# FACULTY OF COMMUNITY/PUBLIC HEALTH

# HARMONIZED CURRICULUM

# 2021

The Harmonized Curriculum by the Faculty of Community Health, West African College of Physicians (Nigeria Chapter) and the Faculty of Public Health, National Postgraduate Medical College of Nigeria

### FACULTY OF COMMUNITY/PUBLIC HEALTH CURRICULUM OF THE POSTGRADUATE TRAINING PROGRAMME

# AIM

To build a pool of highly competent Public Health Physicians with the requisite knowledge, attitude and skills to measurably improve the health of population groups.

# **OBJECTIVES:**

The objectives of the training programme in Community/Public Health are to:

- 1. Provide advanced postgraduate training for Physicians who wish to practice in the specialty of Community /Public Health.
- Prepare physicians to practice as Specialist/Consultant Community /Public Health Physicians in various settings including Ministries of Health and Parastatals, Industries, University Departments of Community Health, Schools of Public Health, Non-governmental Organizations, Armed Forces, etc.
- 3. Enhance the practice of Community/Public Health in the sub-region with a view to improving the general health status of the population at the community level.
- 4. Contribute to research activities on priority public health problems and ensure wide dissemination of research findings for improving the health of the general population.

# **ADMISSION REQUIREMENTS:**

Admission into the **Primary programme** in Community/ Public Health is open to physicians with basic medical degrees which are registrable with the Medical and Dental Council in their countries.

To be admitted into the **Membership programme**, candidates must have passed the primary of any of the Regional or National programmes or must possess an acceptable MPH degree

To be admitted into the **Fellowship programme**, candidates must possess the Membership diploma or must have passed the Part one stage of any of the regional or National programmes.

# **TRAINING CENTRES:**

- The training programme is conducted in centres accredited by the Postgraduate Colleges on the recommendation of the Faculty Board of Community /Public Health. These include Departments of Community Health located in the Teaching Hospitals and other accredited training centres.
- Such centres must have satisfied the basic requirements for accreditation. Accredited centres are responsible for providing all the resources including personnel for training the trainees who work as Resident Doctors in the training institutions.
- The institutions issue a Certificate of Training to each Resident, attesting to successful completion of the prescribed training programme as required by College regulations.
- Training certificates from the Training centres qualify the residents to sit for appropriate stages of examinations of the Postgraduate Medical Colleges.

# GENERAL STRUCTURE OF THE TRAINING PROGRAMME:

The programme is structured into **three phases**:

- Training for the Primary examination/MPH degree
- Training for the Part I/Membership examination
- Training for the Fellowship examination.

# TRAINING FOR THE PRIMARY EXAMINATION:

# THE PRIMARY COURSE CONTENT:

Self-study is the major format of training for this part of the programme and candidates are not obliged to receive formal residency training in the accredited institutions to sit for the Primary Examination. Candidates are however advised to attend update courses organized by Faculty or by training institutions.

# **LEARNING OBJECTIVES:**

Candidates should be able to:

- 1. Describe principles of Anatomy, Physiology and Biochemistry and Human Genetics as related to Community Health
- 2. Explain the principles of Microbiology, Parasitology and Pathology as related to Community Health
- 3. Explain the principles of Biostatistics, Demography, Human nutrition, and Behavioural sciences as related to Community Health.
- 4. Explain the principles of core areas of Community Health listed below:

# **AREAS COVERED**

The aim of this part of the programme is to upgrade the knowledge of the candidate in the sciences basic to Community Health:

- Human population and Applied Demography
- Public Health Nutrition
- History & Evolution of Public Health
- Behavioral Science in Public Health /Medical Sociology
- Principles of Immunology & Genetic Aspects of Preventive Medicine
- Medical Parasitology and Virology
- Medical Microbiology
- Therapeutics

and Principles of core areas of Community Health:

- Epidemiology and Disease Control
- Medical Statistics
- Primary Health Care
- Family and Reproductive Health
- Health Policy & Health Services Management
- Occupational Health
- Rehabilitative and Social Medicine
- International Health
- Health Education and Promotion
- Environmental Health Sciences

Other areas include:

- Community Mental Health
- Community Dental Health

# **Details of Specific Topics**

Human Population and Applied Demography	Population structure (fertility and mortality analysis and population pyramids), global and national trends (stages of demographic transition) and its influences on health for developing and developed countries
	Population growth, problems and policies
	Population census (list types), demographic data, sample survey
Behavioural Science in Public Health (Medical sociology)	Nature of the behavioural sciences Strategies and techniques for assessing community behaviour and needs
	Concept of culture and society: process of socialization, The roles of cultural, social, psychological and environmental factors in the aetiology of diseases
	Dynamics of human behaviour in family and community settings:
	The structure and function of society
	The family, community, social stratification including concept of class and ethnic subcultures on health seeking behaviour as well as utilization of health services.
	Community structure, culture and health:
	Global socio-political factors as well as policies that impact on health.
	Definitions and nature of a community, the workings of a community, and the economic, political, social, and cultural variations found in communities.
	Ways in which community institutions interact in supporting the lives of community members.
Environmental Health Sciences	History, and practice of environmental sanitation and environmental control:

Define, characterize, assess and evaluate the
mechanisms by which Biological, Physical and
Chemical agents cause disease in man; describe the
methods and technologies for controlling these hazards
in the sub-region; list the importance of community
mobilization and participation for behavioural change
towards environmental improvements

Air pollution, its sources, effects and control.

Radiation and health

Water supply and health:

Sources of water supply and International Standards for assessment of water quality; Water Resource Development and Health, cite examples of diseases associated with water

Waste (sewage and refuse) disposal:

Describe sewage systems and diseases associated with Excreta disposal; Discuss solid waste control

Housing and health: concept of zoning and town planning

Vector control

Noise in relation to health; sources, effects, measurement and control.

Food hygiene.

Industrial environment and health

Work physiology and health

Medical Microbiology Nature and classification of bacteria:

To discuss the aetiology and pathogenesis as a basis for prevention and control of diseases caused by microbes

Ecology of major pathogenic micro-organisms of the following groups – mycobacteria corynebateria, vibro,

	streptococci, staphylococci. enterobacteria, haemophilus and spirochaetes
	Dynamic processes of host/agent interactions and resistance of bacteria to physical and chemical agents; disinfection and sterilization
	Methods of laboratory diagnosis as a basis for prevention and control of diseases caused by microbes:
	Theory and practice of current methods and techniques applicable to medical microbiology; fluorescent antibody techniques, preparative and analytical electrophoresis, immuno-electrophoresis, etc.
	General concepts of parasitology and parasitism:
Medical Parasitology & Virology	Nature, life cycles and control of parasites of medical importance.
	Parasites of medical importance in Nigeria (helminths, protozoa, etc) Main types and classification of helminths and protozoa, the transmission pathways and mechanisms of action of helminths and protozoa;
	Parasite-host relationship and its importance in public health.
	The concept of biological vectors of pathogens, and types of transmission:
	Nature, life cycles and control of vectors and other insects of medical importance in Nigeria.
	Nature, life cycles and control of common fungal diseases
	Classification of structure and life cycle of common viruses of public health importance in Nigeria and globally
	Recent advances in virology: including diagnosis, identification and management of viral illnesses

Principles of Immunology	Immunologic basis underlying diagnostic procedures:
& Genetic Aspects of Preventive Medicine	Principles of immunity and the immunological phenomenon which helps to understand the pathogenesis and laboratory diagnosis of infectious and non-infectious diseases
	Active and passive immunization
	Immunologic response to pathogens (bacteria, viruses and other microbial infections)
	Vaccine types, production, storage including the cold chain and associated problems
	Elementary human genetics and classification of genetic diseases.
	Chromosome pathology:
	Identify the common human genetic disorders nationally and in the sub-region and the primary genetic defects underlying the diversity of disorders
	Behaviour of genes in the population: Importance and implications of genetic disease at the levels of the population and individual families
	Application of genetic principles to the prevention and control of genetic disorders and study of human health: Genetic counselling
Therapeutics	Basic pharmacokinetics: transport, metabolism and excretion of drugs.
	Antibiotics – their uses and misuses. Drug resistance
	Basic mechanisms of drug action
	Drug classification
	Drugs used in the management of endo- and ecto- parasites

	Management of common poisons including pesticides Management of Communicable diseases. Leprosy and other endemic diseases Antibacterial substances used in the treatment of infections
History & Evolution of Public Health	The evolution of health through the ages. Review of public health activities.
	Important names and landmarks in public health in Nigeria
	International health agencies and their developments including the U.N.O
	The W.H.O.: constitution, structure and scope
Epidemiology	History, definition and basic principles of epidemiology
	Epidemiology as the quantitative science underpinning much of public health practice
	Epidemiological basis of Disease causation and control:
	Screening for diseases
	Evaluation of diagnostic and screening tests
	Levels of disease prevention
	Basic methodological tools of Epidemiology:
	Epidemiological study methods: – descriptive, hypothetical, analytical and experimental studies
	Design of clinical and experimental trials
	Measurements of disease frequency, sources and limitations
	International classification of diseases, injuries and causes of death

	Collate, analyze and interpret Epidemiological data from different sources
Medical Statistics	Basic medical statistics (Role of statistics in human biology and medicine)
	Descriptive statistics, Data summary and presentation:
	Summarise simple data sets using appropriate summary statistics such as measures of central tendency (mean, median), measures of dispersion (standard deviation, interquartile range), describe categorical data using frequencies, proportions, percentages and ratios and use appropriate diagrammatic methods. Sampling techniques
	Health and vital statistics: Sources of information relating to vital events: mortality and morbidity
	Population and sample parameters:
	Distinguish between population and sample, population parameters and sample statistics and the importance of sampling variability in relation to the central limit theorem
	Describe the main factors affecting sample size and how to calculate sample size for common study designs
	Measurement of health and disease: Rates, crude and specific
	Standardization of rates and their applications
	Probability theory:
	Recall the basic concepts and laws of probability
	Normal distribution
	Statistical inferences and tests of hypotheses, significance levels
	Describe and interpret the results of a significance test

(hypothesis testing) and confidence interval estimation.

	Candidates should be able to describe the circumstances in which to use parametric and non-parametric tests. They should discuss when to use z test, 1, 2 and paired sample t tests and Pearson's chi-square test
	Use correlation and regression including simple linear, multiple linear and logistic regression
Health Education and Promotion	Health education, health promotion and health literacy
	Role of health education and promotion in health maintenance and disease prevention
	Role of communication and communication media in the promotion of health care
	Methods and techniques used in communication for health promotion
Public Health Nutrition	Major classes of nutrients and the manifestations of micronutrient and macronutrient deficiency states
	Epidemiology of nutritional disorders nationally, regionally and globally
	Nutritional requirements during pregnancy, lactation, infancy, childhood and adolescence
	Assessing nutritional status of a community and implementing interventions for prevention and control

# LOCATION FOR TRAINING

There is no designated location for this part of the training programme.

# THE PRIMARY EXAMINATION

The examination consists of one paper made up of multiple choice questions. In order to pass the examination, the candidate must obtain an aggregate of 50% overall.

#### JUNIOR (MEMBERSHIP) RESIDENCY TRAINING CURRICULUM

#### **INTRODUCTION**

Candidates who wish to enrol into Junior Residency Training Programme shall have passed or been exempted from Primary Examination of the National Postgraduate Medical College of Nigeria (NPMCN) or West African College of Physicians (WACP). Exemption from Primary Examination is also granted to candidates who have an equivalent qualification acceptable to the Faculty. The period of training shall be a minimum of 24 months, after passing the primary examination. Candidates who have an acceptable Master of Public Health degree are however expected to spend a minimum of 12 months to complete the curriculum before taking the Part 1 Examination. Candidates shall undertake their residency training programme in Institutions accredited by the College. The Trainers shall be Fellows of the College in the Faculty of Public/Community Health. There would be a continuous formative assessment of Residents throughout the training period as detailed in the Training Logbook. This shall be endorsed by trainers/supervisors at the end of each posting for presentation at the Part 1 examination when Residents undergo summative assessment.

#### **GENERAL AIM**

To equip the Trainees with the knowledge, skills and competencies in the principles and practice of Community /Public Health in their country and the sub-region

#### **GENERAL LEARNING OBJECTIVES**

At the end of the training, candidates should have acquired required proficiency to:

- 1. Conduct Community Diagnosis to prioritize health issues in communities at all levels.
- 2. Demonstrate the basic communication skills to discuss effectively Public Health issues with individuals, groups, communities, Organizations etc and at all levels of government.
- 3. Function as Medical Officer of Health at LG level.
- 4. Demonstrate adequate knowledge on all subspecialties of public health with the view of pursuing in-depth learning and further research in any of the key subspecialties.
- 5. Identify and proffer solutions having applied appropriate measures of primary, secondary and tertiary prevention to health problems of public health importance.

- 6. Carry out the steps needed in public health planning, initiate, organize, execute and evaluate public health programmes.
- 7. Demonstrate leadership and team-player skills in addressing Public Health problems.
- 8. Describe the procedures for basic laboratory techniques for diagnosing common health problems of Public Health interest.

# LIST OF CORE SUBSPECIALTIES AND FIELD ACTIVITIES FOR JUNIOR (MEMBERSHIP) RESIDENCY

For Junior (Membership) Residency Training in preparation for the Part I Examination, the following Core Subspecialties and Field activities in the Faculty of Public /Community Health are recognized. Residents are also expected to do minor postings in Adult Accident and Emergency, Paediatrics and Obstetrics and Gynaecology Departments.

List of	f Core Subspecialties for posting	Duration
1.	Environmental health	6 weeks
2.	Epidemiology and Disease Control	8 weeks
3.	Health Policy, Planning and Management	6 weeks
4.	Health Promotion and Education	2 weeks
5.	International Health and Travel Medicine	2 weeks
6.	Medical Statistics	4 weeks
7.	Occupational Health	6 weeks
8.	Public Health Nutrition	2 weeks
9.	Rehabilitative and Social Medicine	4 weeks
10.	Reproductive and Family Health	6 weeks
	TOTAL	46 weeks

# List of field activities

#### Duration

I. Rotations through Adult A&E, Obst. & Gynae. and Paed.	12 weeks
ii. Dental Public Health	2 weeks
iii. Mental Health	2 weeks
iv. Computers in Public Health	2 weeks
v. Public Health Lab. & Museum for exposure, Microbiology	
Parasitology, Haematology	2 weeks
vi. Treatment of common endemic diseases including STIs	

Sexually Transmitted Infections	2 weeks
vii. Urban Health posting e.g. Management of essential drugs	4 weeks
viii. Tuberculosis and Leprosy Control	2 weeks
ix. Posting to Medical Officer of Health	2 weeks
x. Rural Health Posting	8 weeks
xi. International Health and Travel Medicine	2 weeks
xii. Posting for experience in Industrial and Occupational Health	2 weeks
xiii Rehabilitative and Social Medicine	2 weeks
TOTAL	44 weeks

# DETAILS OF SUBSPECILATIES FOR POSTING

# ENVIRONMENTAL HEALTH

#### **DURATION: 6 weeks**

# **LEARNING OBJECTIVES**

- To show understanding of the objectives, key concepts and elements of Environmental Health.
- 2. To describe and discuss current global and national policies and programmes relating to Environmental Health.
- 3. To identify common Environmental Health problems.
- 4. Have knowledge of mitigation of environmental exposures and application of control measures to prevent them.

#### **AREAS COVERED**

#### 1. The human environment

- The composition of the human environment and its contribution to health and disease.
- Diseases and conditions associated with Physical, Social, Biological environment.
- Components of Environmental Health practice.

# 2. Water supply and health

- The natural importance of water, distribution and sources of water, properties of potable water; water standards, tests for portability.
- Water treatment at home and for public supply.
- Water-borne diseases and other water related diseases.

#### 3. Refuse Collection and Disposal

- The nature of human wastes, and refuse and measurement of quantities produced.
- Components, collection and disposal of refuse.

- Seasonal geographical and social class variation in refuse generation; garbage, rubbish, ashes, street refuse, dead animals, abandoned vehicles, industrial refuse, construction and demolition refuse, hazardous and special refuse
- Problems from poor refuse disposal; methods of refuse disposal; Sanitary landfill, incineration, composting, grinding, waste recovery/recycling, feeding of animals, sea laws and refuse disposal; refuse disposal organization and management as Medical Officers of Health.

# 4. Sewage and waste water collection and disposal

- Nature of non-solid wastes; sewage and sullage
- Collection and disposal of sewage; on site disposal privies and their types, sanitary and unsanitary sewage collection and disposal; latrines; composting; water carriage systems: sewage, sewer and sewage system.
- Quantity and composition of waste water, waste-water treatment preliminary treatment: sedimentation, chemical coagulation and flocculation, biologic treatment, sludge management: waste water reclamation; oxidation ponds.
- Drainage of buildings: drainage of towns/roads: disinfection of waste waters (including from sewage treatment plants)
- On-site disposal of domestic waste waters; waste-water reclamation.

# 5. Housing and Health

- Housing/shelter as a basic biological need: basic principles of healthful housing: physiological needs; safety needs; psychological needs; protection from contagion.
- Established housing standards; distance from crown of the road; occupancy, structure, location and fire safety; minimum standards for basic equipment – viz; lighting, ventilation, heat, access, plumbing and sanitary fixtures, special housing needs; social provision.
- Town and regional/country planning including the principle of zoning.

# 6. Food Hygiene

- Definition and scope of food hygiene: public health objective of food hygiene and safety.
- Legislation of food hygiene; elements of a standard food hygiene and safety programme.

- Food poisoning and other food-borne diseases; role of food in communicable diseases; investigation of outbreaks of food poisoning.
- Handling, storage and preservation of food; problems of food hygiene and safety in Nigeria; food premises their types and food hygiene control.
- Abattoirs and their services; meat inspection and hygiene, canned food hygiene and inspection, common local infections of raw food items in Nigeria.
- Hazard Analysis, Critical Control Point (HACCP)

# 7. Air pollution and control

- The physiological importance of clean air, health problems from contaminated air.
- Sources of air pollution dusts, gases, noise, radiation pollution; regulations in relation to air pollution.
- Control of air pollution; natural, domestic and industrial air pollution. Environmental law: pollution control.
- Health effects of indoor and outdoor air pollution.

# 8. Vector control

- Vectors of public health importance in Nigeria.
- Chemical, biological and mechanical/physical control of vectors.

# 9. Environmental Impact Assessment (EIA) of development projects

• Policy, programmes and impact management strategies

# 10. Management of disasters

- Definition and nature of disasters, public health aspects of disaster management
- Disaster preparedness, relief and surveillance, evaluation.
- Bio-terrorism public health preparedness and response
- Control of epidemic diseases, among displaced populations, public health care for displaced populations and refugees, role of agencies.

# 11. Public Health Laws

• Public Health laws

# 12. Climate Change

- Causes and effects of Climate change
- Public Health response to climate change.
- International action plans for the mitigation of climate change

# SKILLS TO BE ACQUIRED

- Ability to take environmental exposure history from patients.
- Ability to carry out inspections/audits of premises such as residential, commercial, food, markets and abattoirs.
- Show proficiency to carry out water sample analysis.
- Ability to carry out analysis of waste water from diverse sources-industries, sewage treatment plants etc.
- Ability to carry out infection control and waste management audit
- Ability to implement waste management plan
- Conduct Environmental Impact and Health Impact Assessment Studies
- Training courses in Environmental Health (Optional)

# LOCATION FOR TRAINING

- Federal Ministry of Environment
- Country Environmental Health Agencies
- State Ministry of Health
- Environmental Health units of Hospitals (Teaching hospitals and Medical centres)
- Industries
- Environmental Health units of Local Government Areas.

# EPIDEMIOLOGY AND DISEASE CONTROL

#### **DURATION: 8 weeks**

# a. PRINCIPLES OF EPIDEMIOLOGY

Duration: 2 weeks

# **LEARNING OBJECTIVES**

- 1. To describe and comprehend the Principles of Epidemiology.
- 2. To describe and comprehend epidemiology and control of communicable diseases
- 3. To describe and comprehend epidemiology and control of Non-communicable diseases
- 4. To demonstrate the ability to apply the Principles of Epidemiology.

# **AREAS COVERED**

- 1. Introduction
  - Definition, Meanings and Purpose of Epidemiology
  - Scope of Epidemiology
  - Sequence and Methods of Epidemiology Reasoning
  - Decision Making in Epidemiology.

# 2. Inductive and Deductive reasoning

• Epidemiological Methods

# 3. Descriptive Epidemiology

- Incidence and Prevalence studies
- Case studies and Case Series
- Descriptive Cross-sectional Studies; issues of time, place and persons, secular and cyclical trends in disease occurrences
- Descriptive mortality studies; death notification and mortality statistics

# 4. Analytical Studies

- Introduction to Analytic cross-sectional studies
- Before and after studies
- Proportional mortality studies;
- Case-control studies

- Historical cohort studies; prospective cohort studies; the issue of "prospective" and "retrospective" studies
- Odds ratios; relative risk/risk ratio; attributable risk; proportional mortality ratios; standardized mortality ratios

# 5. Experimental Epidemiology

- Introduction to clinical trials
- Blinding, matching and other methods of bias control; randomization
- Ethical issues in human/experimental studies;
- Community trials
- Survival/actuarial studies

- 1. Ability to understand the sequence and methods of Epidemiological reasoning.
- 2. Ability to differentiate various types epidemiological study designs
- 3. The ability to design and carry out various epidemiological studies
- 4. Acquisition of the knowledge, understand and calculate the various rates and ratios in epidemiology.

# **b. EPIDEMIOLOGY AND COMMUNICABLE DISEASE CONTROL**

Duration: 3 weeks

# **LEARNING OBJECTIVES**

- 1. To demonstrate the ability to investigate disease outbreak
- 2. To be able to carry out literature review of research studies on communicable diseases.
- 3. Ability to write a study proposal on Communicable disease
- 4. Ability to analysis data generated on Communicable disease.
- 5. Ability to carry out research study on Communicable disease
- 6. Ability to review journals and make presentations at scientific meetings

#### **AREAS COVERED**

- 1. Introduction
  - Terms & Concepts used in Communicable Disease Epidemiology

#### 2. The natural history of diseases

• The cycle of Health and Disease

#### 3. Human Immunity

- Factors affecting Human Immunity against Diseases
- Herd Immunity etc

#### 4. Diseases transmitted;

- Through the Respiratory Tract
- Through the Gastro-Intestinal Tract
- Through Vectors
- Through contact or active penetration

#### 5. Nosocomial infections

- Definition, agents, site, sources and predispositions;
- Principle of infection control and Disease Exposure Control, Prevention and control (surveillance) of nosocomial infections.

#### 6. Emerging and re-emerging diseases-

Ebola, SARs, COVID, Lassa

#### 7. Surveillance and notification of diseases in general

- Locally and Nationally Notifiable Diseases
- Internationally notifiable diseases and mechanisms. Integrated Disease Surveillance and Response Epidemiology and control of National Priority Diseases

# 8. Arthropods of medical importance and their control

• Roll back malaria, Onchocerciasis control programme

# 9. National Control Programmes

- National control programme for various countries in the West African Subregion such as STI/HIV control programme, Guinea worm eradication programme, Poliomyelitis eradication initiative
- Yellow fever Control Programme, Lassa fever Control Programme, Emergency response to epidemics

# **10.** Control of pandemics

• SARs, Ebola Virus Disease, Corona Virus Disease (COVID)

- 1. To describe the epidemiology and control of communicable diseases.
- 2. Understanding the applications of the terms and concepts used in communicable disease epidemiology.
- 3. Ability to describe and apply the epidemiologic Triad in communicable disease spread and control
- 4. To describe and apply outbreak investigations to the control of communicable diseases
- 5. To identify and describe current disease surveillance systems in the country and the sub-region.
- 6. To participate in emergency response to epidemics

# c. EPIDEMIOLOGY AND NON-COMMUNICABLE DISEASE CONTROL

Duration: 3 weeks

# **LEARNING OBJECTIVES**

To demonstrate the ability to:

- 1. Investigate Non-Communicable diseases
- 2. Carry out literature review of research studies on Non-Communicable diseases.
- 3. Write a study proposal on Non-Communicable disease
- 4. Analysis data generated on Non-Communicable disease.
- 5. Carry out research study on Non-Communicable disease
- 6. Review journals and make presentations at scientific meetings

# **AREAS COVERED**

- 1. Epidemiology, Multi-factorial causation and control of Cancers.
- 2. Epidemiology & Control of hypertension and common cardiovascular diseases, diabetes sickle cell anaemia e.t.c
- 3. Epidemiology of non-communicable diseases and Genomics in Public Health

# **SKILLS TO BE ACQUIRED**

- 1. Ability to describe the epidemiology and control of non-communicable diseases.
- 2. Ability to identify, manage and prevent common non-communicable diseases
- 3. Ability to demonstrate the understanding of medical and biological processes in the prevention and treatment of non-communicable diseases.
- 4. Ability to identify and describe current disease surveillance systems.

# LOCATION FOR TRAINING

- Federal Ministry of Health (Epidemiological unit)
- State Ministry of Health (Epidemiological Unit)

- Local Government Areas (Epidemiological unit)
- Urban and Rural Practice Areas
- Teaching Hospitals and Medical Centres (GOPD, special e.g. HIV/AIDS, TB clinics, NHIS clinics, Microbiology and Parasitology laboratory, e.t.c)
- Departmental clinics such as well person's clinic.
- Departmental demonstration laboratory

# HEALTH POLICY, PLANNING AND MANAGEMENT

### **DURATION: 6 weeks**

### **LEARNING OBJECTIVES**

- 1. Describe the health systems and identify the major organizational structures that make up the health services at Federal, State, Local Government or District levels.
- 2. Understand strategic health planning in the management cycles in effective and efficient health services delivery.
- 3. Identify the types, key elements and functions of budgeting.
- 4. Describe the functions of the Executive and Legislature in budgeting.
- 5. Understand the principles and process of health policy formulation
- 6. Understand policy implementation and evaluation
- Understand the policy context, objectives and structure of National Health Management Information Systems.

#### **AREAS COVERED**

# 1. Health Policy

- The role of the Health sector in national development
- Public Policy making process
- Contemporary policy issue
- The policy environment
- Health decision making
- Historical perspective of health in National Development Plans in Nigeria and own country
- The National Health Policy of the country
- Comparative international appraisal of health policy in developed and developing countries.

# 2. Fundamentals of Health Economics

• Health economics – definition, basic concepts, scope, uses.

- The health sector with the macro economy
- Microeconomic principles demand and supply, methods of pricing; concepts of marginal analysis and opportunity cost, etc.
- Economic evaluation of health programmes concept of economic efficiency; types of economic evaluation; measurement and valuation of costs and consequences.

# 3. Health Planning and Management

- The management process in the context of health care historical perspectives, modern management concepts, principles and functional elements.
- Health planning –historical perspectives; uses and scope; planning approaches and processes; strategic planning techniques; action planning techniques; quantitative techniques in health planning; planning implementation and evaluation, feedback mechanisms and re-programming
- The organisation of health services: organisation, structure and design.
- Interpersonal and organizational communication in health management; conducting meetings, etc.
- Evaluation of health services basic concepts & general principles, types of evaluation :-input, process output and outcome
- Quality assurance in health care
- Health management information systems
- Social marketing of health programmes
- Health systems research as a management tool
- Public health legislation
- The functions of the Medical Officer of Health
- The management of change

# 4. Management of human resources

- The personnel management function
- Health manpower planning, recruitment and selection
- Leadership, Motivation and team building
- Supportive supervision and control
- Performance appraisal, health manpower and development, training needs assessment; training strategies and methods

• Conflict resolution; industrial relations, collective bargaining and Labour Laws

# 5. Management of material resources

- Problems of management of general support services, maintenance of buildings, vehicles, equipment etc.
- Purchasing and supply procedures
- Stores management
- Management of drugs and consumables
- Inventory management
- Office management, management of workplace, patient flow, paper-work, time etc.

# 6. Healthcare financing cost recovery and management of financial resources

- The financial environment, laws and financial regulations
- Health care financing, sources of finance: short-term, long-term, relative merits and demerits, the National Health Insurance Scheme.
- Cost-recovery mechanisms; management of funds
- Budgeting and budgetary control. General principles of budgeting; budget preparation, budget implementation and budget performance monitoring.
- Basic accounting records and procedures; the appraisal or financial and cash flow statements; internal financial control procedures; auditing procedures, appraisal of audit reports.

# 7. Organized National programmes of Medical care

• Objective, nature, content and managerial problems of various specialized health programmes organized by:-Federal, state and local governments-Voluntary and non-governmental organizations.

- Involvement in development, implementation, monitoring and evaluation plan for Public health programmes
- 2. Participate in program planning and management including budget preparation
- 3. Have exposure to the functions of Medical Officer of health.
- 4. Manage Material resources

- Involved in financial management and budgeting, expenditure control and elements of Accounting
- 6. Involved in manpower planning and development
- 7. Involved in monitoring relations in evaluation of health services
- 8. Do Public relations in health service
- 9. Interaction with the Community and NGOs
- 10. Health Policy formation at Federal, State and Local Government
- 11. Legal aspects of Public Health
- 12. Training courses and seminars attended in Management

# LOCATION FOR TRAINING

- 1. Urban Primary Health Care centre
- 2. Rural Primary Health Care centre
- 3. State Ministry of Health, Local Government, District Health Department
- 4. International agencies: USAID, WHO
- 5. National Non-Governmental Organizations with international projects

# HEALTH PROMOTION AND EDUCATION

### **DURATION: 2 weeks**

# **LEARNING OBJECTIVES**

- To demonstrate understanding of the key concepts and objectives of Health Promotion, Health Education and Health Literacy
- 2. To demonstrate and identify the role of human behaviour in the development of diseases
- 3. To describe behaviour change theories as they relate to public health and demonstrate understanding of the interplay between cultural factors and health
- 4. To describe and develop appropriate behavioural change programmes at the community level
- 5. To identify best practices in communication and health information, community mobilization and organization

#### **AREAS COVERED**

- 1. Concept of health promotion, health education and behavioural change
- 2. Current theories and models of health behaviour
- 3. Health communication process
- 4. Mass and interpersonal communication- theories, models and methods
- 5. The role of health education and promotion in health maintenance and disease prevention

- 1. Able to conduct patient education, health talk and counselling
- 2. Able to conduct community-based health education during outreaches
- 3. Able to conduct community diagnosis
- 4. Able to mobilize community for specific health interventions
- 5. Participate in delivery of public health lectures, radio/television health programmes
- 6. Assist in design, production of IEC materials (posters, fliers, booklets) for specific health problems

# LOCATION FOR TRAINING

- 1. Primary Health Care centres (Urban & Rural)
- 2. LGA Health Departments
- **3.** Departmental outreach programmes
- 4. Departmental Rural posting programme

# INTERNATIONAL HEALTH AND TRAVEL MEDICINE

#### **DURATION: 4 weeks**

# **LEARNING OBJECTIVES**

The trainee should be able to:

- 1. Describe the procedures to control disease spread at ports/across international borders.
- 2. Demonstrate an understanding of the procedures for establishing and managing a Public Health event of International concern (PHEIC).
- 3. Demonstrate understanding of the key concepts of international and Global Health.
- 4. Demonstrate an understanding of the global partner roles in key national, regional and African Public Health programmes.
- 5. Provide basic essential information and care for intending international travellers
- 6. Demonstrate disparities in health indices using summary measures of population health.

#### **AREAS COVERED**

- 1. Scope and content, changing paradigms like Global health e.t.c.,
- International Health Regulations (IHR) including history, features, paradigms of international Health Practice (IHR 1969 versus 2005) and (2005 Second edition versus 2005 Third edition)
  - Definitions, purpose and scope, principles and responsible authorities
  - Information and Public Health Response
  - Recommendations (Temporary and standing recommendations) and criteria for recommendations.
  - Points of entry (Airports, Sea ports, ground crossing)
    --- Role of competent authorities
  - Public Health Measures (Health measures on arrival and departure, Special provision for conveyances and conveyance operators, Special provision for travellers, Special provision for goods containers and container loading areas)

- Health Documents (General rule, Certificates of vaccination or other prophylaxis, Maritime Declaration of health, Health Part of the Aircraft General Declaration, Ship Sanitations Certificates)
- Charges (For health measures regarding travellers, For baggage, cargo, containers, conveyances, goods or postal parcels).
- General Provision (Implementation of Health measures, Additional Health Measures, Collaboration and assistance, Treatment of personal Data)
- The IHR Roster of Experts, The Emergency Committee and the Review committee including their functions
- Final Provisions (International Sanitary agreement and regulations, Entry into force; period for rejection or reservations, Relationship with other International agreements, Reporting and reviews, Amendments, Settlement of disputes, New member states of WHO, Rejection, Reservation, Withdrawal of rejection and reservation, States not members of WHO, Notification by Director General of WHO, Emergency
- Core capacity requirement for surveillance and response
- Core capacity requirement for designated Airport, Seaports and groundcrossing
- Major international disease outbreaks, driver and challenges to international control.
- 3. Port Health Services objectives, organization and functions
- 4. Role of international and non-governmental health agencies in promoting International Health. (Including History, Structure, functions, activities and funding of the agencies)
  - Multilateral Health Agencies (United Nations Agencies with particular reference to World Health Organization (WHO).
    - ---FAO (Food and Agricultural Organization)
    - --- UNFPA (United Nations Fund for population activities)
    - ---UNICEF (United Nations Children's fund)
    - ---UNDP (United Nations Development Programme)
    - ---UNHCR (United Nations High Commission for Refugees (UNHCR)
    - ---World Bank
    - ---IMF (International Monetary Fund) etc

- Bilateral Health Agencies (CIDA :Canadian International Development Agencies, USAID: United States Agency for International Development e.t.c)
- Non-governmental Organizations (NGOs) (Christian Medical Commission, League of Red Cross Societies, Save the Children Alliance e.t.c)
- Private Foundations (Rockefeller Foundation, Wellcome Trust, Ford Foundation, Bill and Melinda Gates Foundation, Sasakawa Foundation)
- Public-Private Partnerships (Merck & Co's for Ivermectin for control of Onchocerciasis,, Pfizer (Azithromycin for elimination of trachoma)
- Others: World Vision, Christian Aid, Medecins sans Frontieres, Oxfam and Save the Children fund. Global Forum for Health Research e.t.c.
- 5. International aspect of communicable disease control, global response to disease outbreaks and disasters, disaster diplomacy, travel medicine.
- 6. Travel Medicine requirements for visitors to and from West Africa and beyond, fitness to travel, assessment of risk of travelling, prevention and treatment of diseases and health related events as a result of travelling.
- 7. Global Burden of disease study.
- 8. Sustainable Development Goals.

- 1. Ability to carry our Ship, Aircraft and Road vehicles inspection to ensure that good sanitary conditions is maintained on board, to detect and abate nuisances on board that can promote the spread of diseases.
- 2. Ability to control diseases at the land, sea and air borders.
- 3. Ability to conduct Travel Medicine Activities: Counselling, provision of travel packs, vaccination and an outpatient travel clinic consultation and management for international travellers to various destinations.
- 4. Be able to treat/manage basic diseases or health events arising from such travels.
- Exposure to implementation of International Health Regulations including the guidelines on the notification of Public Health Events of International Concern (PHEIC)
- 6. Be able to describe the organization and implementation of Port Health Services at points of entry.

- Assess compliance with implementation of IHR Regulations at National, State, LGA, Community and points of entry.
- 8. Ability to develop and implement disaster preparedness plan and activities.
- 9. Be able to assess an individual's fitness to travel.
- 10. Be able to advice a schedule of vaccination to meet host and international travel requirements
- Be able to control current/existing diseases or event of international importance, Public Health Emergencies of International Health Concern (PHEIC)
- 12. Ability to appraise current/relevant International Health Activities or programmes in respective member countries within the West African Sub region.
- 13. Be able to appraise the roles and responsibilities of International Health Organizations in Health Care Delivery within the West African Sub Region.
- 14. Internship or visits to International, Bilateral or Non-governmental Organizations (Optional)

# LOCATION FOR TRAINING

- 1. International ports and clinics at international ports
- 2. Port Health Division of Federal Ministry of Health
- 3. Public and private travel clinics
- 4. Primary Health Care Centers (Urban & Rural)
- 5. Designated Staff clinics in Teaching Hospitals
- 6. Non-governmental Organizations

# MEDICAL STATISTICS

#### **DURATION: 4 weeks**

### **LEARNING OBJECTIVES**

- To demonstrate understanding of the key statistical methods underlying the design of different study designs (sample size calculation, sampling methodology, plans for data management and analysis)
- 2. To demonstrate ability to design data collection instruments (questionnaires and proforma), implement data collection and other aspects of data management (data cleaning and data manipulation)
- 3. To be able to identify the differences and methods of calculation of the measures of disease frequency (rates, ratios and proportions), measures of association (odds rations and relative risks), measures of impact (attributable risk and population attributable risk)

#### **AREAS COVERED**

- 1. Introduction to statistics, importance of numeracy in medicine and health care
- 2. Data sources/vital statistics/morbidity statistics and probability statistics
- 3. Normal distribution
- 4. Graphic presentation of data- frequency distribution/tables, bar charts, histogram etc
- 5. Inferential statistics
- 6. Regression and correlation
- 7. Use of statistics in medical research

- **1.** To have sound knowledge of medical statistics and differentiate between descriptive and inferential statistics
- 2. Able to perform data entry and basic statistical analysis using statistical software (Epiinfo, SPSS, STATA etc) packages
- 3. Able to demonstrate the capability to critically analyze data and test its significance
- 4. To understand the rationale for multivariate methods in statistical analysis

- 5. Able to demonstrate the initiation and implementation of Health Management Information Systems
- 6. To compute and interpret demographic indices (birth rates, death rates, fertility rates mortality analysis, population projections and life table parameters)

- 1. State Ministries of Health (MOHs)
- 2. Federal Ministry of Health (FMOH-Research & Statistics Department)
- 3. Federal Office of Statistics
- 4. Nigeria Centre for Disease Control (NCDC)
- 5. Primary Health Care centres (Urban & Rural)
- 6. Medical records Departments of accredited training institutions
- 7. National Population Commission
- 8. Non-Governmental Organizations

# **OCCUPATIONAL HEALTH**

#### **DURATION: 6 weeks**

## **LEARNING OBJECTIVES**

- 1. Investigate, diagnose, control common occupational diseases and health related events.
- 2. Use Spirometer, Audiometer, Air sampler and other personal, environmental and biological monitoring equipment.
- 3. Conduct fitness for work examination and occupational risk assessment at the work place.
- 4. Carry out health promotion in the workplace, investigate and control work place hazards

# **AREAS COVERED**

#### 1. Principles of Occupational Health

- Definition and goals of Occupational Health.
- History and landmarks in occupational health.
- Functions of an Occupational Health Service.
- The components of the work environment, the interaction between work and health.
- Principles of disease prevention and hazard control in industry.

#### 2. Effects of Physical Hazards in the work place

- Heat and cold effects
- Ionizing and non-ionizing radiation
- Noise as a health hazard
- Pressure
- Vibration
- Humidity
- Lighting (glare or darkness)

# 3. Effects of Ergonomic Hazard in workplace (Mechanical environment & its problems)

- Posture
- Organization of workplace
- Equipment used at the work place
- Machine safety
- Occupational accidents (Epidemiology and control)

# 4. Diseases due to biological agents at the work place.

- HIV, COVID 19, Hepatitis B and C, Lassa fever, Ebola virus
- Anthrax, Bagassosis, Bird fancier's disease
- Tuberculosis, Anthrax, Brucellosis,
- Bagassosis, Byssinosis e.t.c

# 5. Diseases due to chemical agents

- Diseases due to metals (lead, mercury, arsenic, beryllium, cadmium, chromium, tin, manganese, iron, copper, zinc e.t.c.)
- Diseases due to chemical compounds, organic compounds, halogenated hydrocarbons, bis(chloromethyl) esters, pesticides, benzidine, the naphthylamines, toxic gases and fumes, irritant gases and fumes
- Occupational lung diseases: silicosis, coal workers pneumoconiosis, asbestosis, extrinsic allergic alveolitis; byssinosis; other obstructive occupational lung diseases; granulomatous lung diseases; simple occupational pneumonitis; occupational chronic bronchitis, benign pneumoconiosis.
- Occupational Skin diseases: Allergic dermatitis, irritant contact dermatitis and other occupational skin disorders.

# 6. Effects of Psychosocial Hazard in the work place:

- Industrial neurosis, Psychological stress, burnout, depression, peptic ulcer, shift work, job dissatisfaction, absenteeism and presenteeism.
- Effect of work on Mental health

# 7. Occupational Cancers:

- Identification of common occupational cancers and their agents.
- Asbestosis ---- Bronchial carcinoma, mesothelioma of the pleura or peritenum
- Nickel ----- Cancer of the ethmoid and paranasal sinus, bronchial carcinoma
- Wood dust ----- Nasal cancer

- Coal tar, pitch, bitumen, soot----- Cancer of the skin, including scrotal skin
- Vinyl Chloride Monomar ------ Angiosarcoma of the liver
- Benzene ----- Leukaemia
- Ionising radiation ------ Leukaemia, bone, lung and skin cancers
- Aniline dyes especially beta-naphthyl amine ----- Cancer of the urinary bladder

# 8. Occupational Health Regulations and Control of Occupational Health problems.

- Factory Act, Workman Compensation Laws (Employee's Compensation Act), Labour Act.
- Miscellaneous Occupational Legislations
- Organisation of Occupational Health internationally and in West-African Subregion.
- Health Education in the industry, role of the labour union in Occupational Health services, Ethics in occupational health.

# 9. Special issues in Occupational Health

- Special groups in Occupational Health: women, the disabled, special screening programmes in Occupational Health.
- Occupational psychology and services
- Occupational Health in agriculture, mining, petroleum, road and air transportation and migrant workers.

# **10. Occupational Hygiene.**

- Introduction to Occupational hygiene practice.
- Recognition, evaluation and control of hazards: instruments and methods.
- Environmental monitoring, atmospheric pollution, industrial waste management.
- Personal protective clothing and equipment.
- Health risk assessment for different occupational groups

# 11. Occupational Toxicology and Pathology.

- Principles of occupational toxicology, dose-effect responses and sensitization
- Biological monitoring, analytical methods, standard setting, carcinogenesis, mutagenesis, teratogenesis genesis, toxicity testing, acute poisoning and emergency treatments.

# 12. Occupational Rehabilitation

• Definition, types, stages of rehabilitation

# SKILLS TO BE ACQUIRED

- 1. Be proficient in the use of environmental monitoring equipment such as sound level meter and lux meter.
- 2. Be proficient in the use of biological monitoring equipment such as audiometer and spirometer.
- 3. Be able to carry out Pre-employment, (General fitness, Pre-placement) and Periodic and pre-retirement medical examination.
- 4. Should be able to Screen workers for disease condition
- Be able to conduct other functions of an Occupational Service such as Hazard monitoring and control, Primary Medical Care and First Aid, Health Education and Rehabilitation.
- 6. Ability to conduct an investigation of Occupational diseases.
- 7. Management of General and Occupational Diseases.
- 8. Ability to conduct a walk through survey.
- 9. Ability to evaluate workplace hazard.
- 10. Ability to conduct occupational risk assessment
- 11. Attendance of Short Courses or other training exposures (Optional).

- 1. Occupational Health unit of the Federal Ministry of Health
- 2. Industries and industry clinics such as NNPC, SPDC, Exon-Mobil
- 3. Staff clinics
- 4. Primary Health Care Centres (Urban and Rural)
- 5. Informal sector workplaces

#### PUBLIC HEALTH NUTRITION

#### **DURATION: 2 weeks**

# **LEARNING OBJECTIVES**

- 1. To demonstrate understanding of the key concepts and objectives of Public Health Nutrition
- 2. To demonstrate understanding of food groups, their sources, composition, functions and requirements by age, sex and physiological status such as pregnancy and adolescence.
- 3. To identify common nutritional problems in all age groups
- 4. To identify common nutritional problems in vulnerable groups
- 5. To demonstrate a thorough understanding of the different methods used in the assessments of nutritional status at individual and community levels.
- 6. To identify resources needed for prevention and treatment of nutritional problems.
- 7. To describe food security, nutrition security and its relationship to Public Health
- 8. To describe and discuss current global and national policies and programmes in nutrition.

#### **AREAS COVERED**

- 1. Principles of nutrition
- 2. Food culture and nutrition
- 3. Nutritional problems of developing countries
- 4. Nutrition problems in different stages of life
- 5. Basic concept of maternal nutrition
- 6. Food security
- 7. Household, national nutritional values of local foods
- 8. Role of the health sector in solving nutritional problems
- 9. Diets and chronic non-communicable disease
- 10. Methods of clinical and epidemiological nutritional assessment.

# **SKILLS TO BE ACQUIRED**

- 1. Growth monitoring and assessment of nutritional status of under-fives and its interpretation.
- 2. Participate in nutritional rehabilitation programmes for different sub-groups of the population e.g. under-fives, school children, adolescents, pregnant and lactating women, the elderly, HIV positive persons.
- 3. Assessment of Community nutritional status
- 4. Assessment of mother-baby positioning and attachment for breastfeeding and other infant and young child feeding practices such as initiation of lactation and appropriate complementary feeding.
- 5. Carry out screening for common nutritional conditions
- 6. Carry out nutritional education, counselling and food demonstration

- 1. Urban Primary Health Care centre
- 2. Rural Primary Health Care centre
- Designated Nutritional demonstration clinic in Teaching Hospitals or Local Government Areas.
- 4. Nutritional Rehabilitation centres.

# **REHABILITATIVE AND SOCIAL MEDICINE**

#### **DURATION: 4 weeks**

#### **LEARNING OBJECTIVES**

- 1. To identify various groups that require rehabilitation services
- 2. To design community-based programmes for selected persons with disability
- 3. To describe the social and health problems of vulnerable population groups
- 4. To evaluate the rehabilitation services available for vulnerable population groups
- 5. To recognize the social determinants of health and health disparities
- **6.** To describe and design national strategies to prevent and control disability and vulnerabilities

#### **AREAS COVERED**

- 1. Rehabilitation: definition, scope and need for, nature and extent of the problem. Economics of the problem, programme needs and goals
- 2. Health care services and programmes for specified, disadvantaged population groups
- 3. Disability assessment, adoption medicine, juvenile delinquency, child trafficking, internally displaced persons and refugees
- 4. Social geriatrics- definition and classification of elderly/aged; problems of the aged, its magnitude and identification of predisposing factors
- 5. Organization and development of relevant programmes of health care services and rehabilitation, role of NGOs

#### **SKILLS TO BE ACQUIRED**

- 1. Able to explain the concept of rehabilitation, types and rehabilitation processes
- 2. Explain and discuss the concept of vulnerability
- 3. Able to identify people who require rehabilitation and available rehabilitation services and programmes
- 4. Discuss the concept of orphans, juvenile delinquency and vulnerable children, their problems and prevention interventions

- 5. Describe the concept of population ageing, active ageing, geriatric problems including elder abuse and long-term care
- 6. Able to conduct assessment of persons with disability, comprehensive geriatric assessment and nutritional assessment of institutionalized children
- Discuss screening programme and able to conduct same for vulnerable populations (eg visual, auditory and speech defects)
- 8. Design and organize/implement rehabilitation services for affected persons
- 9. Counselling skills for at risk populations

- 1. State Ministries of Social welfare and Women's affairs
- 2. Motherless babies' homes & orphanages
- 3. Home for persons with disability
- 4. Geriatric homes & centres
- 5. Borstal homes/Remand homes
- 6. NGOs involved in care of abandoned and street children

# **REPRODUCTIVE AND FAMILY HEALTH**

## **DURATION: 6 weeks**

# **LEARNING OBJECTIVES**

- 1. Describe the organization of Family and Reproductive Health Services.
- 2. Understand the key concepts, principles and elements of Family and Reproductive health.
- 3. Identify common Family and Reproductive Health problems.
- 4. Identify resources needed for prevention and treatment of Family and Reproductive Health problems.
- 5. Describe and discuss current global and national policies and programmes in Family and Reproductive Health
- 6. Describe the ethical issues regarding Family and Reproductive Health practices and research

#### **AREAS COVERED**

#### 1. Physiological and psychosocial disadvantage basis of Maternal and Child Health

- Historical evolution from MCH to Family Health (FH)
- The MCH/FH cycle of service programmes and their individual objectives, contents and services
- Family Health care within the services of the MOH
- Family Health versus Family Medicine
- 2. The modern ideological concept of Reproductive Health
  - Its evolutionary background including landmark global efforts at addressing population, health and development issues
  - The International Conference on Population and Development (Cairo 1994) and Fourth World Conference on Women in Beijing 1995 etc.

# 3. Components of Reproductive Health (RH)

- Definitions, rights based and life cycle approach
- Family-planning counselling
- Information, education, communication and services
- Education and services for prenatal care, safe delivery, and post-natal care, especially breastfeeding, infant and women's health care
- Prevention and appropriate treatment of infertility
- Prevention of abortion and the management of the consequences of abortion.
- Treatment of reproductive tract infections; sexually transmitted diseases and other reproductive health conditions
- Information, education and counselling, as appropriate, on human sexuality, reproductive health and responsible parenthood.

# 4. Key issues of concern in RH and global efforts and programmes to address them.

- Maternal morbidity and mortality, levels, trends, determinants in Nigeria and contemporary developing countries; interventions for reducing them and objectively verifiable indicators for measuring progress and evaluating reduction programmes; Roll back malaria (RBM) and malaria in pregnancy.
- Management of the complications of abortion and post abortion care.
- Maternal mortality audit.
- Sustainable Development Goals relevant to maternal mortality ratio reduction.
- Newborn, infants and under-fives morbidity and mortality -levels and determinants of morbidity in the newborn, infants and under-fives in general.
- Child-care services as offered within PHC context.
- Priority health problems of this group and global and national initiatives for addressing them; ie, IMCI and other child survival strategies.
- Reproductive Tract Infections (RTIs) especially HIV/AIDS including prevention of mother to child transmission (PMTCT), prevention and management of RTIs; trends in national sentinel surveys for HIV, national programmes (NACA, SACA, LACA, etc) and efforts for the control of HIV/AIDS and PMTCT; global efforts to contain the disease including mother

to child transmission including the 3 by 5 Initiative. Care and support and gender based violence-elimination of harmful traditional practices, violence against women and men, spouse abuse and battering etc.

- Adolescent RH needs and services -developmental processes, patterns of adolescent behaviour, parental influences socialisation and factors influencing adolescent developmental outcomes.
- Major causes of morbidity and mortality during adolescence. Identifying RH needs of adolescents and programming for them.
- Implementation challenges and policy issues.
- Male involvement and participation in RH -RH services for men-routine and special care including screening for prostatic enlargement and testicular malfunctions
- Menopause, andropause and the health needs of ageing populations identify and design programmes to meet the RH needs of this growing population. Screening for reproductive tract cancers and management of conditions associated with andropause/menopause

# 5. Safe Motherhood

- Historical background, global efforts of support
- Component services viz. prenatal care (focused ANC), essential obstetric care, basic and comprehensive, essential care for safe delivery by skilled birth attendant; Perinatal & neonatal care, Post natal care and breast feeding, Family Planning information and services

#### 6. Adolescent Reproductive Health information and services

- Concept of adolescent/youth friendly services
- Life planning education for adolescents
- Programming for the adolescents

#### 7. Gender equity

- Meeting the RH rights of all -male responsiveness to family
- RH needs; Girl-child developmental issues; Status of women; Gender index

#### 8. School Health

- Objectives of the school health programme
- Health problems of school children

- Components of the school health programmes
- School health services
- School health environment
- School health education
- Organisation of a school health programme
- Concept of health promoting schools

# SKILLS TO BE ACQUIRED

- 1. Provision of MCH services namely Antenatal care, Postnatal care, Family Planning, Normal vaginal deliveries, Life saving skills, Sick child and Child welfare clinics.
- 2. Delivery of Immunization services
- 3. School Health Services including treatment for minor ailments, preschool and screening for physical challenges.
- 4. Inspection and management of school environment e.g. Light, ventilation, water supply, refuse and sewage disposal.
- 5. Counselling PMTCT, Birth preparedness and complication readiness, Family Planning
- 6. Management of Labour using partograph
- 7. Proficiency in use of Family Planning commodities, insertion of IUCD/Jadell and implanon
- 8. School Outreach including programmes for in and out of school adolescents
- 9. Training and management of Food handlers
- 10. Short Courses and other training exposures in Reproductive Health.

- 1. Urban Primary Health Care Centre
- 2. Rural Primary Health Care Centre
- 3. Designated Family Planning Units in Teaching Hospitals or local Government Areas.

#### **ASSESSMENT OF CANDIDATES**

## FIELD TRAINING

During the Part 1 training programme, Residents are expected to document four (4) field training activities out of which three (3) are compulsory postings and one an elective field posting.

- 1. The following are the compulsory postings
  - Rural posting
  - Medical officer of Health posting
  - International /Port Health posting
- The elective posting may be in any area the Resident elects e.g. Occupational Health, posting with Non-governmental organizations, other sub-specialties of Medicine or Surgery provided the community/Public Health Context is evident.
- 3. The field reports will be accordingly subjected to formative assessment in WACP and summative assessment in the NPMCN Part 1 examination.

#### PART 1 EXAMINATION

The Part 1 examination is designed to test the knowledge, attitude and skills of the examinees. The examination is conducted in two consecutive stages.

Stage 1. This is a screening examination made up of theory papers. Only candidates who pass this stage are allowed to proceed to Stage 2 of the examination.Stage 2. This stage of the examination constitutes Theory, Practical, Clinical and Viva Voce examinations for NPMCN and Practical, Clinical and Viva Voce for WACP.

A pass mark in any of the components of the examination shall be a minimum score of 50%.

# FELLOWSHIP (SENIOR RESIDENCY) CURRICULUM

#### **INTRODUCTION**

Candidates who wish to enrol into the Senior Residency Training Programme shall have passed the Part 1 or Membership Examination of the National Postgraduate Medical College of Nigeria (NPMCN) or West African College of Physicians (WACP). The period of training shall be a minimum of 24 months, after passing the Part 1 / Membership examination. Candidates shall undertake their residency training programme and be registered in Institutions accredited by the College. The Trainers shall be Fellows of the College in the Faculty of Public Health/Community Health. There would be a continuous formative assessment of Residents throughout the training period as detailed in the Training Logbook. This shall be endorsed by trainers/supervisors at the end of each posting for presentation at Part 2/ Fellowship examination when Residents undergo summative assessment.

#### GOAL

The General Objective of this part of the training programme is to equip trainees with the competencies required to practice as consultant and full specialist in Community Health serving in Ministries of Health at Federal or State levels, in Industry and International or National Non-Governmental Organisations. It equips trainees with competencies to supervise the implementation and evaluation of community health services, conduct research to identify community health problems and intervene to improve the health of the community. This part of the programme also provides further opportunity for in-depth experience in the subspecialty areas of Community/Public Health.

#### LEARNING OUTCOMES.

At the end of this training period, the trainees are expected to demonstrate relevant knowledge, attitude and skills in Community Health required to practice as consultants with full specialist status in Community Health. Trainees should have acquired the competence to :

- 1. Manage common Community Health problems at all levels of health care
- 2. Supervise Community Health services at all levels of healthcare
- 3. Evaluate Public Health programmes at all levels of healthcare
- 4. Influence policy through advocacy and community engagement

- 5. Conduct research to identify community health problems and implement appropriate interventions applying the principles of research methodology.
- 6. Train resident doctors, medical students and other cadres of healthcare staff in the discipline of Community Health.

# **PART 2 POSTINGS**

Total	96 weeks
Management, Ethics and Research Methodology Courses	4 weeks
Elective	12 weeks
Rural/ Urban PHC posting	8 weeks
Rehabilitative and Social Medicine	8 weeks
Reproductive and Family Health	8 weeks
Public Health Nutrition	4 weeks
Medical Statistics	4 weeks
Occupational Health	8 weeks
International Health and Travel Medicine	8 weeks
Health Promotion and Education	8 weeks
Health Policy and Management	8 weeks
Epidemiology and Disease Control	8 weeks
Environmental Health	8 weeks

#### **ENVIRONMENTAL HEALTH**

#### **DURATION : 8 weeks**

#### **LEARNING OBJECTIVES**

- To demonstrate understanding of the key concepts, objectives and elements of Environmental Health
- 2. To identify common environmental health problems
- 3. To identify resources needed for assessment of environmental exposure and environmental risk in the human population
- 4. To describe the institutional arrangements for the control of environmental threats to human population
- 5. To describe and discuss current global and national policies and programmes in Environmental Health
- 6. To describe mitigation of environmental exposures and apply control measures to prevent (where possible) environment related health conditions and diseases
- To describe the ethical issues and research requirements in environmental health to achieve public health objectives

#### **AREAS COVERED**

All the areas listed under MEMBERSHIP are assumed.

At the end of the posting, the resident should be able to

- 1. Describe environmental surveillance and environmental monitoring
- 2. Describe methods for interpreting environmental sampling results
- 3. Describe standards for water quality and methods for water treatment
- 4. Describe methods for monitoring water supplies for potability
- 5. Explain the general principles of waste management including hazardous wastes.
- 6. Describe the principle of integrated solid waste management (ISWM), waste segregation and the principles and methods of managing health care waste.
- 7. Describe indoor and outdoor air quality assessment methods

- 8. Describe walk through survey and audit checklist for environmental sanitation, food handlers' premises inspection and infection control
- 9. Describe environmental research methods
- 10. Explain environmental health laws and international treaties on the environment to safeguard human health
- 11. Describe pest control methods
- 12. Describe community based emergency response systems
- 13. Recognise the need for and use of noise mapping
- 14. Describe direct reading instruments required to satisfy public health objectives for assessment and the control of the physical environment
- 15. Describe sustainable development goals and the implementation strategies in the West African Sub-region
- 16. Explain the purpose and objectives of community risk assessment and discuss the increasing role of risk assessment in public policy formulation
- 17. Describe environmental aspects of vector control including use of biotechnology

#### **SKILLS TO BE ACQUIRED**

- 1. Ability to obtain environmental exposure history from patients
- 2. Integrate professional judgment into decision making
- 3. Interpretation of results from the application of checklists on environmental sanitation
- 4. Implementation of waste management plan
- 5. Performance of infection control audit
- 6. Conduct waste management audit
- 7. Conduct Environmental, Social and Health Impact Assessment (ESHIA)
- 8. Preparation of Emergency responsiveness plan to major events and disasters: flooding, chemical poisoning
- 9. Select sampling methods for water, gases and particulates
- 10. Select sampling parameters for water quality assessment that satisfies public health objectives
- 11. Select sampling parameters for gases and particulate matter in indoor air that satisfies public health objectives

- 12. Given appropriate data, develop a risk-based assessment for environmental pollutants in different media (water, soil, air) in homes and outdoor places to achieve public health objectives
- 13. Select and use direct reading instruments based on fundamental scientific principles to satisfy public health objectives
- 14. Apply professional judgement to proffer mitigation measures for environmental health effects or impacts, including climate change mitigation
- 15. Apply professional judgement in the design of housing for re-settlement purposes and population sub groups or special/emergency circumstances
- 16. Apply professional judgement to design environmental interventions in the control of insect pests and vectors of disease.
- 17. Applying professional judgement to provide leadership in the promotion of linkages and networking with environmental support groups to achieve public health objectives.

- 1.Designated Environmental Health units in Teaching Hospitals, Industries or Local Government Areas.
- 2. State Ministry of Environment, Federal Ministry of Environment and Country Environmental Health Agencies

# EPIDEMIOLOGY AND DISEASE CONTROL

#### **DURATION: 8 weeks**

#### **LEARNIING OBJECTIVES**

1. To demonstrate acquisition of advanced knowledge in the principles of epidemiology and disease control

2. To apply basic epidemiological concepts to address prevailing local public health problems

3. To acquire hands on practical field experience in Epidemiology and Disease Control

#### **AREAS COVERED**

#### All the areas covered in Membership/Junior Residency Training are assumed

- 1. Advanced epidemiological studies e. g nested case control, community trials etc
- 2. Disease control programming.
- 3. Critical appraisal of research: To discuss the factors contributing to validity of research
- 4. Scientific style of writing, e.g. for research grants, publication and ethics review.
- 5. Sources of research funding
- 6. Challenges of translating research into public health practice.

#### SKILLS TO BE ACQUIRED.

- 1. Investigation of at least two epidemics or health problem prevalent in the community.
- 2. Design of epidemiological study to address prevailing health problem
- 3. Planning and implementation of disease control programmes
- 4. Population health assessment.

- 5. Screening for common diseases in the community
- 6. Review and analysis of hospital data for decision making
- Write and summarize major control programme reports in various National Public Services/Systems
- 8. Formulate a research question, perform a literature search and review, and critically appraise information from different sources.
- 9. Develop appropriate protocol and methods for research, including submission to an appropriate ethics committee.
- 10. Apply knowledge of statistical methods and demonstrate the ability to: plan and execute a research project, collect, store, analyse and evaluate research data, write a scientific or medical paper including appropriate referencing and apply for research funding.

Epidemology Unit of Federal and State Ministries of Health .

Epidemiology units in Departments of Community Health

Centres for Disease control.

#### HEALTH POLICY, PLANNING AND MANAGEMENT

#### **DURATION: 8 weeks**

#### **LEARNING OBJECTIVES**

The residents should be able to: an

- 1. Identify organizational structures and management levels which make up the health system, institutions and services in their respective countries and how decisions are taken across various levels (national and sub-national levels).
- Demonstrate understanding of planning cycle and its importance in operational, tactical and strategic planning and how this translates into delivery of efficient and effective health care services.
- 3. Demonstrate knowledge, skills and competencies in budgeting; identifying various types, main actors, major elements, key functions and constraints in the budgeting process.
- 4. Demonstrate mastery of health policy formulation, implementation and evaluation processes in their countries.
- 5. Describe and characterize national and sub-regional health systems.
- 6. Demonstrate knowledge, skills and competencies of health policy analysis with regard to its content, context, actors, structures and functions.

#### **AREAS COVERED**

- 1. The practical application of the principles and theories of management within the health context.
- 2. The knowledge of health system organization in the operations of health services at national and sub-regional levels.

- 3. Competencies in decision-making process in health care service delivery, project management and health programming.
- 4. Health system performance at sub-national, national and sub-regional level.
- 5. The role of health systems and services in national and sub-regional development.
- 6. The role and influences of health policy on populations health at sub-national, national and sub-regional level.
- 7. Practical demonstration of major steps involved in health policy formulation, implementation, evaluation and analysis.

## Primary Health Care

- 1. To demonstrate knowledge, skills and competencies in principles, components and practice of PHC.
- 2. To demonstrate ability to manage human, and material resources (including essential drugs) in PHC.
- 3. To demonstrate knowledge, skills and competencies in financial management including budgeting, expenditure control and elements of accounting.
- 4. To demonstrate ability to develop implement and evaluate sub-national and national health plans, as well as vertical and integrated PHC programmes.
- To demonstrate practical understanding of two-way referral system across all tiers of health care.

#### Human Resource for Health

1. To demonstrate knowledge, skills and competencies in staff development and training and role of public administration on HRH function.

- 2. To demonstrate knowledge, practical skills and competencies on the principles, practices and theories of public personnel management and administration.
- 3. To demonstrate practical ability to assess and determine HRH objectives and needs.
- 4. To demonstrate the practical ability to manage HRH challenges expected of health managers.

## Health Management Information System

- 1. Demonstrate practical understanding of HMIS and its importance at facility, subnational and national level.
- Demonstrate the ability to identify major sources and flow pattern of information for health management.
- To demonstrate the ability to make use of available health information for planning and decision making.
- 4. To demonstrate the knowledge and understanding of providers and users of HMIS at national and sub-national level.

#### Communication in Health Management

- 1. To demonstrate knowledge, skills and competencies in discussing policy documents, outbreak investigation reports, and survey summaries and reports.
- 2. To demonstrate the ability to use available reports for decision making processes at facility and community level.
- 3. To demonstrate practical understanding and ability to engage effectively with the media.

# Health Economics

- 1. To demonstrate the understanding and ability to apply economic principles, practices and theories in public health.
- To demonstrate knowledge, skills and competencies of economic evaluation of public health issues, interventions and programmes.
- 3. To demonstrate the ability to identify and discuss equity issues in public health programmes and interventions from an economic perspective.
- 4. To demonstrate knowledge, skills and competencies in discussing and interpreting value judgements and ethical issues within economic frameworks in public health programming.
- 5. To demonstrate practical understanding and ability to evaluate different health care financing options across different climes.
- 6. To demonstrate knowledge, practical skills and competencies of micro and macro economics of health and national development.
- To demonstrate practical understanding of how economics as a social science fits into multi-dimensional analysis of health and health-related problems.

#### Monitoring and Evaluation of Health Problems

- To practically demonstrate the role of health systems and service M & E in evidence based data generation for informed and practical decision making process and comparisons.
- 2. To demonstrate the ability to evaluate a planned health intervention or programme using both qualitative and quantitative evaluation tools and techniques.
- 3. To practically demonstrate the roles and importance of consumer involvement in planning, implementation and evaluation of public health intervention.
- 4. To demonstrate the importance of implementation process of evaluation outcome in health policy and practice improvement.

5. To demonstrate knowledge, skills and competencies in quality, quality assurance, and management audit in health, as well as identify potential barriers to effective evaluation and implement strategies to address them.

## **SKILLS TO BE ACQUIRED**

- 1. To demonstrate mastery of Public Health related programmes planning at national and sub-regional level.
- 2. To practically demonstrate appropriate and relevant leadership skills and competencies required for inter-sectoral and multi-dimensional team work as obtainable in health sector.
- 3. To demonstrate ability to lead and manage health facility, health intervention and/or public health programme at national and sub-national level.
- 4. To demonstrate the ability to use available and relevant health information for health system management.
- 5. To demonstrate mastery in the use of different tools and methods of assessment of the health information system and literature search.
- 6. To demonstrate practical ability in the use of tools and methods of public health data and information management including computer programmes and software, as well as statistical and other relevant packages and computer programmes.
- 7. To practically demonstrate the ability to conduct stakeholder analysis for targeted public health intervention and programmes.
- 8. To demonstrate ability to utilize appropriate epidemiological study designs to assess health and health related conditions, public health programme and the effect or impact of an intervention or public health policy on the health and social development of a population.

- 9. To demonstrate the ability to communicate findings, results, knowledge and public health information to the population.
- 10. To demonstrate the ability to prepare standard and acceptable reports and journal articles or publications on health and health related conditions for publication.
- 11. To demonstrate effective presentation skills to different audience and stakeholders.

- 1. PHC centres.
- 2. LGA, State and National Health departments.
- 3. State and National Ministries of Health.
- 4. International agencies e.g USAID, WHO
- 5. National Non-Governmental Organizations with international projects

# HEALTH PROMOTION AND EDUCATION

#### **DURATION: 8 weeks**

#### **LEARNING OBJECTIVES**

- 1. Conduct of community diagnosis
- 2. Design of Information, Education and Communication (IEC) materials
- 3. Community mobilization and community sensitization on key public health issues
- 4. Develop appropriate behavioural change programmes at the community level.
- 5. Conduct of qualitative surveys (Indepth interviews, Focus group Discussions and Observational research)
- 6. Use of software for qualitative data analysis (NVIVO and/or ATLASTi)
- 7. Report writing

# **AREAS COVERED**

- 1. Key concepts and objectives of health promotion and health education
- 2. Components of the P-Process for behavioural change communication
- 3. Behavioural theory and other major social and behavioural science theories that are relevant to the development of public health interventions
- 4. Common theories used in public health interventions
- 5. Identify the most important considerations for choosing the right theories to address an identified public health problem in a particular population or context

#### **SKILLS TO BE ACQUIRED**

- 1. Pre- and post HIV test counselling
- 2. Develop a communication plan based on hitherto identified behavioural theory
- 3. Adapt health message to suit audience needs (audience segmentation)

- 4. Communicate key information in disease control
- 5. Design IEC materials to suit targeted health education and promotion activities
- 6. Frame health communication for various groups
- 7. Utilize the principles of the P- process to develop a communication plan
- 8. Effective communication to relate to clients and stakeholders.

9. Report writing

- 1. Primary Health Care Centres (Urban & Rural)
- 2. Health Education Division of Ministries of Health

# INTERNATIONAL HEALTH AND TRAVEL MEDICINE

## **DURATION: 8 weeks**

## **LEARNING OBJECTIVES**

- 1. To describe the existing framework for public health management by international partners.
- 2. To develop health plans for international review/implementation.
- 3. To be able to evaluate international health plans/programmes.
- 4. To describe International Health Requirements for travellers.

## **AREAS COVERED**

- 1. International Health Regulations
- 2. Current international public health policy and procedures or innovations to maintain population health.
- 3. Strengths and weaknesses of international health projects.
- 4. International Health Requirements for travellers
- 5. International aspect of communicable disease control, global response to disease outbreaks and disasters, disaster diplomacy, travel medicine.
- 6. Travel Medicine requirements for visitors to and from West Africa and major world destinations, fitness to travel, assessment of risk of travelling, prevention and treatment of diseases and health related events as a result of travelling.
- 7. Global Burden of disease study and its role in tracking population Health indices.
- 8. Sustainable Development Goals and its relationship with the global health agenda

#### SKILLS TO BE ACQUIRED

- 1. Consultation at travel clinic and provision of medical guidance for travellers to major world destinations, counselling, provision of travel packs.
- 2. Assess an individual's fitness to travel.

- 3. Advice a schedule of vaccination to meet host and international travel requirements.
- 4. Be able to treat/manage basic diseases or health events arising from such travels.
- 5. Draft singly or in a team an international health related proposal.
- 6. Participation in outbreak control in an international team/local team with an international mandate
- Exposure to implementation of International Health Regulations including the guidelines on the notification of Public Health Events of International Concern (PHEIC)
- 8. Assess compliance with implementation of IHR Regulations at National, State, LGA, Community and points of entry.
- 9. Ability to develop and implement disaster preparedness plan and activities.
- 10. Ability to appraise current/relevant international Health Activities or programmes in respective member countries within the West African Sub region.

- 1. Port Health Division of Federal Ministry of Health
- 2. International Government agencies e.g. USAID.
- 3. International NGOs/Public Health Programme with International Partners
- 4. National NGOs with International Health projects
- 5. Federal/State Ministry of Health Departments

# **MEDICAL STATISTICS**

#### **DURATION: 4 weeks**

#### **LEARNING OBJECTIVES**

- 1. To demonstrate acquisition of advanced knowledge in medical statistics
- 2. Acquisition of skills in data analysis and health informatics

#### **AREAS COVERED**

#### All the areas covered in Membership/Junior Residency Training are assumed

Advanced statistical methods e.g survival analysis, sensitivity analysis, multivariate analysis,

Meta-analysis

Qualitative data analysis

Health informatics

Review of statistical analysis in published papers

# **SKILLS TO BE ACQUIRED**

- 1.Use of statistical packages e.g STATA, SPSS to analyse health data.
- 2. Critical review of at least three (3) journal articles
- 3. Interpretation of advanced statistical analysis.
- 4. Systematic review and meta-analysis skills
- 5. Qualitative data analysis softwares e.g N-INVIVO.
- 6.Health information management systems e.g DHS.

- 1. Ministry of Health Department of Planning ,research and statistics
- 2. Federal Office of Statistics
- 3. Statistical units in Department of Community Health/ Epidemiology.
- 4. NGOS involved in Research and Health informatics.

# **OCCUPATIONAL HEALTH**

#### **DURATION : 8 weeks**

## **LEARNING OBJECTIVES**

- 1. To identify, control and manage common occupational and work -related diseases.
- 2. To develop Health and Safety programmes to prevent occupational and work -related diseases and accidents.
- 3. To conduct fitness for work examinations.
- 4. To interpret results of relevant investigations in the workplace such as noise monitoring, dust measurements, chest x-ray, audiometry and spirometry.

# **AREAS COVERED**

All the areas listed under MEMBERSHIP are assumed.

At the end of the posting, the resident should be able to

- 1. Discuss the history of occupational health
- 2. Describe the interaction between work and health and components of the Work Environment.
- 3. Evaluate hazards in the workplace using occupational risk assessment process and draw conclusions.
- 4. Describe and assess the effects of physical, biological, chemical, ergonomic and psychosocial hazards in the workplace.
- 5. Discuss and evaluate occupational hazards of specific work groups in the formal and informal sector, special groups: women, disabled, elderly and describe the medical and socio-economic problems of working children and control of child labour.
- 6. Assess and discuss the signs and symptoms and management of Occupational Respiratory Diseases: asbestos-associated diseases, Silicosis, Coal workers' pneumoconiosis, benign pneumoconiosis e.g. siderosis and stannosis, pulmonary responses to organic materials, occupational asthma, chronic bronchitis due to workplace agents.
- 7. Review/analyze industrial health data for local decision making

# **SKILLS TO BE ACQUIRED**

- 1. Demonstrate occupational history taking skills
- 2. Carry out required physical examination in the workplace: pre-employment, periodic examination, pre-placement medical examination and fitness to work and pre-retirement medical examination.
- 3. Diagnose and manage work-related low back pain and other work-related musculoskeletal disorders
- 4. Diagnose and manage common eye problems such as conjunctivitis, keratitis and trauma to the eye
- 5. Diagnose and manage acute and chronic otitis media and laryngitis
- 6. Diagnose and manage common respiratory diseases such as asthma, chronic obstructive airway diseases and any other occupational lung disease.
- 7. Diagnose and manage occupational skin disorders such as allergic and irritant dermatitis and other occupational dermatoses
- 8. Investigate and manage occupational accidents
- 9. Conduct occupational risk assessment in workplaces.
- 10. Conduct Environmental monitoring and use equipment to measure workplace environment e.g. sound level meter, dust sampler
- 11. Conduct Lung Function Tests to measure FEV1, FVC and Peak Flow Rate and make inferences from Chest X-Rays.
- 12. Conduct screening audiometry and make inferences from the audiogram, conduct hearing conservation programme.
- 13. Conduct general opthalmoscopic eye examinations, visual acuity, colour vision test.
- 14. Conduct patch tests for allergic conditions

- 1. Staff clinics, specialty clinics (ENT, Ophthalmology, Chest, Dermatology, Pulmonology)
- 2. Primary Health Care Centers (Urban & Rural)
- 3. Factories and factory clinics
- 4. Appropriate or designated workplaces in the informal sector.

# PUBLIC HEALTH NUTRITION

#### **DURATION: 4 weeks**

# **LEARNING OBJECTIVES**

1.To demonstrate acquisition of knowledge and application of concepts in Public Health Nutrition

- 2. Acquisition of skills to conduct community based nutritional assessment.
- 3. Hands on experience in nutrition clinics for vulnerable groups

## **AREAS COVERED**

## Areas covered in Junior Residency are assumed

- 1. Nutrition for vulnerable groups. e.g elderly, pregnant women,
- 2. Planning, Implementation and Evaluation of Nutrition intervention programmes

# **SKILLS TO BE ACQUIRED**

- 1. Community nutritional assessment methodology
- 2. Planning of nutritional intervention programmes
- 3. Hands on experience in administration of nutrition clinics.
- 4. Participation in Dietetics Activities in Teaching Hospitals or Comprehensive Health centres

- 1. Nutrition Unit of Ministry of Health
- 2. NGOS involved in Public Health Nutrition
- 3. Nutrition clinic in Teaching Hospitals.

# **REHABILITATIVE AND SOCIAL MEDICINE**

#### **DURATION : 8 weeks**

# **LEARNING OBJECTIVES**

1.To demonstrate acquisition of knowledge and application of principles of Rehabilitative and Social medicine

2. Design community -based programmes for vulnerable groups

3. Acquire hands on experience in the management of programmes focusing on vulnerable groups

#### **AREAS COVERED**

Emerging special groups e.g Autistic children /ADHD children,

Evaluation of programmes for vulnerable populations

#### **SKILLS TO BE ACQUIRED**

- 1. Design, implement and evaluate programmes for organizations that provide rehabilitative services for vulnerable groups.
- 2. Evaluate primary, secondary and tertiary facilities that provide services for vulnerable population groups
- 3. Evaluate programmes provided by governmental and non-governmental organizations for vulnerable groups
- 4. Hands on experience in management of programmes focusing on rehabilitative and social medicine e.g care of the challenged and vulnerable persons.

- 1. NGOs involved in Rehabilitative and Social Medicine practice.
- 2. Special schools, orphanages, correctional centres.

#### **REPRODUCTIVE AND FAMILY HEALTH**

#### **DURATION: 8 weeks**

#### **LEARNING OBJECTIVES**

- 1. To demonstrate knowledge and general understanding of the key concepts, general principles and major elements of Reproductive and Family Health.
- To demonstrate mastery and general understanding of the epidemiology, presentation, prevention and control of reproductive and family health problems and conditions seen in the sub-region.
- 3. To discuss national, regional and global reproductive and family health problems and challenges and public interventions to address them within resource constrainted climes.
- 4. To discuss evidence-based reproductive and family health intervention within the context of sub-stainable development.
- 5. To plan and implement Reproductive and Family Health programmes at national and sub-national levels.
- 6. To critically appraise Reproductive and Family Health programmes and publications.

#### **AREAS COVERED**

- 1. Knowledge, practical skills and competencies with regards to concepts, strategies and practice of safe motherhood,
- 2. Planning and implementation of family planning services, intervention and programmes.

- 3. Planning and implementation of infertility, sexual dysfunction management and prevention services and programs.
- 4. Planning and implementation of complications of abortion management and interventions programs.
- 5. Planning and implementation of reproductive tract infections prevention and treatment services, interventions and programmes.
- 6. Planning and implementation of adolescent reproductive and sexual health problems prevention, control and treatment services, interventions and programmes.
- 7. Planning and implementation of gender-based violence and harmful practices prevention, control and treatment services, interventions and programmes.
- 8. Planning and implementation of reproductive cancers prevention, control and treatment services, interventions and programmes.
- 9. Knowledge, practical skills and competencies on reproductive health measurements and indicators.
- 10. Management of community-based family and reproductive health services, interventions and programs.

# **SKILLS TO BE ACQUIRED**

- 1. To demonstrate knowledge, practical, skills and competencies on growth maintenance and nutritional assessment of the family.
- To demonstrate knowledge, practical skills and competencies on the provision of focus ANC, delivery and post-natal care services.
- 3. To demonstrate knowledge, practical skills and competencies in newborn assessment.
- 4. To demonstrate knowledge, practical skills and competencies in family risk assessment.

- 5. To plan, implement and evaluate screening services, interventions and programmes visual defects, learning deficits, speech defects, nutritional deficiencies and skin diseases in primary school children.
- 6. To plan, implement and evaluate screening services, interventions and programmes for reproductive cancers.
- 7. To demonstrate knowledge, practical skills and competencies on counselling clients and patients with Reproductive and Family Health problems and cancers.
- 8. To critically appraise family and reproductive health programmes and published articles.
- 9. Insertion and application of family planning commodities.
- 10. Cervical cancer screening using Lugols iodine and/or EUA.
- 11. Removal of family planning commodities.
- 12. Appropriate sample collection for STIs
- 13. Growth monitoring and evaluation for < 5 years children

- 1. PHC centres
- Designated Family Planning units in General Hospitals, State Specialist Hospitals, Teaching Hospitals, or LGA Health Departments.
- 3. Other designated institutions recognized for the training of residents (NGOs, bilateral and multi-national health partner's offices).

# THE FELLOWSHIP (PART 2) EXAMINATION

#### Introduction

This part of the examination is designed to test the competencies of candidates who have passed the Membership (Part 1) examination on the relevant knowledge, specialized professional and managerial skills and competences required to practice as a consultant in the field of Public/Community Health at the Federal, State, LGA or District levels, and also in the private and development sectors of the economy.

#### Eligibility for the Fellowship examination

- The candidate must have worked in the field of Public/Community Health for a minimum of two years after passing the Membership (Part1) examination in Public/Community Health in positions approved by the Faculty of Public/Community Health covering all the areas outlined in the curriculum. These positions need not be in an accredited training institution.
- 2. During this period, the candidate, under the guidance of an approved supervisor, conducts a study approved by the College after a formative assessment of the proposal by two Fellows of the College
- 3. The candidate writes a dissertation on a practice-oriented problem of choice with emphasis on problem solving. Preference is given to studies which demonstrate the application of skills acquired by the candidate in the course of the training programme.
- Candidate must have attended at least one approved Update course, Sub specialty course (where applicable), Research methodology course and Management course. Evidence of this should be attached to the application form.
- 5. Candidate must be certified by the Head of Department and a Fellow of the Faculty other than the Head of Department, as being of good behavior and a proper and fit person to be admitted into the Faculty as a Fellow.
- 6. The completed application form must be accompanied with the following:
  - a) The dissertation endorsed by both the supervisor and the Head of Department of the training institution. The absence of this endorsement by both persons will lead to disqualification
  - b) Certificate of training showing the postings done for the period after the Membership (Part 1) examination and authenticated by candidate's trainers
  - c) Certificate of attendance at Research methodology course

- d) Certificate of attendance at Health Management course
- e) Evidence of payment of examination fees

#### Sections of the Fellowship Examination

The examination comprises of two parts:

#### i. Oral examination in Principles and Practice of Public Health

• The oral examination on the Principles and Practice of Public Health covers all aspects of the training programme and lasts for one hour. Oral discussion will cover the theory and applications of knowledge and competencies acquired during the training in all the subspecialties of Public/Community Health. Questions drawn for the orals will also cover Management experience/responsibilities, Teaching Experience and Research training. Each candidate will answer questions from the various domains of Public Health. The questions will examine at higher level of cognition and will test mainly application and problem-solving skills. The candidate is expected to be examined by two independent panels of paired examiners. Examination at each panel lasts for 30 minutes.

The candidates are awarded a pass or fail mark depending on performance where 50% and above constitutes a pass and below 50% a fail.

# ii. Oral defence of dissertation

This part of the examination lasts for one hour. The candidate is expected to defend the dissertation and is examined by two or three examiners one of whom must be one of the two assessors appointed by the Faculty, who assessed and approved the candidate's proposal during the formative assessment. All examiners are expected to have read the dissertation and developed written reports on the dissertation which they are expected to bring to the examination. The examination gives the candidate an opportunity to present and discuss his/her work verbally. The examiners will also be able to clarify any points with the candidate. The dissertation is scored by the two or three examiners.

## Oral dissertation defence Outcome

There are three possible outcomes of the examination in the dissertation: pass; provisional pass; referred.

- a. Pass: successfully defended and no more than minor editorial corrections needed
- b. Provisional pass: defended but substantial corrections that require vetting
- c. Referred: to be re-written, re-presented and defended at a subsequent examination.

In order to qualify for the Fellowship diploma, candidates are required to obtain a pass in the two parts of the examination. In the case of a provisional pass in the dissertation, this requirement is met after the candidate makes the stipulated corrections and submits the corrected dissertation.

A candidate who has passed the Dissertation but Fails in the Viva Voce shall be referred in the Viva Voce only against the next examination. A candidate having Passed the Viva Voce but whose dissertation needs a major re-structuring shall be Referred in the Dissertation only against the next examination.