

## Community Medicine: learning experience of medical students

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### Introduction

The main objectives of Community Medicine teaching is to expose medical students to Primary and Secondary healthcare settings where they will have to render competent promotive, preventive, curative and rehabilitative services. This helps them to serve the needy people in the community as primary healthcare physicians, with a holistic approach, in alignment with the National Health Goals and the vision of the Ministry of Health.

### Curriculum requirement

In our institution, the total duration of medical education for medical students is four and half years. As part of the curriculum students are posted to the Community Medicine Department for three and half years, where they are required to meet certain objectives drawn from the Institutional Goals.

The broad objectives are;

- to appraise the health status of a community
- in depth study of public health and preventive medicine
- in depth study of primary healthcare services to become a competent primary healthcare physician.

### Classroom to Community

An emphatic shift in the area and method of Community Medicine teaching gives students more opportunity to be with the people and the community during their learning process. The fully functional Urban Health Training Center and Rural Health Training Centre attached to the Department, catering to a population of 15,000 and spread over 3 townships and 9 villages are field training areas for students.

The teaching programme starts in year I, where students are introduced to the objectives of learning Community Medicine, history of public health, evolution of medicine and concepts of health, illness and diseases for better understanding of the basic fundamental aspects. The year II programme is conducted in subgroups of 25 students each and involves two sessions of full time community oriented training and theory classes for one academic year. Each group undergoes training on a rotation basis.

### Community Oriented Training programme

This primarily offers a learning experience that cannot be provided within the confines of lecture halls. Students visit the community and places of public health importance for hands-on training. This programme is broadly divided into three major activities.

*1. Demographic and Morbidity Survey:* During the first month, students are briefed on conducting a demographic and morbidity survey using a structured questionnaire, in a rural/urban area with the help of field staff. The collected data is analyzed with guidance from faculty and a statistician and then presented. This helps the students to learn the demographic structure and morbidity patterns existing in the community.

*2. Community Diagnosis:* This is the process of appraising the health status of a community with vital and other statistics, information on determinants of health and examination of their relationships within the specified community.

Students visit designated villages/urban areas with field staff. Social mapping of the area is done with the help of the field staff and the local community leaders. The students visit the families allotted to them and collect as much data as possible and a report is presented to the faculty and students. Based on the results of community diagnosis, a health education intervention programme is arranged to create awareness regarding existing health problems with appropriate remedial measures.

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3. *Field visit:* Students visit centers of public health importance such as primary health centers and sub-centers, water/sewage treatment plants, milk processing units, child care centers, rural and urban health training centers, TB, filaria and leprosy control units etc. They also visit nearby villages and urban slums to build awareness of socio-economic status, public health problems, existing health practices, planning for community diagnosis and field surveys and to organize health education programmes in the community.

In addition, students are assigned the following “**Learning by Doing**” activities:

*Seminars:* Each student is assigned a topic related to community medicine. Seminars aim to develop new knowledge and skills about topic selection, preparation of material, presentation and discussion. This also develops greater understanding of the subject by the use of library, writing and resource seeking behaviour. Students prepare posters relevant to the subject, which are exhibited.

*Project Work:* This helps develop research skills and to identify common and important public health problems. Knowledge about research questions, topic selection, literature search, questionnaire preparation, pre-testing and data collection techniques is acquired. Topics are often selected by students themselves with guidance of the faculty. Projects are done individually or in small groups, with data collection from the community, hospitals or health centres. After data compilation and analysis, a project report is submitted. These studies are precursors of advanced research.

*Epidemiological and Bio-statistical exercises:* This is primarily a problem solving exercise using a wide variety of problems. Each student is actively involved with guidance from the faculty members. This helps in building and strengthening their analytical skills.

*Laboratory work:* Each batch of students undergoes practical training in Medical Entomology, Helminthology, Parasitology, environmental sanitation, nutrition specimens, family planning methods, vaccines and cold chain equipment as well as in Public Health Chemistry. This is systematically recorded in a practical record book for evaluation.

During year III the students are exposed to the following programmes.

*Clinical-social case studies:* Each student is given a model case sheet of patients with relevant data relating to communicable and non-communicable diseases of public health importance. Questions are answered and discussed with faculty members. Finally, each student examines patients in hospital wards or urban or rural health centers and presents the case study report to other students and faculty members. This helps in encouraging peer review and acquisition of clinical skills.

Students take a detailed history and examine the patient, write a case sheet and discuss based on the probable diagnosis and management at individual, family and the community level by considering clinical, social and economic issues related to the patient. They are expected to apply knowledge on the levels of prevention, existing healthcare infrastructure available for the management and relevant National Health Programmes. Thus the student learns about the holistic approach to patient care in a community setup.

### **Evaluation**

Internal evaluation is in two levels, both contributing to internal assessment marks.

1. Concurrent evaluation on a day to day basis, based on the performance in the class, laboratory or in the field.
2. End of posting evaluation in the form of a written theory examination with multiple choice questions and a practical examination

Final Evaluation is the university examination at the end of the pre-final year. Written, practical and viva voce examinations assess the knowledge and evaluate the skills acquired by the students during practical procedures. They also assess confidence in facing examiners and to identify the best outgoing students by assessing overall performance.

### **Conclusion**

Teaching activities are totally integrated with relevant specialties of Clinical and Community Medicine. The aim is to facilitate coordination between medicine and public health teaching to the medical student. Teaching programmes are designed and implemented in a way that will have a positive impact on the cognitive [knowledge], psychomotor [skills] and affective [attitude] domains. Thus, learning Community Medicine helps the student not only to become a good clinician but also to become a good manager, teacher/educator and a researcher with a holistic approach.