PROGRAMME REVIEW REPORT



FACULTY OF MEDICINE UNIVERSITY OF RUHUNA

 03^{rd} to 06^{th} July 2007

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1. PROGRAM REVIEW PROCESS

Program review process formulated by the University Grants Commission evaluates quality of education within a specific subject/discipline or a program. It is focused on quality of the student learning experience and on student achievement. It has been designed to evaluate the quality of both undergraduate and postgraduate programs offered by academic departments of the Sri Lankan Universities.

This report describes the outcome of a program review carried out to evaluate the quality of the academic programmes and related issues in the Faculty of Medicine, University of Ruhuna, Sri Lanka. In this exercise the following aspects were examined and evaluated (see Agenda – Annex 1).

- 1. Curriculum Design, Content and Review
- 2. Teaching, Learning and Assessment Methods
- 3. Quality of Students, Student Progress and Achievements
- 4. The Extent and Use of Student Feedback
- 5. Postgraduate Studies
- 6. Peer Observations
- 7. Skills Development
- 8. Academic Guidance and Counselling

2. BRIEF HISTORY OF THE UNIVERSITY, FACULTY AND THE DEPARTMENT

The University of Ruhuna was established by a Special Presidential Decree on 1st September 1978, as Ruhuna University College. Initially it constituted of four faculties, namely, Agriculture, Arts, Medicine and Science.

The Faculties of Agriculture and Science were located in the premises of Technical College at Meddawatte, Matara, whereas the Faculty of Arts was located in the premises of Teachers' Training College at Eliyakanda, Matara. These three faculties were initially affiliated to Universities of Peradeniya, Kelaniya and Colombo respectively. The Faculty of Medicine was affiliated to the University of Colombo and the first batch of students who enrolled for the M.B.B.S. Degree was sent to the Faculties of Medicine, in Colombo and Peradeniya. This affiliation continued until the Ruhuna University College was upgraded to a fully-fledged University on 1st February 1984. A Faculty of Engineering was established in Hapugala (Galle) in 1999. The most recent additions to the list of faculties in the University of Ruhuna were Faculty of Management & Finance and the Faculty of Fisheries & Marine Sciences & Technology inaugurated in 2003 and 2005, respectively. Thus, the University of Ruhuna currently comprises of seven faculties.

The Vision and Mission of the University

Vision Statement

The vision of the University of Ruhuna is to be an outstanding internationally respected academic centre of excellence while affirming Sri Lankan identity and committed to rigorous scholarship, academic freedom, sound moral values and social responsibility. Mission Statement

The University of Ruhuna strives to produce outstanding internationally accredited graduates who are innovative, analytical, articulate, adaptable life-long learners contributing to the educational, cultural, economic and natural environment of the society we serve.

Faculty of Medicine

The Faculty of Medicine was inaugurated in the premises of the General Hospital, Galle in July 1980 and was initially affiliated to the University of Colombo. The construction of buildings for the Faculty at Karapitiya commenced in December 1980 and the Faculty moved to its new premises in September 1983. Medical students were admitted directly to the new premises of the Faculty of Medicine, Galle, from the academic year 1983/84 and the entire course is now conducted at the Faculty. Prior to this, students admitted between 1978 and 1983 attended the preclinical courses at the Faculties of Medicine in the Universities of Colombo and Peradeniya. The faculty has provision for graduates to read for the Doctor of Medicine (DM), Doctor of Philosophy (PhD) and Master of Philosophy (MPhil) degrees.



Figure 1. Faculty of Medicine University of Ruhuna

The new Teaching Hospital is situated 300 meters from the Faculty of Medicine. The University units in Medicine, Surgery, Paediatrics and Psychiatry are located in this hospital. The Department of Obstetrics & Gynecology is situated in the premises of the old hospital at Mahamodera. As this hospital was affected by the Asian Tsunami in 2004, these units are due to be moved to the proposed Helmut Kohl Hospital once it is completed in 2010. Teaching in all clinical disciplines is done in these two hospitals. Teaching in Psychiatry is done in the Psychiatric Hospital at Unawatuna situated 8 km south east of the Medical Faculty. Field Training in Community Medicine is done at Bope-Poddala MOH area located close to the Faculty of Medicine. The students have an opportunity to live and study in Akuressa and Akuressa District Hospital respectively during the Rural Attachment.

Students

At present the Faculty of Medicine has 6 batches of students, i.e. approximately 960 students. The faculty is currently in the process of back log clearance and work 4 terms a year. However, there is no delay in enrolling students to the course after selection by the UGC. The presence of 6 batches of students within the program has made students spend nearly 6 years in the faculty to complete the course. The students were obviously not comfortable with that. This situation would get rectified in year 2008. The present annual intake of students is approximately 130 (see Figure 2).

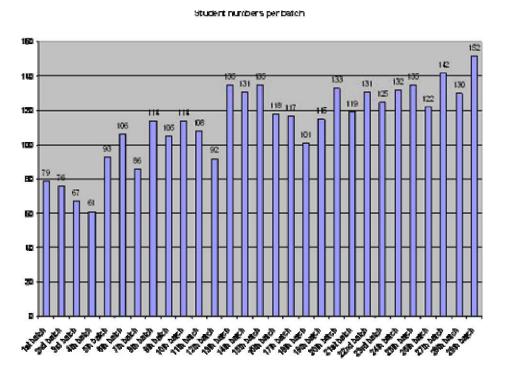


Figure 2. The number of students entering the Faculty annually since its inception

Staff and Facilities

Currently there are 94 academic staff members constituting of 3 Senior Professors, 8 Professors, 1 Associate Professor, 37 Senior Lecturers, and 45 Lecturers. Approximately 10 academic vacancies exist. In addition, the Chairs in Pediatrics, Surgery, Forensic Medicine, Pathology, and Psychiatry remain to be filled. There are 34 temporary demonstrators supporting the academic activities. In addition, there is an extended faculty, who are specialists of the Ministry of Health mainly undertaking clinical training of 3rd and 4th year students.

The Faculty of Medicine of University of Ruhuna is considered spacious being situated in a 7.5 acre land. It is located with in a 3 km distance from Galle town in the suburbs.

The administrative block of the faculty hosts the offices, library, canteen, and common rooms for students, academic and non-academic staff. The academic activities are conducted in 3 separate large buildings designated for pre-clinical, Para-clinical, and clinical subject areas. There are 5 spacious lecture halls where 160-200 students could be accommodated. There is provision to combine the lecture rooms to accommodate 385 students with the removal of partitioning. Each lecture hall has its own multimedia, and overhead projectors. All lecture rooms are well lit and ventilated whilst one room is air conditioned. The lecture halls with

removed partitioning are used to conduct written examinations. Many tutorial rooms are located within the departments and are equipped with a whiteboard and an overhead projector.

In addition, there is a 950 seat air-conditioned auditorium mainly used for special functions.

The main **Library** has a seating capacity for approximately 250 students with photocopying facilities. It is open 10 hours on weekdays and allows access for postgraduate students and hospital teaching staff. In addition, there are small reading rooms in Departments of Community Medicine and Medicine. A mini library with basic clinical titles is available in the department of Paediatrics.

The **Museums** of the faculty hosts collections of specimens in Anatomy, Pathology, Forensic Medicine and Parasitology.

There is a large **Dissecting Room** in the Anatomy block. There are several **laboratories** for practical classes for Physiology, Histology, Biochemistry, Microbiology, and Parasitology. The skills facility available for Obstetrics and Gynaecology is impressive.



Figure 3. A section of the skills laboratory for Obstetrics and Gynecology

There is a **Computer Aided Learning Lab** equipped with over 60 computers with broadband connectivity to the Internet. The **English Language Laboratory** has two seconded staff members offering self learning help using computer aided learning. An area for a **Clinical Skills Laboratory** is identified, refurbished and partitioned and is awaiting furnishing and installation of equipment.



Figure 4. The Computer Aided Learning Laboratory

There is a Student Support Service Centre staffed with volunteer staff and a hotline. Counselling sessions are being carried out in this centre. Approximately 400 student visits are recorded in this centre annually.

There are several study areas newly created for student use. Some of these areas are still to be furnished. There is a **Physical Education Centre**. The students are also supported for art, cultural and other social activities.

There are 3 hostels and some rented houses providing residential facilities for approximately one third of the student population. The residential facilities provided in the vicinity of Mahamodara, however, were subject to much criticism by the students. Others have found their own accommodation and a few travel from home. There is a large hostel project in progress that would be able to host another 680 students by the year 2008.

3. AIMS AND LEARNING OUTCOMES

3.1. Aims

In line with the vision of the University, the Faculty of Medicine has set itself the following aims for its degree program

- 1. To be an outstanding internationally respected academic centre of excellence while affirming its Sri Lankan identity
- 2. To contribute significantly to the health manpower of this country
- 3. To graduate well motivated competent doctors to serve society in any part of the

country

- 4. To encourage life long learning among students
- 5. To motivate the academic staff to develop their careers and pursue research

3.2. Learning Outcomes

On successful completion of the MBBS degree offered by the Faculty of Medicine, the students should

- 1. Have developed positive attitudes towards patients, the community and other members of the health team.
- 2. Be motivated to serve the people of Sri Lanka
- 3. Have perception of the ethical issues relating to individual doctor-patient relationships, interaction with other health professionals and society
- 4. Have the desire and capability to maintain professional standards
- 5. Be able to diagnose, treat and prevent diseases common in Sri Lanka and manage medical emergencies with the resources available
- 6. Be able to recognize serious diseases in the early stages
- 7. Be aware of the limitations of their professional skills and available facilities and be able to recognize conditions where referral is necessary.
- 8. Be able to carry out basic medico-legal procedures
- 9. Have a knowledge of managerial skills required to administer health institutions and health teams and be able to take a leadership roles when necessary
- 10. Have the knowledge and skill to deliver primary health care
- 11. Be aware of the principles of behavioural sciences as applied to health and the practice of medicine.
- 12. Be aware of the alternative systems of medicine practiced in the country
- 13. Be capable of continuing self-learning

4. FINDINGS OF THE REVIEW TEAM

4.1. Curriculum Design, Content and Review

The Faculty of Medicine offers a course leading to the Bachelor of Medicine and Bachelor of Surgery degree. The MBBS curriculum is of the traditional, discipline-based type. The degree programme consists of 14 academic terms. In the first two years, students receive instruction in the pre-clinical subjects of Anatomy, Biochemistry and Physiology, and have to pass examinations in these three subjects at the end of 5 terms to proceed to the next phase of study. The recently introduced Foundation Module during the first term offers English, Information technology, Medical Humanities and Communication Skills.

The students commence their clinical training (which continues through the 3^{rd} , 4^{th} and 5^{th} years) after successfully completing the 2^{nd} MBBS examination. In the 3^{rd} and 4^{th} years, students study Para-clinical subjects. At the end of the 3^{rd} year the students sit the 3^{rd} MB Part 1 Examination (Microbiology and Parasitology), and at the end of the 4^{th} year, 3^{rd} MB Part 11

examination (Pharmacology, Pathology, Community Medicine and Forensic Medicine). During this period, students are expected to attend clinical clerkships in all the main clinical disciplines and in several medical and surgical specialties.

The Final year examination subjects include Medicine, Surgery, Paediatrics, Gynaecology & Obstetrics and Psychiatry. Since 2005, the students are offered an AIMS (Administrative, Interpersonal and Managerial Skills) module after the final MBBS examination. In the final year, students focus entirely on the clinical subjects of Medicine, Surgery, Obstetrics & Gynaecology and Paediatrics (with 4 clinical rotations of 2 months each in the Professorial Units of the Teaching Hospital, Karapitiya), and are assessed in these subjects at the Final MBBS examination. Psychiatry is assessed with Medicine in this examination. There are no opportunities for formal elective appointments.

Detailed learning objectives for each of the subjects have been articulated by the staff, and are made known to the students in a variety of different ways. Learning objectives for Anatomy, for example, are put up on a notice board in the department. In other subjects such as Medicine, they are provided in a booklet given to students. Almost all of these are phrased in terms of desired learning outcomes.

The total course is conducted in 14 terms. There is a stand alone Neuroscience course offered in the pre-clinical stage based on the modular concept.

Department	Lectures	Tutorials	Practicals	Clinicals	Ward Classes	
Anatomy	116	72	117			
Physiology	140	40	33			
Biochemistry	138	40	50			
Microbiology	90	30	60			
Parasitology	45	15	15			
Community Medicine	100	40		6 weeks		
Forensic Medicine	66	7		2 weeks		
Pathology	100	20	35	80 hours		
Pharmacology	85-90	20-25				
Medicine	90			46 weeks**	32 hours	
Surgery	90			34 weeks**	32 hours	
Paediatrics	108			17 weeks	32 hours	
Gynaecology & Obstetrics	90	100		17 weeks	32 hours	
Psychiatry	70			4 weeks		
Multidisciplinary				4 weeks*		
*Rural Health ** Cardiology, Neurology, Rheumatology, Chest, Dermatology, STD, Eye, EN Oncology, Radiology, Anaesthesia, Orthopaedics						

Table 1. Distribution of teaching and learning activities by subjects in the medical curriculum

Although no major changes have been made in the curriculum design, several new content areas have been added in the recent past. For example, the Foundation Module introduces several areas that are of importance to new entrants: English as a medium of effective communication; information technology as a tool for enhancing learning; communication skills; management and entrepreneurial skills; and introduction to social and Sri Lankan studies, medical ethics, arts and music in medicine and medical anthropology.

The Foundation Module is conducted over a period of 4 weeks in the 1st term of the 1st year. It has now been conducted for 2 years in succession. This module has been given favourable ratings by students of the 29th batch. The pre-intern demonstrators who have been involved with conducting of this module were of the opinion that it has greatly enhanced rapport between students and staff. A 4 week rural health program has also been introduced and a multidisciplinary 4 week clinical attachment at Akuressa District General Hospital. An innovative AIMS module, focusing on Administrative, Interpersonal and Management Skills has been introduced recently for the qualifying graduates; unfortunately such graduates have no obligation to participate.

Curricular modifications proposed by any department are discussed by the Curriculum Development and Evaluation Committee (CDEC) and then referred to the Faculty Board for endorsement. Significant departures from the existing course are sent for ratification by the Senate of the University of Ruhuna. A separate Curriculum Revision Committee has been entrusted with overseeing major changes.

There has been minor, mainly department based, curriculum modifications. These changes have been implemented following the approval of the Curriculum Development & Evaluation Committee and the Faculty Board. The students were informed of these revisions at the beginning of the course.

The need for major revision of the MBBS curriculum has been seriously considered on several occasions in the recent past, especially with a view to adopting an integrated curriculum based on a modular system. This had been discussed in workshops and the integrated medical curriculum offered by the University of Kelaniya has been considered. Several sub committees formed under the Curriculum Revision Committee (CRC) have studied this model. A survey conducted in 2006 among the academic staff has indicated that 88% of the 51 respondents were in favour of change, but most of them preferred minor changes restricted to teaching and learning methods and the introduction of new elements such as behavioural sciences, rather than a major change such as switching over to an integrated, system-based modular curriculum. It is of note however, that a significant proportion of the academic staff (estimated 30 members) has not responded to the survey. At present, the opinion of other stakeholders such as extended faculty, recent graduates and alumni is also being sought on this issue. The faculty will take up the issue of major curriculum revision again, once this stakeholder survey is complete. The Review Team is of the view that this issue should be re examined early to reach a final conclusion.

It is the view of the Review Team that the Curriculum Design, Content and Review, can be judged as SATISFACTORY.

4.2. Teaching, Learning and Assessment Methods

The MBBS programme incorporates a variety of teaching – learning activities, such as lectures, laboratory-based practicals, dissections, tutorials, small group discussions and role play sessions, fixed learning modules, student seminars, field work, a research project, as well as clinical appointments in the Karapitiya Teaching Hospital. Although problem based case scenarios are used in tutorials in some subjects none of the departments appear to use problem-based learning as a learning tool. The practical classes, tutorials and clinical clerkships are compulsory requiring a minimum of 80% attendance. The lectures are optional.

Lectures are the main activity by which students are expected to acquire new knowledge. The faculty has 5 well-equipped, spacious lecture halls; all equipped with sound amplification

systems, as well as computers and multi-media projectors. It appears all lectures are now delivered with PowerPoint presentations using multi-media.

The faculty has been striving to move towards a more active learning process. Regular opportunities for active learning are provided by most departments. It was noted that some departments conduct seminar programs as part of active learning. Community Attachment programme that runs over the 3rd and 4th years, as well as the mandatory research project supervised by the Department of Community Medicine carried out by groups of 12–15 students contribute to active learning.

All scheduled teaching-learning sessions are displayed on several notice boards, and any changes are similarly notified. Scheduling of formal learning in the faculty appears to run smoothly in general.

The new Computer Aided Learning laboratory supports self-directed learning by students, by providing a variety of web-based learning materials.

Their clinical training is carried out with the assistance of the Ministry of Health specialist staff and Post Graduate Institute of Medicine (PGIM) trainees at Teaching Hospital, Karapitiya, and district hospital, Akuressa, field clinics, and clinics in Bope-Poddala MOH area. Until recently, clinical training for the faculty's medical students has been imparted exclusively in an urban, tertiary care setting (in the Karapitiya and Mahamodara teaching hospitals in Galle). The lack of exposure to health care in a rural, resource-poor setting has been perceived as a deficiency in the training programme. This deficiency has been corrected by the recent introduction of the Rural Health training programme in the Akuressa District Hospital. This is a multi-disciplinary, 4-week residential appointment conducted with inputs from the Departments of Medicine, Surgery, Obstetrics & Gynaecology, Paediatrics, Psychiatry and Community Medicine. It is expected to equip students with the skills necessary to fulfill their roles as doctors in a predominantly rural country, with a multicultural society, and learn to handle health issues in a resource-poor setting.

Clinical training in the teaching hospital appears to be well-structured, and students as well as extended faculty are provided with guidance regarding the level of clinical skills expected at each stage of the training programme, such as the first Medicine appointment, the second Medicine appointment and the Professorial appointment in the final year. All departments expect students to perform a compulsory number of practical ward procedures, and to assist in, or observe others. In the final year, professorial unit appointments, students are expected to maintain log books, and present case histories regularly.

Students appear to be generally satisfied and happy with the learning opportunities and resources provided by the Faculty. However, particular mention was made of the constraints encountered by them during clerkships in Obstetrics & Gynaecology. These difficulties are a direct consequence of the 2004 tsunami, which greatly damaged the Mahamodara Hospital that housed all the Obstetrics and Gynaecology wards of the Health Ministry and the Faculty's Professorial Unit. Three antenatal wards, and one Gynaecological ward are functional at present and 3rd year, 4th year and final year clerkships have all to be carried out in these wards. The Obstetrics and Gynaecology Field Clinic which is run in a temporary structure in the faculty premises partly overcomes the lack of facilities for teaching, but a more permanent solution is anticipated in the form of a 300-bed hospital that is to be completed by 2010.

Assessment Methods

A variety of assessment methods are used in the Ruhuna MBBS programme. Almost all departments practice in-course assessments and summative end-of-course examinations.

In the 3 pre-clinical subjects, the continuous assessments are conducted at the end of each term and include theory papers (mainly MCQs) as well as OSPEs. Continuous assessment contributes towards 20% of the final mark in these subjects and in Microbiology and Parasitology. Microbiology continuous assessment includes MCQs as well as assessment of laboratory procedural skills; Parasitology includes only laboratory procedural skills.

In Community Medicine, 40% of the final mark comes from 4 different types of continuous assessments: theory papers (MCQ and SEQ); the end-of-clerkship OSCE; the research project report and viva; and a viva at the end of the community attachment programme. Pharmacology has just one continuous assessment: a MCQ paper that contributes towards 10% of the final mark. Forensic Medicine also has provision for continuous assessment: 10% of the final mark is derived from a mark given to the students for medico-legal procedures carried out by them during the clerkship. At present, Pathology is the only subject that has no provision at all for continuous assessment. However, according to the documents provided for perusal by the review team, a proposal submitted by the Department of Pathology to conduct 2 continuous assessments that will account for 15% of the final mark from 2008 onwards, has been approved by the Faculty Board.

In the final year, the marks set aside for continuous assessments vary between subjects: 10% in Surgery (for an end-of-appointment viva); 20% in Obstetrics and Gynaecology (for 2 OSCEs, one at the beginning and the other at the end of the appointment); 25% in Medicine (for maintenance of a log book, assessment of case histories, and an end-of-appointment OSCE); and 30% in Paediatrics (long case, short case, OSCE and MCQ paper).

Summative Examinations

All examinations use a combination of different assessment methods. The 2nd MBBS examination includes MCQ papers, SEQ papers, OSPEs and vivas in all three subjects.

The 2 subjects in the 3rd MBBS Part I examination also include the same assessment methods. Of the 4 subjects in the 3rd MBBS Part II examination, all include MCQ and SEQ papers, and vivas, but only Pathology and Forensic Medicine have practical examinations.

The 4 subjects in the final MBBS examinations are tested through theory papers, OSCEs, short cases, long cases and vivas (Surgery only). Assessment in Psychiatry contributes towards a small proportion (8.5%) of the final mark in the subject of Medicine. This is derived from theory questions as well as through inclusion of one station in Psychiatry in the Medicine OSCE. The percentage mark distribution assessments are shown in Table 2, Table 3 and Table 4.

Since 2005, the MCQ papers for the final MBBS examination have been set by a common panel of examiners from all 6 medical faculties, coordinated by the UGC.

The inclusion of 4 subjects in the 3rd MBBS Part II examination, especially in the light of the fact that the Part I examination includes only 2 subjects, appears to make this examination quite stressful for students. This was highlighted in comments made by students and pre-intern graduates.

The faculty has a good in-built mechanism for scrutiny of MCQ papers, first within the department, and then by a panel of senior academic staff from outside the Department.

From 2007, achieving UTEL level 5 competency in English is made compulsory by the faculty before graduation.

Subject	MCQ	SEQ	Viva	OSPE	CA	Total
Anatomy	20	20	10	30	20	100
Physiology	25	25	10	20	20	100
Biochemistry	25	25	10	20	20	100

 Table 2. The percentage mark distribution for assessment in pre-clinical subjects

Table 3. The percentage mark distribution for assessment used in Para-clinical subjects

Subject	MCQ	SEQ	Prac	Viva	OSPE	CA	Clerkship	Resch	Com Atach	Total
Microbiology	20	30		10	20	20				100
Parasitology	20	30		10	20	20				100
Community Medicine	25	25		10		10	10	10	10	100
Forensic Medicine	20	40		10	20	10				100
Pathology	20	40	30	10						100
Pharmacology	40	40		10		10				100

Table 4. The percentage mark distribution for assessment in Clinical subject	Table 4. The	ie percentage mark	distribution for	assessment in	Clinical subjects
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Subject	MCQ	SEQ	Viva	OSPE	LC	SC	OSCE	CA	Total
Medicine	13.5	16			15	8	14	25	91.5
Surgery	20	20	10		20	20		10	100
Paediatrics	15	20		5	15	15		30	100
Gynaecology & Obstetrics	20	20			15	15	10	20	100
Psychiatry	1.5	4					3		8.5

It is the view of the Review Team that the present status of Teaching, Learning and Assessment Methods adopted by the faculty can be judged as GOOD.

4.3. Quality of Students, including Student Progress and Achievements

University slots for medicine are highly competitive and are decided by the University Grants Commission based on the dual criteria of merit and others such as district, educationally disadvantaged and special intake criteria. Admissions of medical students to MBBS Ruhuna are also based on the above University Grants Commission recruitment criteria. Thus, student recruitment is not under the control of the faculty. In 2006, the faculty admitted its' largest number of students in one batch i.e. of 150.

The proportions of merit, district and other quotas that are operative for admissions to the faculty are uncertain. However, the preference of students for Ruhuna and other faculties have been intermittently surveyed.

In a survey done in 2004, among 272 students who were in the faculty at that time, Colombo (46.3%) was the first choice, Ruhuna (34.5%) second, followed by Peradeniya (18%). In a more recent survey done in 2006 on 145 of the 150 students, 63% of students preferred Colombo, 19% for Peradeniya and 15% for Ruhuna. The relegated choice of Ruhuna has

been of serious concern to the staff. However, examination of the Z-scores of the students entering the facility during the last three years indicated that more than 62% of the students enter with Z-scores of more than 2.0.

The majority of the recently admitted students come from the Southern Province districts of Galle (31%), Matara (31%), and Hambantota (16%) and also from Moneragala. The most recent survey, revealed significant numbers of students from the districts of Badulla and Ratnapura in addition to those from the Southern Province districts.

The faculty probably has the middle rung of the overall intake as the majority of the students have been successful through the advance level examination on their second (52%) or third attempt (26%).

The preferred numbers of students are approximately 130 per annum and the faculty is unable to increase this number mainly due to the limitations of spaces available for hospital based training.

All students pursue their primary education in Sinhalese or Tamil medium whilst the medium of communication in faculty academic work is in English. There is a program to rectify the English language deficiency. An English language laboratory has been established with the intention of assisting students to achieve bench mark level of 5 in the University Test for English Language (UTEL). The new entrants face a placement test on reading and writing and are ranked according to the marks. All students attend an intensive course in English for 20 days followed by the UTEL test. Students who are still performing poorly at the end of the course could follow further lessons to make up.

The student view is that the English education program should be tailor made according to the level of performance in the placement test. Further, the main problem of pronunciation and oral communication in English is not adequately addressed in the present program. However the student's participation in the ongoing English classes appears to be lower than expected.

The students sit for the 2^{nd} MBBS examination at the end of 5 terms and its successful completion is compulsory before proceeding to the next stage. The 3^{rd} MBBS Part 1 and Part 2 are not 'bar' examinations and hence they could commence professorial clinical appointments without completing those. However, the entire course must be completed in 10 academic years, at the end of which his or her studentship will be automatically cancelled. Compared with the 2421 students graduated since inception of the faculty, 43 students were unable to complete the course; 3 had died, 3 had left on own accord, 10 failed to complete within the 10 year rule, 15 – failed the 2nd MBBS, 13 Part 1 and 2 and 7 Final MBBS. Failing students were often found to have a psychiatric illness.

The overall performance of the students as indicated by examination pass rates have been steady and satisfactory, but there is considerable variation between subjects and during different periods. The students appear to perform better in the final year clinical subjects than in other subjects (see Figure 5). Consistently, 3rd MBBS Part 2 pass rate has been lower than that of 3rd MBBS Part 1. The 2nd MBBS pass rate too was lower and had a downward trend but this has shown some improvement in last 2 years. The Biochemistry and Anatomy appear to be the hardest subjects.

The students have a considerably heavy workload in the 4th year. This is because they have their time tied to the 4 Para-clinical subjects, their examinations, clinical appointments, community attachment and clerkship, a research project and the final year clinical lectures during this year. Students are of the opinion that it would be beneficial to have Pharmacology moved from Part 2 examination to the 3rd MBBS Part 1.

Trend in pass rate - Final MBBS - 1-22 batches

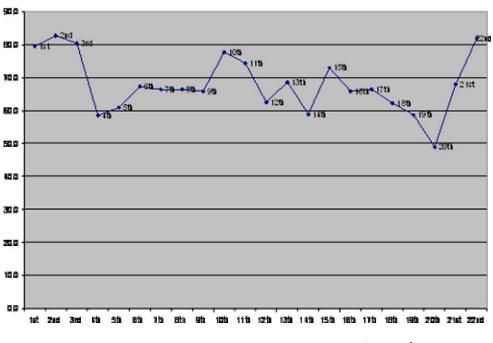


Figure 5. The final year pass rates at first attempt: 1st to 22nd batches

Their greatest hurdle appears to be the 2nd MBBS examination, perhaps contributed by the generally limited proficiency in English in the early years of the course (see Figure 6). Anatomy as a subject appears to be the most difficult, with an average 50% pass rate at first attempt. This is perhaps also related to its large syllabus.

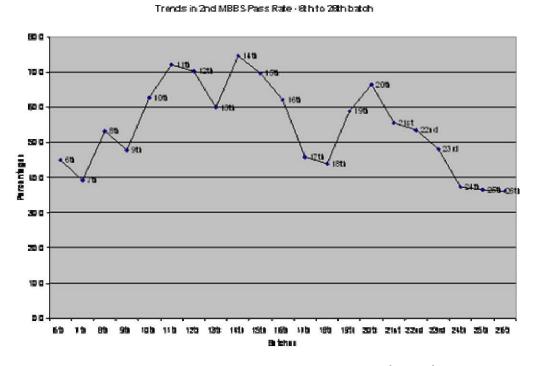


Figure 6. Second MBBS pass rates at first attempt: 6th to 26th batches

In general, University of Ruhuna graduates have shown favourable ranking places in the common merit list (amongst all 6 faculties in Sri Lanka) for internship. A comprehensive assessment of the quality of the Ruhuna graduates in terms of their skill, knowledge and attitudes has not been done but a limited survey of hospital specialists on the knowledge, skills and attitudes of Ruhuna interns shows that their attitudes based on interpersonal skills, team work, punctuality, empathy was better rated (mean 4.2/5) than the knowledge and skills (mean 3.2/5).

A surrogate measure of the quality of the graduate is the progression to postgraduate studies. Three batches of graduates were followed up but the results are heterogeneous. Nearly 50% of graduates from the 1984 batch (37/75), 16.5% from the 1990 batch (16/97) and 31% (42/136) from the 1991 batch are now specialists. Such a progression could be considered an acceptable advance and reflects well on the basic training received as an undergraduate.

The award of distinctions during the last 28 years does not show any pattern of consistency in the context of subjects or batches of students.

It is the view of the Review Team that the Quality of Students including Student Progress and Achievements can be judged as GOOD.

4.4. The Extent and Use of Student Feedback, Qualitative and Quantitative

Most departments have obtained feedback by distributing comprehensive well structured questionnaires on a regular basis. Samples of these completed forms were made available to the Review Team. The information available in these forms could be used more effectively by an organized analysis to understand the improvements required in teaching. Provision of a space for individual comments in the form would be useful.

Some departments such as Anatomy, Microbiology and Pathology have set-up student staff liaison committees to obtain qualitative feedback from students. Extension of this activity to other departments is suggested.

Although each teacher has been assessed regarding his or her quality of teaching, the program itself has not been assessed in most departments. The reviewers feel that a formal student – staff meeting combined with a questionnaire survey at the end of a course or examination targeting program quality would assist each department.

Students are represented in the Faculty Board and in most IRQUE committees and their suggestions had been taken into consideration during relevant discussions.

The Review Team is of the view that the Extent and Use of Student Feedback can be judged as SATISFACTORY.

4.5. Postgraduate Studies

Students enrolled for postgraduate studies and research in a university contributes much to the research culture and generation of materials for undergraduate teaching. It also provides opportunities for undergraduates to recognize the research element in studies.

The Faculty of Medicine, Ruhuna has produced 13 Ph.D.s, and currently there are 10 students engaged in research at different stages of their degree program. The Review Team met a group of 9 students of whom 5 are enrolled for Ph. D. degrees. They are working in several disciplines including Molecular Biology and Parasitology with clinical orientations. Of them, two are about to submit their thesis and one has published 3 articles in international journals while others have made presentations in local and foreign technical meetings/workshops.

Some of them have understood the mechanisms to secure grants, and work in multidisciplinary groups. In the academic staff there are several researchers recognized at national and international levels, received awards for research and currently participating in collaborative research with organizations outside the Faculty. Their publication records have been impressive. Their views and approaches indicate signs of a rapidly evolving research environment in the faculty. There is also a group of 5 students engaged in research at M. Phil. Level.

The faculty also has regularly attracted postgraduate trainees from PGIM, enrolled for MD/MS degrees during the last 20 years. There are more than 10 PGIM trainees on site and in general they rate the facilities, guidance and exposure provided for clinical/ laboratory training as of high standing. Regrettably, some departments are unable to offer an on-call room and hence some PG trainees have to stay in clinical areas whilst on-call even at night.

The Review Team is of the view that the faculty is maintaining and improving on a research culture, and has been able to attract postgraduate students due to the strengths of committed staff, link programs with foreign universities and availability of modern equipment.

Increased number of academic staff for research and a strong desire to publish articles in internationally recognized journals would further strengthen the research culture.

MD trainees who are engaged in hospital duties are often not provide with any accommodation. Even during on-call some of them do not even have an on-call room – hence they just stay on the ward. The Review Team views this as an unsatisfactory situation.

In the opinion of the Review Team, Postgraduate Studies can be judged as GOOD.

4.6. Peer Observation

Peer observation among teachers and among students, provides a strong mechanism for self improvement and achieve uniform practices strengthening teaching-learning activities.

There has been evidence from a few departments on peer observation of teachers by teachers. The evaluators have mostly been the senior academics, and the evaluatees junior academics. There was also evidence that the pre-intern demonstrators are guided and observed by senior staff on their performance. It is essential to expand the practice of peer observation among the teachers to all the departments and on a more regular basis, perhaps on a schedule for the term.

Peer observations by students has been in practice in one department (Physiology) where the answer scripts of examinations held in the middle of the term were made to mark by the students based on a predetermined marking scheme, followed by discussions by the tutor or teacher.

Peer observation process need to be strengthened as it brings in a cultural change of recognizing opinions of others, junior or senior, in addition to improvement of teaching practices.

The Review Team judges this aspect as SATISFACTORY.

4.7. Skills Development

The medical curriculum possesses many in-built strategies in place for students to acquire critical skills to practice medicine. The transferable skills such as Language, communication and IT skills are attended to in the Foundation Module designed for the new entrants. This is

strengthened by the use of these skills very effectively during clinical teaching. The students also use the Computer Aided Learning Lab intensely for self learning. The skills are further strengthened by the AIMS module, described below.

A stepwise clinical skills development is achieved through student's hand book/log book that specifies in detail the clinical examination skills and procedural skills to be mastered in Medicine, Paediatric and Obstetric and Gynaecology appointments.

Acquisitions of clinical skills are often assisted by good guidance. For example, before the commencement of first clinical appointment in Paediatrics, a senior staff member of the professorial unit would explain the objectives of each appointment to the students. The clinical skills in Obstetrics and Gynaecology are often practiced using simulators or models hosted in the laboratory of the Department of Gynaecology.

The AIMS module is an innovative teaching programme initiated two years ago for the final year medical students after completing the final MBBS examination. This module carries a course content to address areas that were not taught, but essential for the functioning of a doctor. These areas include Administration, Information Technology, and Management Skills (AIMS). This course focuses on efficient communication skills, health policy and health care delivery system in Sri Lanka, personal development, ethics, medico-legal aspects and human resources management and information. The attendance in the first course was less than 50% of the batch initially, but this has improved in the 2nd course, when the course was conducted soon after the exams but before the release of final MBBS results. In general attendees have truly welcomed these courses and have indicated its usefulness in a very high grade on the feedback assessments. The organizers of the course are now keen to incorporate this AIMS module in the medical curriculum as it is of direct relevance to the medical training program.

It is the view of the Review Team that the Skills Development of the faculty can be judged as GOOD.

4.8. Academic Guidance and Counselling

The Faculty of Medicine, University of Ruhuna has been providing counselling assistance through number of student counsellors. Establishment of a student support service (SSS) centre with IRQUE/QEF funding has improved the quality of the counselling services. Twelve academic staff members have undergone training by an overseas expert on counselling and they are supposed to act as trainers in training more of the academic staff members. In addition 40 academic staff members have undergone training as mentors. Introduction of the mentoring scheme in the year 2003 resulted in 2-3 new entrants are being assigned to each staff member. These mentors assist students during the orientation period, provide guidance and refer them to relevant services. The non academic staff members who work on a roster to sit at the reception have also been trained by the counsellors in identifying the urgency of a situation and also to answer some of the inquiries regarding certain services available in the faculty.

The faculty has two categories of appointed counsellors. There are 12 specially trained counsellors and 31 staff members trained in mentoring. In addition, there are the student counsellors appointed by the Vice Chancellor, who are also engaged in a disciplinary role as indicated in the appointment letter. The general body of counsellors feels this tied disciplinary role is inappropriate.

Counsellors see needy students for various reasons. These include personal matter on relationships, absenteeism, failure in exams; most academic related matters are often counselled by the relevant head of department. Psychiatry related matters are dealt by the

Psychiatrists.

The student confidentiality is maintained at the student support centre. From time to time the Counsellor will meet the faculty. They also meet the student union mainly on welfare issues. There is no welfare committee but there is a self help fund established for student scholarships *etc* for the needy students. There is a hostel committee looking into matters related. Meals not being served within some hostels are another difficulty the students face.

The Review Team feels that a comprehensive Faculty Handbook made available for all new entrants would be beneficial. There is a need to improve awareness amongst students, in particular the senior students most of whom are not aware of this service. A leaflet addressing common student issues might help the students self prepare and resolve some issues.

It is the view of the Review Team that Academic Guidance and Counseling can be judged as GOOD.

4.9. Other Aspects

The Review Team met approximately 30 members of non academic staff.



Figure 7. Non academic staffs participating in the review process

The discussion with them brought in following suggestions.

- Need for a permanent sports instructor
- Need to reconsider the present system of provision of newspapers for a more cost effective and beneficial system to students
- Re-commencement of Tamil language classes

- Inadequacy of printing facilities at the library resulting in limitations in obtaining material from on-line journals
- Need to interlink database in the hospital to wards for use of students during on-call hours
- Reorganization of practical classes to provide better facilities to students, specially such as use of microscopes
- Low use of library even if kept open in the night
- Need for a more efficient book binding service.
- Need for a permanent facility for maintenance and repair of equipment within the faculty

The following aspects appear to affect them directly

- Lack of information in circulars from University Grants Commission and matters pertaining to training programs coming down to them
- Low opportunities to participate in research and get acknowledgement of their services

5. CONCLUSIONS

The Faculty of Medicine, Ruhuna provides the undergraduate students entering the faculty a unique opportunity to master a competitive subject area with a promising future career.

1. Curriculum Design, Content and Review

Strengths/Good Practices

- Learning objectives are clearly defined and made known to students
- Academic staff committed for improvement of curriculum and teaching program
- Operating at manageable level for students and staff
- Introduction of Foundation Module, Rural Health attachment, AIMS module

Weaknesses

- Absence of a pre-planned review process
- Uncertainty among academics on the need for major revisions
- Stalled review process pending inputs from stakeholders
- Poor recognition of the relevance of some areas within some subjects by students
- Relative congestion of 4th year resulting in inappropriate student stress
- Inadequate preparation of students to meet the future needs for employment for example family practice

2. Teaching, Learning and Assessment Methods

Strengths/Good Practices

- Use of multimedia
- High tutorial component conducted in small groups
- Use of a combination of several assessment methods
- Continuous assessment and in course examinations
- Scrutiny of examination papers at both departmental and faculty level
- Presence of IT-based self learning materials
- Innovative approaches to improve curriculum delivery

Weaknesses

- Poor class size management in some settings
- Poor maintenance of laboratory equipment used for teaching
- Absence of a strong mechanism to encourage students to improve English proficiency
- Absence of opportunities for improving Tamil proficiency

3. Quality of Students, including Student Progress and Achievements

Strengths/Good Practices

- Acceptable quality of students at entrance with good Z-scores and English proficiency
- Satisfactory performance at examinations with consistent improvement towards final year
- Minimal dropout rate

Weaknesses

- Regionalized student population
- Total dependence on UGC admission process
- Absence of any pattern in the distinctions gained by students in relation to subjects or batch

4. Extent and Use of Student Feedback, Qualitative and Quantitative

Strengths/Good Practices

- Presence of a regular end-term subject/teacher evaluation system
- Student participation at meetings in some departments

Weaknesses

- Absence of a mechanism to compute an index for each teacher based on the evaluation so that teacher could recognize the changing trends of performance.
- Absence of a mechanism welcoming additional comments from students in the form
- Absence of mid term feedback mechanism to permit the teachers to adjust themselves for the expectations of students.

• Absence of a mechanism to obtain student feedback on course content

5. Postgraduate Studies

Strengths/Good Practices

- Notable number of PhDs produced
- Extensive staff involvement in PGIM teaching
- Enthusiasm of young staff to complete postgraduate studies locally
- Links with several universities abroad
- Satisfactory clinical exposure for PGIM trainees

Weaknesses

- Insufficient research grants from local sources.
- Inadequate accommodation facilities

5.6 Peer Observation

Strengths/Good Practices

- Efforts to establish peer observation among teachers
- Peer observation of demonstrators
- Peer observation among students through correction of papers
- Scrutiny of examination papers at departmental level

Weaknesses

- Absence of a formal mechanism for peer observation of teaching
- Absence of a pre-planned arrangement for peer observations across all departments

7. Skills Development

Strengths/Good Practices

- Use of seminars, interactive discussions, group activities
- Akuressa project
- Good IT facilities
- AIMS module
- Language laboratory
- Clinical skills laboratory for Gynaecology and Obstetrics
- Log books and supervision

Weaknesses

- Relatively low access speed and no printing facilities
- Inadequate opportunities for final year students to practice procedural skills under supervisions

8. Academic Guidance and Counselling

Strengths/Good Practices

- Heads of departments meet and advise students who are not successful in passing examinations
- Presence of student support service centre with a hotline and a trained receptionist
- Availability of trained counsellors and mentors
- Introduction of a formal mentoring scheme for new entrants from year 2003
- Mechanisms for confidentiality of information including the concealment of attendees
- The supportive role of the Department of Psychiatry by providing a day-counselling service

Weaknesses

- Inadequate awareness of student support service centre amongst senior students
- Absence of an updated student handbook
- The job descriptions of the VC appointed students counsellor and that of trained counsellors contradict, especially because of a disciplinary role tied to the former

Based on the observations made during the visit by the Review Team and discussed above, the eight aspects were judged as follows:

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

Overall Judgment - Suspended

6. RECOMMENDATIONS

Based on observations made during this visit reviewers wish to make the following recommendations.

1. It is recommended to strengthen avenues to obtain information from stakeholders on the ability of the present curriculum to meet the current and future needs of the profession and reach a decision on the extent of curriculum changes as early as possible.

- 2. Establishment of a planned curriculum review process looking at overall curriculum on a regular basis is recommended.
- 3. The faculty may consider redressing the relative congestion of student workload specially during the fourth year of study
- 4. It is recommended to optimize group size at bedside teaching/ laboratories by identifying alternative concurrent activities and other means
- 5. Linking the achievements in English proficiency at different UTEL levels, in a stepwise fashion to degree requirements at the end of years 2, 3, and 4 respectively is recommended.
- 6. Extending the opportunities for improving English proficiency through use of language laboratory to senior students is recommended.
- 7. The faculty may examine reasons for the absence of any pattern of distinctions acquired. E.g. variations in delivering instructions and assessments.
- 8. It is recommended to strengthen the mid-term student feedback mechanism through students-Head-Professor interactive session in each department
- 9. It is recommended to analyze student feedback information to establish an index for each course/teacher enabling teachers to assess their extent of meeting the expectations of the students/education system
- 10. The faculty may consider inviting open comments from the students by providing an identified space in the questionnaire on feedback for students.
- 11. The faculty may encourage all departments to expand their peer observation processes
- 12. Improving student awareness regarding available student services already in place E.g. Attractive posters in the student common rooms is recommended.
- 13. Updating the student handbook including the general, examination, regulatory information and make a copy available to new entrants at entry and copies made available in the library is recommended.
- 14. Improving avenues for training and participation in faculty activities for the nonacademic staff is recommended.
- 15. Improve communication channels to receive official information for non-academic staff.
- 16. A sustained efficient mechanism is needed for the maintenance of equipment and repair.
- 17. It is recommended to regularize opportunities made available for learning Tamil and/ or Sinhalese for the enthusiastic student.

7. ACKNOWLEDGEMENTS

The reviewers would sincerely thank the Dean, Faculty of Medicine Prof PL Ariyananda and Prof Rifdy Mohideen who has taken an enormous effort to provide the reviewers with all necessary documents and access various areas in the hospital and meet all categories of staff and also for the warm hospitality extended. This has made the reviewer's task so much easy and credible. The reviewers also thank the Vice Chancellor Prof Susirith Mendis, the internal QA panel and all academic and non academic staff members and students for cooperating so

well with the review process. A special appreciation is extended to the 3 temporary preintern demonstrators who assisted the Review Team throughout their stay at the Faculty of Medicine, Galle. The Review Team also wishes to extend their appreciation to Prof Colin Peiris, Quality Assurance Specialist, Quality Assurance and Accreditation Council of Sri Lanka for this opportunity provided.

8. ANNEXES

Annex 1. AGENDA OF THE REVEIW VISIT

Day 1, Tuesday 3rd July 2007

Time 0900 – 0930	Activity Meeting with Dean and Internal Quality Assurance Panel Discussion of the agenda	Venue CH
0930 – 1030		СН
1030 – 1130	Discussion of SER with the Faculty Board	СН
1130 – 1230	Observe facilities within the Faculty – Lecture Theatres A, B, C & D; CAL Lab, Library, Student Canteen, Student Common Room, Senior Common Room, Non-academic Common Room, Guest Rooms	Tour
1230 – 1300	Lunch - Reviewers & Internal QA Panel	SCR
1300 – 1400	Observe facilities within the Faculty – Gymnasium, Student Support Centre, Language laboratory, Lecture Theatre D, Auditorium, Faculty Health Museum	Tour
1400 – 1600	Meeting with academic staff (40 min. each) 1. Clinical departments 2. Para-clinical departments 3. Pre-clinical department	Com Med TR Com Med Lib CH
1600 – 1615	Tea – Reviewers & Academic Staff	
1545 – 1645	Meetings with medical students (3 concurrent meetings) 25^{th} Batch – 40 students 26^{th} & 27^{th} Batches – 20 students from each batch 29^{th} batch – 40 students	CH Com Med TR Com Med TR
1645 – 1730	Meeting of reviewers	ME & SDU

Day 2, Wednesday 4th July 2007

Time	Activity	Venue
0900 -	Observe teaching/ Assessment	
1100	Clinical teaching for final year students – Medicine, Paediatrics & Surgery	THK & Field Clinic
	Assessment in progress – Biochemistry	O & G Bio. Dept.
1100 – 1115	Tea – Reviewers & Academic Staff	Com Med TR
1115 – 1215	Meeting with pre-intern demonstrators	CH
1215 – 1300	Lunch - Reviewers & Internal QA Panel	SCR
1300 – 1400	Observe teaching – Lecture in Obs. & Gyn. Review documents	LTD ME & SDU

 400 – Observe facilities in the Anatomy Block, Clinical Block & Environs – RBL, Tour
 1500 Anatomy Dissecting Room & Museum, Clinical Lecture Theatre, Faculty Skills Laboratory, Ruhuna-Duke Link Office, General Clinical Laboratory, Neuroscience Centre, CHDLD, Skills Laboratory(Obs. & Gyn) new Playground for students, new hostel projects for students

	Meeting with Research Students	СН
1545		66D
	Tea - Reviewers & Internal QA Panel	SCR
1600		
	Pharmacology Tutorial	LTD
1700	Review documents	ME & SDU
1/00 -	Meeting of reviewers	ME & SDU

1800

Day 3, Thursday 5th July 2007

Time	Activity	Venue
0900 - 1000	Meeting with Student Counsellors (with working tea)	CH
1000 - 1100	Meeting with non-academic staff	CH
1100 - 1200	Meeting with PGIM trainees	СН
1200 - 1300	Lunch - Reviewers & Internal QA Panel	SCR
1300 - 1600	Observe teaching/ Parasitology Museum/ Pathology Museum	Parasitology
	Parasitology Revision Practical	Com. Med
	Community Medicine Tutorial	Microbiology
	Microbiology Revision Practical	
1600 – 1615	Tea - Reviewers & Internal QA Panel	SCR
		ME & SDU
1900 – 1930	Meeting with the Vice Chancellor	ME & SDU

Day 4, Friday 6th July 2007

Time	Activity	Venue
0900 - 1015	Journal Club – Department of Medicine	ТНК
1015 – 1030	Tea - Reviewers & Internal QA Panel	ME & SDU
1030 - 1200	Report writing	ME & SDU
1200 - 1300	Lunch - Reviewers & Internal QA Panel	SCR
1300 - 1400	Wrap-up meeting with Dean and the Faculty Board	CH
	Departure	

Abbreviations

CH – Conference Hall CHDLD – Centre for Hypertension, Diabetes & Lipid Disorders ME & SDU – Medical Education & Staff Development Unit RBL – Reproductive Biology Lab SCR – Senior Common Room THK - Teaching Hospital, Karapitiya TR – Tutorial Room

Title	Initials	Surname	Designation	Department
Administrative			<u> </u>	1
Staff				
Professor	PL	Ariyananada	Dean & Professor	Medicine
Pre- clinical staff				
Professor	Chitra	Pathirana	Senior Professor & Head	Biochemistry
Dr	Kamani	Jayathileke	Senior lecturer	Biochemistry
Dr	GED	De Zoysa		Biochemistry
Ms	AP	Gamage	Lecturer	Biochemistry
Dr	СМ	Wickramatilake	Lecturer	Biochemistry
Ms	MT	Napagoda		
Dr	AD	Nanayakkara	Lecturer	Physiology
Dr	Sampath	Gunawardene		
Dr	KD	Mahinda	Senior lecturer	Physiology
Dr	KG	Somasiri	Senior lecturer	Physiology
Dr	MB	Samarawickrama	Lecturer	Anatomy
Dr	LBL	Prabodha	Lecturer	Anatomy
Dr	HHLK	Fernando	Lecturer	Anatomy
Dr	Ι	Illayaperuma	Senior lecturer	Anatomy
Dr	PGCL	Nanayakkara	Lecturer	Anatomy
Dr	BG	Nanayakkara	Senior lecturer & Head	Anatomy
Para-Clinical Staff				
Professor	Mirani	Weerasooriya	Professor & Head	Parasitology
Dr	Lakmini	Mudduwa	Senior lecturer & Head	Pathology
Dr	Subodha	Wickramasinghe	Lecturer	Microbiology
Dr	PV	De Silva	Lecturer	Community Medicine
Dr	Saman	Wimalasundara	Senior lecturer & Head	Community Medicine
Dr	J	Nanayakkara	Lecturer	Pharmacology
Dr	A de S	Nagahawatte	Senior lecturer & Head	Microbiology
Dr	MPS	Mudalige	Senior lecturer & Head	Parasitology
Dr	М	Vidanapathirana	Senior lecturer & Head	Forensic Medicine
Dr	RHAI	Rathnaweera	Lecturer	Forensic Medicine
Dr	PLGC	Liyanage	Lecturer	Pharmacology
Dr	KAC	Wickramarathne	Senior lecturer	Pathology
Dr	WAA	Wijayasiri	Senior lecturer & Head	Community Medicine
Dr	СР	Nissanka	Lecturer	Community Medicine
Clinical Staff				
Professor	Sujeewa	Amarasena	Associate Professor and Head	Paediatrics
Dr	KD	Pathirana	Senior lecturer	Medicine
Dr	GH	Chandanie	Senior lecturer & Head	Psychiatry
Dr	GD	Punchihewa	Senior lecturer	Psychiatry
Dr	Pushpika	Jayawardene	Lecturer	Paediatrics
Dr	Chandanie	Senadheera	Lecturer	Psychiatry
Dr	Ajith	Jayasekera	Senior lecturer	Psychiatry
Dr	Champika	Bodhinayake	Senior lecturer	Medicine
Professor	Rifdy	Mohideen	Professor & Head	Medicine
Dr	Asoka	De Silva	Senior lecturer	Surgery

Annex 2. LIST OF ACADEMIC STAFF MEMBERS MET BY THE REVIEW TEAM

Dr	Vasantha	Devasiri	Senior lecturer	Paediatrics
Professor	PL	Ariyananda	Professor & Dean	Medicine
Professor	Malik	Gunawardene	Professor & Head	Obstetrics & Gynaecology
Dr	Tikiri	Gunawardene	Senior lecturer	Paediatrics

Annex 3. LIST OF POSTGRADUATE RESEARCH STUDENTS MET BY THE REVIEW TEAM

Name of student	Department	Degree
Dr Lalan Fernando	Anatomy	PhD
Dr LBL Prabodha	Anatomy	MPhil
Dr Channa Yahathugoda	Parasitology	PhD
Dr EI Waidyaratne	Anatomy	MPhil
Dr DMY Amarasinghe	Obstetrics & Gynaecology	MPhil
Dr CN Samaranayake	Pharmacology	MSc
Dr PM Rodrigo	Anatomy	PhD
Dr UCP Perera	Forensic Medicine	PhD
Dr AD Nanayakkara	Physiology	PhD