health education campaigns.	2014-2018	FMOH ICOH, JOS NPHCDA SMOH LGA TV Stations	Airtime on television and radio. School Instructional /IEC Materials. Honoraria Materials	100M	FMOH SMOH LGA	Education Campaigns held	1, 2, 3, 4	
2.	Public enlightenment	2014-2018	FMOH ICOH, JOS NPHCDA SMOH LGA TV Stations	Airtime on television and radio. School Instructional /IEC Materials. Honoraria Materials	100M	FMOH SMOH LGA	Public awareness created		
3.	Commemorate World Oral health Day	2014-2018 (Annually)	FMOH/ICOH/NPHCDA/States/LGAs/Partners		10M	FMOH SMOH LGA	World Oral Health Day marked annually		
4.	Sensitization of local community members on oral health: Religious, School PTA, Market women, Youths, etc	2014-2018	FMOH/ICOH/NPHCDA/States/LGAs/Partners		20M	FMOH SMOH LGA	Sensitization Carried out		

Objective 2: To enhance the capacity of health workers at primary and secondary levels of health care delivery system at early diagnosis and treatment of oral diseases.

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Training/Re-training of PHC workers, Dental Auxilliaries, Dentists, Capacity.	2014 and ongoing	FMOH ICOH, JOS NPHCDA	- Manpower - Materials - Meetings - Transport - Alternate Power Source - Dental Consumables	200,000,000	FMOH SMOH LGA Donor Agencies	Trained Dental Personnel	All 36 States +FCT	
2.	Develop Training Curriculum for schools of health technology	2014	FMOH ICOH, JOS NPHCDA FMEduc SMEduc	Manpower - Materials - Meetings - Transport	10,000,000	FMOH SMOH LGA Donor Agencies	Training Curriculum	All schools of health technology	
3.	Develop a standard training manual for the training of PHC workers	2014-2018	FMOH ICOH, JOS NPHCDA	Materials Meetings Manpower Printing	20,000,000	FMOH	Training Manual	1, 2, 3,4	
4.	Impact Assessment of Capacity of trained PHC workers	2016-	FMOH ICOH, JOS NPHCDA	Manpower Transport Materials	10,000,000	FMOH	Reports	-d0-	
5.	Organize community postings for Dental School Students and Residents	2014-2018	Training Institutions ICOH FMOH NPHCDA	Manpower, communication, transport, equipment, materials and consumables	200,000,000	FMOH			

Objective 3: To implement intervention programmes aimed at risk factor reduction and the prevention of complications of oral diseases.

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs (N)	Source of Funds	Expected Output	Targets	Remarks
1.	Establish mobile dental Health service	2014-2018	FMOH ICOH, JOS NPHCDA SMOH LGA	Materials Transport, communication, manpower, equipment, materials and consumables	50M	FMOH SMOH LGA	Improved access to oral health for the community	1, 2, 3, 4	
2.	Advocate to provide dental service in at least 1 Health facility per LGA	2014-2018	FMOH/SMOH /LGAs ICOH, JOS NPHCDA	Communication, manpower, transport, stationery	200M	FMOH SMOH LGA	One dental clinic per LGA	1, 2, 3, 4	

Objective 4: To sustain the potential gains of intervention programmes by advocacy to policy makers using findings from evidence-based researches.

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs(N)	Source Of Funds	Expected Output	Targets	Remarks
1.	Establish a database for oral health diseases, manpower and facilities	2014-2018	FMOH/ICOH/NPHCDA	Data management tools, Transport, communicat	20M	FMOH	Availability of database and feedback	1, 2, 3,4	

				ion, manpower, Stationery; printing			reports		
2.	Conduct operational researches to improve interventions	2014-2018	FMOH/ICOH/NPHCDA	Data management tools, Transport, communication, manpower, Stationery; printing	200M		Evidence-based data generated	1,2,3,4	
3.	Stakeholders' meeting on the development of a minimum dataset for oral health problems in Nigeria	2014	FMOH/ICOH/NPHCDA/SMOH	Venue, Transport, communication, manpower, Stationery	10M		Outline for minimum dataset developed	All States	
4.	Publication and distribution of annual reports on the oral health disease, manpower and facilities status for the purpose of advocacy and policy development.	2014-2018	FMOH/ICOH	Transport, communication, manpower, Stationery; printing	20M		Annual Reports published and circulated	All states Health Institutions Dental Schools	

8.0 Tobacco

Goal: To eliminate morbidity and mortality from tobacco use and exposure by implementing all measures of tobacco control as outlined in the WHO Framework Convention on Tobacco control (FCTC).

Objectives:

1. To raise awareness about the dangers associated with tobacco use in the general population and among policy makers
2. To reduce access to tobacco products particularly among youths
3. To enhance capacity for detection and control (including cessation)of tobacco use at all levels of health care delivery system in Nigeria
4. To enhance the working relationships with anti-tobacco coalition group in Nigeria
5. To ensure tobacco free environment
6. To ensure evidence based monitoring of tobacco use and research
7. To address the economy of tobacco raw materials production

Objective 1: To raise awareness about the dangers associated with tobacco use and exposure in the general population and among policy makers

Strategies:

1. Sensitizing and embarking on advocacy visit to policy makers and community/religious leaders
2. Engaging in health education campaign through school health education programmes – incorporation of anti-tobacco use messages in school curricula at all levels, community campaigns, formation of tobacco free clubs/societies in schools
3. Engaging in community based campaigns through the mass media, folklore, town criers, labeling on packs, billboards, posters, pamphlets etc.
4. Celebrating annual World No Tobacco Day

Objective 2: To reduce access to tobacco products particularly among youths

Strategies:

Ensuring legislations and enforcement of laws that reduces access to tobacco products, ban smoking in public places, high taxation on tobacco products, prohibition of sale to under age persons, etc.

Objective 3: To enhance capacity for detection and control (including smoking cessation) of tobacco use at all levels of health care delivery system in Nigeria

Strategies:

1. Building capacity for health care workers (doctors, nurses, pharmacists, CHOs etc. on tobacco cessation interventions (and encourage brief cessation interventions by all health care workers at all levels)
2. Providing facilities for monitoring of treatment
3. Including some medical cessation assistance in the essential drugs list (nicotine patch, drugs, gum, telephone quit lines
4. Increasing the number of health personnel that can provide cessation services – counseling, treatment, nicotine substitutes etc.

Objective 4: To enhance the working relationships with anti-tobacco coalition group in Nigeria
Strategies:

1. Ensuring that there is an open communication between the anti-tobacco coalitions groups and the government
2. Ensuring that government work with anti-tobacco coalition group in tobacco control activities in Nigeria

Objective 5: To ensure tobacco free environment
Strategies:
Enforcing ban of Tobacco smoking in public places in Nigeria

Objective 6: To ensure evidence based monitoring of tobacco use and research
Strategies:

1. Encouraging research into tobacco use by providing grants
2. Planning (budget) for research on tobacco use and the ensure that the result is put to use

Objective 7: To address the economy of tobacco raw materials production
Strategies:
Providing economically viable alternative source of livelihood for tobacco farmers

Targets

1. To reduce the prevalence of smoking among the general population to …5% by 2018
2. To reduce the incidence of tobacco use among youths from …12% to …<2% by 2018
3. To reduce morbidity and mortality associated with tobacco use by 25% by 2018

Objective 1: To monitor tobacco use and national tobacco prevention policy

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Tobacco use prevalence survey-GATS, GYTS, etc	2014 and onwards	FMOH/ Partners	Manpower Materials Transport Communication	800M	FMOH /NBS/ States/ Partners	Survey Report	All States+FCT	Funding and international technical support required
2.	Establish Tobacco use surveillance system as part of NCDs Risk Factor surveillance system	2014 and ongoing	FMOH/ Partners	Data management tools, manpower, transport, communication	500M	FMOH /States/ Partners	Surveillance data	All States+FCT	Sentinnel sites
3.	Evaluate impact of National Tobacco policy	2015	FMOH/ Partners	Data management tools, manpower, transport, communication	50M	FMOH /State/ Partners	Impact evaluation Report	All States+FCT	
4.	Collect data and Monitor tobacco industry marketing, promotion and lobbying	2014 and ongoing	FMOH/ Partners	Data management tools, manpower, transport, communication,stationery	150M	FMOH /State/ Partners	Monitoring data available	All States+FCT	
5.	Advocacy, dialogue and Lobbying for passage of National Tobacco Control Bill into Law.	2014	FMOH/ Partners	Manpower, transport, communication, stationery	50M	FMOH /States/ Partners	NTC Legislation	All States+FCT	Executive NTCB in process

Objective 2: To protect people from tobacco smoke

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Sensitize the public on the dangers of second-hand smoke	2014 and ongoing	FMOH/ Partners	Manpower, transport, communication, stationery, media	500M	FMOH /SyaPartners	Sensitization messages	All States+FCT	
2.	Advocate for legislation on smoke-free environments.	2014	FMOH/ Partners	Manpower, transport, communication, stationery	50M	FMOH /Partners	Advocay package	National Assembly; Policy makers	

Objective 3: To offer help to quit tobacco use.

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Establish cessation counseling services/centres and improved access to low-cost medicines	2014 and ongoing	FMOH	Manpower, data management tools, transport, communication, stationery	200M	FMOH /Partners	Tobacco cessation Counselling centres/services	All States+FCT	Start with at least one centre in each geopolitical zone.
2.	Establish cessation support groups	2014	FMOH/Partners	Manpower, transport, communication, stationery	50M	FMOH /Partners	Tobacco cessation Support Groups	All States+FCT	
3.	Provide quit support-	2014 and	FMOH	Phones, internet,	150M	FMOH	Toll-free	All	

	toll-free lines, Online information/courses	ongoing		manpower		/Partners	lines; online courses	States+FCT	
4.	Train and re-train health care workers on tobacco cessation programme	2014 and ongoing	FMOH/Partners	Manpower, transport, communication, stationery	500M	FMOH /Partners	Trained Tobacco cessation service Providers	All States+FCT	
5.	Develop Guidelines for managing Tobacco cessation	2014	FMOH/Partners	Manpower, transport, communication, stationery	6M	FMOH /Partners	Guidelines for managing Tobacco cessation	All States+FCT	

Objective 4: To Warn about the dangers of tobacco

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Public sensitization on media	2014 and ongoing	FMOH	Communication, manpower, stationery	100M	FMOH /Partners	Media jingles/ messsgaes	All States +FCTs	
2.	Implement Pictorial health warnings on cigarette packages	2015	FMOH	Communication	20M	FMOH	Cigarette packages with pictorial health warnings	Tobacco Industry	
3.	Sensitize policy makers on the dangers of tobacco	2014 and ongoing	FMOH/Partners	Manpower, transport, communication, stationery	100M	FMOH /Partners	Sensitization messages	Policy makers	

	use								
4.	Provide, distribute and display graphic images demonstrating the harm of Tobacco use.	2015	FMOH	Communication	20M	FMOH	Cigarette packages with pictorial health warnings	Tobacco Industry	
5.	Commemorate World No Tobacco Day	2014-2018 (Annually)	FMOH	Manpower, communication, IEC materials, transport, stationery, Media	10M	FMOH /Partners	Public enlightenment messages; IEC materials	All States +FCTs	
6.	School-based awareness creation and Formation of Tobacco-free clubs in secondary Schools	2014-2018 (Annually)	FMOH/FMOE	Manpower, communication, IEC materials, transport, stationery, Media	30M	FMOH /Partners	School youth education messages and IEC materials	All States +FCTs	

Objective 5: To enforce bans on tobacco advertising, promotion and sponsorship

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Advocate for legislative ban on tobacco advertising, promotion and sponsorship (TAPS)	2014	FMOH	Manpower, communication, IEC materials, transport, stationery, Media	100M	FMOH /Partners	Ban on TAPS	Tobacco industry; Media	
2.	Gather data and monitor enforcement and	2015 and onwards	FMOH	Manpower, communication, IEC materials, transport,	100M	FMOH /Partners	Monitoring data on TAPS	Tobacco industry; Media;	

	compliance to ban on TAPS			stationery, Media				Law enforcement Agencies	

Objective 6: To raise taxes on tobacco

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Advocacy and sensitization of policy makers for legislative raise in taxes on tobacco products	2014	FMOH/FMOT&I/FMOF/FIRS	Manpower, communication, IEC materials, transport, stationery, Media	200M	FMOH/Partners	Sensitization messages and advocacy package	Policy makers	
2.	Gather data and monitor implementation of high tobacco prices and higher taxation	2015 and ongoing	FMOH/FMOT&I/FMOF/FIRS	Manpower, data management tools, communication, transport, stationery,	150M	FMOH/Partners	Monitoring Data and report	Tobacco industry and marketers	
3.	Sensitize the public on the benefits of increasing tobacco prices and higher taxation including what accruing resources are used for.	2014 and ongoing	FMOH/Partners	Manpower, communication, IEC materials, transport, stationery, Media	500M	FMOH/Partners	Public enlightenment and sensitization messages	All States +FCTs	

9.0 Violence and injuries

9.1 RTIs

The Nigerian government is presently committed to the Decade of Action on Road Safety (2010-2020) and the Accra Declaration on Reduction of Road traffic Injuries on the African continent.

Objective 1: To increase capacity for implementation of global best practices in road traffic management and safety in Nigeria.

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Organizing workshops and seminars on management of road safety for road traffic personnel Statewide	2014 - 2015	FMOH FRSC Nigeria Police Traffic Division NGOs	- Logistics - Honorarium for resource persons. - IEC Materials.	50M	FMOH Donor agencies	Road Traffic personnel have access to current thinking in road safety. Improved driving licensing at all levels		

Objective 2: To increase capacity for research in road safety in Nigeria.

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Engaging Universities and research institutions	2014	FMOH NGOs	- Logistics - Honorarium for	150M	FMOH Donor	More research	Researchers in	Engage heads of

	in road safety research		FMOE FRSC (partners)	resource persons.		agencies	for postgraduate degrees focused on road safety	institutions of higher learning	research units of relevant institutions

Objective 3: To reduce the incidence of drunk and drug-induced driving in Nigeria.

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Printing and disseminating IEC materials targeted at the general population	2014	FMOH SMOH LGAs FRSC	Logistics	20M	- FMOH - Donor Agencies	Increased nationwide awareness of the harmful use of alcohol, drink and drug induced driving	General public Print and electronic media	
2.	Organizing workshops and seminars on drink driving and road safety Statewide 2 In their regular meetings	2014 - 2015	FMOH with FRSC SMOH LGAs NGOs NURTW	- Logistics - Honorarium for resource persons. - Materials.	222M	FMOH SMOH LGAs Donor agencies	Personnel have access to current information and thinking on drink	General public	

3.	Engagement of the legislature to enact point of sale laws that restricts access of alcohol in motor parks, access to minors etc	2014 - 2018	FMOH NURTW RTEAN NGOs	- Logistics	10M	FMOH Donor agencies	Zero tolerance for alcohol sale in motor parks etc	Improved enforcement of point of sale violations	

Objective 4: To reduce the morbidity and mortality associated with Road traffic injuries in Nigeria.

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Grassroots training on basic life support and management of RTIs	2014-2018	FMOH SMOH LGAs NGOs	Logistics Training honorarium	See below on non RTI injuries	- FMOH - Donor Agencies	Nationwide training of health personnel on basic life support	Reduction in morbidity associated with RTIs	
2.	Increase input of road safety personnel in road design, construction and maintenance	2014-2018	FMOH FRSC Federal Ministry of Works FERMA	Inter-ministerial working group	5M	FMOH SMOH LGAs Donor agencie	Improved road infrastructure, furniture	Consider as part of activity for road	

			State works and transportation/ maintenance agencies Local Government Works Departments			s	and road safety communication at all levels	safety week	

9.1.1 Other injuries apart from RTIs

These include work related, violence-(self harm, interpersonal, collective) e.g. crime-related and those related to communal clashes and terrorism. There is paucity of data on these types of injuries in Nigeria. A 10 year (1987-1996) review of factory-related injuries and fatalities described 3185 injuries with an overall case-fatality ~~of~~ rate of 2.23/100 workers. There were 71 deaths mainly from power-driven machinery, explosion and falls.[1]

However it is clear that the incidence of some of these injuries is increasing due to the armed robbery, ethno-religious crisis and terrorist attacks.

There is a need to improve existing data collection mechanisms and conduct studies to provide reliable information on other injuries apart from RTIs.

Objectives:

1. To determine the burden of other forms of injuries not related to RTI
2. To encourage enforcement, and where unavailable enact legislation on other forms of injuries
3. To train and retrain select population and health workers on management of injuries

Objective 1: To determine the burden of other forms of injuries not related to RTI

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Meeting of trauma experts to determine the burden of disease	2014	FMOH	Funding of meeting	5M	FMOH	Accurate national statistics to begin with		See action points 1-3
2.	Carrying out surveillance study in 6 geopolitical zones	2014-2015	FMOH Injury experts	Funding of the studies	15M	FMOH SMOH	Current & useful data as well as a national bench mark		19 states for 1 week See action points 1-3, 11, 12, 14

Objective 2: To encourage enforcement, and where unavailable enact legislation on other forms of injuries

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Meeting with stakeholders	Early 2015	FMOH	Transport Accommodation	5M	FMOH Donor agencies	Awareness about the need for enactment & enforcement of relevant legislation		see action points 4-9
2.	Follow-up meeting	Late 2015 2016	FMOH	Transport Accommodation	100M	FMOH Donor agencies	Awareness about the need for enactment & enforcement of		see action points 4-9

							relevant legislation		

Objective 3: To train and re-train select population and health workers on management of injuries

S/N	Activities	Timing	Implementing Agency	Resources Needed	Costs	Source of Funds	Expected Output	Targets	Remarks
1.	Organizing Statewide TOT for first aid	Early 2014 Mid 2014 Late 2014	FMOH	Resource persons Venues Basic equipments	185M	FMOH SMOH Donor agencies			
2.	Organizing first aid training for first responder in schools, workplaces and public buildings LG wide	February 2015 – December 2016	FMOH Health institutions	Resource persons Venues Basic equipments	370M	FMOH SMOH LGAs Donor agencies	First aid skills	20% of Students, teachers, workers, traders are skilled	185 LGAs
3.	Organizing basic life support; trauma life support Statewide	Late 2016	FMOH Health institutions	Resource persons Tertiary institutions Basic equipments	92.5M	FMOH SMOH Donor agencies	Widespread skilled workforce in life support strategies	80% of Health workers, firemen, police, selected	36 states + FCT In designated centres

								workers are skilled	
4.	Organizing advanced trauma life support	May 2016	FMOH Health institutions	Resource persons Tertiary institutions Basic equipments	92.5M	FMOH SMOH Donor agencies	Highly skilled health workers in trauma care	20% of Health workers in primary secondary and tertiary health workers are skilled	36 states + FCT In designated centres

Action points[2]

1. Develop a sustainable and comprehensive system for injury data collection in Nigeria.
2. Integrate injury surveillance with a comprehensive population-based NCDs surveillance system.
3. Institute mechanisms for utilizing multiple sources of data for robustness (e.g., hospital-based data, police reports, reliable newspaper reports and data from other reliable sources).
4. Establish a National Safety Commission – an interdisciplinary group of stakeholders with the aim of improving safety at all levels.
5. Integrate injury prevention as part of a comprehensive NCDs behavioural change communication strategy.
6. Develop a comprehensive policy, enact and enforce legislation for occupational health and safety.
7. Develop product safety standards for household products.
8. Include preventive health in the mandate of organizations dealing with worksite safety.
9. Enforce effective legislation on building safety.
10. Study patterns of occupational injuries and their determinants with a view to defining precise targets for preventive interventions.
11. Formally evaluate interventions to reduce all forms of violence in Nigeria.
12. Improve trauma care to the extent that a credible, cost-effective analysis suggests.
13. Build capacity of health systems in support of injury prevention and control. Integrate public health programme monitoring and evaluation with NCDs surveillance.
14. Build a coalition or network of organizations at the national, state and local levels facilitated by federal and state health services to add momentum and legitimacy to injury prevention and control as part of a comprehensive effort for the prevention of NCDs.

Bibliography:

1. Adegbembo A.O, E.-N. M. (1995). National Survey of Dental Caries Status and Treatment needs of Nigerians. *Int Dent J* , 35-44.

2. CBN. (2008). *Economic and Financial Review Vol 44, number 3.* Abuja: Central Bank of Nigeria.
3. Akpata E.S, (2004). *Report of Study on Fluoride, Fluorosis and Dental Caries.* ICOH.

4. Etoh E.C, Johnson N.W, Olasoji H.O, Danfillo I.S, Adeleke O.A. (2005). Intra-oral Carcinomas in Maiduguri, Nigeria. *Oral Diseases* , 379-385.

5. FMOH. (2008). *National Demographic and Health Survey Final Report.* Abuja: Federal Ministry of Health.

6. FRSC. (2006). *Annual Report.* Abuja: Federal Road Safety Commission.

7. Gureje O, Lasebikan V.O, (2006). Lifetime and 12-month Prevalence of Mental Disorders in the Nigerian Survey of Mental Health and Well-being. *British Journal of Addiction* , 188: 465-471.

8. Ekanem I.A, (2008). *Global Youth Tobacco Survey for Nigeria.* World Health Organization.

9. Lagos. (2008). *Lagos Population Survey.* Lagos.

10. Miranda J.J, Patel. V, (2005). Achieving the MDGs: Does Mental Health Play a Role? *PLoS Med* .

11. NPC. (2006). *Final Census Results.* Abuja: National Population Commission.

12. Otoh E.C, Adeleke O.A, (2006). *Dental Caries Status in Northern Nigeria: Report on the study of the Oral Health status, Knowledge,attitudev and practice of Nigerians.* ICOH.

13. Otoh E.C, Johnson N.W, Mandong B.M, Danfillo I.S, (2004). Pattern of Oral Cancers in North Central Nigeria. *African Journal of Oral Health* , 47-53.

14. Otoh E.C, Johnson N.W, Ajike S.O, Mohammed A, Danfillo I.S, Jalo P.H, (2009). Primary Head and Neck Cancers in North Western Nigeria. *West African Journal of Medicine* , 227-233.

15. UN. (2000). *Landmark Resolution on Women, Peace and Security.* Retrieved January 11, 2011, from http://www.un.org/womenwatch/osagi

16. UNDP. (2009). *Human Development Report.* United Nations Development Programme.
17. WHO. (2005). *Global Health Improvement and WHO: Shaping the future.* World Health Organization.

18. WHO. (2005). *Public Health problem caused by harmful use of Alcohol.* World Health Organization.

19. WHO. (2004). *Publication on Road Safety.* World Health Organization.

20. WHO. (2006). *Reducing Salt intake in Populations: Report of a WHO Forum and Technical Meeting.* World Health Organization.

21. WHO/ISH. (1999). *Hypertension guidelines.* World Health Organization and International Society of Hypertension.