# SUBJECT REVIEW REPORT

# DEPARTMENT OF COMMUNITY MEDICINE



# FACULTY OF MEDICAL SCIENCES UNIVERSITY OF SRI JAYEWARDENEPURA

15<sup>th</sup> to 17<sup>th</sup> May 2007

# **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 and Kelaniya to undertake a subject review in Community Medicine at the Faculty of Medical Sciences, University of Sri Jayewardenepura.

The Review Team comprised of:

Prof. Lalini Rajapaksa (Review Chair) Prof. Nilanthi de Silva Dr Chrishantha Abeysena

The subject review was undertaken to evaluate the quality of the Community Medicine teaching programme at the Faculty of Medical Sciences, University of Sri Jayewardenepura. The review visit was carried out by the above team from 15<sup>th</sup> - 17<sup>th</sup> May 2007 (see Annex 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 Department of Community Medicine (DCM). 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 Faculty is about to change its MBBS curriculum. The new curriculum will be introduced with this year's intake of freshers. However, since the Community Medicine programme is meant for  $3^{rd}$  and  $4^{th}$  year students, the DCM will continue with the old curriculum until 2010. At present 3 batches of students are following the Community Medicine programme: students in Term 5 of the MBBS programme (Batch 15); students in Term 7 (Batch 14); and students in Term 9 (Batch 13).

#### Peer Review Process

The review processes adopted by the team were:

**meetings** with the Vice-Chancellor; Dean; Head of DCM; academic and non academic staff in the DCM; Senior Student Counsellors in the Faculty; and undergraduate and postgraduate students (see Annex 2 for list of persons met during the visit).

**observation** of teaching/learning sessions -2 lectures (one for Batch 14, one for Batch 15) and one small group discussion (Batch 15)

**inspection** of academic facilities: lecture halls, tutorial rooms, computer lobbies and learning support facilities (departmental and faculty libraries).

**perusal** of documents: curriculum, timetables, handouts, examination papers, samples of answer scripts, student reports, records, minutes of departmental meetings etc.).

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

# The University

The University of Sri Jayewardenepura commenced in 1959 as the Vidyodaya University. It was renamed as the University of Sri Jayewardenepura in 1978. It is now one of the largest universities in the country, with over 9000 students registered for its academic programmes in 5 faculties.

# The Faculty of Medical Sciences

The Faculty was established in January 1993. The Department of Community Health (as it was first named) was re-named the Department of Community Medicine and Family Medicine in 1995, with inclusion of the discipline of Family Medicine. The two departments were separated in 2005.

#### The Department of Community Medicine

The DCM was one of the initial departments that comprised the Faculty at its inception in 1993. With regard to undergraduate courses, the DCM mainly contributes to the MBBS degree programme at present. At the time of the review visit, the DCM conducted classes for 162 students in Term 5; 162 students in Term 7 and 161 students in Term 9.

The DCM has cadre provision for one Chair and 6 other academic posts: these are occupied by 1 Senior Professor, 1 Merit Professor (currently on sabbatical leave), 1 Senior Lecturer and 3 Lecturers (probationary). One more Senior Lecturer has been recruited recently to the permanent cadre and is expected to assume duties in the DCM in the near future. Temporary staff includes one Professor (on contract basis) and two Temporary Demonstrators. Support staff in the DCM includes one clerk, one instructor in social work, one laboratory attendant and one labourer.

This department has been reviewed in September 2002 as one of the pilot subject reviews undertaken during the introductory phase of the Quality Assurance and Accreditation Programme.

# **3. AIMS AND LEARNING OUTCOMES**

The stated learning objectives for the Community Medicine programme for MBBS students, as given in the SER, are as follows.

# Mission of the DCM

The graduates will have the necessary knowledge, skills and attitudes to promote health and well- being and to prevent disease with other health care professionals and community agencies to the benefit of the individual patient, the family and the community as a whole.

Their practice will be community based, health oriented and evidence based. They will be aware of factors and resources needed to promote health and well being and be able to integrate this knowledge effectively in providing health care in any part of Sri Lanka.

# 3.1. Aims

Aim is that upon completion of undergraduate medical education the student should acquire knowledge and understanding of health and disease and of the prevention and management of the latter in the context of the community.

# **3.2. Learning Outcomes**

At the end of the course the graduate should be able to

- 1. Demonstrate an understanding of:
  - demography and vital statistics
  - basic and applied epidemiology
  - basic statistics as applied to medicine/research
  - health promotion and prevention
  - the organization of curative and preventive health services in the country
  - needs assessment and health care planning
  - health care management and economics
  - the quality of health care provision
  - epidemiology and control of non communicable diseases
  - nutrition
  - occupational health
  - maternal and child health
  - family planning
  - health education
  - substance abuse
  - care of the elderly
  - certification of cause of death
  - impact of environment on health
  - the quality of life
  - health care provision in disaster situations
  - international health
  - care of the marginalized and the differently-able
- 2. At the end of the Orientation to Primary Health Care students should be able to :
  - Describe the health status of the community of his/her home area.
  - Understand and explain the scope of health problem in that community in the socio –cultural context.
  - Describe the organization of the health programmes and services in the context of community setting (curative and preventive care, public health act, community programmes and services, environmental and health hazards)
- 3 At the end of the clerkship students should be able to develop the basic skills, favourable attitudes and knowledge to carry out health promotion activities that are necessary to become a doctor and practice in any part of Sri Lanka. In addition the

student will be exposed to preventive and promotive health care in Sri Lanka as well as an understanding of the community context of health, illness and health care.

- 4 The graduate will possess the knowledge, attitude and skills necessary to:
  - formulate relevant research questions or hypothesis
  - use appropriate methods in collecting, analyzing and interpreting data.
  - read critically medical literature and determine its relevance to practice within one's own working environment.

The Review Team notes that these Aims and Objectives have been developed after taking into consideration the comments made by the Subject Review Team in 2002.

Detailed learning objectives have also been developed for individual components in the Community Medicine teaching programme, and these are included as Annexes 3-6. These learning objectives are made available to all students through the documents provided to them by the DCM.

# 4. FINDINGS OF THE REVIEW TEAM

# 4.1. Curriculum Design, Content and Review

The curriculum in the Faculty of Medicine, University of Sri Jayawardenepura, is in the process of change from a traditional subject based curriculum to a more integrated approach. The new curriculum will come into effect with the new entrants to the Faculty this year.

The present curriculum in Community Medicine is in the traditional style where the students learn the subject during terms 5-10. The 'Home Area Project' which the students carry out before they commence work in the third year and the Family Attachment Program during the Professorial appointment in Paediatrics in the final year extends the exposure to Community Medicine beyond terms 5-10. Students following the new curriculum will commence Community Medicine in 2009.

The curriculum consists of four broad areas at present: the 'home area project'; a series of lectures and tutorials; the clerkship programme; and the research project. It includes both theoretical inputs into principles and concepts and opportunities for practical experience and exposure to public health services in the country. The objectives of the DCM, overall undergraduate programme, main components and lesson objectives are documented and made available to students in the form of a handbook.

Curricular content is well planned, comprehensive and relevant. It was noted that although the stated mission of the DCM includes promotion of health and wellbeing, promotion of health as such is not addressed in the curricular content, the emphasis being on prevention. Contents are revised to include new knowledge and new approaches in public health. The process of revision is through discussion at departmental meetings.

# It is the view of the Review Team that the Curriculum Design, Content and Reviewing Process is GOOD.

#### 4.2. Teaching, Learning and Assessment Methods

#### **Teaching and Learning Methods**

Diverse settings and methods are used in teaching. The 'home area project', re-named the Phase 1 Community Medicine clerkship, is a self learning experience which the students appear to enjoy greatly. The exposure to a hospital in their home setting at their own pace before being introduced to ward teaching in a Teaching Hospital setting, was reported as helpful. It also gave them a better understanding of the way health care provision was organised and gave a holistic view of services.

Until the 15<sup>th</sup> batch, the report was a description of what was observed. The programme has been revised from the 15<sup>th</sup> batch onwards to include information on socio-cultural aspects related to health and health seeking behaviour as well as societal factors such as gender and social inequality. The report is expected to provide a critical reflection of the observations. Discussion with students suggested that the new format may have to be modified, taking into consideration difficulties students reported in obtaining the required information on some components, and assessment of reports.

For example: the essay on alcohol misuse and gender and social inequality in the area (section 12 of the guidelines), could be modified as a case discussion on the impact of alcohol misuse on family and society, perceptions of gender/gender roles in the community, specific examples case report/s on health impacts of social inequality in the area. Section 10.1, interview with an Ayurvedic physician, could be modified in a more structured manner to include the Ayurvedic concept of health and disease, principles of practice, type of patients encountered.

Some students expressed language difficulties in writing their reports, but overall, this exposure was rated as very useful both by students and staff, is organised well and should be continued. Introducing them to the Annual Health Bulletin at this stage may add to the learning experience.

The clerkship is well organised and structured. The student handbook gives clear guidelines on the expected learning outcomes to be achieved during the clerkship. During the clerkship field learning experiences are complemented by seminars on specific topics. The research project is carried out in the 4<sup>th</sup> year. A very comprehensive booklet "Research Guidelines for Students" has been developed and a copy given to each group and has replaced some of the lectures on research methodology. This was found to be very useful in carrying out the research project.

Faculty based inputs are mainly in the form of lectures, around 100 lectures are held during the 6 terms. An attempt is made to integrate lectures on disease control with relevant theoretical components of the Parasitology curriculum. Very comprehensive handouts are given to students at each lecture. Tutorials are held by senior staff during the final term. At each 2-hour tutorial, around 4 topics are discussed. The planned order of lectures has to be changed at times based on availability of members of staff. This sometimes leads to students having difficulty in seeing the relevance of the lecture and the content area covered for the continuous assessment may thus differ from year to year.

One of the biggest constraints to the teaching learning process is the inadequacy in staff numbers. This has resulted sometimes in changing the order of the series of lectures and in a large number of invited lecturers from within the Ministry of Health. Sometimes this results in students being taught about a program (what actually takes place) without linking it to the principles learned or teaching learning in another area of study, e.g. talk about the activities of a vector control program without linking it to the principles underlying the control of a vector borne disease or the parasitology taught earlier in the MBBS course. Circumventing this may need prior detailed discussion with the lecturer.

In the third year, as they commence the Community Medicine course, students appear to have difficulty in relating the subjects learned to the rest of the clinical studies that they are concurrently undertaking. However, they do see the link and relevance as they progress, as evidenced by our interactions with the senior batches. This appears to be a problem seen in most Faculties and is probably a result of starting the Community Medicine course with demography, statistics and epidemiology. It is partly also the aversion or shutting off of anything mathematical by biology students. This part of the program could be linked to the clinical learning setting by asking each student to bring the socio-demographic details of 3-5 patients that they have seen in the ward (without name and identification details) together with the diagnosis and pooling them together in to a data set to answer the question on the type of persons utilising the teaching hospital. Even a random selection procedure could be introduced at this stage. It may be worth considering starting with statistics, bringing the demography to relate the data to the population and link the basic epidemiology to the research project.

The research project appears to get varied levels of inputs from supervisors, especially in the writing phase and with statistical analysis. Some groups get help in writing their projects, have access to facilities to get their data analysed using SPSS while others do not. Since this is an examination document, it may be good to have uniform inputs in these areas. Help with language should be available for any group, independent of the supervisor. If use of software packages for data analysis is encouraged, access must be available to all groups uniformly and student should do their own data analysis rather than get someone who has experience in data analysis to analyse their data set.

# Assessment Methods

Assessments are carried out both in-course and end of course, proportion of marks being 40% and 60% respectively. A variety of methods are used, which is a good feature observed.

Orientation to primary health care is assessed on the written submission. This has led to copying from seniors to some extent and has led to the current change in format. The documents submitted are word processed and are sometimes bound with a hard covers. Since the project is carried out at home during the vacation, students who do not have computers at home have to pay for use of word processing facilities in internet cafés. Access to computers and help with English language writing skills within the Faculty during the last week of the vacation may be an alternative. A uniform method of simple binding (probably to be done in the University for a fee) may have to be prescribed so that the outward appearance of the submission does not become competitive and a burden to the students with financial problems.

Statistics, demography and basic epidemiology are tested using SEQs and applied epidemiology, family health, nutrition and health education using MCQs. In our opinion, the basic sciences lend themselves well to MCQs, especially best response MCQs, and the applied part of the curriculum needs SEQs (where application could be examined). The SEQ papers that were examined for the 3 preceding batches of students showed varying standards. The MCQs and SEQs in these two assessments were based directly on material given in the handouts and were testing recall and not critical application of what was learned. An analytical approach to a problem, which is an essential public health skill, appears to be tested poorly in the examinations, many of the questions needing only recall. A student

commented that one could get through Community Medicine if one just went through the handouts. 20 MCQs per paper is said to reduce the validity of the assessment.

The research project and the clerkship program assessments are carried out well. The OSPE appears to be comprehensive, covering the contents of the clerkship program. Here too it may be worthwhile to consider a 20 station OSPE. The research project is marked on the common report and the viva. Many in the student groups the team talked to were not happy about allocating the common pooled mark according to the individual contributions within the group, although they admitted that there were persons who got "donations of marks".

A portfolio has replaced the log book maintained during the clerkship from the current batch. This is a move in the right direction. However, skills of portfolio writing and assessment have to be developed within the students and staff, if this is to be successful.

# It is the view of the Review Team that Teaching, Learning and Assessment Methods adopted by the DCM are GOOD.

# 4.3. Quality of Students, including Student Progress and Achievements

#### Students' Entry Qualifications

About 150-160 students are recruited to the Faculty of Medical Sciences according to UGC criteria. The faculty has no choice in the recruitment as the number and the type of students admitted are decided by the UGC.

#### Student Progress and Achievements

Discussions were held separately with a group of three batches of students. All student groups highly appreciated the 'Home area Project'. The objectives of the projects were clear to the students and the pass rate had been 100% during the last 3 years. The reports submitted on the projects were comprehensive in terms of content area and were well written.

At the end of the  $6^{th}$  term, students have to sit for a continuous assessment that takes the form of a Structured Essay Question paper. The failure rate in this component varied from 19% to 49% during the last three years. At the end of the  $8^{th}$  term they have to sit for a second continuous assessment that takes the form of a MCQ paper with 20 questions. The failure rate in this component varied from 27% to 49% during the last three years. However the failure rates were not comparable because the content areas taught varied from academic year to year.

A group of 5-6 students work together as a group in the 4<sup>th</sup> year on a research project under the supervision of a senior staff of the Faculty. The reports of the research projects were well written according to the standard specified. Failure rates were less than 25% during the last three years.

At the end of the clerkship program in the 4<sup>th</sup> year, students have to sit for another continuous assessment, which comprises an OSPE and a SEQ paper. Failure rates for OSPE and SEQ were < 10% [mean marks-68 (SD-14)] and 14% [mean marks-60 (SD-9)] respectively. Overall failure rate of clerkship program has been < 10% during the last three years.

The overall failure rate at the final examination at the end of the 4<sup>th</sup> year (3<sup>rd</sup> MBBS part II) varied from 6% to 20% during the last three years, as shown below. It was noted however, that very few students have achieved Distinctions in Community Medicine during this period. There was no evidence that a formal system is adopted in the department to help failures.

Year of exam	Percentage pass rate	Number of distinctions
1999	80%	04
2000	88%	01
2001	69%	00
2002	84%	01
2003	80%	00
2003	94%	05
2004	75%	00
2005	92%	00
2006	88%	01

#### **Students Pass/Fail Rates**

The students reported that a majority had difficulty with communicating in English and that report writing was difficult as they entered the Faculty. As they progressed through the course both speech and writing in English improved. However, students felt that help in this area was greatly needed in the first few years.

# It is the view of the Review Team that the Quality of Students including Student Progress and Achievements is GOOD.

# 4.4. Extent and Use of Student Feedback (Qualitative and Quantitative)

Student feedback was obtained in an informal, but fairly regular basis, on several components of the course. The 'home area project' was evaluated both qualitatively and quantitatively. The clerkship program and some lectures were evaluated. Such feedback is used to modify and improve the course wherever possible. However, there was no evidence that student feedback has been obtained on the overall course contents or teaching-learning activities, especially the balance between lectures and tutorials.

# It is the view of the Review Team that the Extent and Use of Student Feedback, both qualitative and quantitative are GOOD.

# 4.5. Postgraduate Studies

The DCM is a training centre for MD trainees from the Post Graduate Institute of Medicine, University of Colombo. At least 2 - 3 MD trainees are assigned to the DCM for a period of one year and nine months, each year after the MD Part I Examination. The Review Team met with 3 of 4 such trainees currently attached to the DCM. They all agreed that their training is comprehensive and were highly satisfied with the training received. This was mainly through their involvement in provision of health services to the Boralasgamuwa MOH area. All postgraduate students were also given an opportunity to participate in the undergraduate teaching programme. Lectures were allocated to them according to their willingness to take on a given subject area. They had been given some guidance on preparation for such lectures, but they also suggested that a senior academic staff member scrutinize their presentations in advance. The postgraduate students were also involved in field teaching, conducting seminars and small group discussions with undergraduate students .

A separate library was available in the DCM for use by postgraduates, as was a computer room with several desktop computers with internet access. A large on-going research grant from SIDA-SAREC had enabled the provision of these facilities, and provided funding for several postgraduate research degrees. However, the Review Team noted that the DCM does not have a journal club nor does it require presentation of protocols from its research students.

#### It is the view of the Review Team that the Post Graduate Studies are GOOD.

# 4.6. Peer Observation

The junior staff reported that their senior colleagues provide them with regular guidance on teaching and student assessment. One of the junior staff stated that a senior colleague in the DCM had sat in on her initial lectures and given her critical and constructive feedback on her performance. In addition, material prepared by junior staff for lectures and other activities appear to be critically reviewed by senior staff quite often, and the same also happens when setting examination questions such as OSPEs and SEQs. Evaluation of continuous assessment answer scripts is carried out by a process of conference marking, which permits all those involved to learn from each other.

One of the junior academic staff members stated that he had requested a colleague from another department to observe one of his lectures during the last academic year, and to give him critical feedback on it. Peer observation amongst the junior academic staff in the Faculty appears to be a fairly regular but informal activity.

These practices could quite easily form the basis for a more formalised process of peer observation within the DCM and the Faculty.

# It is the view of the Review Team that Peer Observation at the DCM is at a SATISFACTORY level.

# 4.7. Skills Development

The curriculum objectives spell out only one skill specifically i.e. health education. There is opportunity provided during the clerkship to deliver a health education lecture to a group of school children. This activity is planned and carried out in small groups. Although the accuracy of content is checked by a member of staff, there is no evaluation of the project. A peer evaluation could be developed based on the theoretical inputs the students received on health education and communication.

The main skills that the students identified were communication skills. In view of this, the lecture inputs could be enhanced using small group activities and instruction methodologies enabling practice of varying scenarios both in the community and ward settings. It is expected that communication skills would be more formally addressed in the new curriculum.

Although the program in Community Medicine includes the submission of a series of reports, the opportunity is not provided for students to improve English language writing skills. With the establishment of the language lab, it would be useful if assistance for writing could be made available in the form of English language teaching staff being available for help. Once such help is provided, specific marks could be allocated for (grammatically) correct use of language within the marks allocated for the written submission.

The research project provides an opportunity to apply knowledge learned during the basic sciences, statistics, demography and epidemiology. This could be further strengthened with

student access to computing and statistical software. It is envisaged that this would happen with the opening of the computer lab. Availability of funding for student research projects (through the IRQUE QEF grant) has enabled students to develop skills in planning budgets and money management.

# The Review Team is of the view that Skills Development is GOOD.

# 4.8. Academic Guidance and Counselling

The students reported that the academic staff of the DCM is very approachable and helpful, particularly when they require guidance in carrying out activities such as the 'home area project' in the  $2^{nd}$  year, and the research project in the  $4^{th}$  year. The Head of DCM regularly meets with all students who have been referred in the Community Medicine examination at the end of the  $4^{th}$  year, and advises them on a one-to-one basis on how they can improve their exam performance. However, no additional classes or tutorials are conducted for students who have been referred.

Over the last year, the Faculty has taken steps to allow students who are unable to continue with the MBBS degree programme to switch to the BSc in Human Biology degree programme.

The Faculty's Student Welfare Committee comprises academic staff and 2 students from each batch. The Committee meets monthly and provides a forum for students to raise any problem that they may experience in common, such as those relating to the canteen, hostels, etc.

The Faculty offers help in a variety of different ways to students who experience any form of academic, personal or financial difficulty. Each student is assigned to 3 academic staff members (designated Moral Tutors), on admission to the Faculty. Students are expected to meet their Moral Tutors on a regular basis, and turn to them in the event of any problems they may experience. The Faculty also has 4 Student Counsellors, one of whom is the Head of the DCM. A mobile phone hotline, manned 24-hours a day by volunteer staff members has been instituted about a year ago, and is used regularly by students. The staff of the Department of Psychiatry runs a twice-weekly clinic for students who require extended counselling or treatment. The Medical Students Financial Assistance Scheme provides funds to 5 - 7 needy students in each batch, through funds provided by academic staff and external funding sources.

# The Review Team is of the view that Academic Guidance and Counselling is GOOD.

# **5. CONCLUSIONS**

# 1. Curriculum Design, Content and Review

Strengths/Good Practices

- 1. Well-planned, comprehensive and relevant curricular content.
- 2. Learning objectives clearly specified and made freely available to students
- 3. Curricular content regularly reviewed and revised to include new knowledge and approaches in public health

#### Weaknesses

1. Promotion of health and well-being, although included in the departmental mission statement, is not addressed in the curricular content.

# 2. Teaching, Learning and Assessment Methods

Strengths/Good practices

- 1. The 'home area project' which the students appear to enjoy greatly, enables students to acquaint themselves with the health system at their own pace, and gain a holistic view of the health services.
- 2. The Community Medicine clerkship in the 4<sup>th</sup> year is well-organised and structured, with clearly identified expected learning outcomes.
- 3. Students receive ample guidance in carrying out their research projects in the 4<sup>th</sup> year.
- 4. Availability of funds for student research projects has enabled students to develop skills in planning budgets and money management.
- 5. Assessments are carried out by a variety of different methods.
- 6. Inclusion of a portfolio as a means of assessing the clerkship is an innovative move in the right direction.

#### Weaknesses

- 1. The number of academic staff available at present in the department appears to be inadequate for the workload generated by the Community Medicine teaching programme.
- 2. The faculty based inputs mainly take the form of lectures
- 3. Students have difficulty in relating what they learn at the beginning of the Community Medicine course to the rest of their clinical studies, which run concurrently.
- 4. Uneven levels of supervision of student research projects.
- 5. Many of the questions used in continuous assessments and examinations are only at recall level and do not encourage an analytical approach to problems.

# 3. Quality of Students, including Student Progress and Achievements

*Strengths/Good Practices* 

- 1. Students have the opportunity to accumulate marks through several forms of continuous assessment before the main summative examination at the end of the 4<sup>th</sup> year, and are therefore aware of their progress in the subject.
- 2. Students appear to do particularly well in the 'home area project', their research project and in the assessments conducted at the end of the clerkship
- 3. The proportion of students who are referred in Community Medicine is at an acceptable level (6 20%).

Weaknesses

1. Very few students have reached Distinction level in the past three years.

# 4. Extent and Use of Student Feedback

# Strengths/Good practices

1. Regular feedback is obtained from students on a routine basis for several components of the study programme.

# Weaknesses

1. Inadequate use of student feedback regarding the didactic teaching component (lectures and tutorials)

# 5. Postgraduate Studies

#### Strengths/Good practices

- 1. PGIM trainees are given a wide range of opportunities to acquire the knowledge and skills required of them during their MD training in Community Medicine
- 2. Excellent support is provided for PGIM trainees in the form of an extensive departmental library, computer facilities and research funding.

Weaknesses

None of note

# 6. Peer Observation

#### Strengths/Good practices

1. Junior staff receive regular informal guidance from senior colleagues regarding teaching and assessment

#### Weaknesses

1. There is no procedure whereby all departmental members can give each other regular feedback individual teaching practices

# 7. Skills Development

# Strengths/Good practices

1. Students are provided opportunities to develop skills in health education, communication and report writing.

#### Weaknesses

- 1. Students could be given more support to improve their English language writing skills while preparing the report on their 'home area project' and the research project.
- 2. Students could be given more support in developing skills in statistical analysis by providing better access to computing and statistical software.

# 8. Academic Guidance and Counselling

#### Strengths/Good practices

1. Students are generally satisfied with the assistance and support extended to them by the DCM.

Weaknesses

None of note

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	Good
Teaching, learning and assessment	Good
Quality of students, including student progress and achievement	Good
Extent and use of student feedback	Good
Postgraduate studies	Good
Peer observation	Satisfactory
Skills development	Good
Academic guidance and counselling	Good

# 6. RECOMMENDATIONS

- 1. The Curriculum Committee may consider continuing with the Community Medicine Phase I Clerkship programme (Self Directed Learning and Critical Thinking), the Community Medicine Clerkship programme and the Community Medicine Research Project in the 4<sup>th</sup> year, all three of which were highly commended by the students.
- 2. The Curriculum Committee may also consider including both curative and preventive elements in the Community Based Medical Learning attachment which has just been initiated.
- 3. Since students are required to write several reports in the Community Medicine programme, this provides a good opportunity to strengthen their language skills. It is recommended that the Faculty consider supporting students in this by employing staff dedicated to English Language teaching, who not only teach freshers in the Orientation Programme, but also assist senior students in report writing.
- 4. It is recommended to include the activities for the development of skills necessary for the promotion of health, and introduction of the basic principles of behaviour change education, in the Community Medicine teaching programme.
- 5. As a means of further developing analytical and critical thinking skills among students, the DCM may consider the following
  - including at least one question that requires analytical skills in each question paper
  - reducing the number of didactic lectures and dealing with some topics through small group discussions
  - making small group discussions more student-centred
  - conducting tutorials earlier on in the programme, rather than confining them to the 4<sup>th</sup> year.
- 6. The Faculty may wish to consider revising the academic cadre provision to the DCM, in view of the need to strengthen student-centred learning activities.

- 7. The Faculty could provide more support for smooth running of the teaching programme through a few measures
  - A telephone line that permits direct dialling of external numbers from within the DCM
  - Equipping all lecture halls with a fixed computer in addition to the multimedia projector and sound amplification system, so that time is not wasted on setting up and connecting different computers between lectures.
  - Centralised booking and maintenance of lecture halls and tutorial rooms within the faculty
- 8. The DCM may consider instituting a more formalised process for regular peer observation of teaching.

# 7. ANNEXES

# Annex 1. PROGRAMME FOR REVIEW VISIT

#### Day 1 - Tuesday 15th May 2007

08.30 - 09.30	Private meeting of Review panel with QAA council representatives
09.00 - 09.30	Discuss agenda for the visit
09.30 - 10.30	Department presentation on the Self Evaluation Report
10.30 - 11.30	Discussion
11.30 - 12.30	Meeting with academic staff
12.30 - 01.30	Lunch
01.00 - 01.45	Lecture on Dengue
01.45 - 02.30	Meeting with non academic staff
02.30 - 03.30	Assessment methods
03.30 onwards	Meeting with undergraduates - 7th term, 14th batch - group D (15-20 Students)

# Day 2 - Wednesday 16th May 2007

09.00- 10.00	Meeting with PG trainees and Demonstrators
10.00 - 11.30	Observing documents
11.30 - 12.30	Meeting with clerkship students - 9th term
12.30 - 01.30	Lunch
01.30 - 02.45	Observing documents
02.45 - 03.30	Observing lectures
03.30 - 04.15	Observing small group activities/ Meeting with students

# Day 3 - Thursday 17th May 2007

08.30 - 09.00	Meeting with Vice Chancellor
09.00 - 10.00	Meeting with student counsellors
10.00 - 11.00	Meeting with final year students (Psychiatry and family medicine)
11.00 - 12.00	Meeting with head and staff for reporting
12.00 - 01.00	Reviewers private discussion
01.00 - 02.00	Lunch
02.00 onwards	Report writing

#### Annex 2. LIST OF PERSONS MET BY THE REVIEW TEAM DURING THE VISIT

- 1. Prof Narada Warnasuriya, Vice-Chancellor, University of Sri Jayewardenepura
- 2. Prof Jayantha Jayawardana, Dean, Faculty of Medical Sciences, University of Sri Jayewardenepura
- 3. Members of the academic staff in Department of Community Medicine:

Dr CSE Goonewardene, Senior Lecturer and Head of Department Prof P Fonseka, Professor on contract Dr BCV Senaratna, Lecturer Dr MVF Jayasuriya, Lecturer Dr S Prathapan, Lecturer Dr Givantha de Costa (Temporary Demonstrator) Dr Tharanga Ubeysekera (Temporary Demonstrator)

- Non-academic staff members in Dept of Community Medicine Mr Sithum Ajith, Clerical Officer Mr MG Upali, Instructor in Social Work Mr Vasantha Pushpakumara, Laboratory Attendant Mr Gunasekera, Labourer
- 5. Senior Assistant Librarian, Faculty of Medical Sciences
- 6. Groups of undergraduate students from Batches 13, 14, and 15 and .... postgraduate students
- Student Counsellors in the Faculty of Medical Sciences Dr Sharaine Fernando Dr Sagarika Ekanayake Dr Sampatha Goonewardene

# Annex 3. Community Medicine Phase I Clerkship programme: Self Directed Learning and Critical Thinking

#### Introduction

The Phase 1 of Community Medicine clerkship is designed for the students to learn health care provision other than the care provided by tertiary care units, the life style of people, their socio-cultural practices in relation to disease/ illnesses, the health care seeking behaviour of people with limited social and financial resources and basic amenities; and social and gender inequalities of the society.

#### Aim

The broad aim of this programme is to enable the student to observe and to understand the health problems and the health care system in the context of community setting in Sri Lanka.

#### **Objectives**

By the end of the community medicine clerkship (Phase I) the student should be able to:

- describe the health status of the community of his/her home area.
- understand and explain the scope of health problems in that community in the socio-cultural context.
- describe the organization of the health programs and services in the context of the community setting (curative and preventive care, public health act, community programs and services, environmental and health hazards).

# ANNEXURE 4:

#### Aims and objectives of didactic course

#### 1. Introduction to Community Medicine

Intermediate Objectives	Broad Content Areas
1.1 Introduction to	1.1.1 Describe Community Medicine, Public Health, and Primary care
Community Medicine and undergraduate	1.1.2 Levels of prevention of illnesses
CM program	1.1.3 Activities during the CM program and assessments
1.2 To describe	1.2.1 Define health
concepts of health,	1.2.2 Concepts of health and disease
Global Health and	1.2.3 Strengths and weaknesses of the definition
millennium goals	1.2.4 Mortality and morbidity in the world
	1.3.1 Define well being
1.3 To describe the	1.3.2 Define quality of life
being and factors	1.3.3 Methods of measurement of well being
affecting the quality of	1.3.4 Factors influencing well being
	1.3.5 Factors associated with quality of life

	1.4.1 Roles a doctor plays in the society
1.4.To describe the role of doctors and	Contribution of a doctor towards the society in general
primary health care workers in society	1.4.3 Contribution of a doctor towards an individual who is "ill"
	1.4.4 Role of other primary care workers
1.5 To describe the	1.5.1 Concept of health care, Levels of health Care
structure of health care systems in Sri	1.5.2 Sources of health care
Lanka	1.5.3 Organizations of allopathic health care services in Sri Lanka

Intermediate Objectives	Broad Content Areas
	1.6.1Organisation of preventive health care services in Sri Lanka
1.6 Preventive health care services	1.6.2 Special institutions involved in provision of preventive health care services
	1.6.3 Preventive health care at the MOH level
1.7 To describe the alternate health care systems	<ul> <li>1.7.1 Importance in provision of health care by alternate systems         <ul> <li>Ayurveda, Homeopathy, Acupuncture, Traditional methods- Sidha, Unani, Acupressure, Reflexology, Yoga, Aroma therapy, Magnetic therapy</li> </ul> </li> </ul>
1.8 To describe the health policies in Sri Lanka and identify the	1.8.1 Define Health Policies in Sri Lanka
contribution of the other sectors in health policy	1.8.2 Sectors associated with health
1.9 To describe the role of the national NGOs and	1.9.1 The functions of NGOs
international partners in health care provision	1.9.2 UN agencies and World Bank

#### 2. Nutrition

Intermediate Objectives	Broad Content Areas
2.1 To describe	2.1.1 Definition of Nutrition
nutritional	2.1.2 Principals of nutrition in health and disease
requirements in different groups	2.1.3 Nutritional requirements in different groups

2.2 To describe the assessment of	2.2.1 Nutritional measurements
nutrition in individuals and community	2.2.2 Methods/tools of measurement and their advantages and disadvantages
2.3 To describe the	describe the 2.3.1 Common nutritional problems in Sri Lanka
nutritional problems in Sri Lanka	2.3.2 Epidemiology of nutritional problems
2.4 To describe national and	2.4 .1 International and national policies on nutrition
on nutrition and nutritional interventions	rnational policies nutrition and itional 2.4.2 Nutritional interventions in Sri Lanka rventions

#### 3. Environmental Health

Intermediate Objectives	Broad Content Areas
Objectives	
	3.1.1 Refuse disposal and waste management
	3.1.2 Housing - Housing and town improvement ordinance, features of a habitable house, Health effects related to poor housing
3.1 To describe the impact of environment	3.1.3 Food safety and hygiene - Food Act, Consumer Protection Act, GM foods, food labelling regulations
strategies adopted to improve the health	3.1.4 Pollution of water and air
	3.1.5 Green House effect and radiation
	3.1.6 Health problems associated with major developmental programs
	3.2.1 International health regulations
3.2 To describe the	3.2.2 Port health
International health	3.2.3 Quarantine
regulations	3.2.4 Vaccines
	3.2.5 Deratting
0.0 To describe and	
3.3 10 describe and	3.3.1 Health care provision
assess the provision	5.5.2 VValer, same and
disaster situations	3.3.3 Temporary placement
	3.3.5 Basic Health care

#### 4. Health Education

Intermediate Objectives	Broad Content Areas
4.1 To describe the relevance of health education in health care provision and principals of health education	4.1.1 Definition of health education
	4.1.2 Principals of health education
	4.1.3 Definition of 'knowledge', 'beliefs', 'attitudes', and 'values' and their relationship to health
4.2 To describe the factors affecting	4.2.1 Pre-disposing factors
behaviour and ways	4.2.2 Enabling factors
of influencing behaviour change	4.2.3 Re-enforcing factors
4.3 To describe methods of health education, identification of behaviour related health problems, identification of appropriate health messages, steps in planning and evaluation of a health education program	4.3.1 Currently available methods of health education
	4.3.2 Identification of health problems for intervention
	4.3.3 Identification of appropriate messages / tools
	4.3.4 Steps involved in planning a health education program
	4.3.5 Evaluation of a health education program

# 5. Occupational Health

Intermediate Objectives	Broad Content Areas
5.1 To understand the concept of occupational health and health hazards	5.1.1 Relationship between health and work
	5.1.2 Importance of taking an occupational history in clinical setting - cancers, lung & skin disorders, musculoskeletal problems, psycho-social problems
5.2 1. Principles of occupational health services 2. To be aware of the screening procedure for applicants/workers for occupational / work related health problems and risk factors	5.2.1 Pre-employment screening, pre-placement screening, periodic screening, post illness employment screening, pre-retirement health screening
	5.2.2 Aims of occupational health

5.3 To be able to describe prevention of occupational & work related health problems	5.3.1 Health and Engineering measures
	5.3.2 Legislation - Factories ordinance Workman's compensation Act
	5.3.3 Notification of occupational diseases and occupational accidents
	5.3.4 Role of occupational health service
	5.3.5 Ergonomics
	5.4.1 Occupational hazards
	5.4.2 Major occupational groups and related problems
	5.4.3 Walk through survey (Inventorising health hazards)
	5.4.4 Common occupational health problems

# 6. Epidemiology - 1

Intermediate Objectives	Broad Content Areas
6.1 To describe what is epidemiology and its uses and the	6.1.1 Definition of terms
	6.1.2 Types of epidemics
principles of epidemic, endemic and	6.1.3 Definition of incubation and communicable periods
pandemic	6.1.4 Epidemiological transition
6.2 To measure the of burden of disease in a community	
6.3 To define, calculate and interpret measures of morbidity	6.3.1 Measures of morbidity
6.4 To define, calculate and interpret measures of mortality	6.4.1 Measures of mortality
	6.5.1 Anti Malaria Campaign
6.5 To describe the objectives and	6.5.2 Anti Filariasis Campaign
special programs	6.5.5 Rabies control program
	6.5.6 Control of Dengue and JF

6.6 To describe emerging and re- emerging diseases In the world and in Sri Lanka	6.6.1 Emerging and re-emerging diseases in the world
	6.6.2 Sri Lankan situation with regard to emerging and re-emerging diseases
6.7 To describe EPI and non-EPI vaccines available in Sri Lanka	6.7.1 EPI vaccines
	6.7.2 Non-EPI vaccines
	6.7.3 Adverse Events Following vaccination

#### 7. Current Trends in Public Health

Intermediate	Broad Content Areas
Objectives	
7.1 To describe the trends in global / national public health	7.1.1 Global burden of diseases
	Cardiovascular disease, diabetes, and obesity
	7.1.2 Mental health program
	7.1.3 Accidents and injuries
	7.1.4 Cancer control
	7.1.5 Substance abuse
	7.1.6 Health promotion and Healthy life styles
	7.2.1 Types of disasters
	7.2.2 Prevention / mitigation of disasters
	7.2.3 Disaster preparedness
7.2 To describe the	7.2.4 Emergency response to disasters
steps involved in	7.2.5 Relief priorities
disaster management	7.2.6 Shelter / water / food / sanitation
	7.2.7 Control of vector borne / infectious diseases
	7.2.8 Waste disposal
	7.2.9 rehabilitation
7.3 To be aware of the extent and distribution of differently-abled persons and other marginalized sub groups in Sri Lanka and the services available	7.3.1 Types of differently-abled persons, elderly, marginalized sub groups
	7.3.2 Health care needs
7.4 To describe the	7.4.1 Issues of human rights and health
human rights issues in relation to health	7.4.2 Gender equity
	7.4.3 Childs rights
	7.4.4 Patients rights

# 8. Epidemiology - 2

Intermediate Objectives	Broad Content Areas
8.1 To describe different epidemiological study designs, uses and limitations	<ul> <li>8.1.1 Classification of study designs</li> <li>1.Observational studies         <ul> <li>Descriptive studies – Case series</li></ul></li></ul>
8.2 To describe, calculate and interpret measures of effect and association	8.2.1 Odds ratio, relative risk, Attributable risk
8.3 To describe factors considered to determine causation	8.3.1 Causality
8.4 To describe the difference between survey and	8.4.1 Surveillance principles
Surveillance	0.4.2 Notification
8.5 To describe concepts of screening	8.5.1 Screening principles
and evaluation of a screening test	8.5.2 Validity and reliability, predictive values
8.6 To determine the efficacy of a screening programme	8.6.1 Screening programme
8 7 To describe the	8.7.1 Risk assessment prognosis
application of	8.7.2 Investigation of epidemics
epidemiology in a	8.7.3 Prevention
clinical setting	8.7.4 Clinical decision analysis
,	

#### 9. Statistics

Intermediate Objectives	Broad Content Areas
9.1 To describe a set of summarizing appropriate summary statistics & graphical methods	9.1.1 Data types
	9.1.2 Scales of measurement
	9.1.3. Tables and Graphs: Histograms, Stem & Leaf plots

	9.1.4 Box plots, bar & Pie chart: (Simple, Compound and Component), Pictogram, Scatter diagram, Line graph
	9.1.5 Measures of central tendency Average – mean, median, mode
	9.1.6 Measure of dispersion: Range, Qualities, Standard deviation
	9.1.7 Normal distribution: properties and uses
	9.1.8 Probability limits, 95% reference levels
	9.2.1 Standard error of mean
	9.2.2 Standard error of percentage/ Proportion
9.2 To explain	9.2.3 SE of difference between two means
confidence intervals	9.2.4 SE of difference between 2 proportions.
significant tests	9.2.5 Null hypothesis
e.ge.	9.2.6 Normal test / Z test, t test, Chi square test
	9.2.7 Type I error and type II error
Intermediate Objectives	Broad Content Areas
0.2 To be able to	
interpret correlation	
coefficient and linier regression	9.3.1 correlation coefficient, linier regression, regression coefficient
coefficient and linier regression	9.3.1 correlation coefficient, linier regression, regression coefficient
9.4. To describe the concept of a population and the	9.3.1 correlation coefficient, linier regression, regression coefficient 9.4 .1 Sampling methods Probability Sampling methods Simple Random Sampling Systematic Sampling Stratified Random Sampling Multistage Sampling
9.4. To describe the concept of a population and the different sampling procedures	9.3.1 correlation coefficient, linier regression, regression coefficient 9.4 .1 Sampling methods Probability Sampling methods Simple Random Sampling Systematic Sampling Stratified Random Sampling Multistage Sampling Cluster sampling
9.4. To describe the concept of a population and the different sampling procedures	<ul> <li>9.3.1 correlation coefficient, linier regression, regression coefficient</li> <li>9.4 .1 Sampling methods <ul> <li>Probability Sampling methods</li> <li>Simple Random Sampling</li> <li>Systematic Sampling</li> <li>Stratified Random Sampling</li> <li>Multistage Sampling</li> <li>Cluster sampling</li> </ul> </li> <li>9.4.2 Sample size calculation</li> </ul>
9.4. To describe the concept of a population and the different sampling procedures	<ul> <li>9.3.1 correlation coefficient, linier regression, regression coefficient</li> <li>9.4 .1 Sampling methods Probability Sampling methods Simple Random Sampling Systematic Sampling Stratified Random Sampling Multistage Sampling Cluster sampling</li> <li>9.4.2 Sample size calculation</li> </ul>
9.4. To describe the concept of a population and the different sampling procedures	<ul> <li>9.3.1 correlation coefficient, linier regression, regression coefficient</li> <li>9.4 .1 Sampling methods Probability Sampling methods Simple Random Sampling Systematic Sampling Stratified Random Sampling Multistage Sampling Cluster sampling</li> <li>9.4.2 Sample size calculation</li> <li>9.5.1 Principles of Meta analysis</li> </ul>
9.4. To describe the concept of a population and the different sampling procedures 9.5 To have an understanding of meta analysis and its interpretation	<ul> <li>9.3.1 correlation coefficient, linier regression, regression coefficient</li> <li>9.4 .1 Sampling methods Probability Sampling methods Simple Random Sampling Systematic Sampling Stratified Random Sampling Multistage Sampling Cluster sampling</li> <li>9.4.2 Sample size calculation</li> <li>9.5.1 Principles of Meta analysis</li> <li>9.5.2 Strengths and weaknesses of meta analysis</li> </ul>
9.4. To describe the concept of a population and the different sampling procedures 9.5 To have an understanding of meta analysis and its interpretation 9.6 To describe qualitative data analysis and its uses	9.3.1 correlation coefficient, linier regression, regression coefficient         9.4.1 Sampling methods Probability Sampling methods Simple Random Sampling Systematic Sampling Multistage Sampling Cluster sampling         9.4.2 Sample size calculation         9.5.1 Principles of Meta analysis         9.5.2 Strengths and weaknesses of meta analysis         9.6.1 Qualitative data analysis methods
9.4. To describe the concept of a population and the different sampling procedures 9.5 To have an understanding of meta analysis and its interpretation 9.6 To describe qualitative data analysis and its uses 9.7 To be able to select the statistical test to a given set of data	<ul> <li>9.3.1 correlation coefficient, linier regression, regression coefficient</li> <li>9.4.1 Sampling methods Probability Sampling methods Simple Random Sampling Systematic Sampling Stratified Random Sampling Multistage Sampling Cluster sampling</li> <li>9.4.2 Sample size calculation</li> <li>9.5.1 Principles of Meta analysis</li> <li>9.5.2 Strengths and weaknesses of meta analysis</li> <li>9.6.1 Qualitative data analysis methods</li> <li>9.7.1 Selection of statistical test</li> </ul>

# 10. Research Methodology

Intermediate Objectives	Broad Content Areas
10.1 To define research and describe types of research	10.1.1 Definition of research
	10.1.2 Types of research
	Basic research
	Applied research
	Health system research
	40.0.4 blockfording of an englishing and have
10.2 To identify	10.2.1 Identification of researchable problems
problems and carry	10.2.2 Problem analysis
out a problem	10.2.3 Conceptual framework
analysis	10.2.4 Problem statement
10.3 To identify	10.3.1 Types and sources of literature
sources of literature.	10.3.2 Accessing literature – library internet
access literature and	
review	10.3.3 Reviewing literature
10.4 To formulate	10.4.1 Hypothesis
10.4 To formulate	10.4.2 Generation of objectives
hypothesis/objectives	10.4.3 Specific objectives
10.5 To describe the	10.5.1 Identification of variables and operationalisation
research method	10.5.2 Study setting
research method	10.5.3 Study instruments
	10.6.1 Classification of study designs
	1. Observational studies
	Descriptive studies – Case series
10.6 To describe	Case report
study designs and	Analytical Case control studies
their strengths and	Cohort studies
limitations [recap]	2 Experimental studies – Clinical Trials
	Community trials
	10.6.2 Biases in each study design
Intermediate	Broad Content Areas
Objectives	
	10.7.1 Data collection tools – questionnaires, interviews,
10.7 To describe and design a suitable study instrument and its application	observations
	10.7.2 Pre-testing and pilot study
40.0 Te 1 "	40.0.4 Data collection plan. Caldwards
10.8 To describe and	10.8.1 Data collection plan – Tield Work
plan Project	10.8.2 Budgeting
папауеттен	

10.9 To identify ethical issues	10.9.1 Voluntary participation
	10.9.2 Informed consent
	10.9.3 Subjects incapable of giving consent
and process of	10.9.4 Investigations (invasive)
obtaining ethical	10.9.5 Drug trials
clearance	10.9.6 Ethical review committee
	10.9.7 Method of obtaining clearance
	10.10.1 Introduction
	10.10.2 Literature review
	10.10.3 Methodology
10.10 To formulate a	10.10.4 Sampling and sample size calculation
project proposal	10.10.5 Organization of field work – training data collectors
	10.10.6 Data management and quality control
	10.10.7 Budget
	10.10.8 Time frame

# 11. Maternal and Child Health

Intermediate Objectives	Broad Content Areas
11.1 To describe the maternal health care	11.1.1 Concepts of maternal health / reproductive health / family health
	11.1.2 Provision of maternal care through the health care system
	11.1.3 Maternal morbidity / mortality and their trends
	11.1.4 Basic obstetric care
	11.1.5 Emergency obstetric care
	11.1.6 Notification and investigation of maternal death
	11.1.7 Safe Motherhood Initiative and strategies that are carried out in Sri Lanka
	11.1.8 Peri-natal mortality and its prevention
	11.1.9 Clinic and field care during ante-natal and post-natal
	period
	11.2.1 Early and late neonatal care
	11.2.2 Post neonatal care
11.2 To describe care	11.2.3 Breast feeding and complementary feeding
of the infant	11.2.4 Monitoring of growth and development
of the infant	11.2.5 Vaccination and maintenance of cold chain
	11.2.6 Mortality during infancy and its prevention
	11.2.7 Immunisation schedule
11.3 To describe care	11.3.1 Concepts involved in and objectives of care for the
for the preschool child	preschool child

	11.3.2 Provision of care for the preschool child through the health care system
	11.3.3 Vaccination
	11.3.4 leading causes of morbidity and mortality in preschool child and their prevention
11.4 To describe the school health program	11.4.1 Objectives of the school health program
	11.4.2 Planning and conducting a school health program
	11.4.3 Common health problems of school children
	11.4.4 Follow up of children with health problems
	11.4.5 Vaccination
	11.4.6 Social services available to school-aged children
11.5 To describe the heath problems among the adolescents	11.5.1 Common health problems among adolescents
	11.5.2 Indicators of adolescent health
	11.5.3 Sexual abuse and safe sexual behaviour
	11.5.4 Social services available to adolescents
11.6 To describe the family planning provision [program]	11.6.1 Objectives of family planning 11.6.2 Advantages of family planning and role of family planning in fertility regulation
	11.6.3 Modern methods of family planning
	11.6.4 Traditional methods of family planning
	11.6.5 Advantages and disadvantages of different contraceptive methods
	11.6.6 Emergency contraception
	11.6.7 Termination of pregnancy
	11.6.8 factors influencing the choice of contraception
	11.6.9 Sub-fertility and related investigations
	11.6.10 Programmes and institutions involved in family planning

# 12. Demography

Intermediate Objectives	Broad Content Areas
10.1 To departing the	12.1.1 Definition of Demography
12.1 To describe the factors that influence the size and composition of the population	12.1.2 Demographic variables
	12.1.3 Fertility, Mortality & Migration
	12.1.4 Population growth rate
	12.1.5 Natural increase
	12.1.6 Population projections
12.2 To describe the population size of Sri Lanka and the implications	12.2.1 Population Census
	12.2.2 Demographic and Health Surveys
	12.2.3 Registration systems (Births & Deaths) and their limitations

	12.2.4 Vital statistics	
	12.2.5 Age sex composition (Population Pyramid)	
12.3 To describe the Demographic transition	12.3.1 Demographic transition	
	12.3.2 Dependency ratio	
12.4 To describe principles of population estimation and projection	12.4.1 Needs for estimation, common methods used	
12.5 To describe the concepts of expectation of life	12.5.1 Principles of life tables and its uses	
12.6 To describe the principles of comparison of mortality	12.6.1 Standardization (Direct / Indirect)	

# 13. Health Care System Planning and Management

Intermediate Objectives	Broad Content Areas
13.1 To describe the	13.1.1 National policy statement
health policy for Sri Lanka and the standard for health care	13.1.2 Regional policy statement
	13.1.3 Health related legislations
	13.1.4 Strengths and weakness
<ul> <li>13.2 To describe the health planning for</li> <li>1. Community</li> <li>2. Emergency needs</li> </ul>	13.2.1 What is planning
	13.2.2 Rationale for health planning
	-Activity planning -Allocation
	13.2.3 State's responsibility in health sector
	13.2.4 Planning models
	13.2.5 Private and public sector planning
	13.2.6 Financing health Care - state funding, Insurance schemes (compulsory, voluntary), user fees, Aid funds (NGOO and INGOO contribution)
	13.2.7 Information for planning -Mortality and morbidity, Disability (DALY) -Sources of information

	13.2.8 Situation analysis -Health needs assessment -Community appraisal -Emergency needs assessment -Health and demographic situation -Services and resources -Policy and political environment	
	-ivietnoos of analysis	
13.3. To describe monitoring and	13.3.1 Indication for monitoring	
interventions	13.3.2 Methods of evaluation	
13.4. To describe the	13.4.1 Introduction to economics         13.4.2 Indicators relevant to health economy	
economics	13.4.3 Cost benefits	
	13.4.4 Cost ellectiveness	
13.5. To assess quality of health care	13.5.1 Dimensions of quality - equity, efficiency, effectiveness	
	13.5.2 5-S concept - clearing, organizing, cleaning, standardizing	
	13.5.3 training and self discipline	
13.6 To describe the methods of a medical audit	13.6.1 Setting standards	
	13.6.3 Analysis	
	13.6.4 Use of a measurement tool	

# 14. Health Information System

Intermediate Objectives	Broad Content Areas	
-		
14.1 To describe the information in the existing health care systems and it's limitation	14.1.1 What is information	
	14.1.2 Uses for health information - Planning, monitoring, evaluation, policy decision, resource allocation, education, research	
	14.1.3 Sources - Vital event registration, Census, Routine information system	
	14.1.4 Epidemiological surveillance data, special survey	
	14.1.5 Reliability and validity of data	
	14.1.6 Annual Health Bulletin	
	14.1.7 Weekly epidemiological report and quarterly epidemiological report	

14.2 To describe the existing hospital information system and flow of information and its limitations	14.2.1 Registration of vital events
14.3 To describe certifications of cause of death and classification of diseases	14.3.1 International classification of death
	14.3.2 Certification of cause of death
	14.3.3 Classification of diseases and cause of death

# ANNEXURE 5: Aims and objectives of Community Medicine Clerkship programme in 4<sup>th</sup> year

# Introduction

Community Medicine clerkship is designed to facilitate medical students to gain knowledge, skills and perspectives of community health that are necessary to practice as a doctor in any part of Sri Lanka. The specific educational objectives of the clerkship focus on exposing the students to preventive health care in Sri Lanka through an understanding of the community context of health, illness and health care. It is hoped that the clerkship will help foster in students an informed sense of social responsibility, accountability and develop skills and attitudes needed to become capable, empathic and caring doctors.

# Overall objective of the clerkship

The objective of this clerkship is to provide students an opportunity to study the services available to a community for the improvement of their health status. Students will have the opportunity of meeting the persons responsible for providing these services and to gain access to community field health services, data collection, monitoring, surveillance and health promotion. Students are expected to study each activity critically and be able to evaluate each in respect of its contribution to the health of the community.

# Learning objectives for specific activities within the clerkship

# 2.1. Small group Activities on Antenatal Care

The students should be **able to** 

- 1. describe the importance of the pregnancy record
- 2. interpret the data provided in the pregnancy records
- 3. describe the clinic procedures and services provided for pregnant mothers

# 2.2. Field Visit with the PHM

The students should be able to **describe** :

- 4. the importance of providing domiciliary ANC in Sri Lanka.
- **5.** the birth rate in this area.
- 6. the proportion of pregnant women are in her area
- 7. the services provided to them.
- 8. how these services are provided for the pregnant mother
- 9. who are at risk mothers and how they are referred and how to monitor these mothers.
- 10. the importance of having post natal visits and the activities carried out during the visit
- 11. how to assess services provided to pregnant women.
- 12. evaluate the services provided to the pregnant mother

# 2.3. Antenatal Care at the field clinic

The students should be **able to** 

- 1. describe the purpose of the ante natal clinic
- 2. describe the pregnancy record card and the importance of maintaining the card.
- 3. describe the activities conducted to monitor the pregnancy.
- 4. the activities carried to improve the health of the pregnant mother
- 5. describe the health and the social risk assessment and the referral procedures
- 6. describe the immunization procedures
- 7. assess the usefulness of the ante natal clinic
- 8. prepare a critical appraisal report of the activities of the ANC

# 2.4 Small group activities on Family Planning

The students should acquire the skills on counselling on contraception. The students will be briefed on how to advice a woman

- 1. on oral pills
- 2. on an IUCD
- 3. on Condom
- 4. on depoprovera injection
- 5. after LRT

#### And on what family planning advice would be given to a

- 1. nulliparous woman
- 2. multiparous woman
- 3. woman with 3 children and over 30 years
- 4. woman with 3 children between 20 30 years
- 5. lactating woman
- 6. 1 week after child birth
- 7. 3 months after child birth

#### 3.1 Small group activities on the Child Health Activities

The students should be able to

- 1. describe the importance of the Child Health Development Record(CHDR)
- 2. acquire skills to complete a CHDR and interpret the data on a CHDR
- 3. to use the CHDR as a tool to educate the mother and health care provider
- 4. describe the methods of successful breast feeding
- 5. describe the importance and quality of complementary feeding
- 6. describe age appropriate immunization
- 7. describe developmental stages of a child

# 3.2 Child Welfare Clinic

The students should be able to **describe** :

- 1. the main aim of child health care
- 2. the CHDR
- 3. the importance of maintaining the CHDR
- 4. how the growth of a baby is monitored
- 5. the importance of monitoring the weight of a baby
- 6. how "at risk" babies are identified from the growth chart
- 7. the advice that should be given to a mother seen at a field clinic regarding the management of a child with one of the following conditions
  - I. Diarrhoea
  - II. Respiratory Tract Infection
  - III. Malnutrition
- 8. Thriposha
- 9. the Thriposha beneficiaries
- 10. how Thriposha should be consumed by the beneficiaries
- 11. the services provided to a neonate in the area
- 12. the immunization schedule for an infant/preschool child
- 13. the dose, mode of administration, contra Indications for each vaccine
- 14. why the DPT is not given for a child above 2 years
- 15. how the vaccines are prepared before administration
- 16. how the physical and mental development of a child is monitored
- 17. the services provided for a socially deprived child.

18. Prepare a critical report on the activities of the CWC to be included in the portfolio

# 4. School Medical Inspection

The students should be able to **describe** :

- 1. the health services available for school children in Sri Lanka.
- 2. the objectives of a school medical inspection (SMI)
- 3. how frequently the SMI is conducted
- 4. the planning and implementation of SMI
- 5. the main activities of a SMI
- 6. how to follow up children with defects detected at SMI
- 7. the roles of teachers and parents at the SMI?
- 8. how to evaluate and list the benefits of SMI with a view to offering suggestions for the provision of better School Health services
- 9. and prepare a critical report on the activities of the SMI to be included in the portfolio

# 5. Health Education Programme

The students should be able to :

- 1. select an appropriate topic for a Health Education (HE) Programme
- 2. organize and conduct a HE programme
- 3. write objectives for the specific HE programme depending on the target population
- 4. identify the appropriate audio- visual materials
- 5. deliver the HE message

# 6.1.1 Environmental Health with the PHI

The students should be able to **describe** :

- 1. the available excreta disposal systems in urban and rural areas
- 2. the role of the PHI in the provision of sanitary latrines for the communities
- 3. how the Ministry of Health supports provision of toilets
- 4. the methods of disposal of solid waste in rural and urban areas
- 5. the health hazards of solid waste
- 6. how well water is chlorinated
- 7. the provision of safe meat and milk

# 6.1.2 Visit to a Food Handling Establishment

- The students should be able to **describe the:** 
  - 1. food act No 26 of 1980
  - 2. role of the PHI in the implementation of the food act
  - 3. health hazards of the eating place

#### 6.2 Factory visit

The students should be **able to describe the different steps in:** 

1. conducting a factory visit in order to determine the occupational health hazards.

#### 6.3 Water treatment and Sewage Purification Plant

The students will visit a Water treatment and Sewage Purification Plant.

The students should be able to **describe** :

2. the different steps to improve the quality of water

- 3. steps involved in sewage treatment
- 4. the advantages of a large scale sewage treatment plant.
- 5. relevant preventive measures that should be adopted

# 7. Estate visit

The students should be able **to describe** 

- 1. the social, economical and cultural factors in the estate sector and their influence on health and disease
- 2. the health problems and the health needs of the estate sector

#### 8. Secondary prevention assignments

# 8.1 Follow up of a patient

To enable the student to learn the importance of observing a patient's physical, psychological and emotional health in his own environment and thus gain an appreciation of the need of including the social history into the medical history.

# 8.2 Surveillance System

The students should be able to :

- 1. list the notifiable diseases in Sri Lanka
- 2. write a notification form
- 3. describe the procedure of the surveillance system in the hospital and in the field.
- 4. describe how a notifiable disease is investigated by the MOH and the PHI

# 9. Tertiary prevention assignments

# **Ragama Rehabilitation Centre**

The students should be able to describe the short term or long term management of a

- 1. quadriplegic or a paraplegic adult
- 2. cerebral palsy or a differently abled child

# **10. Community Survey**

At the end of the community survey the students are **expected to**:

- 1. identify any health and social problems in the pregnant mothers, preschool children and youth.
- 2. identify the problem of the elders/ differently abled people and identify the solutions and rehabilitative measures for these individuals.
- 3. identify the social problems affecting health
- 4. identify environmental problems
- 5. assess the nutritional problems in the families.

# 12. Community Medicine Clerkship Portfolio

A portfolio is a collection of written accounts of events and activities experienced by individuals, and kept in a form of a booklet. However it is used not only as a piece of evidence but also as an effective learning tool. Therefore portfolio based learning is a process of reviewing, reflecting and learning from events.

**Objective:** the portfolio writing will enable the students to achieve skills in

- 1. clinical and scientific writing
- 2. critically evaluating the services provided

# **ANNEXURE 6. Objectives of the Research Project**

At the completion of the research project the students should achieve the following

objectives. The broad content areas under each of these objectives are also given here.

Intermediate Objectives	Broad Content Areas
To define research and describe types	of research
	Definition of research
	Types of research
	Basic research
	Applied research
To identify researchable problems and	l carry out a problem analysis
	Identification of researchable problems
	Conceptual framework
	Problem analysis
To identify sources of literature, acces	s literature and review
	Types and sources of literature
	Accessing literature – library, internet
	Reviewing literature
	Discuss a scientific paper critically
To formulate hypothesis/objectives	
	Hypothesis
	Generation of objectives
To describe the research method	
	Identification of variables and operationalisation
	Study setting
	Study instruments
To describe study designs and their strengths and limitations	
	Study designs- cross-sectional, case-control,
	cohort, experimental, randomized controlled
	trials
	Biases
To describe and design a suitable study instrument and its application	
	Data collection tools – questionnaires,
	interviews, observations
	Pre-testing and pilot study
To describe and plan project management	
	Data collection plan – field work
	Budgeting
lo identify ethical issues involved in a clearance	a study and the process of obtaining ethical
	Voluntary participation
	Informed consent
	Subjects incapable of giving consent
	Investigations (invasive)
	Drug trials
	Ethical review committee
	Method of obtaining clearance

To draw up a project proposal	
	Introduction
	Literature review
	Methodology
	Sampling and sample size calculation
	Organization of field work – training data
	collectors
	Data management and quality control
	Budget
	Time frame
To describe and perform data analysis	
To describe and perform data analysis	Data antru computer software EVCEI
	Data entry – computer software – EACEL,
	Epi data
	Data cleaning and storage
	Data analysis
	Manual - dummy tables
	Computer programmes – Epi info, SPSS
	Data presentation
	Diagrams- bar charts, histograms, pie
	charts, linear graphs
	Frequency distributions
	Cross tabulation
	Selection of a suitable statistical test
	Arriving at inferences
To report research outcome	
	Arrive at conclusions
	Making recommendations
	Writing a paper/Report
	Write a abstract for a research session
	Publishing
To write the references scientifically	
	Vancouver system
	Harvard system
To critically discuss the findings and co	onclusions of study
	Identify limitations of a study and suggest
	improvements
During this period the you will also acqu	uire the following skills
Application of research methodo	logy
Basic communication skills inte	erview skills
- Dasic communication skills	ciview skills
- Dasic presentation skills	
- Academic writing skins	anna dahaata atatiatiaal autnuta aamnutar haaad
- 11 skills. Wold processing,	spreadsheets, statistical outputs, computer-based
Diblig graphic and library skills	
- Dibilographic and library skills	ion of field work budgeting
- Administrative skills – organisat	ion of field work, budgeting
- Analytical thinking	
- Team WOTK	
- Leadership	

- Leadership Application of research ethics