



THE SECRETARY OF EDUCATION
WASHINGTON, D.C. 20202

MAY 23 2003

SENT BY FACSIMILE TRANSMISSION

Dr. M. Hayat Zafar
President
Pakistan Medical and Dental Council
G-10/4, Mauve Area
Islamabad
Pakistan

Dear Dr. Zafar:

In March 1997, the National Committee on Foreign Medical Education and Accreditation (NCFMEA) determined that the medical accreditation standards used by Pakistan were comparable to the standards used to evaluate programs leading to the M.D. degree in the United States. On March 13, 2003, the NCFMEA reviewed the information recently provided by the Pakistan Medical and Dental Council (Council) on its current medical accreditation standards to reassess the comparability of those standards.

I am pleased to inform you that the NCFMEA, based on the most recent information and materials received from Pakistan, reaffirmed its prior determination that the standards and processes used by the Council to accredit medical schools in Pakistan are comparable to those used to accredit medical schools in the United States. This determination of comparability by the NCFMEA has a maximum duration of six years from the date of this letter, unless the Committee withdraws, extends or renews its determination prior to that date. Before expiration of the six-year period, the NCFMEA will seek to confirm that your standards and processes for accrediting medical schools in Pakistan are still comparable to the accreditation standards applied to medical schools in the United States. If so, its previous determination of comparability will be extended for another period.

As a result of the determination of continued comparability by the NCFMEA, any medical school in Pakistan that is accredited by the Council may apply to the U.S. Department of Education to participate in the Federal Family Education Loan (FFEL) program. If a medical school's application is approved, students enrolled in the school who are either U.S. citizens or permanent residents of the U.S. may receive FFEL loans to finance their medical education if they meet all other eligibility requirements. Medical schools that wish to participate in the FFEL program may obtain the proper application forms from the Foreign Schools Team by calling (202) 377-3168 or by writing to the following address:

Foreign Schools Team
FSA/Schools Channel/CMO
U.S. Department of Education
Room 73C3
830 First St., NE
Washington, DC 20202-5340
U.S.A.

The NCFMEA also requested that Pakistan submit, for review at the March 2004 NCFMEA meeting, a report on Pakistan's accreditation activities. Please see the enclosure for specific details about the report. In addition to the report, the NCFMEA requested that Pakistan provide more detailed information on the following: (1) what policy, if any, the Council has pertaining to a medical school's humane treatment of animals that are used in medical research, and (2) what policies the Council has to deal with circumstances where the private interests of a faculty or staff member may conflict with that person's official responsibilities.

Please provide the requested policy information and the report on accreditation activities by December 1, 2003 to the U.S. Department of Education at the address below:

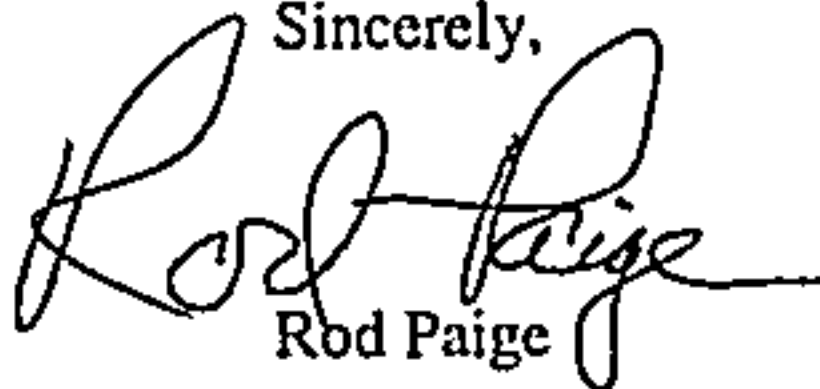
Carol Griffiths
Chief, Accrediting Agency Evaluation Unit
U.S. Department of Education
1990 K Street, NW – Room 7105
Washington, D.C. 20006-8509
U.S.A.

If you have any questions regarding the information requested, please feel free to contact Ms. Griffiths at (202) 219-7011 (telephone), (202) 219-7005 (fax), or carol.griffiths@ed.gov (e-mail).

In the fall of 2003, Bonnie LeBold, the Executive Director of the NCFMEA, will contact you to provide information regarding the March 2004 NCFMEA meeting. In the interim, if you have any questions about the meeting, please do not hesitate to contact Ms. LeBold at (202) 219-7009 (telephone), (202) 219-7008 (fax), or bonnie.lebold@ed.gov (e-mail).

I want to thank you for taking the time to respond to our requests for information about your standards and processes for accreditation of medical schools. The NCFMEA members and I very much appreciate your ongoing interest and assistance in this matter.

Sincerely,



Rod Paige

Enclosure

**Report Requested from the
Pakistan Medical and Dental Council (PMDC)
by the National Committee on Foreign Medical Education and Accreditation (NCFMEA)**

Due Date: December 1, 2003

Submit to: Carol Griffiths
Chief, Accrediting Agency Evaluation Unit
U.S. Department of Education
1990 K Street, NW – Room 7105
Washington, D.C. 20006-8509
U.S.A.

Phone: (202) 219-7011
Fax: (202) 219-7005
E-mail: carol.griffiths@ed.gov

Content: The NCFMEA is requesting the following information (and any applicable supporting documents) regarding the following:

- ***Current status of medical schools:*** A list of the medical schools currently operating in Pakistan, indicating whether each school has gone through the accreditation process and what the outcome of that accreditation process has been; for example, whether the school is fully accredited, whether the school is provisionally accredited, whether accreditation has been terminated, etc.
- ***Overview of accreditation activities:*** A summary of key activities by the PMDC in 2003, such as a list of accreditation reviews conducted, accreditation decisions reached, and accreditation conferences or training sessions held.
- ***Laws and Regulations:*** An indication as to whether there have been any changes during 2003 in your country's laws or regulations that affect the accreditation of your medical schools, and, if so, what those changes were.
- ***Standards:*** An indication as to whether there have been any changes during 2003 in the accreditation standards that the PMDC uses to evaluate and accredit medical schools in the areas listed below, and, if so, what those changes were:
 - administration,
 - faculty,
 - curriculum,
 - admissions procedures,
 - student services,
 - methods for evaluating student achievement, and
 - facilities.
- ***Processes and procedures:*** An indication as to whether there have been any changes during 2003 in the accreditation processes or procedures used by the PMDC for the following –
 - conducting site visits,
 - selecting and training individuals who conduct site evaluations or who make accreditation decisions,

- periodically reevaluating and regularly monitoring medical schools,
 - reviewing substantive changes reported by medical schools,
 - ensuring the PMDC has effective controls against the conflicts of interest and the inconsistent application of accreditation standards, and
 - ensuring that accreditation decisions are based, in part, on the evaluation of student performance after graduation from medical school.
- *Schedule of upcoming accreditation activities:* A listing of upcoming accreditation meetings and on-site visits to medical schools and clinical clerkship sites for the period covering December 2003 through December 2004.

U.S. Department of Education



Staff Analysis

Pakistan

**For the March 13, 2003 Meeting
of the
National Committee on Foreign Medical
Education and Accreditation**

U.S. Department of Education
Staff Analysis
of the Standards Used by
Pakistan
For the Evaluation of Medical Schools

Prepared February 2003

Background

At its March 1997 meeting, the National Committee on Foreign Medical Education and Accreditation (NCFMEA) determined that the standards of accreditation used by Pakistan to accredit medical schools offering programs leading to the M.D. (or equivalent) degree were comparable to standards of accreditation applied to M.D. programs in the United States. The NCFMEA reviews the comparability of countries' standards on a periodic basis. The U.S. Department of Education (Department), in September 2002, sent Pakistan a copy of the NCFMEA's new guidelines and requested that Pakistan provide information to demonstrate its compliance with those guidelines. The information provided by Pakistan in response to that request is the subject of this analysis.

Summary of Findings

The environment for the evaluation and recognition of medical schools in Pakistan is somewhat different from the system used in the United States to accredit medical schools. The Pakistani government completely regulates every aspect of public medical education in the country, with the Pakistan Medical & Dental Council (PMDC or the Council) prescribing the medical curriculum and its objectives, the size and qualifications of the faculty, admissions criteria and other indicia traditionally associated with educational quality, and even the number of beds to be used in clinical studies in the affiliated teaching hospitals.

The function of the on-site evaluation teams (called inspection teams) is to verify whether the prescribed standards are maintained by each of the medical schools, and only those schools that meet the standards qualify for recognition by the PMDC. This is very different from the accreditation system used in the United States, which allows medical schools considerable freedom and flexibility to operate within generally established parameters. While the Pakistani system may be seen as focusing primarily on what would traditionally be called "educational inputs" in the United States, it nevertheless does require a very thorough on-site inspection of a number of variables, namely, the quality of a medical school's faculty and the adequacy of its facilities, including equipment, classrooms, laboratories, and libraries.

One other aspect of Pakistan's evaluation system that is particularly important in light of their highly structured, government-mandated format for medical education is the feedback mechanism that is used to obtain information about the effectiveness of the system. The Council, through interviews with appropriate individuals during the on-site inspection (primarily faculty, who it believes to be the key to the overall quality of the national system of medical education), elicits suggestions for improving the overall quality of medical education. The on-site inspection thus serves a valuable function in assisting the PMDC to evaluate the effectiveness of the government-mandated educational objectives of the medical curriculum and to make appropriate changes.

The highly-structured, government-mandated format for medical education in Pakistan and the application of a thorough on-site inspection component used to evaluate the delivery of medical education appears to have a comparable rigor to the system used in the United States to evaluate medical education programs.

However, subsequent to the NCFMEA's prior determination of comparability, the Committee made changes to its guidelines for comparability (in 1999). Because the accreditation/approval process is usually an ongoing and evolving process of improvement, the Department understands that a country may also have made changes to its accreditation evaluation process and standards. Therefore, each time a country comes before the NCFMEA for a redetermination of comparability, Department staff reviews the application as a case of first impression and relies only on the documentation submitted with the country's new application. In this instance, the documentation provided was not inclusive. Therefore, Department staff cannot, based on the information provided, make an assessment as to whether Pakistan's process and standards for the evaluation of the medical education offered by its institutions remain comparable to the system used to evaluate medical education programs in the United States.

Staff Analysis

PART I: The Entity Responsible for the Accreditation/Approval of Medical Schools

There should be a clearly designated body responsible for evaluating the quality of medical education in the foreign country, and that body should have clear authority to accredit/approve medical schools in the country that offer educational programs leading to the M.D. (or equivalent) degree.

The Pakistan Medical & Dental Council is by statute the regulatory entity responsible for medical education in Pakistan. The statute granting the Council authority is the Pakistan Medical & Dental Council Ordinance of 1962, which was amended in 1973 by an Act of Parliament. The PMDC approved Regulations in March 1998 to exercise its powers for the degree of Bachelor of Medicine and Bachelor of Surgery (M.B.B.S.).

Under the Regulations, the Council's authority includes setting minimum standards for basic and higher qualifications in medicine, and includes the following:

- To prescribe a uniform minimum standard of courses of training for obtaining graduate and postgraduate medical qualifications
- To prescribe minimum requirements for the content and duration of courses of studies for the degree of M.B.B.S.
- To prescribe conditions, for admission to courses of training for the degree of M.B.B.S.

PART II: Accreditation/Approval Standards

The entity within the foreign country that is responsible for evaluating the quality of medical education in the country and has authority to accredit/approve medical schools should have standards comparable to the following:

1. Mission and Objectives

- (a) The educational mission of the medical school must serve the general public interest, and its educational objectives must support the mission. The medical School's educational program must be appropriate in light of the mission and objectives of the school.
- (b) An essential objective of a program of medical education leading to the M.D. (or equivalent) degree must be to prepare graduates to enter and complete graduate medical education, qualify for licensure, provide competent medical care, and have educational background necessary for continued learning.

Pakistan requires its medical schools " . . . to prepare a caring general purpose community oriented doctor who is competent to deal with the common health problems of the people in a scientifically sound and cost effective manner."

Students must have five years of training from an institution recognized by the PMDC and affiliated with a chartered Pakistani university. Students can be registered as medical practitioners once they complete this five-year education, pass all University professional examinations and serve a one-year internship in a recognized hospital.

2. Governance

- (a) The medical school must be legally authorized to provide a program of medical education in the country in which it is located.

- (b) There must be an appropriate accountability of the management of the medical school to an ultimate responsible authority external to and independent of the school's administration. This external authority must have sufficient understanding of the medical program to develop policies in the interest of both the medical school and the public.**

The Council licenses institutions to provide medical education programs, and institutions must be legally authorized to operate. All medical institutions must be affiliated with universities, which are authorized by the country's higher education commission. Universities in Pakistan have the authority to issue the M.B.B.S. degree.

For public universities, federal and provincial health ministries exercise administrative control. For private universities, a Board of Governors oversees the management of the medical institutions.

3. Administration

- (a) The administration of the medical school must be effective and appropriate in light of the school's mission and objectives.**
 - (i) There must be sufficient administrative personnel to ensure the effective administration of admissions, student affairs, academic affairs, hospital and other health facility relationships, business and planning, and the other administrative functions that the medical school performs.**
 - (ii) The chief academic officer of the medical school must have sufficient authority provided by the institution to administer the educational program. That individual must also have ready access to the university president or other university official charged with final responsibility for the school, and to other university officials as are necessary to fulfill the responsibilities of the chief academic officer's office.**
 - (iii) In affiliated institutions, the medical school's department heads and senior clinical faculty members must have authority consistent with their responsibility for the instruction of students**

The PMDC regulations stipulate that: "Administrative organization of the College should be prompt, effective, and problem solving in the form of governing body with non-lapsable budget." Pakistan also reported that: "Board of Governors appointed by the respective authorities are responsible for the administration of their medical schools in light of PMDC regulations."

The regulations further stipulate that each medical college establish a " . . . Department of Medical Education with adequate staff, space, furnishing, equipment, stationery, and funds. A Department of Medical Education has to be given the status of a compulsory departments without which a medical college should not be recognized." The regulations require the department to be under a trained senior staff member for " . . . devising educational innovations, conducting teacher training programs, continuing medical education activities and student counseling for which proper facilities be provided."

- (b) The chief academic official of the medical school must be qualified by education and experience to provide leadership in medical education.**

A senior professor is in charge of the medical institution and its affiliated teaching hospital. Pakistan has not provided the qualifications that are required to be a "senior professor." However, in the Department of Medical Education subsection of the Educational Facilities section of the Regulations, there is this statement: "As a rule, the senior-most professor should be the Principal or Dean of the College."

- (c) The medical school may determine the administrative structure that best suits its mission and objectives, but that structure must ensure that the faculty is appropriately involved in decisions related to--**

- (i) Admissions;**
- (ii) Hiring, retention, promotion, and discipline of faculty; and**
- (iii) All phases of the curriculum, including the clinical education portion;**

Pakistan reported that " . . . administrative authorities in light of PMDC regulations" control . . . admission and promotion of faculty." A medical institution's academic council has the authority to make clinical teaching decisions. The University Grants Commission, appointed by the Pakistani government in 1976 as the "Competent Authority to look after the Curriculum Revision Work beyond Class XII at Bachelor level and onwards of all Degrees, Certificates and Diplomas awarded by Degree Colleges, Universities and other Institutions of higher education" continually revises the medical degree curriculum and the curriculum of a subject must be reviewed after every three years. Although it does not appear that faculty at the medical schools in the country are involved in revising the curriculum at their schools, the University Grants Authority constitutes "various committees . . . at the national level comprising senior teachers nominated by the Universities. Teachers from local degree colleges and experts from user organizations, where required, are also included in these committees."

It does not appear that the faculty is involved in admissions or the hiring, retention, promotion and discipline of faculty.

- (d) If some components of the educational program are conducted at sites that are geographically separated from the main campus of the medical school, the school must have appropriate mechanisms in place to ensure that--**
- (i) The educational experiences at all geographically separated sites are comparable in quality to those at the main campus; and**
 - (ii) There is consistency in student evaluations at all sites.**

There are no branch campuses of medical institutions in Pakistan. Some medical schools have teaching hospitals that are not located at the site of the medical institution, but these hospitals are located in the same city as the medical institution.

4. Educational Program

- (a) Duration: The program of education leading to the M.D. (or equivalent) degree must include at least 130 weeks of instruction, scheduled over a minimum of four calendar years.**

The medical education program to earn an M.B.B.S. degree is a minimum of five calendar years plus one year of a supervised residency.

- (b) Curricular Content: The medical school's curriculum must provide students with general professional education, i.e. the knowledge and skills necessary to become a qualified physician. At a minimum, the curriculum must provide education in the following:**

- (i) The sciences basic to medicine, including—**

(A) The contemporary content of those expanded disciplines that have traditionally been titled anatomy, biochemistry, physiology, microbiology and Immunology, pathology, pharmacology and therapeutics, and preventive medicine; and

(B) Laboratory or other practical exercises that facilitate the ability to make accurate quantitative observations of biomedical phenomena and critical analyses of data.

A student enrolled in a Pakistani medical school must study a variety of basic medical science subjects to earn the M.B.B.S. degree. The subjects are:

Anatomy
Biochemistry
Physiology
Pharmacology and Therapeutics
Pathology (Microbiology, Histology)
Forensic Medicine and Toxicology
Community Health Services (Preventive Medical)

The Council's regulations specify the total number of hours to be taught in each subject and the "spacing," i.e., the year(s) the subject is to be taught. A total of 2550 hours is required in these non-clinical subjects. For Biochemistry, Physiology, Pharmacology and Pathology, laboratories should be available and they should have both simple and high technology equipment for demonstrations and experiments. Immunology does not appear to be a required basic medical science subject.

- (ii). A variety of clinical subjects, including at least the core subjects of internal medicine, obstetrics and gynecology, pediatrics, surgery, and psychiatry and, preferably, family medicine.

Note 1: Medical schools that do not require clinical experience in one or another of the above disciplines must ensure that their students possess the knowledge and clinical abilities to enter any field of graduate medical education.

Note 2: Clinical instruction must cover all organ systems and include aspects of acute, chronic, continuing, preventive, and rehabilitative care.

Note 3: The medical school's program of clinical instruction must be designed to equip students with the knowledge, skills, attitudes, and behaviors necessary for further training in the practice of medicine.

Note 4: Instruction and experience in patient care must be provided in both ambulatory and hospital settings.

Note 5: Each required clinical clerkship (or equivalent) must allow the student to undertake thorough study of a series of selected patients having the major and common types of disease problems represented in the clerkship.

The required clinical science subjects to earn the M.B.B.S. degree, "... which are examined by the university" are:

Internal Medicine
Surgery
Obstetrics & Gynecology

Pediatrics
Ophthalmology
Otorhinolaryngology

Other related clinical specialties, mentioned in the M.B.B.S. regulations, are also taught. These include:

Cardiology
Neurology
Urology
Psychiatry
Dermatology
Tuberculosis and Chest Diseases
Orthopedic Surgery
Thoracic Surgery
Neurosurgery
Anesthesiology Geriatrics
Family Medicine
Radiology
Radiotherapy

The Regulations' Curriculum section provides that: "Students should learn to perform simple basic clinical procedures in all disciplines (emphasis added)," and that the fourth-year students should learn the management of health problems for both in- and out-patients. There are guidelines in the Regulations for each clinical subject, including Internal Medicine, Surgery, Obstetrics and Gynecology, Pediatrics and Ophthalmology.

(iii) Disciplines that support the fundamental clinical subjects, such as diagnostic imaging and clinical pathology.

The M.S.S.B. regulations include radiology as one of the clinical specialties that is taught. Also, Pakistan reported that: "In support of the fundamental clinical subjects in a medicine program leading to the M.B.B.S. degree fully developed departments of Radiology and Clinical Pathology are established."

(iv) Ethical, behavioral, and socioeconomic subjects pertinent to medicine.

The Council believes that students should be taught behavioral sciences, including interpersonal relationships and social adjustment issues, in the first two years of their M.B.B.S. program. The Regulations' Curriculum section has the following under Subject Objectives: "Behavioral Sciences: It is imperative that students be trained to deal with complexities of life, as well as the complex medical problems accruing from them. It is, therefore, essential that in the first two years of the MBBS course the

students should be taught behavioral sciences, including the interpersonal relationships and social adjustment issues."

- (v) **Communications skills integral to the education and effective function of physicians, including communication with patients, families, colleagues, and other health professionals.**

The PMDC believes students should be able to conduct interviews and take patient histories as well as conducting accurate physical examinations by the time they finish their M.B.B.S. program. The Council expects that graduates will "... display virtues, personal character and a sense of responsibility towards patients, community and colleagues."

The "Guiding Principles" that resulted from the curriculum revision work of the University Grants Commission on behalf of the Pakistani government, states that: "The desired humanistic attributes of a caring doctor with effective communication skills should be defined, methods that build these attributes should be included and tested, including trust-building in a professional patient-doctor relationship."

(c) Design, Implementation, and Evaluation:

- (i) **There must be integrated responsibility by faculty within the medical school for the design, implementation, and periodic evaluation of all aspects of the curriculum, including both basic sciences and clinical education.**
- (ii) **The medical school must regularly evaluate the effectiveness of its medical program by documenting the achievement of its students and graduates in verifiable ways that show the extent to which institutional and program purposes are met. The school should use a variety of measures to evaluate program quality, such as data on student performance, academic progress and graduation, acceptance into residency programs, and postgraduate performance; the licensure of graduates, particularly in relation to any national norms; and any other measures that are appropriate and valid in light of the school's mission and objectives.**

The PMDC and Pakistan's Higher Education Commission are the two entities authorized to evaluate the curriculum of all medical schools. The Council, which prepares and approves the M.B.B.S. curriculum, periodically evaluates and redesigns it with the assistance of senior faculty members from all of the country's recognized medical schools. Also, medical schools are permitted to make changes in the implementation of the curriculum for teaching and training.

As stated earlier in this analysis, the University Grants Commission continually revises the medical degree curriculum, as needed, and the Commission must review the curriculum of all subjects every three years. The National Curriculum Revision Committee in May 2002 reviewed 18 subjects.

5. Medical Students

(a) Admissions, Recruiting, and Publications

- (i) The medical school must admit only those new and transfer students who possess the intelligence, integrity, and personal and emotional characteristics that are generally perceived as necessary to become effective physicians.**
- (ii) A medical school's publications, advertising, and student recruitment must present a balanced and accurate representation of the mission and objectives of its educational program. Its catalog (or equivalent document) must provide an accurate description of the school, its educational program, its admissions requirements for students (both new and transfer), the criteria it uses to determine that a student is making satisfactory academic progress in the medical program, and its requirements for the award of the M.D. degree (or equivalent).**
- (iii) Unless prohibited by law, student records must be available for review by the student and an opportunity provided to challenge their accuracy. Applicable law must govern the confidentiality of student records.**

The PMDC sets the standards for admission to all the public medical schools in Pakistan. Thus, admission to these schools is regulated at the national level and medical schools are required to provide data on their admissions. On-site inspectors are expected to verify the quality of the student body through interviews.

The Council prescribes in some detail the conditions for admission to programs leading to the M.B.B.S. degree. These include, as stated in the "Pakistan Medical & Dental Council Regulations for The Degree of Bachelor of Medicine and Bachelor of Surgery" (pages 4-5): limiting the size of class enrollments; mandating that provincial governments conduct entry tests for those seeking admission and directing how the tests are to be scored; setting minimum academic requirements and passing scores, and determining what courses candidates must pass before being admitted.

The PMDC allows private medical schools to conduct their own entry examinations.

Medical institutions keep student records of internal assessment results, such as monthly, mid-term and term exams. Students have full access to these records. The universities conduct annual professional examinations and maintain the records of the results of these exams. University rules do not allow students access to these records.

Pakistan provided no information on its oversight or regulation of a medical school's publications, including its catalog or equivalent document, or on a medical school's advertising or student recruitment.

(b) Evaluation of Student Achievement

- (i) The medical school faculty must establish principles and methods for the evaluation of student achievement, including the criteria for satisfactory academic progress and the requirements for graduation.**
- (ii) The medical school's evaluation of student achievement must employ a variety of measures of student knowledge, competence, and performance, systematically and sequentially applied throughout the medical program, including the clinical clerkships.**
- (iii) The medical school must carefully monitor the progress of students throughout their educational program, including each course and clinical clerkship, must promote only those who make satisfactory academic progress, and must graduate only those students who successfully complete the program.**

The Council's Regulations mandate that all medical colleges and universities in Pakistan continuously make internal assessments. These assessments include appropriate evaluations at the end of each assignment, term, stage or course of the curriculum. Records of internal evaluations are maintained and the scores from these tests contribute 30% to the final total score of the candidates. Medical schools are not free to establish their own methodology for evaluation of professional examinations. The Universities conduct professional examinations at the end of each academic year.

(c) Student Services

Students must have access to preventive and therapeutic health services, including confidential mental health counseling. Policies must include education, prevention, and management of exposure to infectious diseases during the course of the educational program.

The Council requires medical schools to provide sufficient facilities for their students in the belief that healthy extra curricular activities contribute to the proper grooming of students. The PMDC recommends the following activities and welfare programs for medical students:

1. Sports clubs
2. Literary societies
3. Social welfare activities such as conducted tours, community organizations, etc.
4. Student counseling services to deal with such problems as substance abuse
5. Motivation against political exploitation
6. Teacher-Student organizations like tutoring systems
7. Student's Group Insurance System and Benevolent Fund
8. Proper awards and adequate scholarships for purposes of incentives and assistance
9. Student health services
10. Student exchange programs with other institutions at home and abroad
11. Proper hostel accommodations
12. Transport facilities
13. Language training programs for proficiency in English language on a voluntary basis

It is unclear whether Pakistan requires its medical schools to have policies regarding services to students in the areas of education, prevention and management of exposure to infectious diseases that students receive during the course of their educational program.

6. Resources for the Educational Program

(a) Finances: The medical school must have adequate financial resources for the size and scope of its educational program.

(b) Facilities:

(i) The medical school must have, or be assured use of, physical facilities and equipment, including clinical teaching facilities, that are quantitatively and qualitatively adequate for the size and scope of the educational program, as well as the size of the student body.

(ii) The medical school should be encouraged to conduct biomedical research and must provide facilities for the humane care of animals when animals are used in teaching and research.

The PMDC has reported that its booklet, "Criteria for Establishment/Recognition of Medical and Dental Colleges," has the requirements for a medical institution's financial resources. This booklet has the following in its "Financial Resources" section: "Every

intending college must be financially viable. Financial resources should be clearly indicated according to level, size, and type of the proposed institution. It should be able not only to establish but also to run progressive medical/dental college."

For facilities, again the Council refers to its "Criteria for Establishment/Recognition of Medical and Dental Colleges, where two sections, "Space" and "Infrastructure" appear to apply. Under "Space," the PMDC has the following: "It must include all the relevant documents of ownership, possession, and plan of academic blocks. Site selected should be suitable from academic point of view. Minimum requirement for total area of Medical/Dental Institution will be provided in due course."

The "Infrastructure" section of this booklet has the following: "Adequate physical facilities for Academic Blocks, dissection halls, common rooms, cafeteria, medical/dental equipment related to laboratories, libraries, various models, Information Technology, etc. must be created for by the intending institute."

Pakistan has not indicated its position on whether it encourages (or requires) medical schools to conduct biomedical research or for providing facilities for the humane care of animals when animals are used in teaching and research.

(c) Faculty:

- (i) Members of the medical school's faculty must be appropriately qualified to teach in a medical program leading to the M.D. (or equivalent) degree and effective in their teaching. The faculty must be of sufficient size, breadth, and depth to provide the scope of the educational program offered.**
- (ii) The medical school should have policies that deal with circumstances in which the private interests of its faculty or staff may conflict with their official responsibilities.**

The Council has reported that the medical faculty's qualifications are found in its "Pakistan Medical & Dental Council Regulations for The Degree of Bachelor of Medicine and Bachelor of Surgery" booklet. Apparently, the only reference to faculty qualifications is in Section VI—"Educational Facilities" (page 19)—where the following is under "Teaching Staff": "Properly qualified and properly committed teaching staff should be provided on the basis of a minimum teacher student ratio of 1:5 for clinical departments and 1:10 for basic sciences. Institutions should have a faculty development plan, and career structure. Good teachers should be rewarded appropriately. Teachers should be provided with adequate support staff, and equipment including access to computers. Institutions should develop organized teacher's exchange programs with other institutions at home and abroad. Teachers training programs should be compulsory."

Regarding the size of the faculty a medical school is required to have, the PMDC's "REQUIREMENTS of Teaching Faculty & Number of Beds, etc. in Medical College and Teaching Hospital" booklet contains lists of the number of "Staff required for 100 admission, 200 admission and 300 admission" for 18 medical school courses or categories.

For instance, under Anatomy, one Professor is required for 100 admissions, while two and three Professors are required for 200 and 300 admissions, respectively. Two Associate Professors are required for 100 admissions, while four and six Associate Professors are required for 200 and 300 admissions, respectively. Finally, ten Lecturers/Demonstrators are required for 100 admissions, while 20 and 30 Lecturers/Demonstrators are required for 200 and 300 admissions, respectively.

Pakistan has not reported on whether it requires that the country's medical schools have policies that deal with circumstances in which the private interests of its faculty or staff may conflict with their official responsibilities (conflicts-of-interest).

- (d) Library: The medical school must have a library sufficient in size, breadth, and depth to support the educational program and adequately and professionally staffed.**

The PMDC does not appear to mandate what specific materials that medical school libraries must contain. Instead, the Council has stated that all libraries: "... should be well equipped with sufficient number of books, latest editions of reference books/journals, computers with Internet facilities. Libraries should be comfortable and well stocked with standard reference printed matter including access to journals. Libraries should also include books on humanities, community problems, psychology, occupational health etc. Library Science should be utilized to train students in proper reading habits and use of library. Audio-visual libraries should be developed."

- (e) Clinical Teaching Facilities: The medical school should have affiliation agreements with each teaching hospital or clinical facility it uses that define the responsibilities of each party.**

In response to the issue of medical schools' clinical facilities, the PMDC again has reported that these requirements are found in the "REQUIREMENTS of Teaching Faculty & No. of Beds, etc. in Medical College and Teaching Hospital" booklet. This booklet contains a section on the "Number of Beds for Teaching Hospitals: A Ratio of Minimum of 5 Beds to a Student (must) be maintained in Medical Colleges." The lists include such categories as Medicine and Surgery (both with 120 beds for 100 admissions and 240 and 360 beds for 200 and 300 admissions, respectively) and Psychiatry with 10, 20 and 30 beds for 100, 200 and 300 admissions, respectively.

