

## ■ *Short Communication*

# Community Diagnosis Program – A multi-professional education and team approach for medical, dental and nursing students

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### Abstract

Multi-professional Education (MPE) is now recognized as the cornerstone of community based education programs. This is especially important since there is a need for the various streams of training to appreciate the roles of each other. The objectives of this study were to know the students' feedback about the each component of Community Diagnosis Program (CDP) and to identify the knowledge and skills learnt by the students. A total 636 students from MBBS, BDS and B Sc Nursing students were posted together for the CDP in different years for various activities in the field. The students were asked to give their feedback by the help of semi-structured questionnaire given to them. The data were analyzed. All 636 students reported that the CDP was very useful.

The knowledge and skills learnt by the student during this posting were communication skills, working in a team, collection, compilation, analysis and interpretation of data, health problems of the community, the socio-economic factors affecting health and diseases, skills related to organizing Focus Group Discussion, Health Education Session, Health Exhibition and Health checkup program and preparation and presentation of report. This CDP provides the students with a comprehensive picture of the health problems of the people, a clear understanding of the physical, socio-economic environmental factors affecting health of the people and health needs of the communities they would serve in future as health professionals.

**Keywords:** community based education, community diagnosis medical education, community oriented program, multi-professional education, Nepal

### Introduction

Community Diagnosis Program (CDP) is residential program for MBBS student with BDS and B.Sc. Nursing students after 3-4 months of joining this institute. They stay in village for 2 weeks.

*This program is being envisaged in the first year to provide early exposure to the community, a better understanding of the student about health problems and the impact of socioeconomic status*

*and culture on health and disease and to inculcate the Team approach. The students perform followings activities in the field to fulfill the above mentioned objectives.*

- Interaction with village leaders to know about the village and obtain permission to conduct the posting.
- Social-mapping the area and house to house survey with structured questionnaire.
- Focus Group Discussion
- Health education session, Health exhibition, Health check-up camp
- Report presentation to the villagers
- Data analysis and Report Preparation

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*Multi-Professional Education and Team approach*  
Multi-professional Education is now recognized as the cornerstone of community based education programs. This is especially important since there is a need for the various streams of training to appreciate the roles of each other.

Interaction between health professions during the formative educational years is more likely to encourage students to develop team spirit and the ability to share knowledge. This is the basis of the multi-professional education.

A shift in the location from class room to clinical and community setting whenever feasible will enhance the extent of interaction. The undergraduate medical students are taken to the community during orientation program of their course to make them familiarize with local socio-cultural structures and norms.<sup>1</sup>

Other community based field programs like Family Health Exercise (FHE), Epidemiology of Health Management (EPIDMAN) and Management skills for health Services (HEALTHMAN) are successful to impart the knowledge and skills to the MBBS students.<sup>2,3,4</sup> These programs also help to change in the behavior and attitude of the students towards people, who may become their patient in future.

### Objectives

The objectives of this study were as follows:

- To know the students' feedback about the each component and duration of the program

- To identify the knowledge and skills learnt by the students
- To get suggestions from the students for the improvement of the CDP

### Methodology

This descriptive study was done in BPKIHS .A total 636 students from MBBS, BDS and B.Sc. Nursing students were posted together for the CDP in different years. The CDP is of two weeks duration. After 2 days of orientation classes and preparation, the students are taken for residential camp in a village for 9 days. After 9 days of busy field activities, the students were back to the institute for the preparation and presentation of the report. The students were asked to give their feedback by the help of semi-structured questionnaire given to them. The data were analyzed and percentages were calculated.

The CDP was supervised by the teachers from medical, dental and nursing faculties. The department of community medicine acts as leader to organize the CDP.

### Results

The students gave rank to each field activities according to their usefulness (Table 2). The health checkup program was given to first rank (96.1%), followed by health education (95.9%) and health exhibition (95.7%). All 636 students reported that the overall CDP was very useful. The duration of the CDP was reported short by 86.2% student. The rest 12.7% reported adequate and 1.1% said long in duration.

**Table 2. The rank given by the students for different activities done in field during CDP (N=636).**

Rank	Activities	Less useful (%)	Useful (%)	Very useful (%)
I	Health checkup program	0	3.9	96.1
II	Health education sessions	0	4.1	95.9
III	Health exhibition sessions	0	4.3	95.7
IV	Report presentation to the villagers	0	4.4	95.6
V	Report preparation	0	4.7	95.3
VI	Report presentation to the faculty in BPKIHS	0	11.5	88.5
VII	House to house survey	0	21.4	78.6
VIII	Social mapping	3.3	25.6	71.1
IX	Village leader meeting	6.1	31.6	62.3
X	Focus group discussion	4.6	45.3	50.1

Three important suggestions provided by the students for the improvement of this program are given below:

1. More interaction sessions among the teachers and student are required during the posting in the field

2. More classes related to field survey, Sociology and Biostatistics should be taken before the starting of the posting.
3. More supervision is required from the teachers in the field.

The knowledge and skills learnt by the student during this posting were given below:

- Communication skills (how to communicate with people).
- Working in a team
- Collection, Compilation, Analysis and Interpretation of data – This will be helpful for their post graduate thesis and other research work in their future life.
- Health problems of the community.
- The socio-economic factors affecting health and diseases.
- Skills related to organizing Focus Group Discussion, Health Education Session, Health Exhibition and Health checkup program.
- Preparation and presentation of report

The additional activities suggested by the students for future are “two days health checkup camp instead of one day” and “free supply of drugs to the patients from village”.

The students were asked to give the rating for this program. Majority (95.6%) of them rated “excellent posting” and 4.4% said very good. They also mentioned that they will remember this posting lifelong.

### Discussion

A combined two weeks residential field program is being developed for Medical, Dental and Nursing undergraduates students soon after their admission into the course before they develop any fixed attitudes towards other profession. A move from class room to community setting is expected to provide an environment for interaction through group discussion to encourage understanding of other health professions.

Health checkup (96.1%), health education (95.9%), health exhibition (95.7%) programs were the best three activities liked by the students. This reflects that students want to repay some thing to the people instead of their trouble and pain during data collection. They suggested to provide free drugs to the people. The period of the CDP and usefulness of the posting were very satisfactory. They rated CDP as “excellent one”. They want to be equipped better in the form of more classes in Sociology, Biostatistics and field survey before going to the field. They stated that knowledge and skills learnt by them will be useful in

their future for postgraduate thesis and research work. Other skills like communication skills and working in a team were the important skills learnt from CDP.

Team work and active participation of all students was facilitated. The students have an opportunity to work with different teams (Medical, Dental and Nursing) with different groups of people (leaders, youth and women) in the villages. They get to understand the effectiveness of working in such team especially during house surveys, village leaders meeting and social mapping.

The students also interacted with different members of the local health team such as “Female Community Health Volunteers (FCHV), Trained/Traditional Birth Attendants (TBAs) from the community, and Auxiliary Health Worker (AHW), Maternal and Child Health Worker (MCHW) and Village Health Worker (VHW) of Sub Health Post and learnt to work harmoniously within that team. They recognized and appreciated the role played by each member of the team. Much of the planning and organization have to be done before two months. Teachers have to stay with students in the village. They have additional responsibility of making sure that standards are maintained regarding the accommodations and food and that the students are in a safe environment. The logistic support is crucial for the success of the program. Above all it needs commitment from all members involved in CDP and also from management authority of the institute.

Feedback obtained from the students after the each year of posting has been very positive. The students have rated the CDP as interesting, relevant and useful. Many of them mentioned that they will never forget this posting in their life.

In BPKIHS, each MBBS student spends 354 days (almost a year) with the community and government health system during the course of 5.5 years<sup>1,5</sup> preparing themselves to work in such environment.

(may be avoided by prior skillful planning for MPE that) Some of the likely problems obstacles are lack of acceptance of the concept of MPE by faculty and students due to nonparticipation during planning stages, existence of significant difference in curricular content, requirement of adequate physical facilities with regard to class rooms, laboratories, instruments etc. Assessment pattern in MPE should take into consideration the difference in curricular content and

activities of each group of students, and needs to be patterned accordingly so as to avoid student dissatisfaction with the system. Community based education is associated with efforts to involve students and, more generally, educational institutions in national development and to combine theory with practice. Almost all countries have community based educational programs in which all types of social system and all levels of development are represented. However, they have been most successful in developing countries because of the benefit derived from the services of the students to the needy community and ultimately to the country.

### Conclusion

The “Ivory tower” concept of teaching institutions is no more acceptable worldwide. The gap between producer and consumer is needed to be bridged, at the same time, role of allied health workforce need to be appreciated. The multi-professional community health assessment program of the BPKIHS is an initiative in this direction. Feedback from students were encouraging. Benefit to community is intraocular. Many social activists and leaders showed willingness to join hand to start such program in their Village Development Committees with their involvement setting (an example for the professionals working towards the population health).

This CDP provided the students with a comprehensive picture of the health problems of the people, a clear understanding of the physical, socio-economic, environmental factors affecting health of the people and health needs of the communities they would serve.

The authors would like to suggest that the CDP could be adopted by other health institutions with appropriate modifications to suit their local needs.

### Acknowledgement

The author acknowledges the contributions of all teachers, staff, students and others in organizing Community Diagnosis Program of the different Years.

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