

110420 pc health

## **UNDERGRADUATE MEDICAL PROGRAMME:**

### **NELSON R MANDELA SCHOOL OF MEDICINE**

#### **EDUCATIONAL PHILOSOPHY AND POLICY**

The Faculty endeavours to achieve its goals through policies and programmes that maintain quality and excellence while simultaneously striving to attain excellence. It serves all sections of the community in Kwazulu-Natal and South Africa through excellence in teaching, research and by continually seeking to upgrade the quality health care and establishing sound principles of health systems management. The Faculty operates as an equal partner at district, regional, national and international levels in order to fulfil its obligations and responsibilities. It ensures community participation consistent with good management.

The MBChB is offered at the NRMSM. The qualification aims to provide graduates with knowledge, skills, and attitudes and applied competencies in a number of fields traditionally associated with medicine. It aims to provide graduates with the foundations for continued personal and intellectual growth, gainful economic activity and for contributing to society at large through service, innovation, scholarship and leadership. The programme aims to prepare general practitioners for primary health care in the South African society.

#### **Graduates of this programme:**

- should know and understand the fundamental principles and methods of medicine and able to apply these as it relate to research
- should have mastered the clinical skills required for diagnosis, prognosis and treatment
- can promote the health of both individuals and communities
- can treat physical and mental diseases at a primary health care level
- behave in a manner and observe medical ethics expected by the medical profession
- have acquired the foundations for life-long learning, and continued personal and intellectual growth
- are able to engage in gainful economic activity with a commitment to professionalism and service
- manage themselves and the health care team

In the design and delivery of the programme, we followed the principles to ensure the programme is

- Student centred (consider their needs and ability)

- Problem based (initially and emphasize clinical problems at exit level)
- Integrated and multidisciplinary
- Community orientated (experiential component conducted in the community setting) Early clinical contact
- Systematic (spiralling) (Concepts introduced in early years are revisited and expanded on later)

The programme utilises a number of methods for teaching and learning. One is the supported problem-based approach as outlined below

### Philosophy of the programme

The approach is a student centred with case-based problems. The emphasis is on the basic sciences (physiology, anatomy, histology biochemistry) and progressing to the pathologies (anatomical pathology, microbiology, virology, chemical pathology) in the latter part of the first year. Organ system approaches is adopted along with basic sciences and pathologies in the second and third years,

During the fourth, fifth and final years clinical re-enforcement and the spiralling of clinical content based on the of the first three years takes place.

### The instructional methods and techniques used

- i. The core of the curriculum is small group, problem-based learning.
- ii. Facilitators are trained to help the group to analyse a problem/case
- iii. Interactive large group sessions (similar to lectures) are included to discuss difficult concepts or tie together multiple sources of material or to address questions raised but not answered during tutorial sessions.
- iv. Practical sessions are used to illustrate concepts or demonstrate specimens, images or functions related to the problem under investigation.
- v. Clinical skills relating to aspects of examination, investigation or management of the problem is included initially in a skills laboratory and later in the clinical ward as and when appropriate.
- vi. Tutorials, bedside teaching and fieldwork are progressively more prominent as students' progress through the years. Ward-based education builds up in 4th and 5<sup>th</sup> years and the 6th year is entirely clinical.

<b>MBChB 1</b> (these modules are year long modules)	
Basic and Foundation Science for Medicine Becoming a professional Academic literacy (English for Medicine) IsiZulu for Medicine Computer literacy for Medicine	
<b>MBChB 2</b> (Semesterised) First semester: Homeostasis  (Respiratory, CVS, Renal)	<b>Second semester</b> Co-ordination and Control (GIT, Endocrine, skin genetics)  Each semester has an introductory section of the applied basic sciences and pathologies
<b>MBChB 3</b>  First semester Mental Health and neuromuscular problems	<b>Second semester</b> Reproduction, blood, Infections and HIV Each semester has an introductory section of the applied basic sciences and pathologies.
<b>MBChB 4</b> First semester Internal Medicine	<b>Second semester</b> General Surgery Trauma and emergency care Family Medicine Obstetrics and gynaecology Paediatrics
<b>MBChB 5</b> Adult and Paediatric Medicine and Mental Health	<b>Second semester</b> Principles of Surgery and Obstetrics and gynaecology
<b>MBChB 6</b> (6 rotations each of ) Medicine, Paediatrics, Psychiatry, Obstetrics and gynaecology Surgery Integrated Family and Public Health Medicine	

## Exit level Outcomes

On completion of this programme the learner will

- approach the practice of medicine with professional values, attitudes, behaviour and ethics.
- have developed critical thinking (inquisitive and questioning attitude and applying rational process, recognising irrationality in oneself and others); competence in problem-posting and problem solving
- recognise, explain and manage health problems based on principles of current scientific knowledge and the best available evidence
- demonstrate an ability to integrate scientific principles into clinical practice
- know and understand diseases relevant to the context of practice, i.e. KwaZulu-Natal and South Africa; their aetiology, prevention and management
- demonstrate effective communication skills and teamwork as part of an integrated health care delivery system and employ general principles of good communication in all spheres and through all media, including dealings with the wider community where necessary
- access, utilise and manage resources consistent with health promotion and the determinants of health and wellness by considering patient, family and community needs and be able to make referrals according to the current health systems organisation as available in context of practice
- demonstrate competency in the clinical method (communication skills, physical and mental examination, clinical reasoning and judgment) using a holistic, patient-centred approach to ensure ethical decision-making and effective patient care
- demonstrate competence in basic technical medical procedures
- effectively manage (collect, store and use) information pertaining to patients and the practice of medicine making appropriate use of technology in order to maintain accurate patient records and ensure confidentiality of the information at all times
- understand the scientific principles, basic science,, methods and techniques of medical research, epidemiology and biostatistics and know how to access and interpret medical literature

Family Medicine, Public Health Behavioural Science and Rural Health are working together and integrating at strategic points throughout the curriculum through spiralling of information built upon in the early years of the curriculum. Family Medicine has integrated

with Paediatrics in the fourth year of study and will do the Integrated management of childhood illnesses (IMCI).

The Integrated management of adult illness (IMAI) will be undertaken in the departments of Medicine and the IMCI will be covered by Paediatrics and Family medicine. In addition, the student selective component allows students the opportunity to conduct research in a primary care/rural setting.

Students work in groups of 2-4 and are expected to choose 4 sites –where they are supervised by a local doctor or nurse. They are expected to conduct consultations and to follow up a newly diagnosed patient ( HIV/TB or Lifestyle Disease) over a 3 year period

The group will also conduct an analysis of each site in terms of adherence to norms and standards as defined by Alma Ater, and present a community assessment of the socio-environmental drivers of illness, a health resource mapping of facilities for this community, and come up with 5 commonly occurring conditions ( in ranking order) occurring in this community. A literature review is then conducted individually on these social determinants of health and a community intervention plan is designed to address the gaps identified.

At third year level the student groups complete a protocol for the Community Intervention study together with a detailed composite literature review, and run a community survey.

In the 4th year it is proposed that the student complete a 2 weeks rotation through the same site to conduct a community intervention project (New proposal for the 6<sup>th</sup> year programme) and to measure its impact in the local community.

Currently, because of all the standardisation challenges, our students spend 2 weeks in a rural hospital and 2 weeks in an urban hospital. The first week is spent on equipping them with knowledge on commonly occurring rural conditions and emergency skills.

### **Monitoring and evaluation**

- Reviewing the curriculum for core content
- Evaluating the lecture contents to prevent overload and instruction inappropriate for the  
level of training
- Matching assessment questions to objectives
- Avoiding over –assessing ( too frequent assessments)
- Assessment committee review has been established
- Reviewing functions in the Skills Laboratory – earlier years and the clinical years
- ADP committee – assessing if referrals are appropriate
- Student evaluations
- Template reviews and facilitator evaluations of the themes

- Departmental reviews along with Departmental representatives
- Reviewing the roles of individuals in the undergraduate programme and re-assigning duties if indicated to relieve overload of staff in another section

### Subcommittees supporting the Undergraduate Curriculum

1. Selection/Registration/Admissions
2. Student support and monitoring
3. Teaching, Learning and Assessment Year Co-ordinators
4. Programmes & Rules
5. Assessments, Monitoring, Examinations (Quality assurance and monitoring)
6. DP appeals and exclusions
7. Selectives/Electives/Clinical Conference/ Outreach