

UNIVERSITY OF NIGERIA, NSUKKA
COLLEGE OF MEDICINE
ITUKU/OZALLA, ENUGU
M.Sc. AND PhD DEGREE PROGRAMMES OF THE
INSTITUTE OF MATERNAL AND CHILD HEALTH

MARCH 2017

PROGRAMME FOR

INSTITUTE OF MATERNAL AND CHILD HEALTH

COLLEGE OF MEDICINE, UNN

Names of Supervisors (Tropical paediatrics)

1. Prof Emodi
2. Prof Obu
3. Prof Ojinnaka
4. Prof Obidike
5. Prof Ikefuna
6. Prof Tagbo Oguonu

Names of Supervisors Human reproduction and women health

1. Prof Obi
 2. Prof Ezegwui
 3. Prof Dim
 4. Prof Anibue
 5. Dr. Nkwo
- 6. Prof Iyoke
 - Dr Ezeugwu
 - Dr asimadu
 - Dr. Chigbu

MASTERS/PHD DEGREE IN TROPICAL PAEDIATRICS AND HUMAN REPRODUCTION AND WOMEN HEALTH

Philosophy of the program

To provide a comprehensive postgraduate course of studies that enables medical doctors to upgrade their knowledge of tropical paediatrics, Human reproduction and basic medical sciences. The course will also facilitate acquisition of skills required for the conduct of research in relevant basic and clinical medical science relevant to the field of tropical paediatrics.

This course of study does not in any way confer on the graduate any specialist status since it does not include the teaching of practical clinical skills in any areas of Paediatrics and Human reproduction.

OBJECTIVES

At the end of the program, candidates should have developed the following competencies

- Ability to identify, assemble and critically analyse scientific literature related to human reproduction and understand the strengths and weaknesses of the research in the field.

- Ability to articulate subsequent researchable hypotheses and develop research questions and approaches to answering these questions based on significance of the issue and identification of gaps in knowledge.
- Conceive a research design and conduct rigorous research in the area of interest in Tropical Paediatrics and Human reproduction and women health in a way that would allow the hypotheses to be aptly tested.
- Select, apply and interpret analytic methods appropriate for qualitative and quantitative research as required for the candidate.
- Explain and apply the principles of research ethics to research.
- Effectively communicate and disseminate research findings through refereed publishable manuscripts, policy briefs and scientific presentations.

Support the teaching of a course and other instructional activities in the student's discipline in order to develop skills in teaching, alongside research responsibilities.

Scope of the Program

The program will emphasize active, student-directed learning, problem solving, and the acquisition of skills essential to the practice, teaching and research in Paediatrics and Human reproduction and woman health especially in the tropics.

Entry requirements for the M.Sc. Tropical Paediatrics

- All candidates must fulfil the university minimum requirement as stipulated by the university programmes and the university.
- Candidates with MB, BS from recognized university.
- All candidates must have passed the Part I fellowship examination in paediatrics or its equivalents from recognized postgraduate medical colleges.

Employment Opportunities:

Graduates are expected to have developed the necessary competencies to function effectively as teachers, researchers, managers and policy makers in reproductive sciences in general and women's health in particular.

Duration:

The programme is essentially designed (for obvious reasons) for Post-Part 1 resident doctors who are currently in training in the various accredited training institutions. Thus, should run as part time program.

- (a) The Master's Degree program (*Part-time M.Sc. Tropical Paediatrics*) should run for a minimum of 4 semesters and maximum of 8 semesters.

b) Ph.D. Program (*Part time PhD Tropical Paediatrics*) should run for a minimum of 6 semesters and a maximum of 10 semesters.

- **Requirements for graduation**

a) Master's degree (*M.Sc. Tropical Paediatrics*) shall require a minimum of 34 units for graduation. There should be a 6 units' project (6 units). The remaining 28 units should include a Faculty course of 3 units on ICT and Research Methodology, and 3 units for a seminar presented from the Master's Project Report.

b) PhD (*PhD Tropical Paediatrics*): A minimum workload of 48 credit units of which 12 credit units are for the thesis, 30 credit units for the Masters programme/coursework and 6 credit units for seminars.

Mode of study /Academic Regulation: Course work and Project

Areas of specialization

1. Growth & Development
2. Genetics, Molecular and Cellular Biology
3. Paediatric Sub-speciality
4. ICT & Priority Advanced Research Methodology

Stress Areas

Growth social paediatrics and genetics, projects0

Field work and specialties 1

Seminars 2

Project

9

First Year (1ST SEMESTER) SOCIAL PAEDIATRICS & HEALTH MANAGEMENT)

SUB- COORDINATOR: DRS IJEOMA ARODIWE/ AGOZIE UBESIE

PED 701: Epidemiology of tropical diseases in children, Health Management and Policy (2 units)

PED 703: Communication skills in Medicine (2 units)

PED 705: Biostatistics (2 units)

PED 711: Fieldworks (2 units)

PED 707: Genetics, Molecular and Cellular Biology of diseases and Dymorphology in children (2units)

PGC 603: ICT & Priority Advanced Research Methodology (Computers in Medical Practice and Research) (2 units)

First year (2ND SEMESTER) Research and special consideration

SUB- COORDINATOR: DR MADUKA UGHASORO

PED 716: Seminar Paediatrics (2 units)

PED 704: Project (6 units)

PED 702: Normal Growth & Development (2 units)

PED 718 Social Paediatrics, (Bioethics and Medico – legal issues in Paediatric Practice) (2 units)

PED 710: Research Methodology (2units)

Second Year (1ST SEMESTER)

SUB- COORDINATOR: DR HU OBU/ DR JM CHINAWA

PED 711 Fieldwork (2units)

PED 712 Paediatric Sub- speciality (2 units)

PED 718 Social Paediatrics, (Bioethics and Medico – legal issues in Paediatric Practice) (2 units)

Second year (2nd SEMESTER) PROJECTS

SUB- COORDINATOR: PROF. AN IKEFUNA/ DR JM CHINAWA

PED 790 Project (6 units)

PED 720 Seminars (3units)

Total (39units)

Course Descriptions:

PED 702: Normal Growth & Development (2units)

Foetal growth and development. Growth and development of the premature child.

PED 718 Social Paediatrics, Bioethics and Medico – legal issues in Paediatrics Practice (2 units)

Traditional knowledge, attitude and practices in relation to childhood diseases.

Current clinical challenges in tropical Paediatrics and ethical issues

Biotechnology and Nanotechnology for developing world. Human cloning and Genetic screening.

PED 707 Genetics, Molecular and Cellular Biology of diseases and Dymorphology (2 units)

Single mutant genes.

Clinical principles in genetic disorders. Normal and abnormal Karyo-types.

PED 701 Epidemiology, Health Management and Principles of Health Policy (2 units)

Principle of Epidemiology: Historical landmarks in epidemiology. The ecological approach to health and disease.

Epidemiological studies I: Observational studies.

Epidemiological studies II: experimental studies.

The nature and scope of Public Policy.

PED 705 Biostatistics and Research Methodology (2 units)

Introduction of Biostatistics. Rates, Proportions, ratio (measure of frequency).

Types of research investigations. General and specific purposes of research.

PED 703 Communication skills in Medicine (2 units)

Field reports. Internal written report. External written report. Scientific manuscript.

PED 718 Social Paediatrics, (Bioethics and Medico – legal issues in Paediatric Practice) (2 units)

Principles of Bioethics especially as it applies to paediatrics and child health. Ethics in conduct of biomedical research. Legal aspects as regards Tropical paediatrics.

PGC 603 ICT & Priority Advanced Research Methodology (2 units)

General introduction to computers: Computer types, digital, analogue, hybrid; general review of computer applications in medicine.

Note: All Masters Students should pass this Faculty course on ICT and Priority Advanced Methodology or Technology for development of research. This course shall also include a Workshop to be organized by the School of Postgraduate courses (SPGC) with a Certificate of Participation without which the result is incomplete. The Faculty returns the full grade while the SPGC issues the Certificate of Participation.

PED 711 Field work (3 units)

- All students to involve in fieldwork relating to the core area of sub-specialization.

PED 712 Paediatric Sub- specialty (2 units)

- Paediatrics Gastroenterology: Development and function for the GIT.
- Paediatrics Respiratology: Diagnostic procedure in pulmonary medicine.
- Paediatrics Cardiology.
- Neonatology & Perinatal Medicine: Perinatal care in developing countries.
- Paediatrics Endocrinology:
- Paediatrics Haematology: Epidemiology of blood diseases in children.
- Paediatrics Oncology: Symptoms and signs in oncology.
- Paediatrics Nephrology: Symptoms and signs in Paediatric nephrology.
- Paediatrics Neurology: CSF Pathways and the blood/brain barrier.
- Clinical Procedures in Paediatrics:

- Ambulatory Paediatrics: The Concept of Primary Health Care as it relates to children. Organizing out-patient healthcare services for children.
- Paediatrics Infectious: Immunity, Infectivity and immunization.
- Paediatrics Nutrition: Nutritional needs of healthy infants and children.
- Adolescent Medicine: Evaluation of Adolescent. Sex differences, Mental and psychosocial changes, Sex maturity ratings.

PED 790 Project (6 units)

- Specialty Project Dissertation under a supervisor.

PED 720 Seminars in Tropical Paediatric (3 units)

- Students are required to prepare and deliver seminar presented from the Master's Project

PhD DEGREE IN TROPICAL PAEDIATRICS

Entry requirements:

Candidates who apply for the programme must meet the required basic academic criteria for postgraduate programmes in the University of Nigeria. For the PhD program, the entry point remains part II fellowship in paediatrics from an accredited postgraduate medical college or must have gone through the Msc programme with at least a merit grade.

MODE OF STUDY

Course work and thesis

Areas of specialization:

1. Infectious diseases
2. Hematology /oncology
3. Nephrology
4. Neonatology
5. Adolescent medicine
6. Global child health

Stress areas

Implementation and monitoring

0

Biostatistics and research methodology	1
Research Grant Writing	2
Critical appraisal	3
Synopsis	4
Seminars	5
Thesis	9

COURSE DURATION OF PhD Tropical Paediatrics

Full-time	A minimum of 6 semesters
	A maximum of 10 semesters
Part-time	A minimum of 8 semesters
	A maximum of 12 programme

Course work:

FIRST SEMESTER

PGC 801: Implementation and monitoring of health insurance (2 Units)

PGC 813: Advances in biostatistics (2 Units)

PGC 815: Advanced research methodology (2) (computers in medical practice and research) (2 Units)

SECOND SEMESTER

PGC 832: Critical appraisal 1 (3 Units)

PGC 834: Critical appraisal 2 (3 Units)

PGC 701: Synopsis and grant writing (3 Units)

PGC 851 Seminar –1 (3 Units)

PGC 852 Seminar – 2 (3 Units)

PGC 890 Thesis (12 Units)

TOTAL CREDIT UNITS (36 Units)

COURSE DESCRIPTION (FIRST SEMESTER)

PGC801: Implementation and monitoring of health insurance (2 UNITS)

Health Coverage, keys to Understanding Health Coverage and Health Coverage Models.

PGC 813: Advanced research methodology (2) (computers in medical practice and research) (2 UNITS)

Administrative use in national health management; use in data basing the national health statistical system.

PGC 815: Advances in research methodology (2 UNITS)

Types of research investigations. General and specific purposes of research.

SECOND SEMESTER

PGC 701: Synopsis and grant writing (3 UNITS)

Identification of types and nature of grants and grant writing; searching for grants application call on the internet.

PGC 832: Critical appraisal (3 UNITS)

Clinical questions, methodology, checklists, applicability, critical appraisal in practice, results.

PGC 851 & 852 Seminars I and II in Tropical Paediatric (6 Units)

Students are required to prepare and deliver seminar presented from the PhD Project

PGC 890: Ph.D Thesis-12 Units

Students are required to write thesis and defend it appropriately.

1. MASTER'S DEGREE PROGRAMME IN HUMAN REPRODUCTION & WOMEN HEALTH (M.Sc. HUMAN REPROD & WOMEN HEALTH)

Entry Requirements:

All candidates must fulfil the matriculation requirement as stipulated by university.

- Candidates with MB, BS from recognized university are eligible with satisfactory level of performance.
- Candidates must also have passed the Part 1 Fellowship examination in Obstetrics/Gynaecology from a Postgraduate Medical College recognised by the Medical and Dental Council of Nigeria
- All candidates must undergo a screening examination organized by the IMCH in conjunction with the university, to assess their suitability for the study.

Duration: As in the regulation.

Areas of specialization

1. Human Reproduction
2. Women health
3. Human genetics
4. Assisted Reproduction

Stress areas

Basic sciences and ICT	0
Reproductive Endocrinology	1
Genetics	2
Embryology	3
Maternal/Fetal Health	4
Reproductive Tract Infections	5
Seminar	6
Project	9

Mode of study:**Code Course title No. of units**

- OBG 701 Basic Sciences in Human Reproduction (3 Units)
- OBG711 Reproductive Endocrinology/Assisted Reproduction (2 Units)
- OBG 721 Human Genetics (2 Units)
- PGC 601 ICT & Priority Advanced Research Methodology (3 Units)

FIRST YEAR: SECOND SEMESTER

- OBG 712 Research Methodology (2 Units)

- OBG 702 Reproductive Endocrinology/Assisted Reproduction (2 Units)
- OBG 722 Ethics/Legal Aspect of Human Reproduction (2 Units)
- OBG 732 Reproductive Health/Fertility Regulation (2 Units)
- OBG 742 Embryology/Immunology in Human Reproduction (3 Units)

SECOND YEAR: FIRST SEMESTER

- OBG 741 Maternal/Fetal Health (2 Units)
- CPY 721 Reproductive Tract Oncology (2 Units)
- OBG 751 Reproductive Tract Infections (2 Units)

SECOND YEAR: SECOND SEMESTER

- OBG 742 Seminars (3 Units)
- OBG 752 Research Project (6 Units)

TOTAL CREDIT UNITS (39 units)

Course Description:

OBG 701: Basic sciences in Human reproduction:

Anatomy of the Male and Female Genital Tracts: Anatomy of the abdominal wall.

The inguinal region. The Male and Female Genitalia.

The Menstrual Cycle: The normal Menstrual Cycle. The control of menstrual cycle. Steroid hormone action. The Puberty, Menopause and Climacteric.

OBG732 Embryology/Immunology of Human Reproduction

Embryology: Overview of embryonic development.

Immunology: Concepts of Antigens. The Lymphoid System. Immune System. Immunoglobulins. Diagnostic Serological Tests.

OBG 721: Human Genetics

The structure and behaviour of DNA, RNA Replication. Mutations, Gene Expression. Regulation of gene transcription. DNA Processing.

OBG732: Reproductive Health/Fertility Regulation

Reproductive Health: Overview of Reproductive Health. Basic Principles of Health Status Assessment. Behavioural Factors and their effect on Reproductive Health. Safe Motherhood.

"Fertility Regulation" Population Dynamics and National development with special emphasis on Nigeria History of Contraception.

OBG741: Maternal and Fetal Health

Maternal health: Pregnancy, labour and puerperium; common maternal complications during these periods; maternal and perinatal mortalities.

Fetal Health (Fetal medicine): Principles of Monitoring Maternal well-being. Drugs and Pregnancy. Biophysical Methods of Fetal assessment.

OBG761: Reproductive Tract Infections

Overview of STIs including Zika Viruses. Environmental determinants of STIs.

OBG751 Reproductive Tract Oncology

Molecular basis of Carcinogens. Carcinogenesis in the Female genital Tract.

Influence of Genes and Environmental Factors on Carcinogenesis.

OBG711: Reproductive Endocrinology/Assisted Reproduction Reproductive

Endocrinology: Of Pituitary. Adrenal cortex. Thyroid and parathyroid glands.

Effects of hypophysectomy adrenalectomy, syndromes and disease of hyper/hypo-functioning of pituitary and adrenal cortex. Diabetes mellitus.

Reproductive Biology: An in-depth survey of male and female reproductive processes including neuro- endocrine pituitary and gonadal control mechanism .

Assisted reproduction: The Human Semen. Semen analysis. Artificial insemination.

Fertilization by micro• insemination.

OBG 712: Biostatistics and Research Methodology

- **Biostatistics:** Role of statistics in medicine. Elements of probability theory, problems solving on the application of the binomial, poisson and normal distribution theory.
- **Research Methodology:** Definition of research. Types of research investigations. General and specific purposes of research.

OBG742: Seminar

- Students are required to prepare and deliver seminar presented from the Master's Project

OBG790: Research Project

PGC 601: ICT & Priority Advanced Research Methodology (Computer in Medical Practice and Research)

General introduction to computers: Computer types, digital, analogue, hybrid; general review of computer applications in medicine.

Note: All Masters Students should pass this Faculty course on ICT and Priority Advanced Methodology or Technology for development of research. This course shall also include a Workshop to be organized by the School of Postgraduate courses (SPGC) with a Certificate of Participation without which the result is incomplete.

The Faculty returns the full grade while the SPGC issues the Certificate of Participation.

OBG 702 :Communication skills in Medicine Field reports. Internal written report. External written report. Scientific manuscript.

OBG 722: Ethics/Legal Aspects of Human Reproduction

Principles of Bioethics especially as it applies to Human Reproduction. Ethics in conduct of biomedical research. Legal aspects as regards human reproduction.

PhD DEGREE PROGRAMME IN HUMAN REPRODUCTION AND WOMEN HEALTH

Entry requirements:

Candidates who apply for the programme must meet the required basic academic criteria for postgraduate programmes in the University of Nigeria. Candidates must also have a Fellowship in Obstetrics/Gynaecology from a Postgraduate Medical College recognised by Medical and Dental Council of Nigeria. Possession of M.Sc in Human Reproduction & Women Health or related areas is an advantage.

Mode of study

By course work and research (Thesis) as in the guideline.

Duration:

Full-time	A minimum of 6 semesters
	A maximum of 10 semesters
Part-time	A minimum of 8 semesters
	A maximum of 12 programme

Employment opportunities:

Graduates Obstetricians and Gynaecologists who undertake this programme will develop further skills and motivations to function as researchers, teachers, managers and policy makers in reproductive sciences in general and women's health in particular.

Core courses 0

Maternal Health 1

Fetal Medicine 2

Reproductive Oncology 3

Fertility Regulation 4

Infertility & Reproductive Endocrinology 5

Stress areas

Reproductive Science and Research Grant Writing 0

Women's Health 1

Women's Health 2

Women's Health 3

Seminar 4

Seminar 5

PhD thesis 9

First year: first semester

Code	Course title	No. of units
• OBG 801	Reproductive Science – 1:	2
• OBG 811	Women’s Health – 1	2
• OBG 821	Women’s Health – 2	2
• PGC 701	Research Grant Writing and Synopsis Writing	3
• First year: second semester		
• OBG 802	Reproductive Sciences -- 2	2
• OBG 812	Women’s Health -- 3	2
• OBG 832	Women’s Health – 4	2
• Second year & Third year		
• OBG 841	Seminar –1	3
• OBG 852	Seminar – 2	3
• OBG 862	Thesis	12

TOTAL CREDIT UNITS33units

OBG 801: Reproductive Science – 1

Basic Principles of Epidemiology of reproductive health, Qualitative and Quantitative Research Methodology.

OBG 811: Women Health – 1:

Sexuality and women, Principles and use of imaging in female Reproductive health; sexually transmitted infections and HIV in women including PMTCT

OBG 821: Women Health – 2:

High risk pregnancy, patients' referral system, maternal and child mortality epidemiology, and issues in developing economies

PGC 701: Research Grant Writing and Synopsis Writing:

Identification of types and nature of grant and grant writing; mining of grants application calls on the interest. Determining appropriate strategy for each grant application. Study of various grant application structures and contents and writing of concept notes, detailed project description, budgeting and budget defence.

OBG 802: Reproductive Science - 2

Introduction to Good clinical practice; Responsible conduct of health Research including plagiarism.

OBG 812: Women Health – 3

Management of common clinical complications in obstetrics & gynecology: including abnormal uterine bleeding, unsafe abortion, pre-eclampsia/eclampsia, antepartum/postpartum hemorrhage, puerperal sepsis, etc.

OBG 832: Women Health – 4

Special public health Topics in Women Health including menopausal health, and Sexual abuse, Domestic violence, Genital mutilation

OBG 841: Seminar 1

As in the guideline

OBG 841: Seminar 2

As in the guide line

OBG 890: Thesis

Students are required to write PhD thesis and defend it appropriately.