

Comparative study of community medicine practice in MBBS curriculum of health institutions of Nepal

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Abstract

Background: A revolution in health care is occurring as a result of changes in the practice of medicine and in society. Medical education needs to adapt to society's changing attitudes. Presently medical education has been criticised for its orientation and insensitivity to people's need. MBBS curriculum of medical institutions of Nepal has been focusing on community-based approaches and still it's guided by same notion. The question put forward is has it been appropriate to nurture the present health need and aspiration of people.

Objective: The objective of the present study is to review the existing Community Based Medical Education in Health Institutions of Nepal to strengthen the components of community care.

Materials and methods: Qualitative study was done by reviewing the curriculum and existing community medicine courses in MBBS curriculum of Kathmandu University Medical School, Institute of Medicine/Tribhuvan University and BP Koirala Institute of Health Sciences.

Result: The curriculum of all the health institutions have addressed significantly on community medicine practice. As per Institute of Medicine, the community medicine practice is achieved through community based learning experiences like community diagnosis, concurrent field with families of sick members and district health systems management field. In BP Koirala Institute of Health Sciences community medicine practice is undertaken through exposure to community diagnosis program, health care delivery system, family health exercise, applied epidemiology and educational research methodology, management skills for health services and Community Oriented Compulsory Residential Rotatory Internship Program (COCRRIP). In KUSMS, community medicine module is carried out as- community diagnosis program, community health intervention project, school health project, occupational health project, health delivery system functioning, family health care activities and Compulsory Residential Rotatory Internship Program in outreach clinics. In the practice the practical aspects are largely unstructured that waste too much time in non-educational activities and rely on learning and doing. Meanwhile, expectation of the community is increasing and the challenge of nurturing their demands has come in forefront. Community has perceived that the medical schools are concentrating on fulfilling the demand of their curriculum rather directing on their health care need.

Conclusion: Health institutions need to be accountable to take the responsibility of strengthening the health status of the community of their catchments areas. The practice of community medicine need to be done in an innovative way and these schools should execute continual intervention activities and complement other institutions working in their areas.

Key words: Community Medicine, curriculum, BPKIHS, IOM, KU

Biomedical sciences and clinical medicine have achieved phenomenal advances and successes during the past 50-60 years. The new and ever improving diagnostic, pharmacological and instrumental armamentaria have made physicians increasingly effective and powerful in combating diseases¹. Advances in medical sciences and technology are but a part of these events. Since there is an organic relationship between medicine and human advancement, the evolution of medical education should be viewed against civilisation and advancement at that time². There was noticeable development in medical education as the theory of

disease causation changed from supernatural to germ causation and from genomics to proteomics. In this regard, medical education needs to be directed to aspire not only the teaching of diagnosis and management, the mainstay of medical education for the last hundreds of years or more, but optimum health requires more than

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this. The role of medical education has been to produce professionals who can understand and assume their responsibilities to meet the wider health care need of their people to remain physically, mentally, socially and spiritually healthy as envisaged by WHO. Equally reassuring for the future of medicine is the continued evolution of medical education itself³.

Medical education should evolve based on science to serve patients. Despite the innovation in medical arena, the developing countries are lagging behind to reap the benefits. The importance of primary health care components in health care delivery system is still evident. Therefore, it has become necessary to incorporate ingredients of primary health care to reinforce the medical education. With the existing system, to facilitate the health care delivery approach community care need to be incorporated and practiced. Obviously, health science students need to be equipped with the essential knowledge and skills to address these issues. Community Based Medical Education is the theme of medical education of Nepal. The current practices related to the community-centred education need to be analyzed and strengthened to address the wider need of the community.

The purpose of the present study is to review the existing Community Based Medical Education in Health Institutions of Nepal to strengthen the components of community care.

Material and methods:

A qualitative study was done to compare the philosophy and existing community medicine courses of the MBBS programs of Kathmandu University Medical School, Institute of Medicine/Tribhuvan University and BP Koirala Institute of Health Sciences. Basic information on the philosophy and contents of the community medicine was obtained from the MBBS curriculum of the respective institutions and the department of the community medicine of each institution and from published documents.

Findings

1. Philosophy and Concept of Community Based Medical Education in IOM/ Tribhuvan University

Institute of Medicine was established in 1972 under Tribhuvan University, the oldest national university of Nepal. The goals of IoM are:

- ❑ Production of human resources for health services, education and research
- ❑ Provide health services through its health institutions
- ❑ Conduct research in health sciences

Objectives of IoM

- ❑ To train different categories of health personnel required for Nepal - university level education at undergraduate and post graduate levels
- ❑ To provide health services to the people
- ❑ To conduct research in the health sector
- ❑ To provide continuing medical education (CME)
- ❑ To evaluate programme and revise curriculum or implementation strategy accordingly
- ❑ To strengthen partnership with government and other agencies in Human Resource Development and other areas

Institute of Medicine runs 7 constituent and 5 affiliated campuses in order to meet the above-mentioned goals.

MBBS program at the Institute of Medicine was created in response to the national health needs identified through district health surveys rural districts (Tanahu, Bara, Nuwakot and Dhankuta) were carried out to develop need-based curriculum. The survey results provided the basic data necessary for curriculum planning. The job description of medical officer was analyzed. The curriculum was designed on the basis of the of health needs and perceived relevance to the community, and the roles to be performed by the medical graduates to serve the health services in the districts of Nepal. Despite passage of time it has remained true to the ideals that motivated its establishment. In 1978 the program was conceived as Medical Science Diploma of Doctor of General and Community Medicine (MSDDGCM) ⁴. However later termed a MBBS. The first batch came in 1984 as MBBS graduates.

Major areas of responsibility of a medical graduate

- ❑ Role in curative health services - to save life, restore health and rehabilitate by providing medical care mainly through district hospitals
- ❑ Role in preventive health services - to prevent disease and promote health, by virtue mainly of his/her work through District Health Office
- ❑ Role in planning, management and education - to provide medical care and preventive services effectively in the hospital, health office and in the community

Feature of MBBS Curriculum

- ❑ innovative
- ❑ community oriented
- ❑ problem based
- ❑ self directed learning
- ❑ integrated approach to teaching and learning

Critique on the curriculum

- ❑ Initially there was opposition to the programme itself, in that this being “WHO inspired and community oriented” was going to produce a second class doctors.
- ❑ The hope of those involved in the training of doctors was that the products of the IoM, especially those who came from among the middle level workers, would be more disposed to work in areas where they had spent their early years.
- ❑ It was also felt that as the medical degree was not universally recognised, they would be more likely to stay within the country.

This program is known for its strong community orientation and stress on integrated learning of basic science subjects. In addition, the strategies of promoting problem based self directed learning adopted by this institute helps our graduates to prove their abilities in different situation. However in the history there had been many comments on MBBS program of IOM. At a time when community based medical education was introduced in Institute of Medicine, it was viewed skeptically as producer of third grade graduates and barefoot doctors. Community based medical education have been viewed not based on science and neglected the importance of premedical courses. The graduates were blamed not being competent in dealing with the patients as they spend most of their time in the community. Apart graduates were blamed of not being able to deal with the patients as they spend most of the time in community than in hospital and were not recognised in other countries. The community-oriented physician, trained in a community oriented medical education system was referred to as a substandard species.

IoM had to face a lot of opposition to this type of thinking. With all the above resistance, IoM is the first medical institution in Nepal to introduce community orientation, systems approach, problem-based and integrated teaching.

Institute of Medicine has a mandate and responsibilities different from many other medical colleges, it being a public sector institution created with the government funds. The features of IoM are as follows: lower fees, highly competitive entrance examination yet still the most sought after medical school in Nepal, experienced and committed faculty members on permanent employment of the university, extensive clinical learning resources including in house internet server and well established library. Besides, Institute of Medicine functions almost as a health science university and conducts a large number of certificate, bachelor and postgraduate programmes in different discipline.

Community Medicine Practice Model

Diagnosis of the state of the health of a community is as important for community medicine as clinical diagnosis is for the care of an individual patient. There is a need to ensure continuing surveillance of the population's health and evaluation of health care programs. To execute above mentioned task the knowledge of epidemiology, biostatistics, demography, sociology, environmental health, occupational health, nutrition, health financing, health related behaviour, health promotion and health administration is indispensable. Having fundamentals of these will enable them to identify the state of the health status of the community, the underlying factors responsible to precipitate the problem and existing health care system, their functional aspects, constraints and challenges. This will broaden their horizon and enable to think in broad spectrum of health.

Community based practices are essential components with the specific aim of developing the student's competencies in understanding community health problem and later enable them to solve these problems working with the community. All field activities are need-responsive, problem solving, and community oriented, which encourages students to render services while they learn and develop clinical and public health management skills.

Important areas of Community Medicine

- ❑ Community diagnosis
- ❑ Community health care
- ❑ Surveillance of health
- ❑ Evaluation of the programs

Curriculum Outline and Implementation Modality

First Year	Community Medicine and Integrated Basic Medical Science
Second Year	Integrated Basic Medical Science
Third Year	Applied Epidemiology, Family Health Exercise, Forensic Medicine, Clinical Subjects
Fourth Year	Clinical subjects, District Health Service Management
Four and half Year	Clinical Subjects
Final (one year)	Rotating Internship

Approaches to community based learning

- ❑ Taught courses mostly in 1st year with small components in the 2nd and the 3rd phases.
- ❑ The community orientation is achieved through community based learning experiences like community diagnosis, concurrent field with families of sick members and district health systems management field.

Strategy of Community Medicine Department

Mission/Vision and Objectives

Vision

To produce human resources necessary to improve the status of health by providing community oriented education, service and research.

Mission

To improve the health of the people particularly the rural poor, the marginalized and the vulnerable group through the establishment of sustainable Institute of Public Health by generating and mobilizing internal and external resources.

Objectives

To train competent and socially responsible human resources for health who are community oriented

To undertake health and allied researches to improve the health of the people

To provide services at the community and family level

Community Medicine Department is a single but big department with faculties from different backgrounds.

Subjects include

- ❑ Epidemiology, Biostatistics, Demography
- ❑ Microbiology, Parasitology, Entomology,
- ❑ Environmental Health and Occupational Health
- ❑ Medical Sociology and Anthropology
- ❑ Nutrition
- ❑ Family Health
- ❑ Health Promotion & Health Education
- ❑ International Health & Primary Health Care
- ❑ Research Methodology
- ❑ Health System Management and Health Economics etc.

Community field programs are the essential component of all academic programs of IoM with the specific aim of developing the student's competencies in understanding community problem and solving these by and through working with the community. All field activities are need-responsive, problem solving, and community oriented, which encourages students to render services while they learn and develop clinical and public health management skills.

The CMFHD is involved in teaching- learning and research activities of other Departments; particularly the involvement in PG, MD, MS and MN programs is notable in teaching research methods, epidemiology,

biostatistics and other community medicine related subjects including supervision of thesis and dissertation as required.

Future Plan

- ❑ Partnership with community for utilizing field areas for community based learning
- ❑ Establishment of Institute of Public Health and Centre for Public Health
- ❑ Faculty Development Plan - enhancement of capacity of faculty through refresher and short term courses, promotion, recruitment of new staff
- ❑ Start of PhD program and development of modular courses in public health
- ❑ Development of Linkages with Universities and other Public Health Organizations
- ❑ Policy input in national health systems

Community Based Medical Education: BPKIHS Perspectives

B.P Koirala Institute of Health Sciences (BPKIHS) established in 1993, upgraded to a university in 1998, is an autonomous Health Sciences University with a mandate to work towards developing socially responsible and competent health workforce. Striving continuously to meet the health needs at the primary, a secondary and tertiary level is its primary responsibility. The medical education at BPKIHS started on October 1994 with the intake of first batch of MBBS students. Gradually, it started B.Sc. Nursing in 1996, BDS, MS/ M.Sc and CN in 1999. In order to provide students a community oriented medical education and to create a socially accountable health work force in the nation, this institute has launched concept of a "Teaching District". In terms of achieving the educational goals of the Institute both the present curricula and future educational program are need based, integrated, community oriented and partially problem solving in the line with innovative medical education program epitomized in the Edinburgh Declaration of 1998.

Mission of BPKIHS

To improve the health status of the people of Nepal and the neighboring regions by providing holistic health care through training of compassionate, caring, communicative and socially accountable health workforce acting as catalyst of change and through advancement in research and innovation in service as well as education to ensure healthy individuals and families by collaborating with all stakeholders.

The vision of BPKIHS is that future doctors need to exhibit qualities of:

- ❑ Care Provider (Healer)
- ❑ Decision Maker
- ❑ Good Communicator (Facilitator & Teacher)
- ❑ Manager finance and personnel
- ❑ Team Member with leadership role

Pillars of MBBS Curriculum: BPKIHS

- ❑ Integrated
- ❑ Organ system oriented
- ❑ Problem based
- ❑ Need based
- ❑ Community based

Community Medicine Practice Module

Phase I (Multiprofessional exposure to Community diagnosis program)

Objectives

- ❑ To appreciate working atmosphere in team
- ❑ To bridge the gap between the professionals
- ❑ To identify the current scenario of different system and fragmented care to comprehensive need of people.

Methodology

- ❑ village leaders meeting
- ❑ social mapping
- ❑ house-to-house survey
- ❑ Focus group discussion
- ❑ health education
- ❑ health exhibition
- ❑ health camp
- ❑ report presentation

Phase I Second Year (Health Care Delivery System)

Objectives

- ❑ To familiarize the students about Health Care Delivery System
- ❑ To understand the structure and functions of the different NGOs /INGOs working in Health

Methodology: Six-field visits

- ❑ Sub-health Posts with FCHVs
- ❑ Primary Health Centers
- ❑ Teaching District Health Units
- ❑ SOS Bal Gram Itahari
- ❑ Purvanchal Anathasram
- ❑ Old Care home Mulghat

Phase II (Third year and Fifth Semester) Family Health Exercise

Objectives

- ❑ To analyse the social and cultural variables related to health and disease in the family
- ❑ To enable the family care in Health and Diseases
- ❑ To work with school hygiene and sanitation of the area

Methodology

- ❑ Each Student- Five Family
- ❑ Fifteen Visits: Once in 15 days
- ❑ Each Visit: 4 Hours, and present in Log Book

Phase II (Third year and Sixth Semester) Applied Epidemiology and Educational Research Methodology (EPIDMAN)

Objectives

- ❖ Appreciate the importance of designing a scientific study.
- ❖ List various epidemiological study designs.
- ❖ Carryout simple epidemiological study
- ❖ Report preparation and presentation
- ❖ Integrate learned knowledge & skills by presenting accurately in presence of adjunct faculties of Health Professional Education Dept

Methodology

- Students-10 Groups
- Each group-Epidemiological Investigation of National Health Problems

Activities

- Planning
- Implementation
- Programming
- Analysis
- Evaluation
- Recommendations

Phase II (Fourth year and Eighth Semester) MANAGEMENTSKILLS FOR HEALTHSERVICES (HEALTH MAN)

Objectives

- Understand the activities at all levels of health care system
- Appreciate the importance of managerial skills

in health care delivery services

- Observe all activities of Zonal Hospital and District Public Health Office
- Familiarize with the mechanism of monitoring and supervision including health financing
- Understand the Health Management Information System (HMIS)

Methodology

- Three Groups – Mechi, Koshi, Sagarmatha Zonal Hospitals
– District Public Health Office

Activities

- National Health Programs
- Managerial Skills
- Supervision and Monitoring
- Community Drug Program
- Laboratory Services
- Medical Record

Phase-II (Fifth to ninth semester) Learning in Field

Objective

- to work up socio-clinical cases.
- to learn about the morbidity and mortality pattern at the level of primary health center and district hospital

Methodology

- By visiting to the District Health Office, Sunsari, Sunday, Tuesday and Friday with Faculties of Medicine, Surgery, Pediatrics, Obs/Gyn, Orthopedics, ophthalmology, ENT, Dermatology, Psychiatry and Community Medicine.

Phase-II (Fifth Year Internship Program) Community Oriented Compulsory Residential Rotatory Internship Program (COCRRIP)

Objective

- To give Preventive, Promotive and Curative Services.
- To take part in all the activities at Zonal & District Hospitals
- To conduct Health Education Session and School Health Program.
- To learn Managerial Skills.
- To carry out a research project.

Methodology

- Six month posting at Teaching Hospital (BPKIHS)
- Six months at Zonal & District Hospitals

–15 days – District Public Health Office

–15 days – Primary Health Centre

Total Field Posting for MBBS Course

Programs days

• Orientation Courses	5
• Multi-Professional Exposure in CDP	15
• Health Care Delivery System	6
• Family Health Exercise	15
• Learning in Field	84
• Applied Epidemiology & ERM	45
• Planning for Health Management	15
• Internship	
– Zonal & District Hospitals	150
– District Public Health Office	15
– Primary Health Centre	15
TOTAL (days)	365

Community Based Medical Education: KUSMS Perspectives

Kathmandu University School of Medical Sciences (KUSMS) is a not-for-profit, non governmental medical college of Kathmandu University (KU). KUSMS was established in 2001 in joint collaboration with KU and Dhulikhel Hospital (DH).

Currently KUSMS offers the MBBS Program. The KUSMS MBBS program is an autonomous program, established to produce technically competent, socially responsible and behaviorally compassionate medical graduates.

KUSMS Educational strategy is based on Problem-Based Learning (PBL) and community-Based Learning (CBL). This is the first medical college in Nepal include PBL as an integrated part of the curriculum. PBL comprises small group tutorial sessions under the guidance of faculty tutor. Following this, self directed, independent learning takes place. This is supplemented by laboratory experiments and lectures on selected key topics. CBL comprises of teaching/Learning in community with regular residential posting as well as the usual classroom learning.

KUSMS is conducting following programs:

- Post-Graduate Program-MD/MS, M.Sc.
- Under Graduate Program: MBBS, B.Sc. Nursing
- Certificate Level Program: General Medicine, Laboratory technology, Nursing, Physiotherapy and Ophthalmic Assistant

Overall goals of the school of medical sciences

The School of Medical Sciences of Kathmandu University is headed by the Dean and has the following overall goals:

1. conduct and give permission to conduct academic programs of certificate, bachelor, masters and doctoral levels in medical sciences including other branches of health sciences.
2. collaborate and coordinate with medical schools of other universities for the growth and development of academic programs, research undertakings and health care services.
3. promote and conduct research for the growth of new scientific knowledge.
4. participate and provide health care to the people.

General description of the curriculum

This curriculum, which has been designed embracing modern Educational Science Technology – as applied to Medical Education, provides for acquisition of

- ◆ a core knowledge, the basic medical doctor must possess.
- ◆ clinical skills to diagnose and manage disease.
- ◆ desirable characteristics and attitudes ingrained in the profession.
- ◆ competency to determine and resolve health problems of the community.
- ◆ proficiency to function in diverse health care settings.
- ◆ interest in continuing medical education.

Features of the curriculum

The curriculum is

Student centered (*rather than teacher centered*)

Problem based (*rather than subject based*)

Integrated (*rather than discipline based*)

Community oriented (*rather than hospital centered*)

Electives embodied (*rather than standard program oriented*)

Systematic (*rather than apprentice based*)

The curriculum outline

The aim of this curriculum for the MBBS degree is to produce a well-rounded medical graduate, who as a result of the five and half years of undergraduate education programme in medical sciences will be competent to carry out preventive, promotive and curative functions expected of a basic doctor. The accent of the curricular approach is community orientation, integrated teaching-learning and problem-based learning.

The curriculum synthesised initially (in 1994) consulting the curricula of medical institutions in Nepal is aptly revised and presented here.

The four-and-half year span of the MBBS course of study is divided into nine units, each of six months duration. The first four units are devoted to the Basic Medical Sciences. The next five units are devoted to Clinical Sciences. After successful completion of the course of study of four-and-half years, and having passed the final MBBS examination, the student will have to complete one year of compulsory Rotating Residential Internship to become eligible for being conferred with the degree of MBBS of the Kathmandu University.

The MBBS curriculum is divided into two Parts. Part One (I) includes the curriculum of the first and the second year. Whilst, the Part Two (II) includes the curriculum of the remaining two and a half years. Part One (I) of the curriculum is included in this document.

Basic Sciences (first year and second year):

The First year and the Second year instruction covers Integrated Basic Medical Sciences, Community Medicine and Clinical Orientation.

Basic Medical Sciences include Anatomy, Biochemistry, Microbiology, Pathology, Pharmacology and Physiology. These subjects will be taught in an integrated manner and would be threaded into Community Medicine and Clinical Orientation, as appropriate. Also, during this phase the student will be introduced to clinical knowledge and skills utilising a problem solving approach. Medical Informatics will provide computer literacy relevant to medical education.

Objectives of the MBBS program

On completion of the five and a half year of MBBS program, the Medical Graduate should be able to:

- a) demonstrate the understanding of principles and practice of modern medicine with an in-depth knowledge of structure and functions of human body.
- b) develop a holistic approach to the practice of modern medicine.
- c) advance ones own knowledge and skills through higher education via continuing medical education programs and research.
- d) demonstrate an understanding of contemporary knowledge and skills.
- e) possess qualities of a compassionate and socially accountable human being.
- f) discharge job responsibilities with concern and care.
- g) provide immediate management care to life threatening situations by self.
- h) identify common health problems, manage them initially, ask opinion from seniors or refer to appropriate health institutions when required.

- i) provide education to people on health and health related matters.
- j) participate in immunisation programs and in health camps.
- k) communicate well with patient and patient's relatives by explaining matters known and refer them to appropriate persons when matters are not clear to self.
- l) provide all information on matters of management of patients to the patient and the relatives.
- m) identify medicolegal cases and function as required.
- n) develop a health care team-approach and give respect to all the other members of the team.
- o) give due care to children, elder citizens and women.
- p) provide health care by becoming aware of the ethos of medical ethics.

First year

Philosophy:

To acquaint the students about the phenomenon and social aspects of health, disease and care

I) Community Diagnosis Program (CDP): 1 Month

II) Observational study

Second year

Philosophy: To carryout intervention programs to reduce the health and disease burden in the community

Community Intervention Project focused on:

- Awareness on health and diseases
- Promotion of maternal and child health
- Promotion of hygiene and sanitation/ Environmental Protection
- Uplift health care utilization behaviour in community

Third year

Philosophy: To carryout specific intervention programs to reduce the health and disease burden in the community

Specific Intervention Project focused on:

- School Health
- Occupational Health
- Visit to the different health institutions

Fourth year

Philosophy

- To conduct comprehensive family health intervention in order to reduce the health and disease burden of the family
- To aware about the national/international health system and national priority health programs

Comprehensive Family Health Intervention focused on:

- Clinico-social aspects

Internship

Philosophy:

- To conduct comprehensive health care activities and to address the health problems at the individual, family and community level.

Community Medicine Posting

- 8 weeks in six different outreach centers- Dapcha, Bhaunipati, Boldhe, Baluwa and Dhading PHCs.

Activities

- Patient care
In the patient management at the health center working closely with the residential paramedical staffs and the visiting doctors
- Managerial function
In all the activities of the health center, e.g. record keeping, dispensing, communication with the hospital, managing logistics etc.
- Health education/promotion activities:

Counseling sessions to the patients in relation to different diseases.

Special counseling sessions to the patients in relation to family planning, MCH

Fig 1: Flow chart of modules in Community Medicine

UNIT - I		THEORY				PRACTICAL
Theory/ Practical 48 hours/45 hours	1. Human & Medicine - 8 hours	2. Concept of Health - 10 hours	3. Nutrition I - 10 hours	4. Environmental Science I - 10 hours	5. Biostatistics - 10 hours	
UNIT - II						
Theory/ Practical 35 hours/40 hours	6. Epidemiology I - 10 hours	7. Health Education - 5 hours	8. Nutrition II - 5 hours	9. Environmental Health - 5 hours	10. Demography - 10 hours	1. Practical Exercise: (1 st Year) - Bio-statistics / Epidemiology - Environmental Health / Health Education. 2. Community Diagnosis. (2 nd Year) 3. Field Project. (Concurrent) 3 hours×2 (2 nd Year) 4. Integrated seminar. (1 st and 2 nd Year)
UNIT - III						
Theory/ Practical 35 hours/30 hours	11. Sociology - 10 hours	12. Community Medicine - 10 hours	13. Family Medicine - 15 hours			
UNIT - IV						
Theory/ Practical 24 hours/30 hours	14. Epidemiology II -10 hours	15. Behavioral Science - 10 hours	16. Integrated Management of Childhood illnesses (IMCI) - 4 hours			
UNIT - V						
Theory/ Practical 40 hours/45 hours	17. Communicable Diseases - 20 hours	18. National plan of communicable diseases -10 hours	19. Occupational Health - 5 hours	20. Mental Health - 5 hours		
UNIT - VI						
Theory/ Practical 40 hours/ 40 hours + 3 weeks	21. Non-Communicable Diseases - 12 hours	22. National plan for Non-communicable diseases - 8 hours	23. Reproductive Health, IMCI - 10 hours	24. National Health Program for reproductive health and specific age group -5 hours	25. EPI Info 2000 -5 hours	1. District Health Management Project (6 th Semester) 2. Family Health record. (6 th and 7 th Semester) 3. Concurrent Health visits-3 hours×2=6 (5 th , 6 th and 7 th Semester) 4. School Health Surveys (5 th Semester) 5. Integrated Seminar (5 th , 6 th and 7 th Semester) 6. Practical Exercise: (Inferential Statistics/ Epidemiology/Entomology) 7. Computer Skills (6 th Semester)
UNIT - VII						
Theory/ Practical 30 hours/40 hours	26. Health Planning & Management - 6 hours	27. Health Delivery System in Nepal - 3 hours	28. Inferential Statistics - 12 hours	29. Disaster Management - 5 hours	30. International Health - 2 hours	31. Research Methodology - 2 hours

Discussion

The philosophy of community oriented medical education has been to acquaint the students about the phenomenon of the disease process and underlying factors and enable them to understand them health problems of the community and acquire clinical/managerial skills to deal with the public health problems. Meanwhile, its essential to enable them to be accountable towards the community and develop as socially accountable physicians. Looking back to the history of IoM, the oldest institution in Nepal, has these mission been achieved? On the other hand we ourselves have been grown up in community and have our first hand experiences, so then is it essential to have community exposure. Apart in our practice the practical aspects are largely unstructured that waste too much time in non-educational activities and rely on learning and doing. Meanwhile, expectation of the community is increasing and the challenge of nurturing their demands has come in forefront. Community has perceived that the medical schools are concentrating on fulfilling the demand of their curriculum rather directing on their health care need. The communities have been used for the sake of academic pursuit rather other way round. Their awareness about they being used for academic pursuit made them reluctant to act as learning tools for medical students. In this regard the communities have been refractory towards external influences and have been reluctant to participate in such works. One of the reason is that the urban and suburb communities have been used by medical colleges for the sake of accessibility who might not be an appropriate target for such purposes.

Medical schools need to continually address on target areas with continual follow up of the work and focus on addressing health care need along with the academic pursuit. The innovative health interventions need to be designed and applied as per the reality of the circumstance. To strengthen community based medical education medical institutions need to be accountable and design innovative intervention strategy to address the health problems identified in the community.⁵ This endeavor will motivate the community to participate in such activities. One of the ideal approach could be the medical institutions taking direct accountability of health care of certain areas within their catchments and use the health facilities within that areas and use as teaching centers. Lack of clarity in functional domain of Ministry of education and Ministry of Health and Population have been hindering the colleges in devising appropriate strategy to address the ethos of community based medical education.

Conclusion and Recommendations

1. Community based practices are essential components with the specific aim of developing the student's

competencies in understanding community health problem and later enable them to solve these problems working with the community. All field activities need to be need-responsive, problem solving, and community oriented, which encourages students to render services while they learn and develop clinical and public health management skills.

2. There is no doubt in the context of Nepal, community based medical education can be an ideal endeavor but how it can be practiced in realistic way? The expectation of the community has increased in the changing context and they are refractory to external interferences. Challenges are multiplying. To provide truthful and effective community based medical education it has been appropriate time to review our current practices and re-design as per the demand.
3. The means to involve the community actively and strengthen community health development endeavours in sustained way to benefit community is essential. This will facilitate in the health care developmental endeavor and enrich the medical institutions, community and boost the moral of community based institutions working in this field collectively.
4. Medical colleges need to be accountable to take the responsibility of strengthening the health status of the community of their catchments areas. The practice of community medicine need to be done in an innovative way and the colleges should execute continual intervention activities and complement other institutions working in their areas. To increase the health status of the community they need to facilitate and strengthen the governmental and non-governmental institutions in their catchments areas to increase their capacity and utilise them as their training site. In this regard Ministry of health & Population and Ministry of Education need to work together to devise appropriate mechanism.
5. Medical schools need to continually address on target areas with continual follow up of the work and focus on addressing health care need along with the academic pursuit. The innovative health interventions need to be designed and applied as per the reality of the circumstance. One of the most effective area could be strengthening school based health care practices. Using schools as a unit of the care and implementing health interventions through school can be a promising approach to sustain the community care. It seems to be an ideal unit to strengthen and expand community care activities. In this regard, governmental institutions, INGOs/NGOs need to work together sharing the resources and translate the ethos of community based medical education in the reality.

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