PROGRAMME REVIEW REPORT

FACULTY OF MEDICAL SCIENCES
UNIVERSITY OF SRI JAYEWARDENEPURA

16th to 19th March 2009

Review Team :

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1. SUBJECT REVIEW PROCESS

The Quality Assurance and Accreditation (QAA) framework currently implemented in the University system in Sri Lanka, envisages reviewing all subjects and institutions in the national universities of Sri Lanka. In keeping with this objective, the Quality Assurance and Accreditation Council of the University Grants Commission, Sri Lanka appointed a team of senior academics from the Universities of Colombo, Ruhuna, Kelaniya, Wayamba and Peradeniya, to undertake a review of the MBBS study programme at the Faculty of Medical Sciences, University of Sri Jayewardenepura. The Review Team comprised of:

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- Prof. Nelun de Silva
- Prof Nilanthi de Silva
- Prof SSE Ranawana
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The programme review was undertaken to evaluate the quality of the Medicine teaching programme at the Faculty of Medical Sciences, University of Sri Jayewardenepura. The review visit was carried out by the above team from 16 – 19 March 2009 (see Annexure 1 for programme). The process used was acquisition of additional information through discussion of issues, and gathering of and analysis of evidence. These findings were then compared with the Self Evaluation Report (SER) presented by the Faculty. The aim was to use all evidence to make a judgment as required by the Quality Assurance Programme on the quality of the eight review aspects listed below, as given in the Quality Assurance Handbook, for Sri Lankan Universities, published by the CVCD and UGC in July 2002:

1. Curriculum Design, Content and Review
2. Teaching, Learning and Assessment Methods
3. Quality of students, including student progress and achievement
4. Extent and Use of Student Feedback (Qualitative and Quantitative)
5. Postgraduate Studies
6. Peer Observation
7. Skills Development
8. Academic Guidance and Counselling

The review processes adopted by the team were:

meetings with the Vice-Chancellor; Dean; Heads of Departments; academic and non academic staff in the Faculty; Senior Student Counsellors in the Faculty; undergraduate and postgraduate students; and extended faculty Consultants contributing to the clinical teaching programme (see Annexure 2 for list of persons met during the visit).

observation of teaching/learning sessions –

Lecture on anatomy of thorax for 1st years
Laboratory class on anatomy of thorax for 1st years
Tutorial on thyroid function tests for 4th years
Clinical skills training for final years: nasogastric intubation; suturing; insertion of intercostal tube
Bedside teaching in Surgery ward
Ward class in Obstetrics & Gynaecology: postpartum haemorrhage with role play
Bedside teaching in Paediatric ward
Clinical lecture demonstration in Paediatrics: dengue haemorrhagic fever
Communication skills training in Resource Centre
English Language training: terminology in relation to Respiratory system

Clinical Skills training in lab: airway management in paediatrics

inspection of academic facilities: lecture halls, tutorial rooms, laboratories, including those in Resource Centre, examination hall, museum, libraries

inspection of facilities for clinical training: University Units in Colombo South Teaching Hospital (including Centre for Community Mental Health), and Family Practice Centre.

perusal of documents: curriculum, timetables, handouts, examination papers and marking schemes, student log books, student feedback forms, peer evaluation forms, module handbooks, teaching/learning material at the resource centre, student reports.

Although the Faculty has several undergraduate study programmes, this review focussed on the MBBS study programme.

2. BRIEF HISTORY OF THE UNIVERSITY AND THE DEPARTMENT

The University of Sri Jayewardenepura was initially started as an institution of higher education for Buddhist monks in 1856 as the *Vidyodaya Pirivana*. It acquired the status of a university in 1959 and was renamed the University of Sri Jayewardenepura in 1978. The university, which celebrates its 50th anniversary this year, now has 5 faculties and a total student population of about 9000.

The Faculty was established in 1993 to conduct undergraduate programmes in medicine as well as the allied health sciences. The MBBS programme has been conducted since the inception of the faculty; it has an annual intake of 150 – 160 students. The faculty has now widened its scope to include BSc degree programmes in Human Biology, Pharmacy, Nursing and Medical Laboratory Sciences. At present, the Faculty has about 1000 undergraduates, mostly on the MBBS study programme. Among the 6 batches of students currently in the faculty, female students comprise between 52 and 67% of each batch; the average age at entry is 21 years.

The Faculty has a staff cadre of 138 including 21 posts for the allied health science programmes. The current academic staff members include 114 permanent and 4 temporary staff members. Among the permanent academic staff, nearly half (47%) have professional postgraduate qualifications such as MD, MS, MRCP, FRCS, etc; while only 9% have a DM or PhD and 15% have a Master's level qualification. Nearly one third (29%) are probationary lectures with only a first degree. The academics are supported by 60 temporary demonstrators, 3 administrative officers, and 132 non-academic staff members. The academic staff in the pre-clinical and para-clinical departments bears a heavy workload since they teach on both Medicine and Allied Health Sciences study programmes.

The Faculty is located within the premises of the University of Sri Jayewardenepura, just outside the city of Colombo. Teaching facilities include 3 large lecture halls equipped with sound amplification, overhead projectors, multi-media projectors and computers; and 17 rooms for tutorials / seminars. There are laboratories for undergraduate students in the Departments of Anatomy, Biochemistry, Physiology, Microbiology, Parasitology and Pathology, as well as in the Resource Centre (IT lab, Language & Communication Skills Lab; and Clinical Skills Lab). Most of the laboratories have excellent, state-of-the art equipment, obtained with funding from several grants that the Faculty has received from JICA, SIDA-SAREC and the IRQUE project.

The Faculty has its own medical library, which has the capacity to accommodate about 150 students at a time. It has a large collection of texts, housed in reference and lending sections. The library currently subscribes to only 15 periodical titles.

The main teaching hospitals are the Colombo South Teaching Hospital at Kalubowila and the Sri Jayewardenepura General Hospital at Thalawathugoda. *Man Suva Piyasa*, the recently opened Community Mental Health Centre in the CSTH provides excellent facilities for psychiatry training. Both hospitals are located within about 30 minutes travel time from the university premises. Other affiliated hospitals include the Cancer Institute, Maharagama, the National Hospital of Sri Lanka in Colombo, and the Lady Ridgeway Children's Hospital in Borella. The Faculty has a Family Practice Centre, which serves as a teaching centre for Family Medicine and provides ambulatory care to the local community. The Faculty is also responsible for the Boralesgamuwa MOH area.

The mission of the Faculty, as given in the SER, is "*To be a centre of academic and professional excellence in providing human resources of the highest quality, services of the highest standards and research of the highest quality for health care and to disseminate knowledge on health*".

3. AIMS AND LEARNING OUTCOMES

3.1. Aims

Goal of the faculty is to produce medical graduates and graduates of allied heath sciences who are equipped with necessary knowledge, skills and attitudes to provide health care services to any part of Sri Lanka.

3.2. Learning Outcomes

Faculty has developed its institutional objectives in keeping with the benchmark statement of a medical graduate produced by the University Grant Commission (UGC) of Sri Lanka and also considering the benchmark statement of a medical graduate of General Medical Council UK.

Institutional Objectives

Graduates of the Faculty of Medical Sciences of the University of Sri Jayewardenepura should be able to

1. Develop and apply the attributes and personal characteristics necessary for a productive professional relationship by:
    a. a sensitive and humanistic approach towards patients and family
    b. being aware that the person who is ill is more important than the illness he suffers.
    c. recognizing that good professional practice involves a partnership between patient and doctor, based on mutual trust and understanding.
    d. collaborating sensitively and effectively with allied health persons as a member of the health care team.
    e. demonstrating ability to lead, guide and co ordinate work

2. Apply basic scientific knowledge in a wide range of practice situations by:
   a. applying knowledge and understanding of the normal structure and function of the body to interpret the observed signs and symptoms.
   b. arriving at a reasoned conclusion with regards to the course of altered structure, function and behavioral changes by an understanding of the mechanisms that cause disease.
   c. planning and interpreting investigative procedures to validate the reasoned conclusions.
   d. planning appropriate management interventions.

3. Diagnose and rationally manage a defined range of health problems in Sri Lanka by
   a. obtaining a relevant clinical history and carrying out an appropriate examination.
   b. formulating a satisfactory differential diagnosis.
   c. planning appropriate and cost effective investigative procedure.
   d. making a rational management plan utilizing available resources.

4. Recognize emergency situations which require immediate action and be able to carry out initial management of such conditions.

5. Communicate effectively by
   a. developing skills in interaction with a wide variety of patients.
   b. counseling patients and members of the family of their illness or disablement to relieve them on their distress.
   c. writing and maintaining accurate clinical records based on observations and communicating the same to others concisely and effectively both verbally and in writing.
   d. interacting with colleagues, allied health personnel, and the general public on professional matters clearly and effectively.

6. Comprehend and apply ethical values associated with professional practice and conduct by:
   a. understanding the medico social legislation and its impact on medical practice.
   b. understanding the ethical standards of professional conduct which includes patient's right to privacy, confidentiality and informed consent.
   c. undertaking management of patients without causing undue economic stress on the patient.
   d. being aware of the potential conflicts that may arise between his obligations to the patient, the community and himself.

7. Apply the principles and practice of medicine in a community or population context by:
   a. using the knowledge of basic epidemiology in health promotion and prevention of diseases.
   b. identifying the health care needs of risk groups and the community in general, undertaking appropriate measures to provide such care and evaluating the results of such interventions.
   c. contributing to the overall improvement of the health of the community by being aware of the health care system of the country and using the services appropriately.

8. Contribute to the health system of the country as a primary care physician by:
   a. providing primary medical care to an individual or family.
   b. providing highly personalized health care with due consideration to cultural, behavioral and social issues.
   c. providing comprehensive care including referral to specialized services while continuing overall responsibility of the patients.
   d. assuming the function of integrating the curative and preventive aspects of health care in the context of the individual and family.

9. Evaluate his own performance and seek assistance where necessary by accepting willingness for review and self audit of his own performance.

10. Keep abreast of advancing medical knowledge, contribute to new knowledge by research and disseminate knowledge to others.

4. FINDINGS OF THE REVIEW TEAM

4.1. Curriculum Design, Content and Review

At present, the MBBS study programme is in transition from a traditional, discipline-based curriculum to a more student-centred, integrated, organ-systems based curriculum. Four of the six batches of students currently in the Faculty are on the old curriculum, while the two junior-most batches are on the new curriculum, which was introduced in 2007.

Design and content of old curriculum
The course is of 5 years duration, with each academic year structured into 3 terms of 10 weeks each. After an initial orientation programme of 4 weeks, the students proceed to learning about the normal structure and function of the human body, under the subjects of Anatomy, Physiology and Biochemistry (pre-clinical phase). There was minimal integration between the basic sciences and clinical disciplines.

After passing the barrier examination held at the end of 5 terms of study, students move on to the para-clinical phase with the subjects of Microbiology, Parasitology, Pharmacology, Forensic Medicine and Community Medicine. Didactic teaching in the form of lectures in the clinical disciplines of Medicine, Surgery, Paediatrics and Psychiatry also begins in the 3rd and 4th years, and continue into the final year of study.

Clinical training begins in the 3rd year with an introductory course. During the 3rd and 4th years, students rotate through a variety of clinical appointments in the major disciplines and sub-specialities. During the final year, students rotate between the professorial units manned by the Departments of Medicine, Surgery, Obstetrics & Gynaecology, Paediatrics (8 weeks each), as well as Psychiatry and Family Medicine (4 weeks each).

Curriculum review
During the period 2000 – 2003, the Faculty reviewed its MBBS curriculum and identified several drawbacks which are listed in the SER. Taking these drawbacks into consideration, the Faculty decided to carry out a complete overhaul of the curriculum under its World Bank funded IRQUE project. During this process, which started in 2005, the views of the Faculty's academic staff, members of the extended faculty, experts from other medical schools and

international experts in medical education, were sought. The new curriculum was drawn up following a series of module committee meetings, and residential and non-residential workshops. Senate approval was obtained in 2006, and the new curriculum was launched with the new entrants in 2007.

Design and content of new curriculum

The new curriculum continues with the basic outline of 5 years, each with 3 terms of 10 weeks each. It also retains division into 3 phases. Phase I consists of 5 terms in the 1st and 2nd years, while Phase II has 6 terms (3rd and 4th years) and Phase III has 3 terms in the final year. Compared with the old curriculum, the 4-week Orientation Course that launches Phase I is more organized and structured with Language and IT modules conducted in purpose-built laboratories in the new Resource Centre. During the remainder of the 1st term, students learn the basics of cell biology during the Foundation Module. Over the next 4 terms, students proceed to learning about the normal structure and function of the human body through 9 self-contained, organ-system-based modules (listed in the SER). Each module is built around learning objectives and content areas identified by the module committees. Students are made aware of these objectives through the handbooks given to them at the beginning of each module. All schedules and timetables are displayed on notice-boards.

Unlike in the old curriculum, students on the new curriculum commence acquisition of clinical skills in the very first year of study, through regular sessions in the new clinical skills lab (also housed in the Resource Centre) and regular hospital visits. Vertical integration of clinical disciplines with the basic sciences has been strengthened, in order to help students understand the clinical relevance of the basic sciences.

At the time of the site visit, the first batch of students on the new curriculum had completed Phase I and was awaiting commencement of Phase II in May 2009. Each module was run by a Module Committee, with a Chairperson and Convenor. Comprehensive reports compiled by the Chairs of several module committees, with details of the timetables, sessions taught by individual teachers, analysis of student feedback on the module, and recommendations for change, were made available to the review team. The Review Team notes that much of the student feedback has been extremely positive. This impression was reinforced during meetings with both students and academic staff.

In Phase II, which is scheduled to be first conducted starting May 2009, students will concentrate on acquisition of clinical skills and on learning about the disease conditions that affect humans. Students will work in the hospital, primary care or community setting in the mornings and return to the faculty for lectures, tutorials and laboratory classes in the afternoon. Formal teaching in Phase II will also be module-based. The 1st term will be devoted to an Introductory Module that introduces the basic concepts of General Pathology, General Pharmacology and Infectious Diseases. During the next 5 terms, students will re-visit the same organ systems as in Phase I, with additional modules on Infections, Growth and Development, Trauma, Mental Health, Legal Medicine and Toxicology.

Two streams of study will run parallel to the system-based modules. These are the Personal and Professional Development stream (PPD), which will run through all 5 years of study, and the Community Health Stream which will run through Years 3 & 4.

During discussions with students and recent graduates (currently working as temporary demonstrators in the faculty), it emerged that the home area project conducted by the

Community Medicine Department under the old curriculum, may not be continued under the new curriculum. Although it does not appear to be an essential learning activity, virtually all students and recent graduates spoke highly of the activity, and said that it helped them to learn about the health care system in Sri Lanka in a highly relevant, personalized manner.

Acquisition of clinical skills starts in the first year with sessions in the clinical skills laboratory. Formal clinical attachments will continue throughout Phase II, remaining unchanged from the existing clinical rotations. However, clinical training will be strengthened through introduction of logbooks for all major disciplines, and assessments such as OSCE and logbook viva. Professorial unit appointments in the final year of study will also remain unchanged. However, all didactic lectures will be completed by the time students commence their final year appointments, so that the only classroom style teaching that will take place in the final year will be tutorials and clinical lecture demonstrations.

Both students and extended faculty noted that the current clinical training schedules do not have provision for exposure to sub-specialities such as neurosurgery, cardiothoracic surgery and genitourinary surgery. Other areas which may not be adequately addressed in the curriculum include foodstuffs and their characteristics, nutritional assessment methods, and human (population) genetics.

4.2. Teaching, Learning and Assessment Methods.

Teaching and learning (T/L) methods
The strategies used for teaching and learning in the MBBS study program are many and varied, catering to the range of learning styles and abilities of its student population. Many tools such as lectures, small group discussions, tutorials, clinical teaching, skills based learning activities, practicals including dissections, learning activities in the resource center and a limited number of problem based learning (PBL) sessions are used for teaching and learning activities in the pre and para clinical departments in the Faculty in the new curriculum.

Though reliance on lectures has diminished to some extent, lectures still remain one of the main learning activities even in the new curriculum.

The observation of a lecture done in Anatomy in the old building provided us with some insight into this mode of teaching, but it was a disappointing exercise. The lecturer was not audible to the back of the hall; perhaps the sound system and the air conditioning was not functioning. The transparencies used were not very clear at a distance nor were some of the power point slides. However the teacher made the lecture quite interesting and was able to keep the attention of the students.

In the old curriculum, lectures were the mainstay of delivery of learning material but the department of Microbiology had introduced small group discussions even at this early stage prior to any curriculum revisions.

A tutorial conducted in chemical pathology gave us an insight into this learning strategy where the active participation of all the students in this small group of about 20 was evident. The tutorial was conducted by projecting the clinical scenarios on a screen, giving the students a minute or two to formulate their answers and questions were asked and discussed.

Another method for small group teaching in phase 1 of the curriculum were the Anatomy dissections where the students actively engaged in procedures or were demonstrated relevant sections aligned with the respective module they were learning at the time.

Intensive, interactive T/L, role play methods, learning based on clinical cases presentations by groups of students and techniques to ensure self learning were the strategies used in teaching in the clinical setting. It was very clear that active participation and interest of the students were maintained throughout these sessions except in one area, enabling students to achieve the intended learning outcomes of the particular T/L activity. The clinical skills laboratory in the Department of Surgery in the Colombo South Teaching Hospital (CSTH) was a hive of activity with demonstrations and opportunities for students to practice and be competent in essential skills which enhanced and supplemented the in ward teaching to a great extent.

The Resource Center which has been equipped with state of the art facilities from the IRQUE-QEF grant is indeed a great asset to the Faculty and its students. The activities conducted therein supplement the routine teaching and provides alternative strategies to students to enhance their generic skills such as language & IT competency and communication skills. The active participation of the academic staff and the relevance provided by aligning these activities to curriculum content is noteworthy and provides students with the stimulus and encouragement to optimise their learning in the center.

The students were appreciative and motivated to learn in the Community Based Medical Learning (CBML) project as a T/L activity which exposes them to management of patients in low resource settings and administrative duties in peripheral hospitals and units in a real life situation .

Some other key areas for T/L activities were the Family Practice Center in the Faculty and the Centre for Community Mental Health in the CSTH. From our observations it was noted that students in their final year demonstrated a high level of professionalism and confidence when participating in these T/L activities.

Essentially, the T/L strategies in place in the faculty in both the old and new curricula are aligned to the Faculty aims and objectives and promote learning to a great extent. The students too are clear of these outcomes. The students are given ample opportunity to interact with the staff and peers during these T/L activities.

T/L strategies that could be strengthened include employment of e-learning methods, more emphasis on research, and the use of statistics, and reduction of lectures together with adoption of other T/L methods in Community Medicine.

Assessment methods

Reliance is on Structured Essay Questions, Multiple Choice Questions, Objective Structured Practical Examinations and Objective Structured Clinical Examinations, together with clinical cases for continuous and end of course examinations. Review of assessments have taken place and new methods of assessments such as log book viva, single response MCQ's and integrated OSCE are being introduced in the new curriculum.

The examinations procedures are made reliable and valid by scrutiny boards and correction of theory papers by two examiners and moderation of discrepancies. The assessments

requirements are made clear to the students by way of the handbook which indicates the format of the examinations and the percentage distribution of marks between components in each examination. The students were satisfied with the release of results of continuous assessments within 2-3 weeks.

In the review report no mention is made of continuous assessments in Surgery and Gynaecology and Obstetrics in the 3rd and 4th years of the old curriculum. However, it is apparent that this deficit is remedied in the new curriculum where continuous assessments are structured in all the years. In addition arrangements are in place to uniformly conduct the clinical examination of the final year on completion of the relevant clinical appointment.

In the new curriculum particular attention has been given to ensure that students are not inundated with many examinations by limiting to one final examination per phase, denoted as MBBS 1st examination, 2nd examination and so on. Continuous assessments are conducted at the end of each module. It is noteworthy that in the new curriculum there is greater emphasis on continuous assessments, shift to single response and extended matching questions and introduction of new methods of assessments to strengthen the clinical teaching.

Perusal of examination papers in various departments and modules indicate that there is constructive alignment of curriculum, teaching learning methods and assessments.

An example of an assessment of generic skills was observed in the formative OSCE undertaken on completion of the CBML programme. Students were observed and assessed on their communication skills when faced with a real life scenario of a patient or parents in distress. They were assessed on a checklist by the examiner observing the process.

Purely formative assessments are not in place for students to find out how well they are progressing in a particular module or in a subject. The teachers however reiterated that they are able to identify the weak students when conducting tutorial and small group learning sessions and take measures to provide a feedback to such students on their strengths and weaknesses.

4.3 Quality of Students including Student Progress and Achievements

The students entering the faculty are selected by the UGC (and not by the Faculty) and entry is based only on the marks obtained at the A level examination. Perusal of the details relating to the last intake of students (18th batch) showed that they had Z-scores ranging from 1.9 to 2.2 and that nearly all of them originated from the Western Province, mostly from Colombo District. It is clear that the students entering this faculty are a select group who should have no difficulty in following the medical curriculum, although their aptitude to study medicine is not tested.

Although there are differences in their abilities at entry relating to English and use of computers, these are effectively addressed during the orientation course. Their excellent presentation skills shown in later years, was clear evidence that they had progressed in this respect. The students themselves were emphatic that they had developed themselves throughout the course, not only in their medical studies but also as individuals. This was apparent to the reviewers at the meetings with the students as well as at the student presentations that we were able to attend.

Considering the quality of the students at entry and the excellence of the teaching program, it was somewhat surprising to note the relatively high rate of failures at the examinations. As much as 20% of the students failed in their first attempt at the 1st examination (2nd MBBS) and even with the new curriculum, the failure rate was 24%. Many of these passed at the repeat examination but still an unsatisfactory proportion "missed an year". The reasons for this situation have not been adequately explored by the Faculty and the reasons given ranged from poor English (in the first year) to a lack of aptitude and interest in clinical work. The review team was glad to note, however, that a fallback option was available for those students who were repeatedly unsuccessful. Although teachers can detect the weaker students in their teaching sessions, there is no formal system to identify and give them special attention

It was clear, however, that the majority of students progressed very well during their study period at the Faculty and developed to their potential. The standards achieved by them at examinations were considered by the external examiners to be equivalent to those from other Medical Faculties in the system.

4.4. Extent and use of Student Feedback

The faculty has in place well-structured, formal systems of obtaining student feedback in order to evaluate the effectiveness of their teaching/learning process. These consist mainly of written responses to a structured questionnaire which the students fill at the end of a set of lessons/modules. These responses are analyzed and included in the module evaluation process and included by the Module Chairman in his formal report. Further feedback is obtained at "focus group discussions" held at the end of modules in which students participate. The results of these evaluations are taken into account when teaching that module in the following year. This system appears to generate a great deal of paperwork as well as much time spent on analysis.

It is evident that feedback is obtained with regard to the teaching modules in a satisfactory manner. The excellent staff-student relationships in the Faculty ensure constant contact between students and academic staff thus reinforcing the feedback. There is no suitable forum however, for students to raise issues of a more general nature, such as a Staff Student Liaison Committee as recommended in the Quality assurance guidelines

4.5. Postgraduate Studies

The University of Sri Jayewardenepura has an established Faculty of Graduate Studies. All postgraduate degrees of the University are offered through this institution. Forty candidates from the Faculty of Medical Sciences have registered with this institution since inception, of which 17 are academic staff members. The faculty offers research opportunities to others as well. So far 12 candidates have obtained M.Phil and 8 candidates have obtained Ph.D degrees. Currently 29 candidates are registered and result of one candidate has been released while 10 candidates have submitted their thesis. Majority of the candidates are registered for M.Phil degree. The Board of Study in Medical Sciences is part of the management of the Faculty of Graduate Studies, which comprises of all the Heads of departments and Professors.

Since the Faculty of Graduate studies is responsible for managing the postgraduates, the Faculty administration is not burdened with the additional task of handling the postgraduates, unlike in some of the other medical faculties in the country. Therefore the faculty could fully devote its time to look after the interests of the undergraduates.

The perusal of the documents revealed that based on the postgraduate work of the students registered with the Faculty of Graduate Studies, 58 peer reviewed research papers have been published. In addition there were abstracts of 122 presentations at various scientific sessions.

The review team had the opportunity to meet the postgraduate students registered with the Faculty of Graduate Studies and PGIM separately. Postgraduates engaged in research training pointed out that a data base on research facilities in the various departments in the faculty would benefit the researchers. They are faced with the usual delays in procurement procedures but nevertheless were not unduly distressed by the delays. They are allowed to use the internet facilities in the departments. The review team however noticed there is no common meeting place for the postgraduates. One of the academic staff member registered for a higher degree had the opportunity to undergo foreign training. Financial support for research is through a number of donor agencies. The University also provides adequate financial support.

The faculty research committee organises training workshops in the areas of research methodology and statistics. The candidates have to present their research proposal and most of the students felt that their interaction with the supervisors is good. The students have the opportunity to meet every month through a monthly research forum and journal clubs.

Students from the Postgraduate Institute of Medicine (PGIM) are trained in the para clinical and clinical departments such as Community Medicine, Microbiology, Parasitology, Pathology, Forensic Medicine, Medicine, Surgery, Paediatrics, Obstetrics & Gynaecology, Psychiatry and Family Medicine. The students from the PGIM are registered for MD, MS and diploma courses. Currently 47 postgraduate students registered with the PGIM are undergoing training in these departments. Some of the PGIM trainees are involved in undergraduate teaching. It was pointed out during the discussion with PGIM trainees that they selected the professorial units at Kalubowila hospital because for some areas in clinical training they perceived them as centres of excellence. The PGIM trainees in some units didn't have internet access.

Some departments of study in the faculty have excellent facilities for research in terms of equipments. The research out put by the academic staff is commendable. The research committee has prepared a comprehensive list of titles of publications and abstracts in a chronological order and according to the departments. A data base with abstracts of all research publications would have enabled the review team to assess the quality of the research output by the faculty.

4.6. Peer Observations

A system of peer observation is currently practiced but needs to be further developed. It was not clear from the documents made available to us whether all Departments participate in peer observation and if all activities relating to teaching/ learning/ assessment activities are observed. We were not able to peruse the documents relating to clinical teaching and it was not clear whether the teaching by demonstrators/research students and extended faculty are also subject to observation. We were also not able study examples where the results of the peer observations have resulted in improvements.

4.7. Skills Development

Skill development was addressed in the old curriculum from the 3rd year, with a predominant focus on development of clinical skills in the wards. In the new curriculum, a variety of skills development is addressed commencing from the orientation programme, which focuses on improvement of generic skills in IT, language and communication. This is continued through the modules, with the added development of clinical skills being introduced from the first year. Students have opportunity to apply their knowledge, and practice basic procedural skills and laboratory skills eg. measurement of blood pressure in the cardiovascular module, maintenance of airway in the respiratory module. Learning outcomes to be achieved are clearly defined in the module handbooks. With vertical integration of the clinical training programme from the first year, students have the opportunity to develop skills in history taking and system based examinations.

The resource centre augments the opportunities for skill development in language and communication with close supervision by academic staff. Development of critical analysis is also addressed early with the opportunity for peer evaluation of skills in communication. The training in community medicine supported development of research and writing skills by the report students were required to submit. The formal evaluation of generic skills is addressed during OSCE assessments together with content areas.

The skills lab provides an interactive, non threatening environment in which students have sufficient time with appropriate teaching aids to develop skills which they would be required to perform under emergency situation such as the pre-professorial life support skills training. The personal and professional development enhances the development of communication and life skills such as stress management, interpersonal and teamwork skills.

There is evidence that students acquire the intended skills defined in the curriculum by the final year with emphasis on procedural, clinical and communication skills. Student presentations with opportunities for role play to enhance team-working skills and collaboration with allied health sciences was evident. Evaluation of these skills by the log-book and viva ensures that students perform and develop their skills.

Discussions with students and extended faculty staff who contribute to clinical skills training in the 3rd and 4th years indicated that there was room for formalising skills development as in phase 1 of the new curriculum and the final year. This is expected to happen with the recently introduced log books into these two years. More involvement of extended faculty Consultants into the introductory, 3rd and 4th year clinical teaching of the faculty is another mechanism to be considered to ensure integration of clinical teaching in the pre-final years.

4.8. Academic Guidance and Counseling

A formal mechanism is in place which helps a medical student entering the faculty to settle in. This is done by a dedicated team of teachers in the orientation module who has taken the initiative to make the students feel at ease right from the very beginning. A unique scheme of assigning 3 personal tutors, one each from the pre, para and clinical programs to each student, is practised to ensure continuity of counselling services throughout their pre, para and clinical years in the faculty. Students are required to keep track of their meetings with their personal tutors by documenting the initial as well as subsequent encounters. This scheme provides students access to seek guidance on both academic as well as personal issues.

In addition, there are 4 student counsellors appointed by the faculty to provide any help to needy students. Their services are strengthened by the teachers in the Psychiatry Department who can provide a fall back measure for issues that the counsellors are unable to advice on.

The teachers also informed us that academic guidance is provided on a one to one basis to students who are unable to cope or are unsuccessful in their examinations in the relevant modules and subjects. However these instances are not documented formally.

Though the student counsellors and teachers are not formally trained in counselling, the very good rapport that students and staff seem to have indicate that students are not hesitant to seek the help of teachers and the teachers are ever willing to help the students in need of academic guidance.

Based on the observations made during the visit by the Review Team and as per the facts discussed above the judgments given to those eight aspects under review are as follows:

Aspect Reviewed	Judgment Given
Curriculum Design, Content and Review	Good
Teaching, Learning and Assessment Methods	Good
Quality of Students including Student Progress and Achievements	Satisfactory
Extent and Use of Student feedback, Qualitative and Quantitative	Good
Postgraduate Studies	Good
Peer Observation	Satisfactory
Skills Development	Good
Academic Guidance and Counseling	Good

5. CONCLUSIONS

1. Curriculum Design, Content and Review

Strengths/Good Practices

1. The new curriculum appears to be well-designed, with participation of a wide range of stakeholders
2. Learning objectives have been clearly identified for each component of the curriculum, including clinical training in the 3rd, 4th and final years.
3. Learning objectives are made known to students through distribution of module booklets.
4. The ongoing change of curriculum is monitored closely and adjustments made according to student feedback.
5. Inclusion of Family Medicine and the Community-Based Medical Learning appointment are major strengths in the study programme, as they will undoubtedly assist graduates who have to practice in a low-resource setting, or set up a general practice on their own.

Weaknesses

1. Lack of awareness among the extended faculty and non-academic staff of the precise nature of, and the reasons for the on-going curriculum change
2. Lack of student choice and flexibility in the study programme

The judgment assigned to this aspect is "**Good**"

2. Teaching, Learning and Assessment Methods

Strengths/Good Practices

1. A wide array of teaching and learning methods are utilised to cater to diverse learning abilities and styles of students.
2. The T/L activities encourage active participation of students and further encourage them to be self learners.
3. The T/L activities conducted with the excellent facilities in the Resource Centre encourages students to develop generic skills in English & IT competency as well as doctor-patient communication.
4. Teaching in the clinical setting is student centred and varied, ensuring active participation by all students of the small groups.
5. Specific skills development of students is emphasised and supplemented by the excellent facilities in the skills laboratories of the Dept. of Surgery and in the Faculty Resource center.
6. Staff student interactions are encouraged during the TL activities and students have no reservations nor any difficulties in contacting their teachers when necessary.

Weaknesses

1. One of the T/L activities in the clinical setting (CLD in Paediatrics) did not encourage active participation of the entire batch and alternative strategies need to be looked at.
2. The problem based learning sessions which drew the attention of the students as being one of the very attractive methods of T/L were few and far between; just one in the phase 1 curriculum
3. The learning environment of the lecture theatres in the old building is not optimum, compromising some of the T/L activities conducted there.
4. Students seem to be unduly stressed when continuous assessments are scheduled in the afternoons during their clinical appointments and they are required to rush back from the hospital to the faculty.
5. Documentation of formal, purely formative assessments is lacking.

3. Quality of students, including student progress and achievements

Judgment assigned to this aspect is "**Good**"

3. Quality of Students, including Student Progress and Achievement

Strengths/Good Practices

1. The majority of students progress well and reach the standards required of a medical graduate

Weaknesses

1. An unsatisfactory proportion of students fail and the reasons have not been studied.

Judgment assigned to this aspect is "**satisfactory**"

4. Extent and Use of Student Feedback

Strengths/Good Practices

1. Formal systems of obtaining student feedback are in place for curricular components

Weaknesses

1. No forum for students to raise general issues

Judgment assigned to this aspect is "**good**"

5. Postgraduate Studies

Strengths/Good Practices

1. Postgraduate student matters are entirely handled by the Faculty of Graduate studies.
2. Research facilities in some departments are praiseworthy.
3. Students are adequately prepared to engage in research.
4. PGIM trainees consider some of the professorial units to be centres of excellence.

Weaknesses

1. Postgraduate students in the faculty lack a common meeting place.
2. PGIM trainees have limited access to internet facilities

Judgment assigned to this aspect is "**Good**"

6. Peer Observation

Strengths/Good Practices

1. An system for peer observation is in place

Weaknesses

1. The system needs to be further developed to cover all teaching/learning/assessment activities.

Judgment is "satisfactory" with regard to this aspect.

7. Skills Development

Strengths/Good Practices

1. The curriculum has a strategy for skills development of generic, procedural and clinical skills which is well integrated with the new teaching programme.
2. Students are aware of the skills they have to acquire and have access to units dedicated to skill development
3. There is close monitoring of skill development with feedback to students on their progress
4. Assessment methods evaluate both personal skills and subject knowledge

Weaknesses

None of note

Judgment assigned to this aspect is "**Good**"

8. Academic Guidance and Counseling

Strengths/Good Practices

1. The personal tutor scheme of appointing 3 teachers from the pre, para and clinical programs for each student and ensuring continuity of the process
2. The dedication of the staff and the good rapport that exists between staff and students provides the suitable environment for students to seek guidance from their teachers.

Weaknesses

1. Lack of training for student counsellors and other teachers.
2. Lack of documentation of a formal mechanism to provide academic guidance by the teachers in the respective modules and subjects.

Judgment assigned to this aspect is "**Good**"

6. RECOMMENDATIONS

At Faculty level

1. Encourage more academic staff to obtain PhDs to redress the balance between clinical and research degrees in the Faculty
2. Keep the extended faculty and non-academic staff informed of the nature of and reasons for curriculum changes
3. Conduct an annual meeting with extended faculty, in order to create a forum where issues relating to clinical training may be discussed.
4. Consider modification of the current clinical training rotations to include more / different exposure to sub-specialities.
5. Encourage establishment of a postgraduate centre equipped with textbooks, computers and internet access, for PGIM trainees at the Colombo South Teaching Hospital.
6. Improvement of the learning environment in the clinical setting for the students in the final year by providing facilities to encourage peer learning and discussions.
7. Consider retaining the Home Area Project for students in transition from 2nd to 3rd year of study.
8. Improve learning environment in Lecture Theatres 1 and 2.
9. Avoid conducting continuous assessments for 3rd and 4th year students on days when they also have to attend clinical appointments.
10. More copies of newer editions of essential standard textbooks to be made available in the library in the lending section.
11. Provide space in the library for students to study on their own and for peer learning when the new building in stage 4 becomes a reality.
12. Monitor and study failure rates to identify reasons
13. Develop formal methods to identify and help weak students early in the course
14. Explore the possibility of establishing a staff-student liaison Committee
15. Computerize the system of obtaining feedback
16. Extend peer observation to cover all aspects and further develop the process
17. Encourage student counsellors to undergo training in counselling.

At University level

1. Provide some form of adequate remuneration and acknowledgement of services rendered by staff members who teach students on more than one study programme within the Faculty.

7. ANNEXES

Annex 1. AGENDA FOR THE REVIEW VISIT

Day 1, 16 March 2009

8.00 – 9.00 am	Reviewers meeting with QAAC
9.00 – 9.30 am	Discussion of agenda for review visit
9.30 - 10.30 am	Presentation of SER by Dean and Head / ME Dept
10.30 – 11.30 am	Meeting with academic staff in para-clinical and clinical depts
11.30 – 12.30 pm	Meeting with academic staff in pre-clinical depts
12.30 – 1.30 pm	Lunch
1.30 – 3.00 pm	Observe facilities: library, lecture halls, labs, Biochemistry Physiology and Community Medicine Depts (including PG centre)
3.00 – 4.00 pm	Meeting with undergraduates: 1st years and 4th years

Day 2, 17 March 2009

8.00 – 9.00 am	Meeting of reviewers
9.00 – 9.45 am	Observe teaching: lecture on anatomy of thoracic wall for 1st years
9.45 – 10.30 am	Observe examination: OSCE on CBML appointment for 4th years
10.30 – 11.30 am	Observe teaching (Anatomy dissections for 1st years); observe facilities (Anatomy Dept)
11.30 – 12.15 pm	Meeting with postgraduate research students (MPhil, PhD, MD)
12.15 – 1.15 pm	Observe documents
1.15 – 2.00 pm	Lunch
2.00 – 3.15 pm	Observe teaching (Pathology tutorial for 4th years); observe facilities (Pathology Dept)
3.15 – 4.00 pm	Meeting with undergraduate students (2nd years)
4.00 – 4.45 pm	Meeting with recent graduates (temporary demonstrators)
4.45 – 5.30 pm	Meeting with undergraduate students (3rd and 4th years)

Day 3, 18 March 2009

8.30 – 10.30 am	Observe teaching and facilities at CSTH: Surgical wards, Surgical Skills Development Centre; Laparoscopic Skills training centre; Gynaecology wards; Endoscopy unit; Paediatric ward; Medicine wards
10.30 – 11.30 am	Meeting with extended faculty
11.30 – 12.00 pm	Meeting with postgraduates (PGIM trainees in O&G, Medicine, Surgery and Paediatrics)
12.00 – 12.30 pm	Observe teaching: Paediatrics CLD for final years
12.30 – 1.30 pm	Observe facilities: Psychiatry unit
1.30 – 2.15 pm	Lunch
2.15 – 3.15 pm	Observe facilities: Resource Centre with IT lab; Language and Communication Lab; Clinical Skills Lab
3.15 – 4.00 pm	Meeting with student counsellors
4.00 – 4.30 pm	Meeting with non-academic staff

Day 4, 19 March 2009

8.00 – 11.00 am	Meeting of reviewers; observe documents and report-writing
11.00 – 12.00 pm	Observe teaching and facilities: paraclinical departments, Family Practice Centre
12.00 – 1.00 pm	Lunch
1.00 – 2.00 pm	Wrap-up meeting with Dean & Faculty Board