

## **ACCREDITATION OF THE FACULTY OF MEDICINE UNIVERSITY OF GEZIRA (FMUG), PILOT STUDY**

Omer Ahmed Mirghani, Mohamed El Sanousi, Mohamed El Hassan Abdulla, Osman Taha Mohamed Osman, Ali Babiker Habour, Sayed Mohamed Ahmed, Ahmed Abdulla Mehamadani, Hashim El Toum, Abdul Rahman Abdul Hafeez, Mohamed El Mukhtar  
Faculty of Medicine , University of Gezira, Sudan.

The Faculty of Medicine University of Khartoum was founded in 1924 and has graduated the majority of doctors in the Sudan. In recent years the government invested heavily in higher education and 26 new medical schools have been established and are now functioning and graduating doctors. Those new schools adopted different models of curricula, however most of them benefited from the Gezira medical school experience and hence their curricula are innovative.

The large number of schools and the diversity in their curricular models fueled interest in the Sudan General Medical Council and the Ministry of Higher Education to establish a national mechanism for evaluating those schools and ensuring the society that they graduate doctors with optimum standard.

The Educational Development and Research Centre (EDC) of the Faculty of Medicine University of Gezira (FMUG) organized a national workshop on accreditation of medical schools in the Sudan. The workshop was attended by representatives of all national institutions concerned with medical education in the country; University of Gezira, Sudan General Medical Council, Ministry of Higher Education, Sudan Medical Specializations Board, Ministry of Health, WHO, national faculties of medicine. The workshop emphasized that adoption of a global set of standards for medical education is not to be equated with global core curriculum and that the main purpose of accreditation is development and reform of medical schools. The main outcomes of the workshop were:

- i. Adoption of the World Federation for Medical Education (WFME) Global Standards (WFME office: University of Copenhagen – Denmark 2003).**
  1. Mission and Objectives
  2. Educational Programme
  3. Assessment of Students
  4. Students
  5. Academic Staff/Faculty
  6. Educational Resources.
  7. Programme evaluation
  8. Governance and Administration
  9. Continuous Renewal

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**ii. Design of an accreditation process.**

**Accreditation Process:**

**1. First contact:**

A detailed request for information covering all aspects of the accreditation (the accreditation committee guide for data collection) is sent to the University and Faculty one year before the visit of the accreditation team.

**2. Self evaluation**

The faculty undertakes an internal evaluation of itself guided by the accreditation committee request.

**3. Study of information**

The accreditation team studies the information obtained from the faculty

**4. Accreditation Team**

Formed of 3-5 members including academic clinicians, basic scientists, social scientists and deans

**5. The accreditation visit:**

The accreditation team makes a planned observational visit to the school. The team meets with the Dean, faculty Board, staff and students and visits all the training sites. The team discusses with them all aspects of accreditation. The atmosphere of discussion is formal, supportive and collegiate. The team presents its comments and suggestions to the dean.

**6. Accreditation report**

The team discusses and analyses all the information obtained and prepare a report. The report is sent to the university/faculty. Then the faculty studies the report and sets a plan for the development of the school based on the comments and suggestions included in the report.

**7. Second Accreditation visit**

The accreditation team visits the faculty for the second time to make sure that all deficiencies are rectified.

**8. Final report**

The team prepares the final report and submits it to the accreditation committee which decides on the school status;

**accredited, accredited with comments, rejected**

**9. Duration of accreditation.**

The accreditation is valid for ten (10) years.

**10. This process**

Is used for accreditation of all medical schools in Sudan; old and new.

**iii. Formulation of the general structure of a national committee for accreditation**

**The Accreditation Committee :**

The workshop recommended that the committee must be one of the General Medical Council committees.

Members are representatives of:

1. Sudan General Medical Council
2. Ministry of Higher Education
3. Ministry of Higher Education Private
4. Federal Ministry of Health
5. Sudan Medical Association
6. Deans of the Faculties of Medicine
7. Sudan Medical Specializations Board
8. World Health Organization (WHO)
9. Community member
10. Community leader (chairman of the Health Committee in the National Council)
11. EDC University of Gezira
12. EDC University of Khartoum
13. Medical students.

The workshop also recommended a pilot study of accreditation of the FMUG.

The study was conducted by the EDC. First a guide for data collection composed of 120 Questions adapted from the WFME guide was formulated. Then the questionnaire was sent to the Dean FMUG to complete it. Next the accreditation team studied and analyzed the completed questionnaire. After that they met with the Dean, staff and

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students. The team also conducted an observational visit to the school and its training sites (biomedical, clinical and community). Finally all the data collected was compiled in the following narrative descriptive report which includes a lot of evidence. The report includes **nine areas** (broad components in the structure, process and outcome of medical education), **37 criteria** (specific aspects of an area, corresponding to performance indicators) and **120 Questions**. The standards are specified for each criterion using two levels of attainment:

- (i) Basic standard: this means that the standard **Must** be met by every medical school
- (ii) Quality development: This means that the standard is in accordance with international consensus about best practice for medical schools and basic medical education. Fulfillment of some or all of such standards **Should** be documented by the school.

## **AREA 1 : MISSION AND OBJECTIVES**

### **CRITERION A: STATEMENTS OF MISSION AND OBJECTIVES**

#### **Basic standard:**

#### **1. Provide a copy of the published general mission and objectives of the medical school?**

The mission of the FMUG is based on the University of Gezira philosophy and goals which aim to address the issues and concerns of the community –especially the rural areas.

The objectives of the FMUG are:

#### **1. The education:**

The curriculum is expected to graduate a highly qualified doctor who will be able to:

- 1.1 Diagnose and treat the endemic and epidemic diseases and all the health problems at the level of the individuals, families and the community
- 1.2 Solve the health problems through community orientation and problem- based approach and play a role in prevention and treatment
- 1.3 Consider the code of ethics when dealing with patients, colleagues and the community as a whole.
- 1.4 Supervise, train and work with the members of the health team and delegate responsibilities to team members through his knowledge of the administration methods and ability to communicate with others
- 1.5 Conduct research, propose and implement health programmes and reporting.
- 1.6 Continue learning after graduation

#### **1. Research:**

Doing research in priority health problems in the Gezira area and the Sudan

#### **3. Service:** Providing health services to the community.

#### **2. Are the school objectives community oriented?**

The school curriculum was prepared by the Dean, faculty members and Ministry of Health consultants. They reviewed a number of curricula; both innovative and traditional. At the beginning they identified the major health problems in the world, Sudan and gezira and from them they determined the community health needs. After that they set the curriculum objectives (contents) to address the main community needs and hence all the objectives are community oriented.

#### **3. How are the objectives made known to the staff, students, university and Community**

The school objectives were set by the Dean, all academic staff, all Ministry of Health consultants at Wad Medani Teaching Hospital and representatives of the University and community. The written objectives are presented to the students during the first course (Introduction to Medicine). Newly recruited staff learn about the objectives through formal introductory sessions, medical education workshops and courses.

#### **Quality development**

#### **1.Specify how the objectives encompass the following areas; Training, Service, Research**

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- The objectives encompass training, service and research. Training of medical students is the primary function of the school. The specific objectives of the course define explicitly the type of competencies which the student is expected to have at the time of graduation. The specific objectives also define clearly the minimum level of competence (perform discuss, demonstrate etc).
- Service: The school is strongly committed to its partnership with the Ministry of Health (MOH). All the staff (clinicians and scientists) are directly involved in service provision. Almost more than 90% of the consultants in Wad Medani Teaching Hospital are academic staff. The majority of the hospital directors are academic staff members. It can be stated that the thrust of health care delivery at consultant level is almost entirely shouldered by staff (Medicine, Surgery Obstetrics Gyn, ENT, Dermatology, Ophthalmology, Nephrology, Pathology Nuclear Medicine and Radiotherapy).
- Research attainment is reflected in the objectives. The medical school encourages relevant research. The total number of staff publications is 200.
- The students have a role in health care provision at variable levels. In curative medicine they participate in the management of patients. In promotion of health, prevention of disease and rehabilitation the students assume a bigger role. They are enrolled in activities related to promotion, prevention and rehabilitation. That is done through the credited community courses.
- The school objectives enable the student to perform research: some of the community courses include objectives in research methodology and scientific writing and those courses are required for graduation (e g: Statistics, Primary Health Care PHC, Clerkship and Field Training Research And Rural Development Programme FTRRD).

### **2. Specify how the objectives prepare the student to continue his/her education and specialization.**

Learning in the FMUG is student centered; problem based learning, integration, self directed learning, small groups activities, seminars, and hence the student acquire skills and attitudes in how to continue learning. The graduates of the FMUG specialize in All branches of medicine. Some of them are high level specialists in charge of specialized units inside the country and abroad.

## **CRITERION B: PARTICIPATION IN FORMULATION OF MISSION AND OBJECTIVES**

### Basic standard:

#### **1. Who are the schools principal stakeholders?**

The principal stakeholders are: the Dean and all academic staff, the University of Gezira the Federal Ministry of Health, the State Ministry of Health and the Sudan General Medical council.

#### **2.How has the School involved its principal stakeholders in formulating the Mission and Objectives?**

The mission and objectives were formulated by the Dean, all the academic staff and representatives of the other stakeholders. Then they were approved by the FMUG Faculty Board, University of Gezira Senate and the University of Gezira Council and the Sudan General Medical Council. The University of Gezira Council includes members of the community

### Quality development:

#### **1. What groups other than the above principal stakeholders does the school consult?**

The school also consults ; national faculties of medicine, the Network of community oriented medical schools, WHO, international medical education centers, local community leaders and Sudan Medical specializations Board

#### **2. How does the school consult and involve these groups in ongoing refinements to the mission and objectives statements?**

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The mission and objectives are regularly reviewed through formal curriculum development workshops which include participants from all the stakeholders: the school organized 5 workshops during which the curriculum was reviewed. The review considered all the inputs of the staff, students, health services and community. Based on those inputs certain changes in the curriculum and its implementation were introduced: Zoology, Botany, Physics and Mathematics courses were deleted because it was found that all the contents of those courses were learned in the secondary school. The Respiratory and Cardiovascular courses were joined together in one course to facilitate learning. New courses were introduced e.g. Computer, Medical Physics and Pharmacology. The Senior Clerkship course was deleted. A number of specific learning objectives were added to the specific objectives of the courses in response to changes in health care delivery and in subject matter. e.g. AIDS, molecular biology, genetics, assisted reproduction.

### **CRITERION C :ACADEMIC AUTONOMY**

#### Basic standard:

**1. Describe or provide copies of institutional and governmental policies that confer responsibility for the curriculum and allocation of resources?**

The Federal Ministry of Higher Education and Scientific Research policy strongly emphasizes the full academic autonomy of all national Universities. The University of Gezira Senate has a written and very explicit document of the academic regulations which organize all the academic affairs of the university. Those academic regulations confer full responsibility of the Faculty Board on the curriculum.

**2. Is the faculty administration free to allocate resources necessary for the implementation of the curriculum?**

The University of Gezira adopts a policy of decentralization and hence each faculty is entirely responsible for the allocation of the resources necessary for implementation of the curriculum e.g. stationary, laboratory materials and equipments, library, community field visits, external examiners, workshops, short term fellowships for staff, incentives.

#### Quality development :

**1. What policies and practices does the medical School have which ensure that teaching by individual staff and by departments appropriately addresses the design of the curriculum?**

The most effective policy is that each course in the curriculum is presented in a booklet. The booklet includes the details of the course in writing (Objectives, time-table, resources, instructional methods, methods of evaluation and references).

The booklet is distributed to all students taking the course and to all tutors. Also each course has a standing course committee responsible for its implementation. Finally the implementation of the course is discussed in the faculty board when the end of course examination result is presented. The teaching is periodically checked by the University Studies Committee and sometimes by the University Sennate if there are major deviations from the curriculum. At any stage of reviewing of the course implementation problems and deficiencies are identified and if possible rectified.

**2. What is the medical school process for reviewing resource allocation in support of an evolving curriculum?**

Resource allocation is reviewed continuously by the Faculty Board in response to the students and staff feedback.

### **CRITERION D: EDUCATIONAL OUTCOME**

#### Basic standard

**1. What are the broad competencies ( knowledge, skills and attitudes) required of students at graduation?**

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**Knowledge:** Basic knowledge in: Anatomy, Physiology, Biochemistry, Pathology, Clinical Sciences (history, examination, investigations and management), Community Medicine and Behavioral Sciences. **Skills:** Basic laboratory skills, clinical skills, community diagnoses skills and research skills. **Attitudes:** communication skills, respect of patients culture and values, demonstrating sympathy and concern about patients problem, conforming to the code of medical ethics. In general all the specific objectives of the curriculum are arranged into two levels; level I and level II where all objectives in level I comprise optimum competencies which the students Must acquire at graduation.

### **2. How do these relate to the existing and emergent needs of the society in which the students will practice**

The optimum competencies (knowledge, skills and attitudes) are closely related to the existing and emergent needs of the society because they are originally based on the society needs which were assessed at the start of curriculum development. Moreover

those competencies are learnt in the existing health units in which the students will practice after graduation. The school adopts the PBL strategy which enables the students to deal with emergent problems in the future.

### Quality development:

#### **1. How does the medical school measure and get information about the competencies of its graduate?**

The graduate competencies are mainly evaluated during the internship period by the supervising consultants. Most of the practicing consultants prefer the University of Gezira graduates and that is reflected on the distribution of graduates. The opinion of the consultants supervising the graduates is obtained formally through a structured feedback questionnaire. The results of the feedback showed that the graduates have most of the optimum competencies. The results were presented in the Network conference (Brazil 2001). The competencies of graduates are also evaluated by the performance of the graduates in the specializations' examinations. The rate of success of the graduates in those examinations is very high.

#### **2. How does the school feedback this information into programme development?**

The information obtained has been used in each curriculum development workshop.

## **AREA 2. EDUCATIONAL PROGRAMME**

### **CRITERION A: CURRICULUM MODELS AND INSTRUCTIONAL METHODS**

#### Basic standard:

##### **1. What is the curriculum model adopted by the school?**

It's a community oriented community based curriculum. Six main strategies are adopted to help the school and students achieve the objectives of the curriculum. (i) Community orientation (contents)(ii) Community based education (part of the curriculum is learnt in the community; village, families) (iii) Integration of basic, clinical, community and behavioral sciences (iv) Problem-based learning (PBL)(v) Team work(vi) Early exposure of students to clinical training (vii) Training of students in the existing health units (iii) Staff development

##### **2. What are the instructional methods used in the school?**

(i) PBL (ii) Tutorials (iii) Small group discussion (iv) Self directed learning (v) Practical (laboratory, basic skill laboratory, bed side teaching in hospitals)(vi) Seminars(vii) Lectures (vii) Field visits (villages)(viii) Families visit(ix) Training in health centres (x) Computer aided learning(xi) training in rural hospitals.

#### Quality development:

**How will the curriculum and instructional methods adopted ensure students centered learning and help prepare the student for lifelong self-directed learning?**

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The curriculum and instructional methods ensure students centered learning. Following are some examples:

- PBL is an effective learning strategy which ensure to prepare the student for lifelong self-directed learning ; all courses include PBL.
- The FTRRDP courses: At all stages of the courses (choice of village, preparing instruments for data collection, planning of the village visit, management of the whole course in the village, collection of data, analysis and reporting) the learning is students centred.
- Course in computer during this course the student learns how to use the computer, and computer aided learning
- Seminars and small groups activities: these are conducted entirely by students

**CRITERION B: SCIENTIFIC FOUNDATION**

Basic standard :

**1. Which components of the curriculum inculcate the principles of scientific method and evidence based medicine and enable analytical and critical thinking?**

The PBL and integration of sciences strategies are adopted throughout the curriculum starting from day I ( introduction to medicine and study of medicine). The principles of scientific method are inculcated in all the 47 courses of the curriculum.

**2. What specific opportunities are there for students to aquire research training?**

The objectives of research training are included in the following courses:

Introduction to Medicine and study of Medicine, Medical statistics, Computer science, FTRRDP , Rural residency , PHC management course, Primary Health Care Center Practice And Family Medicine ( PHCCP and FM ); all contents of epidemiology are included in this course , All the above courses are required for graduation

Quality development:

**1. Do the students conduct elective research projects?**

There are no electives or options in the curriculum.

**CRITERION C: BASIC BIOMEDICAL SCIENCES**

Basic standard:

**1. Which of the basic biomedical sciences contribute to the medical programme ?**

Anatomy, Physiology, Biochemistry, Pathology, Microbiology, Parasitology, Pharmacology, Genetics, Molecular Biology, Cell Biology, Immunology.

TOTAL NUMBER OF CONTACT HOURS	=7388 HOURS
Basic Biomedical sciences	=2161 (29.3%)
Behavioral sciences	=268(3.6%)
Community Medicine	=1156(15.6%)
Clinical Sciences	=348(47.3%)
Anatomy	=537 hours
Physiology	=477
Biochemistry	=317
Pathology, Microbiology, Parasitological	=559
Pharmacology	=171
Genetics	=39
Statstics	=61
Medical Ethics	=14
Sociology	=128
Medical education	=45
Management	=45
Community Medicine	=1156

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Forensic (legal) Medicine	=68
Medicine	=117
Psychiatry	=120
Surgery	=960
Anesthesia	=84
Paediatrics and child health	=598
Obstetrics and Gynecology	587
English language, Arabic language	=99
Islamic studies	=60
Computer	= 60
Elective	=100

**2. How is the contribution of basic biomedical sciences, the behavioral sciences, the community medicine and clinical sciences integrated ?**

All the basic, clinical, behavioral and community sciences are fully integrated throughout the curriculum. Sciences are integrated around clinical problems and systems of the body.

Quality development:

**1. What is the process by which the medical school adapts the curricular contribution of the various basic biomedical sciences to developments in the science, practice and delivery of health care ?**

The curriculum is community oriented and hence the objectives address the main health needs of the community; the practice and delivery of health care. Basic biomedical sciences relevant to those needs are selected and integrated with the clinical and community sciences e.g.

- In course Man and his Environment the physiology of the internal environment ( body fluids, homeostasis, pH etc) are fully integrated with the effects of external environmental factors (light, sound, dust, temperature, humidity, radiation etc.)
- In course Nutrition and Nutritional Biochemistry the major aspects of human nutrition are learnt. The course also includes the principles of biochemistry relevant to nutrition (metabolism of major food contents and energy production and storage).

**CRITERION D: BEHAVIOURAL AND SOCIAL SCIENCES AND MEDICAL ETHICS:**

Basic standard :

**1. Which of the behavioral and Social Sciences contribute to the medical programme?**

The contents of the medical programme includes the communication skills and the counselling of patients and their relatives. It also includes the effect of individual and society behaviour on health ( nutritional habits and taboos, disposal of human and animal waste, use of water and its sources, prevention of pregnancy, harmful habits like smoking and alcohol and female circumcision, sexual behaviour, traditional healers, wrong beliefs about certain diseases ) and the effect of social status on health ( education, economic status, gender, tribe etc). Community courses include objectives of hygiene, public health and community medicine. Mental Health course and Doctor and his Society course include objectives of medical Psychology and medical Sociology. Statistics and Epidemiology objectives are included in course of Statistics. The effects of socioeconomic, demographic and cultural objectives are included in all system courses. e.g. Tuberculosis in Cardiopulmonary course, Liver cirrhosis in Gastrointestinal course. Female circumcision in Genito Urinary course. The curriculum includes an important strategy, the holistic approach when dealing with a health problem affecting the individual or the society. In each learning activity in the curriculum there are objectives of the effects of the social and behavioral sciences on the health problems.

**2. Which of the medical ethics contribute to the medical programme ?**

Throughout the curriculum the student learn about medical ethics particularly in learning activities involving the human being. The main contents includes: integrity of the doctor and his honesty, respect to the patient( culture values, religion), equity ( no discrimination on bases of gender, race, religion social class), care of the patient, confidentiality, medical ethics in specific situations ( research, organ transplant, abortion etc). The behavioural

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sciences, social sciences and medical ethics are included in all learning activities involving human beings. However some courses contribute more e.g Doctor and his Society, Mental Health Family Medicine, FTRRDP

### **3.How does the curriculum provide for contributions of these sciences and disciplines to foster effective communication, clinical decision making and ethical practices?**

These sciences are learnt whenever a learning activity involves human beings. The specific objectives are learnt by appropriate teaching/ learning methods and those objectives are also evaluated by appropriate methods e.g. interviews, clinical examinations, written examinations.

#### Quality development:

### **1.What is the process by which the medical school adapts the curricular contributions of the behavioral sciences , the social sciences and medical ethics to developments in the science, practice and delivery of health care?**

In the programme evaluation the opinions of health care users and providers, are obtained and analyzed. The results are used to develop the science. e.g. the school introduced new objectives of medical ethics and Islamic views in the course Doctor and his society in response to advancement in medical sciences and the community awareness associated with better knowledge of religious bases of scientific facts.

#### **CRITERION E: CLINICAL SCIENCES AND SKILLS:**

#### Basic standard:

- 1. What is the total number of credit hours in the school = 256 .**
- 2. What is the total number of credit hours allotted for clinical sciences = 117**
- 3. What are the specific objectives ( knowledge skills, attitudes) stated to ensure clinical competence on graduation?**
  - Graduate a highly qualified doctor who will be able to :
  - Diagnose and treat the endemic and epidemic diseases and treat health/ medical problems at the level of the individuals , families and community.
  - Solve the health / medical problems through community orientation and problem based approach and play a role in treatment and prevention of diseases.
  - Observe the code of ethics when dealing with patients, colleagues and the community as a whole.
- 4. What are the specific clinical disciplines, and level of involvements in which this experience ( knowledge , skill and attitudes) is to be acquired ?**

The clinical sciences in the curriculum are:  
Medicine, surgery, obst gyn, paediatrics, anaesthesiology, ophthalmology, oto rhino laryngology, dermatology, diagnostic radiology, emergency medicine, family medicine, laboratory medicine, oncology, radiotherapy, psychiatry. Clinical sciences are integrated in all courses in increasing amounts. All courses in the curriculum include clinical sciences objectives amounting to different weights between 30% early in the curriculum to 70% late in the curriculum. In the system courses (cardiopulmonary etc) the relevant clinical sciences are fully integrated with the basic sciences. The clerkship courses ( medicine , surgery, obstetrics and Gynecology, Paediatrics, psychiatry) are mainly clinical. The instructional methods used are bed-side. , teaching, outpatient clinics emergency units, operative theatrs sessions, night duties, ward work an basic skills laboratory. In those courses the students learn knowledge, attitude and clinical skills (history taking, physical examination, procedures and investigations, emergency practice) The students are involved at different levels , observe, participate, perform.
- 5. What are the forms of practice ( inpatient) ambulatory health care, hospital / community, rural / urban, specialist , general in which this experience is to be acquired?**

The students acquire the clinical experience by practicing in all the above mentioned forms.

**5.1.** Wad Medani Teaching Hospitals - the main clinical training sites: Clerkships and system courses.

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- 5.2. Wad Medani Health Centers, ambulatory health care ( PHCCP)
- 5.3. Families ; urban community ( family Medicine course)
- 5.4. Rural Hospitals ( Rural residency courses )

Quality development:

**1. What specific opportunities are there for early and ongoing direct participation in patients care?**

The students are introduced to clinical sciences very early in the curriculum, semester 1, when they take the Man and his Environment course which includes two hospital visits during which oedema is demonstrated. All courses in the curriculum include clinical sciences, the contents increase steadily through the curriculum . In the Primary Health Care Center Practice courses which start at semester 4 the students participate in the patients care . They practice in the health centres under the supervision of the health centre doctor . In the Family Medicine course they practice in the families applying their skills. In the system courses the students attend a lot of clinical activities in the hospital during which they are involved in the patients' care ( observe – participate perform). In the clerkship courses the students are resident in the hospital and their involvement is remarkable; clerking, followup, assisting , taking samples for investigations)

**2. What specific opportunities are there for relevant community experience and for working with other health professionals?**

In each course there is an opportunity for the students to acquire community experience e.g.

- Musculoskeletal course= road traffic accidents seminar
- Blood and blood related problems = interview people in the community about their perception to blood and blood transfusion.
- In all health care units (hospital, HC) the students work with the health professionals.
  
- Man and his Environment course: work in factory to identify the effects of external factors on the internal environment
- Clerkship in obstetrics: Ante-natal clinics in health center
- Clerkship in Paediatrics: implementation of ICMC programme in the health centers and the families.
- In Endocrine and Metabolism course: work at Wad Medani Centre for diabetes mellitus ( community centre)
- In mental health clerkship: work in the traditional healers ( Sheikh)settings.

**CRITERION F: CURRICULUM STRUCTURE, COMPOSITION AND DURATION**

Basic standard:

- 1. For the compulsory elements of the curriculum provide a summary in terms of topic/subjects taught, and length (hours/weeks) by semester/year. Indicate balance between lecture, small group teaching, seminars, laboratory sessions, clerkships etc?**
  
- 2. Provide a brief synopsis of individual topics indicate where health promotion, preventive medicine and alternative /unorthodox medical practice death with**

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**SEMESTER (1)**

Course	No. of week	Credit hrs.
Introduction to Medicine	2	2
Biochemistry	6	5
Man & His Environment	7	5
Zoology & Introduction to Medical Entomology	3	2
Medical Physics	3	3
English	Longitudinal	4
Arabic	Longitudinal	4

**SEMESTER (2)**

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Course	No. of weeks	Credit hrs.
Nutrition & Nutritional Biochemistry	5	4
Introduction to the Study of Disease	8	8
Medical Statistics	2	4
Computer	3	2
English	Longitudinal	4
Arabic	Longitudinal	4
Field Training Research & Rural Development (Part I) Summer Course	4	4

**SEMESTER (3)**

Course	No. of weeks	Credit hrs.
The Doctor and his Community	3	3
Growth & Development	5	6
Problems of the Musculoskeletal System	8	7
English	Longitudinal	4
Islamic Studies	Longitudinal	4
Arabic	Longitudinal	4

**SEMESTER (4)**

Course	No. of weeks	Credit hrs.
Primary Health Care Centre Practice & Family Medicine	Longitudinal	3
Basic Skills	2	3
Pharmacology	3	3
Blood and Blood related problems	5	4
Cardiopulmonary System (Part I)	9	7
English	Longitudinal	4
Arabic	Longitudinal	4
Field Training Research & Rural Development (PartII) summer course	5	4

**SEMESTER (5)**

Course	No. of weeks	Credit hrs.
Primary Health Care Centre Practice & Family Medicine	Longitudinal	3
Cardiopulmonary System (PartII)	9	8
Problems of Endocrine & Metabolism	8	8
English	Longitudinal	2
Islamic Studies	Longitudinal	2

**SEMESTER (6)**

Course	No. of weeks	Credit hrs.
Primary Health Care Centre Practice & Family Medicine	Longitudinal	3
Problems of the Gastrointestinal Tract (Part I)	5	5
Problems of the Gastrointestinal Tract (Part II)	5	8
Endeamic diseases	3	3
English	Longitudinal	2
Field Training Research & Rural Development (Part III) Summer Course	4	5

**SEMESTER (7)**

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Course	No. of weeks	Credit hrs.
Primary Health Care Centre Practice & Family Medicine	Longitudinal	3
Problems of the Genito-urinary System	9	10
Problems of the Nervous System	9	10
Rural Residency	4	8

**SEMESTERS (8,9,10)**

semester	Course name	Course No.	No. of weeks	Credit hrs.	Total Credit hrs in semester
8	Medicine Clerkship	5101	14	18	23-26
	Mental health Clerkship	4075	4	5	
9	Surgical Clerkship	5102	14	17	25-22
	PHC Clerkship	4074	4	5	
10	Obst Gyne Clerkship	5103	9	13	27-24
	Pediatrics Clerkship	5104	9	11	
	Fronsic medicine	4072	Longitudinal	3	

- to the degree structure 5 calender years, 10 semesters+ summar courses (community courses preventive medicine, promotion of health and rehabilitation). The sequence of courses are compulsory to the students and there are no options in the curriculum
  - Health promotion, preventive medicine and rehabilitation contents are
- Included (integrated) in all courses. There are certain community courses which deal mainly with preventive medicine, rehabilitation and promotion of health.
- There is interface with unorthodox medical practice. Students visit community sites where they see psychiatric patients under the care of the religious leader. The religious leader keeps and looks- after a large number of psych. patients. The school Psychiatrist accompany his students and they conduct a clinical round in the presence of the Sheikh. At the end of the visit the psychiatrist, students and the Sheikh discuss all aspects of the patient management. This course is beneficial to all partners: The students see a large number of patients, who are not available to them in the hospital
- The psychiatrist find a good variety of real problems to teach his students on and also manage large numbers of patients in the community.
  - The Sheikh benefits from this; recognition, consultation and support
  - Patients benefit from the sheikhs accommodation and psychiatrist treatment.
- The patient relatives: The sheikh is more acceptable to the relatives than the psychiatry hospital.

Quality development:

**1. What policies guide integration (horizontal/vertical and basic/clinical sciences) of the curriculum?**

Sciences are integrated horizontally (in the course itself) and vertically (sequence of courses is rigid and designed in such a way that most courses have pre-requisite courses. The policies which guide integration are that sciences are integrated around system e.g. Central Nervous system and around clinical problems e.g. jaundice. None of the subjects( biomedical, clinical and community sciences) is learnt in isolation.

**2. What mechanisms exist to ensure that it occurs ?**

Each course has a detailed time- table which include all the learning activities and the school conforms strictly to the time table (tutors, staff coordinators, student coordinator, students, course committee, Dean) . The course committee and the course coordinators are responsible for the implementation of the course and are accountable to the faculty bard and the Dean. Any modifications or changes in the courses are subject to approval of the faculty board

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**CRITERION G: PROGRAMME MANAGEMENT**

Basic standard:

**1. Does the school have an official body (curriculum committee) responsible for the programme management?.**

The official body is the Faculty Board which is formed by All the staff members in addition to other members.

**2. What are the terms of reference of the curriculum committee? Specifically what authority does the committee have to resolve conflicts of educational principles and to determine the contributions of specific disciplines to the medical programme. How are its decisions implemented?**

The curriculum committee (Faculty Board) is fully authorized for planning, implementation and control of the curriculum. The board meets regularly twice/month. It discusses and decides on the progress of all courses; implementation, evaluation, allocation of resources, conflicts. Problems encountered are discussed and solved. The decisions are implemented immediately. Major changes in the curriculum are subject to approval of the faculty Board and University Sennate.

This experience – the faculty board being formed by all staff and acts as the curriculum committee- is unique to the FMUG.

**3. What are the mechanisms and the resources of the curriculum committee for introducing teaching and learning, evaluation and curriculum innovations?**

The Educational Development Centre (EDC) is responsible for all the medical education activities in the school. It provides the school with technical advice and support in all aspects of curriculum development and management. It organizes workshops and courses in medical education for staff development: Also staff and students are awarded short term scholarships to attend courses, workshops and meetings in medical education abroad. The EDC propose, supervises and conducts research to evaluate teaching , learning and evaluation methods used and to test new methods. The school organizes a workshop for curriculum development every 5-10years. In that workshop all the innovative methods are considered and introduced officially in the curriculum. Other stakeholders participate in those workshops. Teaching and evaluation methods are continuously monitored ( students' feedback, tutors feedback and students' results).

**CRITERION H: LINKAGE WITH MEDICAL PRACTICE:**

Basic standard:

**1. What links exist between the basic medical programme and the next stage of training for practice (internship training and specialist training )?**

The training of graduates during the internship period is the responsibility of the Federal Ministry of Health(FMOH) . Doctors are permanently registered in the General Medical council after completion of the internship satisfactory; based on the reports of the specialists who supervise the doctors. There are informal links between the FMOH and the medical school concerning the training in the internship period. The specialist training is the responsibility of the Sudan Medical Specializations Board . The school is fully represented in the Board (Council and specializations councils).

**2. What specific transition programme occur in the final year of the programme?**

There are no transition programmes. However the graduates are fully exposed to the health care delivery system during their basic training; being trained in the existing health units and working with the existing health professionals and hence they are smoothly enrolled in the service.

**3. Are there reciprocal representations between the committees responsible for the basic medical programme and the subsequent phase of education and training?**

There is full partnership between the Faculty of Medicine and the Ministry of Health (institutionalized) and hence the school is represented in all committees, directorates and programmes of MOH and the MOH is fully represented in all institutions of the medical school

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### **4. Does the Faculty board seek feed back from supervisors consultants, community and society about the practice and competencies of its graduates?**

- In the comprehensive programme evaluation the opinion of the supervising consultants during the housemanship is obtained through a formal mechanism.
- Formal feedback about the school graduates is obtained from patients, community leaders and members and Ministry of Health officials,
- All these inputs are used in the curriculum development

## **AREA 3: ASSESSMENT OF STUDENTS**

### **CRITERION A: ASSESSMENT METHODS**

#### Basic standard :

### **1. Define and describe the methods used for assessment of students (methods, balance between formative and summative, number of examinations, balance between oral and clinical examinations, use of OSCE, criteria of passing level)?**

The methods used in student's evaluation include: **MCQs, Essays, OSCE, clinical, attendance and performance, assignments, logbook, practical examinations, reports, supervisory visits and peer evaluation**

- There is no oral examination in the school.
- Formative tests are used in all courses and never included in the summative assessment but is valuable in monitoring the students achievement and programme progress There are 47 courses and each course is evaluated by an end of course examination (47 examinations). Each examination is composed of a number of evaluation tools ranging between (3-5)
- The balance between the written and the practical examination (clinical) depends on the nature objectives of the course (eg weight of clinical exam. in clerkship is 40% and in system courses is 20%)
- The OSCE is used as a total of assessment in (36) courses.
- The minimum pass level is used for passing level at examination (criterion reference- absolute criteria-minimal competence level)

### **2. Describe the student evaluation system in your school?**

The FMUG conforms with the Gezira university evaluation system. It is a cumulative evaluation so that all the student's achievements constitute the student final score, which is expressed in the cumulative Cumulative Grade Points Average (CGPA) that ranges between 2-4. This system depends primarily on the time spent in learning /teaching and hence results in courses are related to the credit hours. The assessment of students is strictly subject to the academic regulation of the university of Gezira

### **3. Are the academic regulations-examination regulations available to staff and Students?**

- ❖ Written Academic regulations are distributed to all staff.
- ❖ They are distributed to all students at the time of registration in semester (I)
- ❖ Discussion of the evaluation system is included in course No 1 (introduction to medicine and study of medicine).

### **4. Describe the mechanism of storage and retrieval of the students results?**

Students results are stored in books , computers and CDs. They are kept in the examination office of the FMUG, office of the Dean of academic affairs of the University of Gezira.

### **5. Who is responsible for the assessment policy?**

The faculty Board and the University Senate

### **6. Describe composition of involved committees and their terms of reference?**

- ❖ Course committee: composed of a number of staff from different disciplines who are involved in the course. They are responsible for setting the examinations and preparing the results.
- ❖ Examination office: composed of the Examination officer and secretaries. It is responsible for the management and control of examinations and their results.
- ❖ Faculty Board : composed of all faculty staff. It is responsible for discussion of results and approval of results

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- ❖ University studies Senate subcommittee :
- ❖ Composed of a number of senate members and is responsible for revising and approval of results
- ❖ Senate : Final approval of results

### Quality development :

#### **1. How dose the medical school monitor the reliability and validity of assessments?**

The school adopts a mechanism to ensure reliability and validity of examinations ; all examinations are set and scored by a group of teachers (minimum 5 ). That ensures content validity, construction validity and reliability. The whole examination is sometimes discussed in the Faculty Boards if the results are odd. Discrimination index and Difficulty Index are not currently used .

#### **2.How are new assessment methods researched, tested and introduced ?**

New assessment methods are tested and evaluated through formal studies. Assessment of students in the community learning activities is a new method which has been designed , tested and evaluated in the Faculty of Medicine through extensive operational studies. Those methods were published as original work from the school and were further adopted by other medical schools.The EDC coordinates the studies conducted on the evaluation of the evaluation methods and instructional methods.

#### **3.How are internal assessments validated against external standards?.**

External examiners participate in all the clerkships examinations and they validate the internal assessments.The external examiners of each clerkship must include a representative of the General Medical Council which is an authorized body to validate assessments.

### **CRITERION B : RELATION BETWEEN ASSESSMENT AND LEARNING**

#### Basic standard:

##### **1. Does the school have a clear criteria for selection of assessment tools?**

The school has clear criteria for selection of assessment tools: Validity, Reliability and feasibility. The examination is set and scored by a group of examiners to ensure that it is valid, reliable and feasible.

Validity: (i). Assessment tools are selected according to the type of learning objectives:Concepts and theories are evaluated by written examinations.Clinical skills and attitudes are evaluated by clinical observational examinations. Laboratory work is evaluated by practical examinations. Field work is evaluated by supervisory visits and reports.( ii). The examination covers all areas of the course (contents) content validity. (iii) Construction validity: The questions are constructed according to sound educational principles .

Reliability: (i) More than one examiner (ii) Use reliable tests like MCQs and OSCE

(iii)Long essays are not used (iv) Oral examination is not used (v) Check lists are used in clinical examinations, supervisory field visits.

Feasibility: OSCE exam improves feasibility ; students could be examined on, videos, charts, photos. when patients' conditions do not permit clinical examination e.g. abortion, acute appendicitis, coma.

#### Quality development:

##### **1. What is the school mechanism that ensures integrating assessment and avoiding curriculum overload?**

- The FMUG adopting a block integrated system in which the students are assessed in all objectives (basic +clinical) in integrated examination.
- e.g: In Cardiopulmonary course the students are assessed in the physiology of the Cardio Vascular System (CVS) and that is not repeated in the subsequent courses

## **AREA (4) STUDENTS**

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### Basic standard:

#### **1. Does the school have a written recruitment and admission policy? Describe the document ?**

The school has a written recruitment and admission policy. The policy is part of the University written academic regulations.

- Admission is national (central admission office) in the Federal Ministry of Higher Education.
- The admission depends on: the student choices and competition according to their achievements in the Sudan School Certificate Examination which includes a minimum of 7 Subjects (Arabic, English, Religion, Mathematics, Physics, Chemistry, Biology) which the student takes in the examination. The results are expressed as a percentage of all the subjects e.g. 80%, 90%. The FMUG ranks high on the order of students' choices and hence the minimum level admitted is 90%.
- The admission is the responsibility of the central admission office only and the university and faculty of medicine are never allowed to admit students in semester (1)
- Gender has no role in the admission
- The admission criteria of FMUG are ...

### Quality development:-

#### **1. Does the school have additional criteria for admission?**

- The school requirements for admission include medical fitness and passing an interview that identifies major handicaps-blindness, deafness, paralysis) Additional criteria (capability of students to become doctors suitability for covering the variations in competencies related to diversity of medicine) are generally overviewed during the interview. In extremely rare conditions the student might be rejected by the interview.

### **CRITERIONS B: METHODS OF SELECTION**

#### Basic standard:-

#### **1. Are the methods and rationale of students selection clearly stated?**

The Central admission office publishes a book of admission guidelines every year and it is issued for all applicants at the time of applying for university. The book includes all the requirements for admission for all national universities.

### **CRITERION C STUDENT INTAKE:**

#### Basic standard:

#### **1. Do you have a defined size of students intake?**

250 per batch

#### **2. Is this number of students related to the capacity of the school at all stages?**

Experience has shown that this number (250) is related to the capacity of the school. The available resources proved to be enough to help the students achieve the curriculum objectives.

### Quality development:

#### **1. Is the student intake reviewed periodically in consultation of the Ministry of Health, Ministry of Higher Education and the Community?**

Each year the university reviews the students intake in all the University Faculties and defines its intake according

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to its resources. The intake is discussed and approved by the National Council of Higher Education which includes all national universities, members of MOH and community representations.

### **CRITERION D : STUDENT SUPPORT AND COUNSELING .**

#### Basic standard:

#### **1. What counseling services are available in the medical school ?**

- The academic advisory system which is an integral part of the evaluation system of the University of Gezira is adopted. All students are distributed among the faculty staff. Each staff acts as an academic advisor for a group of students; 15-20 students from different batches.
- The academic advisor observes , monitors and discusses the academic status of individual students. Then he offers them the appropriate academic advice. The advice of the academic advisor is considered by the school as a requirement when deciding about that student (registration, transfer to the next class or dismissal from university).

#### Quality development:

#### **1.What other student support programmes are available through the medical school?**

The university has a deanship of students affairs that caters for all students' needs; psychological, social, personal and financial needs. It supports students' organizations and activities.

#### **2.What additional support programme , provided by other organizations, can the students access?**

The National Student's Support Fund , a governmental body helps the students in accommodation, feeding and health care.

#### Quality development:

#### **1. What mechanisms exist to identify students in need of pastoral , psychological , social and/or academic support ?**

That is done mainly by the student's academic advisor . Sometimes the student who needs support is identified when the examinations results are discussed ; sudden drop in his/her standard .

### **CRITERION E : STUDENT REPRESENTATION**

#### Basic standard:

#### **1. Are the students represented in the design, management and evaluation of the curriculum?**

- Students are represented in all activities of curriculum development (meetings, workshops, seminars reviews and programme evaluation) .
- Students are represented in the course committees and they act as coordinators for courses (students coordinators) to help the course coordinators (staff).
- Students were represented in the faculty board (full members) in the first years of school establishment, but that was cancelled after the 4 th year. The representation of the students during the establishment of the school was of immense benefit to the school especially the innovative programme was at its very early stages all over the world and it was strongly resisted by all the medical profession, teachers and students,

#### **2. Does the school encourage student organizations?**

There are 4 main students organizations in the FMUG : **University Students Union, Medical Students Association, Students Network Organization (SNO), Medical Students Academic society.**

- ❖ The school recognizes these associations and organizations. It supports all their activities and participates in them. The school provides technical and financial support. All the Network conferences were attended by students who were sponsored by the school . The school supports the students workshops, caravans and other activities .
- ❖ These organizations made a lot of success nationally and internationally. In the Sudan they

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participated effectively in all students activities in the community. Their contributions in community studies and developments and containment of disasters were witnessed by the whole country. They have influential contribution in the international organizations and that is recognized by electing them in the executive offices of those organizations; two students Imam Hassan and El Fayad Sid Ahmed were elected chairmen of the Students' Network Organization.

## **ARIA 5 ACADEMIC STAFF/FACULTY**

### **CRITERION A RECRUITMENT POLICY**

#### Basic standard:

#### **1. Does the School have a staff recruitment policy? (Describe)**

- The school has a clear recruitment policy which conforms to the recruitment policy of the university (one policy) . That policy satisfies the needs of all departments and ensures replacement of staff; retirement, or any other cause.
- The policy includes recruitment of all staff; professor, associate professor, assistant professor ,lecturer and teaching assistant.
- Posts are advertised in public media .The minimum standard for recruitment of staff is a Bachelor degree from a recognized school plus Master/PhD/MD. The undergraduate transcript must be free of failures and with a minimum of a merit in the subject to which he applies. The admission is subject to the approval of the department, faculty board, Dean of academic affairs, the Vice Chancellor and the Ministry of Higher Education.

#### **2. What is the number of permanent staff and the number of par time staff ?**

- Number of permanent staff = **78**
- Number of par time staff = **16**
- Number of non- medical staff = **11**
- The selection of par time staff depends on his/her qualifications which should be similar to that of the permanent staff (eg MD)

The permanent staff includes; surgery 12, medicine 12, obst gyn 8, dermatology 4, pathology 5, community 8, paediatrics 6, psychiatry 3, psychology 4, biochemistry 8, anatomy 8.

The partime staff includes; obst gyne 2, medicine 3, orthopaedics 1, dermatology 1, pharmacology 2, physics 1, statistics 2, Arabic 1, Islamic studies 1, English 2.

### **CRITERION B : STAFF POLICY AND DEVELOPMENT**

#### Basic standard:

#### **1. Does the medical school have a staffing policy which addresses the balance between teaching, research and service?**

There is no clear policy which defines the balance between teaching research and service. All staff are involved in teaching, service and research.

#### **2. Does the school have policy for promotion (describe)?**

The promotion is based on the duration of service, teaching and research. This is the University policy for promotion. It is a detailed written policy. The promotion committee is chaired by the Vice chancellor. The University policy of promotion emphasizes both teaching and research. It also considers the duration of service and the administrative responsibilities All academic staff of the university are promoted by the same standard set by the university policy of promotion. The details of the policy are made available to all academic staff members in the university.

#### Quality development:

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### **1. Does the staffing policy include teacher training, teacher/student ratio and teacher representation in relevant bodies?**

- The school sponsors long term and short term/scholarships for teachers in their specialties and in medical education, inside the country and abroad.
- The teachers attend regular courses, in medical education in the EDC,
- The teachers travel to attend conferences and scientific meetings sponsored by the school.
- Teachers are accountable for the head of department and the dean.
- The teacher/ student ratio: this is not clear in the school.
- Almost all the teachers are represented in National and International relevant bodies eg: General Medical Council, Board of Medical specializations, Ministry of Health Advisory council, All national health programmes, Arab Board for Medical specializations, Network of community oriented medical schools, Association of Arab Medical schools etc).

## **AREA (6) : EDUCATIONAL RESOURCES**

### **CRITERION A: PHYSICAL FACILITIES**

#### Basic standard:

#### **1. Describe the faculty physical facilities? Physical facilities?**

1. Faculty of Medicine Main Building " Sphinx" four stories building Total area =  $18 \times 75 = 1350$  m<sup>2</sup>. This main building includes: Dean office, Deputy Dean's Office , Registrar Office, Supportive staff offices, examination office, departments ( anatomy, physiology, biochemistry, obst and gyn, psychiatry, surgery , medicine, paediatrics, community medicine, dermatology, post graduate studies), six lecture halls.
2. Faculty of Medicine Library , internet library , professor Mubark Magzoub's Hall.
3. Basic Skills Laboratory.
4. Education Development and Research Centre (EDC)
5. Medical laboratory ; 3 stories building , Total area 384m , Includes : Bacteriology lab , haematology lab , chemical pathology lab , histopathology lab , parasitology lab
6. mortuary area = 270m<sup>2</sup>
7. Institution of Nuclear Medicine and Molecular Biology
8. University Clinic : area = 180 m<sup>2</sup>
9. Primary Health Care Centre
10. 4 cafteria
11. Post office
12. Play grounds

#### Quality development :

#### **1. How does the medical school review the adequacy of the educational resources?**

The medical school reviews the adequacy of resources regularly. Information about the adequacy of resources is obtained from the staff feedback, the students ' feedback and supporting staff feedback. The school has full authority to direct resources to respond to deficiencies. The resources are extensively reviewed in the comprehensive programme evaluation of the school and major changes were made e.g. building and new library.

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**CRITERION B :CLINICAL TRAINING RESOURCES**

Basic standard:

**1. Describe the clinical facilities offered by your school for clinical training?**

Students of FMUG are trained at levels of health care institutions. Those facilities include: Wad Medani Teaching Hospital 600 beds, Wad Medani Pediatrics teaching hospital 170 beds, Wad Medani Obs /Gyn teaching hospital 193 beds, Wad Medani Psychiatry teaching hospital 30 beds, A/Saim Eye Hospital 38 beds, Renal Teaching hospital 29 beds, Radiotherapy Teaching hospital 34 beds, Dermatology Teaching hospital 60 beds, Nuclear Medicine and Molecular Biology Institute, the medical laboratory, Community Psychiatric Training Sites, Wad El Obeid- Shikaniba – Tayba, all health centers in Wad Medani Town 22 , all rural hospital in Gezira State 52 ,all Villages in Gezira State- 15 /batch, all Families in Wad Medani -200/batch.

**Wad Medani Teaching hospital**

This is a tertiary hospital that serves the whole Gezira State and nearby states It is the main teaching hospital . It includes the following departments: Medicine, Surgery, ENT Orthopedics , Radiology, Blood Bank, ICU, CCU, 5 referred clinics, Medical Emergency Department, Surgical Emergency Department, Laboratory, Pharmacy,3 operative theatres.

**Wad Medani Obs/ Gyn teaching hospital**

This is a hospital with a wide encatchment area covering the whole Gezira State and nearby states. There are wards for antenatal problems, postnatal, labour ward, gynaecology, bleeding in early pregnancy, private wards, I.CU. and a special ward for pre clampsia. There are two labour rooms. The total number of deliveries is about (4000) per year. There is an operative theatre.4 rooms for major and 2 rooms for minor surgery.

**Wad Medani Paediatrics Teaching Hospital**

It has 170 beds. It is composed of general paediatric wards, a department of paediatric surgery with two theatres, an emergency paediatrics department, outpatients' clinics, a blood bank,a laboratory, a pharmacy and a large neonatal care unit. The clinical training sits in Wad Medani Hopital have 1154 beds, 6 out-patient clinics, 43 referred clinics, 10 operative theaters.

Quality development:

**1. In what way are these clinical training facilities adjusted to ensure adequate clinical training?**

Students are divided into (3) groups for the clinical training in the clerkship courses (in which the clinical load is high). Each group will take a different course (eg medicine, surgery obstetric and gynaecology, pediatrics and psychiatry). The Faculty of Medicine contributed in the development and upgrading of all Wad Medani Hospitals in an attempt to provide excellent clinical training sites. It contributed in foundation of: Renal Hospital, Radiotherapy Hospital laparoscopic surgery unit, Institute of Nuclear Medicine, I.C.U., C.C.U., neonatal care unit, innovation of the pediatrics casualty and a colposcopy unit. In collaboration with the Ministry of Health and the Medical Insurance Corporation a lot of improvements have been introduced in all health centers in Wad Medani town

**2. Does the clinical training consider the skill laboratory ?**

The school has got a skill laboratory, which functionally has existed since the, establishment of the school. In 1993 it was founded (laboratory +equipments.) .It consists of two large rooms one for males and one for females. It includes models of resuscitation, ECG, ETC diagnostic sets etc. The students learn the basic skills when they take the Basic Skills course and they learn other skills included in other courses.

**3. Does the school evaluate these affiliated institutes?**

The students are trained in the existing health facilities and it does not have a university hospital. This strategy ensures that the training is relevant to the community health problems and the community health services. The majority of the specialists in these hospitals are in fact academic staff members of FMUG, and also the chief administrators of all Wad Medani Hospitals are academic staff. This enables the school to introduce

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developments to suit the training of its students. In that way the hospitals are continuously evaluated. There is no periodic formal evaluation for the purpose of recognition.

**CRITERION C: INFORMATION TECHNOLOGY**

Basic standard:

**1. What policy does the medical school have for the use of information and communication technology in its teaching programme?**

The school has a clear policy for the use of information technology which includes : Information technology facilities (computers, network, internet) are available in all the school sites (departments, laboratories , libraries , PHC,EDC), all staff and students have access to the information technology. An electronic library has been established. The school organizes training courses for staff in the use of information technology. A course in computer has been introduced in the undergraduate curriculum. In all courses students are referred to information technology to obtain the required information. The School is planning to introduce information technology in curriculum delivery in the near future.

**2. What committee or body is responsible for formulating the medical school's policy on information and communication technology?**

There is no formal committee for that purpose. There is an information technology center for the whole university and the school in part of that center.

**3. Are there additional or governmental policies ?**

The computer course is a university requirement. The government generally encourage the use of information technology.

**4. What authority does the medical school have to direct resources to the use of information technology?**

The school has full authority to direct sources It founded the electronic library and established the information technology network. The faculty web site is under establishment .

Quality development:

**1. How is the medical school enhancing delivery of the curriculum by the use of information technology?**

This is at its early stages, the plan is to use the computer in the delivery of a small percentage of the curriculum because the nature of the majority of objectives could only has learnt on patients, in the community and in laboratories. The computer is not an effective method of learning clinical, laboratory or community competencies.

**2. To what extent are information and communication technologies used by teachers and students for self learning, accessing information, managing patients and working in health care system?**

Both teachers and students use information technology in self learning. In managing patients its use is limited, only used by teachers to obtain information to help solving the patient problems .In health care system it is used in storing and analyzing health care information (diseases, resources , mortalities ). Computer aided learning is not suitable for acquiring competencies; clinical, community or laboratory, those cometencies could only be learnt in real life situations.

**CRITERION D :RESEARCH**

Basic standard:

**1. Provide a brief description of the research facilities and research programmes of the school?**

The school has the following research facilities:a committee of postgraduate studies and scientific research, a research committee which coordinates staff research, adequate laboratory facilities for biomedical research

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(Biochemistry ,Physiology, Pathology ,Parasitology, Nuclear medicine and Molecular Biology), adequate facilities for clinical research (hospitals, health centers, Blue Nile Institute for training and Research), access to research facilities in other university faculties, enough teachers who have vast experience in research and can supervise researchers. The EDC organizes a course of Research Methodology and scientific writing every year. The University and the Ministry of Higher Education budget include funds for the majority of research projects in the school. The school has strong linkages with many national and international research institutions and these can either participate in the research or sponsor it (WHO, UNICEF ,UNFPA, etc). The school founded a peer-reviewed Journal (Gezira Journal of Health Sciences )to improve and support research work. The main research programmes include:Research in biomedical sciences, tropical diseases, genetics in relation to tropical diseases, Cancer, community medicine, nutrition, Prevention of blindness, evaluation of health care programmes, Medical education..

### Quality development:

#### **1. What mechanism exists to ensure that research activities are reflected in the curriculum and teaching ?**

- In course Field Training Research and Rural Development Programme (FTRRD), which runs through three semesters (12 weeks) the students learn about the research methodology , conduct research , apply the principles of research , evaluate the research project and learn about scientific writing. Phase I :- they learn about the principles of research methodology, prepare instruments for data collection, design a sample and calculate the sample size, learn about the statistical analysis and the use of tests of significance, collect the data , analyze it scientifically and then identify the main problems and prioritize them, select a priority problem and prepare proposals for solving that problem. In phase II : they implement the project. In phase III: they evaluate the study project and write a scientific report about that project.
- Statistics course includes objectives in the principles of statistics and the types of scientific studies and research methods.
- In computer course the students learn how to operate the computer and use it in data analysis.

#### **2. Are there any initiatives at the medical school to engage students in medical research?**

The students are frequently engaged as investigators in staff research in the community during the field work e.g evaluation of community health programmes (National TB control programmes). The students are sometimes engaged in clinical research .

### **CRITERION E : MEDICAL EDUCATION EXPERTISE**

#### Basic standard:

#### **1. Does the school have a policy of teaching methodology (explain)?**

The school has a well-defined policy in medical education. Academic staff have started learning about medical education since the first day of establishment of the school (in 1978) when they started the design and development of the curriculum. Staff development in medical education has always been an important strategy in the FMUG. The school uses many ways to help the staff learn about medical education and the following are examples: (i) EDC the (educational development centre) has been established at the start of school establishment. At that time the Dean was the only member with a qualification in medical education. The centre organized a large number of workshops seminars, courses in medical education regularly and during those courses all staff had training in medical education. Overtime the EDC developed and it has been designated as a WHO collaborative centre for its excellence in medical education. (ii) The EDC contributed to the medical education and innovative curriculum development in all medical schools in the Sudan. The majority of the national medical schools' staff had training in medical education in the EDC. (iii)The curriculum of the school is based on innovative scientific principles, and hence the staff learn and apply those principles of medical education during the implementation of the curriculum.The staff knowledge and skills in medical education are continuously reinforced by the practical application of the educational principles in the management of the curriculum. (iv) The staff meet regularly (twice/month) and exchange opinions about the implementation and evaluation of the curriculum . (v) About 15 of the academic staff benefited from a 3 month WHO scholarship in

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attending a medical education course in Chicago USA and those members contributed to the upgrading of the teaching/ evaluation methods in the curriculum. (vi) A large number of the staff attended educational workshops regionally and internationally eg. Egypt, Netherlands, Great Britain, Chicago USA (vii) All the network TUFH meetings are regularly attended by academic staff who participated by presentations related to curriculum.

### **2. How does the school ensure that the instructional and evaluation methods are effective?**

The school selects methods which have been tested and proved to be effective; small group teaching, bedside teaching MCQs, OSCE etc. The methods are selected based on their validity and reliability and feasibility. Many studies are conducted to evaluate the effectiveness of the instructional and evaluation methods. The methods are also evaluated continuously by the students and staff feedback.

### Quality development:

#### **1. Has your school access to experts in teacher development or medical education units (if you have used such experts in staff development give evidence?)**

The following is a list of educational experts who contributed in the development of medical education in the school: (i) Dr. Sagid Chicago USA. Participated in the training of staff in Chicago-a three months course in medical education sponsored by WHO. He helped them write some courses e.g. Basic Skills, Clerkship in Medicine, Surgery, Obst and Gyn, Paediatrics. (ii) Perick L. He contributed in the development of the Health education diploma curriculum and the Health education center.. (iii) Hank Schmille-Netherlands: He organized a community based education workshop. He supervised Prof Mohy El Din in his Phd. He helped him in designing methods of evaluation of students in community sites. (iv) Susan Nadlar and Gorosh from Colombia: University USA. They contributed in the foundation of the PHC center and the courses offered by the center (PHC for medical officers, Health area policy; PHC clerkship course). (v) M. Seedfelt : He worked as a WHO consultant for the comprehensive evaluation programme of the school. (vi) Gillbert JJ: Participated in the COME workshop. (vii) Professor Ismat Izzat and Professor Zohair Nouman Ismailia Egypt : Participated in workshops of curriculum development. (viii) Professor. Sultan Farougi – Pakistan College of Physicians and Surgeons. (ix) Susirith Mendis, Dean Faculty of Medicine University of Ruhuma, Galle, Sri Lanka. He conducted evaluation of the school in response to assignment from the Network organization. Based on that report the school was recognized by the Network.

### **CRITERION F: EXCHANGE WITH OTHER EDUCATION INSTITUTIONS**

#### Basic standard:

##### **1. Does the school have a policy for collaboration with other educational institutions? Describe**

The school has strong linkages with all the medical schools in the Sudan. All the medical schools have benefited from the Gezira experience in innovative community oriented medical education. Many of the new medical schools adopted the Gezira curriculum and the rest adopted it partially. In fact the Gezira medical school influenced all medical schools in the country.

- The school contributed significantly in the curriculum development of many schools and in the modification of other curricula. The influence was achieved through workshops, meetings, visits, external examiners etc. A large number of the academic staff of new medical schools had formal training in medical education in the EDC. At the present time the communications between the Gezira schools and other medical schools is good. The staff of Gezira school are continuously participating in the teaching and assessment of students in all national medical schools.
- The school has collaboration with other regional and international medical schools: Faculty of Medicine Suez Canal University Egypt. Gonium Center For Renal Diseases, Egypt. Mc Master school of medicine, Canada. Columbia University, New York USA. Faculty of Medicine and Applied Sciences in Yamen ( adopted the Gezira curriculum. All the teaching and evaluation in the first 6 years was done entirely by Gezira staff ). EDC Chicago USA. Dundee Educational Center UK. The EDC is a WHO Collaborative Center in medical education. It collaborates with the other EDC; in the EMRO region (Tahran- Behrain, Ismaelia, Kratchi, Jorjoan). Mastich Netherlands. Network. Arab Board for Medical Specializations.
- The Gezira school has a well defined Partnership with the Ministry of Health. The Partnership includes all the schools and institutions of para-medical training (nurses, medical assistants, village midwife, health visitor, staff

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- nurse midwife, medical assistant theatre attendants). The school founded the curriculum of the Faculty of Applied Medical Sciences in the University which includes: Nursing, Anaesthesiology and Medical Psychology.
- The school reviewed all the curricula of all the pre-medical schools and the final curricula are now adopted by the State and Federal Ministry of Health. The academic staff participates in the planning and evaluation and in the teaching.
  - The school has strong relations with all the health departments in the MOH e. Reproductive health, IMG, TB, polio etc.

### Quality development:

#### **1.Does the school provide resources to facilitate regional and international exchange of academic staff ?**

The school provides resources for all medical schools and health professionals schools, Sudan Medical Specializations Board and the National Arabization Center. Academic staff from all departments are members in the Arab Board of Medical specializations . They participate in the training, curriculum. Development and examinations. Academic staff participate in the final examinations of the college of Physicians and Surgeons of Pakistan. Some of the staff were short term consultants for WHO for evaluation of Yemen medical schools.

## **AREA 7 :MONITORING AND EVALUATION OF PROGRAMME AND COURSES**

### **CRITERION A: MECHANISMS FOR PROGRAMME EVALUATION**

#### Basic standard:

#### **1. Does the school have a mechanism for programme evaluation? (Describe)**

This is a well defined mechanism which includes a mechanism of continuous monitoring and periodic evaluation. The programme is continuously monitored by students feedback, staff feedback, progress of students (examinations results),examiners' reports and external examiners' reports. The Faculty Board (all staff members) meets 2-3 times per month. The meeting is primarily devoted for the monitoring of the curriculum; examinations results, students feedback, staff feedback. All the problems encountered during the courses and their examinations are raised, discussed and immediate solutions are made. Academic problems of students are discussed and solutions suggested. All problems facing the staff are discussed. The Faculty Board also discusses programmes for curriculum development e.g. workshops and meetings. The programme is evaluated regularly through comprehensive programme evaluation every 10 years. There is no independent body for programme evaluation.

#### **2.Are basic data about the medical programme available (data obtained through monitoring of the programme and student progress)? What evaluation data are being collected?**

The following data about programme evaluation is collected and is available in the school..

- (i) Students: complete data about the selection of students (national students and foreign students), students' intake and the students' background (Sudan School Certificate, Arab certificate, other certificates and private students). Accurate data about the currently registered students.
- (ii) Political commitment and community support: Enough data about the Ministry of Higher Education policy, University of Gezira regulations and bylaws, community support (State government and non-governmental organizations).
- (iii) Curriculum: Comprehensive and detailed documents about the curriculum in writing compiled in books; detailed description of all the 47 courses (justifications, general objectives, specific objectives, instructional methods, resources, methods of evaluation, references and detailed timetables).
- (iv)Resources: strategies, man power (staff and supportive staff), resources ( physical facilities, equipments), training sites (biomedical sciences, clinical sciences and community sciences ), financing,.
- (v) Partnership- a written document stating clearly the relationship between the medical school, MOH and community.
- (vi)Research: all the research of staff, postgraduate students and undergraduate students in biomedical sciences, clinical sciences, social sciences and health system (published or ongoing).
- (vii)Graduates: results of examinations, number of graduates, number of dropouts, performance of graduates in internship and specializations, career choice.
- (viii) Health system development: Data about the number of staff contributing in provision of health care delivery in all specialties.
- (ix) Results and recommendations of Faculty Board meetings,

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curriculum development workshops and comprehensive evaluation programmes concerning the inputs, process and outcomes

### **3. What are the main content areas of the mechanism of programme evaluation?**

Main contents areas are; the school objectives general and specific, the instructional methods used, the main strategies adopted, the plan of work, the resources, the teachers, the references, the evaluation methods used, the graduates, the research.

### **4. Is there a group that independently monitors and evaluate the programme**

The Faculty Board monitors the programme continuously, The periodic evaluation is conducted by a Programme Evaluation Committee formed by the Faculty Board and includes the majority of the staff. The EDC coordinates the work of the committee.

#### Quality development:

### **1. Have the school conducted a formal evaluation of the programme?**

The curriculum was reviewed and updated four times and all the input and feedback data was used to update it. (Barakat, Research Center Hall, Imperial Hotel, PHC Hall). Comprehensive programme Evaluation was conducted by the school staff with the help of a WHO consultant; M. Seed felt. The final report was submitted to the Dean. The programme evaluation addressed the following areas: mission and objectives, the curriculum, assessment of students, academic staff. Resources, impact of COME curriculum –FMUG on (students, graduates and health services ) , attitude of staff towards the Gezira curriculum,. attitude of community and village leaders towards the Gezira medical school programme, influence of the Gezira programme on other medical and health sciences schools. All those areas were evaluated by formal scientific studies which were published.

## **CRITERION B: TEACHER AND STUDENT FEEDBACK**

#### Basic standard:

### **1. Are the teachers and students opinions sought systematically ?**

At the end of each course the opinion of students is obtained through an structured feedback questionnaire which comprises information about ; the objectives of the course, instructional methods used ,organization, duration of course , the teachers who participated in the course, the instructional language and the problems and constraints. The questionnaire is normally administered at the beginning of the written examinations. The responses are analysed using SPSS .The results are included in the examinations' report and discussed with the results. Opinoinaire of the students is usually sought once or twice during the course. The student coordinator reports any problems facing the class to the staff coordinator. The opinion of the teachers participating in the course is obtained verbally and reported by the course coordinator. The opinion of the external examiners is also reported.. The feedback from students and staff is presented with the end of course examination result and is discussed thoroughly and appropriate descions are made and implemented.

#### Quality development:

### **1. Are the teachers and students involved in the programme evaluation ?**

All the programme evaluation activities were conducted by the school teachers and students entirely ;the WHO consultant provided technical support only. The programme has NEVER been assessed by external assessors, The students participated officially in all the programme evaluation activities. The students organizations ( SNO, Scientific society and the students association) organized many workshops and meetings addressing the programme evaluation and they suggested a lot of solutions for problems.

## **CRITERION C: STUDENT PERFORMANCE**

#### Basic standard:

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### **1. What statistical data on student performance is collected and analyzed and how are they used in relation to the curriculum and the mission and objectives of the medical school?**

The main statistical data on student performance are the examinations results; end of course examination result, and end of semester examinations results (results of all courses in the semester converted into Grade Points Average GPA) and cumulative result of the students in all semesters (Cumulative Grade Points Average CGPA). These data reflect clearly the student performance and the class performance; improve, static or deteriorate. Another statistical data is the student attendance in the learning activities. The majority of the students stay for 10 semesters, pass all the courses, obtain a CGPA of 2 or more at graduation and they take the courses in the same sequence in the curriculum. Few students stumble and those are scrutinized and analyzed carefully by the academic advisors and Faculty Board and they are helped by special tuition. During the last 10 years none of the students was dismissed or dropped out voluntarily. Generally the performance of the students in all courses is similar. The performance of the students is the most important indicator about the course objectives, implementation and evaluation. It is used by the Faculty Board as the main parameter for the evaluation of the curriculum management.

#### Quality development:

### **1. What student parameters are monitored in relation to performance during the course and how is this feedback into student selection, curriculum planning and student counseling?**

Physical attendance: this is closely observed and there is a well defined system of registering the attendance of each student in each learning activity. A student who fails to attend 75% of all the learning activities in the course is not allowed to sit for the end of course examination and is graded failure and is required to repeat the course (academic regulations of the University). Performance and contribution in the learning activities: this is monitored by the tutors (rather subjective). Assignments, Diagnostic tests: results are not included in the summative evaluation. The attendance, performance and assignments are included in the summative assessment of students; weight =10% of each course. Monitoring of student performance is used in student counseling and curriculum planning but it is not used in students selection.

### **2. Are the results of student performance analysed against his background entrance qualifications?**

The entrance qualifications of the majority of the students are similar ranging between 91% to 90%. Experience showed that the entrance qualifications are suitable and relevant to the curriculum because the majority of students could attain the school objectives during 10 semesters. Since there are no variations in the entrance qualification (91-90%), they cannot be used as parameters affecting the student performance. There are ongoing formal studies to evaluate the results of students admitted with entrance qualifications other than the Sudan school certificate e.g. Arab certificate foreign, private students. Generally the performance of those students is less than the majority of students with the Sudan school certificate.

## **CRITERION E: INVOLVEMENT OF STAKEHOLDERS**

#### Basic standard:

### **1. How are the principal stakeholders within the medical school involved in programme evaluation?**

The principal stakeholders are fully involved in programme evolution; feedback about the programme and participating in programme evaluation as investigators and researchers. The Dean, staff and students are continuously involved at all stages of the evaluation programme. Representatives from the University, Ministry of Health, Sudan General Medical Council and community are involved by participating in the programme evaluation committee and curriculum development workshops and meetings.

#### Quality development:

### **1. To what extent is a wider range of stakeholders involved in the evaluation and development of the programme**

Representatives of National Board of Medical Specializations, WHO, national faculties of medicine, medical educational expertise, participate in the programme evaluation.

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**CRITERION D : FEEDBACK OF EVALUATION INFORMATION**

Basic standard:

**1. Is there a mechanism to convey and process information from programme evaluation for purpose of curriculum development?**

The feedback from students, teachers, examiners and coordinators is reported to the Faculty Board together with the end of course exam result and discussed. Many problems are solved and certain modifications are made. Such solutions and modifications are related to the constraints e.g. : transport, absence of a tutor, lack of references etc. Comments and suggestions about the course objectives are deferred to the periodic curriculum development workshop. A lot of development have been introduced in response to the feedback and programme evaluations: The following are examples of changes and modifications introduced in response to the recommendations of the programme evaluation : Deletion of end of semester examinations, deletion of final examination,. introducing new courses ( computer, physics, pharmacology), combination of Cardiovascular and Respiratory courses in one course cardiopulmonary, division of Gastrointestinal tract course in part I and part II, arabization of the curriculum, introducing health management in PHC courses, evolution of new methods of evaluations used in assessment of students in community courses, distribution of students in Rural Residence course among rural hospitals in Gezira State only, introducing the Objective Structured Clinical Examination (OSCE) examination in most of the courses, .substituting the long essay question by the Modified Essay Question (MEQ) and Structured Short answer Question (SSAQ), adding new objectives e.g. AIDS, Molecular biology, IMCI, IVF, upgrading the clinical training sites in Wad Medani, upgrading the biomedical sciences laboratories, development of the basic skills laboratory by introducing modern educational materials, increasing the number of academic staff and supportive staff, foundation of a new library and an electronic library.

**AREA 8 GOVERNANCE AND ADMINISTRATION**

**CRITERION A: GOVERNANCE**

Basic standard:

**1.Describe the governance structure, its components and their functions?**

The structure includes ; The Dean, The Deputy Dean , The Faculty Board , The Departments , The Registrar , The Examination Office, the Administrative Officer , The Library , The Educational Development Centre, The Primary Health Care Centre , The University Studies committee , The Research Committee , The Course committee, the Programme Evaluation Committee, the Postgraduate Studies Committee, Academic advisors. **The Dean** : Responsible for all the academic and administrative affairs. **The Deputy Dean** : Acts as Dean in the absence of the Dean. Responsible for the financial management. **Faculty Board** : the composition and functions of the faculty Board are unique. It is composed of All academic staff in addition to representatives of the University , Ministry of Health and the General Medical Council. It is fully responsible for the medical programme management, academic advisory system , other academic activities organized by staff or students (workshops – meetings – seminars – lectures – scholarships – exchange programmes research). It is responsible of all the committees and centers. The faculty Board shoulders the thrust of all the school governance. **Departments** : Medicine , Surgery , Obstetrics and Gynecology Pediatrics , pathology , community Medicine , Anatomy , Physiology , Biochemistry , Psychiatry. Each department is composed of all the staff in the discipline. They are responsible for the development , implementation and evaluation of courses. The department participates in the health care delivery system. The department conducts research , individuals or groups. The burden of teaching is mainly shouldered by the Department. **The Registrar:** He is the reporters of the Faculty Board and is responsible for the management of the curriculum – (course time-table , examinations, results of examinations, students' registration, students' transfer). **The Examination officer:** An academic staff responsible for the examinations management and their results. **The administrative office:** Management of the supportive staff and all logistics in the school (transport, lecture halls , stationary etc). **The Library:** Books , periodicals , electronic. Keep the library , update references and help students to use the library. **The EDC :**The centre is responsible for development of medical education in the school. **The PHC :** Responsible for training medicals and para-medicals in PHC, community medicine and

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health education. **The University Studies Committee:** Standing committee which revise the students results and present them to the University studies

committee of the University , a Sennate sub-committee. **Research committee :**Coordinates research in the school and supports researchers technically and financially .It is responsible for allocation of research budget. **Course committee :**Each course has a committee which is responsible for its management. **Academic advisors:** Supervise students , council them and advise. **Programme evaluation committee:** responsible for the periodic evaluation. **Postgraduate studies committee:** Responsible of all postgraduate affairs in the school; students registration, programmes, examinations and research.

### **2. Describe the relationship between the medical school and University.**

The medical school conforms rigidly to all university regulations , academic or administrative. The school is accountable to the university Vice Chancellor , registrar , dean of academic affairs , Sennate and the University Council .The dean , all professors and head of departments are members of Sennate. Some of the staff are members of the Council. The Dean is a member of the Deans Council of the university (administrative).

### Quality development:

#### **1. Describe the representations and functions of academic staff , students and other stakeholders in the various governance structure and committee?**

Staff: represented in all structures and committees and are directly involved in the governance and administration of the school. Students : Represented in the course committees, research committees, EDC, PHC centre. Ministry of Health consultants : represented in all structures and committees

### **CRITERIA B: EDUCATIONAL BUDGET AND RESOURCE ALLOCATION**

#### Basic standard:

##### **1.Describe the budgetary practice and responsibility of the medical school?**

Each department, centre or unit set its proposals and then the Dean and head of departments prepare the annual budget of the school. Next the budget is discussed and approved by the university and finally the budget of the whole university is approved by the Ministry of Higher Education, Ministry of Finance and the Council of Ministers.

The practice strictly conforms to the budgetary practice of the Sudan government .

The main financial sources are: The Federal Ministry of Finance, students fees and the Private students fees.

### Quality development:

#### **1.How is appropriate resource allocation assured to achieve the objectives of the school?**

The University of Gezira adopts a policy of decentralization and hence the Dean is fully

authorized to allocate resources to achieve the objectives of the school.

### **CRITERION C: ACADEMIC LEADERSHIP:**

#### Basic standard:

##### **1.Describe the academic management structure of the medical school indicating the line of responsibility for individual areas as of the medical programme?**

The dean and the Faculty Board are responsible for the academic management of the programme (students registration, calendar of dates, courses offered , staff coordinators, students coordinators, resources, examinations, students results, transfer of students and dismissal of students). The course coordinator and the course committee prepare the time table, name the tutors , implement the course, evaluate the course (students assessments and programme evaluation) prepare the examinations results and present them in the Faculty Board. The examination officer and the registrar organize the examinations, keep the examinations and their results and prepare the end of

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semester results. The University Studies Committee; this is a Sennate subcommittee. It revises the students results and ensures that the results are conforming to the university academic regulations. The Sennate is responsible for the final approval of all results of examinations .

### **2.How is the performance of the academic leadership evaluated and appraised in relation to the mission and objective?**

Evaluated by the students' results, the students' feedback and the tutors feedback.According to the University of Gezira State the Dean is appointed by the Vice Chancellor for 4 years and the head of departments are appointed by the Vice Chancellor for 2 years. The Dean and Head of departments are mainly evaluated by the Vice Chancellor.

#### **CRITERION D: ADMINISTRATIVE STAFF AND MANAGEMENT:**

##### Basic standard:

### **1. What administrative support functions are provided by staff of the school?**

The following are functions of the administrative support : Management of training sites ( laboratories, basic skills laboratory, library, DR, museum, lecture halls). Preparation of courses materials ( booklets audiovisuals). Transport. Organization of field visits in community courses. Organization of visitors programmes; examiners, exchange staff , officials. Management of budget, keeping accounts and security.

### **2.How is the size of the administration staff determined in relation to the programme and other activities?**

This is determined through practice and available resources and jobs.

### **3.How is the management of the programme reviewed ?**

It is reviewed by the continuous monitoring feedback from students and staff by the period programme evaluation.

#### **CRITERION E: INTERACTION WITH HEALTH SECTOR**

##### Basic standard:

### **1.Describe the relationships between the medical school and the health services with which it interacts, regarding mission and objectives of the school, the educational programme, the provision of resources, teaching facilities and staff**

At the time of its establishment the school developed strong linkages with the State Ministry of Health and by time those linkages evolved into full partnership which is institutionalized and written-between the State Government and the University of Gezira. Ministry of Health: Provides all the training sites for clinical and community training, MOH consultants participate as full tutors in the training and evaluation of students. All MOH health professionals participate in the training of students. All MOH consultants participate in all the medical school academic activities (workshops meetings seminars) and they are represented in all the school committees. The medical school: provides regular services in hospitals and health centers. More than 90% of the consultants in Wad Medani Hospital are academic staff and all the hospitals' administrators are academic staff. All the staff are represented in the MOH departments and committees and health programmes. The school participates in the training and evaluation of all health professionals in MOH.

## **AREA 9 CONTINUOUS RENEWAL OF THE MEDICAL SCHOOL**

##### Basic standard:

### **1.Does the school initiate a programme for regular reviewing and updating of the school and its activities?**

The school has a strong programme of monitoring and evaluating all the school. The school is flexible and always responds to students needs, society needs and subject matter needs. New Objectives are added to the curriculum and some are deleted. Efforts are made to modernize the resources e.g. laboratories, skill laboratory, references, hospitals, health centers. Instructional methods are gradually modernized by introducing computer aided learning and use of multimedia. Teachers are continuously sent abroad for short courses in their specialties.

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**Conclusions**

The school has written statements of mission and objectives .It has a community oriented problem solved curriculum and use innovative methods of instruction and evaluation. The strategies are effective and help the school achieve its objectives.

The school has adequate academic staff with appropriate qualifications.The educational resources are adequate. There is a defined mechanism for continuous monitoring and programme evaluation . The school conforms to the academic and administrative regulations of the University and it has full authority to allocate resources to suit the educational programme . The selection of the students is national and is based mainly on the result of the Sudan School Certificate Examination. The learning is student centred and the students participate in the governance of the school .

This pilot study showed that the questions used in the study were valid , reliable and feasible . It also showed that the accreditation processed is effective.