CHAPTER II
ESSAY

Improving the community- orientation of medical students in Myanmar

2.1. Introduction

Medical students are the important human resources for health task force of Myanmar. They are major inputs to the health care delivery system of the country and are expected to serve for the people in the community. Therefore, fostering community orientation in the medical students is the fundamental requirement to meet this expectation. However, medical students in Myanmar are found to be more clinical and hospital oriented. Their community orientation is poor and not sufficient enough to meet the health care needs of the people.

Health system is one of the most labor-intensive systems and human resource is the major input. Medical students are most important (resource) input because as WHO stated that, within the health work force they traditionally have held key positions in shaping and operating health care system. Health system should encompass the entire population and include components from health and other related sectors. Therefore, as the potential main actor in the health system, the medical students should be prepared to be able to treat, lead, teach, and protect the community.

Myanmar is a developing country where 80% of its population live in the rural community. To address the health needs and health related quality of life of this large segment of the population, medical doctors, who are the main care providers, should extend their professional role into a more social role.

The concept of health and health care become more social and more community oriented today. Accordingly, health care approach also becomes more comprehensive and encompasses curative, preventive, promotive and rehabilitative health services. In order to meet this change, it is now essential to train medical

students to be more community oriented and to have wider view. They should be trained to extend their scope of knowledge, attitudes and skills and practice towards larger environment.

The necessity to improve the community orientation of medical students had been advocated for a long time both in Myanmar and world wide. The AlmaAta declaration on primary care in 1978 , the founding of Network of Community Oriented Educational Institutions for Health Services in 1979 , the Institute of Medicine Conference on Community Oriented Primary Care in 1982, World Summit on Medical Education in 1993, and The 15th Pan American Conference on Medical Education held in Argentina in 1997, acknowledged that medical education must become more community oriented and articulated values, goals and methods of vital importance to this movement. (Doyle, et al, 1998, Wasylenki and Cohen, 1997 and Pulido, 1998).

In its popularly known as the five star doctor, the World Health Organization (WHO) now identified the medical doctors as community leader, care provider, decision maker, communicator and manager (WHO, 1996). Medical doctors are expected to discharge the four main charismatic offices namely those of teacher, healer, leader and guardian of public good (de Vaul, 1994). These characteristics reflect the requirement of fostering community orientation especially in social context in medical students and doctors.

However, fostering community orientation does not mean of expecting medical doctors to sacrifice their whole life for other people by doing the best things in the community. They have the right to fulfill their professional values, roles and expectation by themselves. We should not put too much pressure on them and expect gold standard from them. At the same time, we should look at the larger environment

too. The community is waiting for health care services from these newly trained providers. Medical students are just modestly expected to make a balance between clinical and public health interests, hospital and community settings and curative and public health services in social context.

2.2 The problem situation

What is the problem situation?

2.1.1 Defining the problem

Community can be defined as a "dynamic whole that emerges when a group of people participate in common practice, depend on one another, make decisions together, identify themselves as part of something larger than the sum of their individual relationships, and commit themselves for the long term to their own, one another's, and the group's wellbeing" (Reagan & Fisher, 1997). In short, community is a group of people with a common characteristic or interest living together in a larger society. Therefore, community should be looked as a whole set.

Although it is widely used in health care delivery system, the concept and definition of community orientation needs to be defined. In WHO report on consultation to thirty consultants in medical education, they expressed concern about the absolute necessity of clarifying the fundamental concepts and approaches such as community orientation (Boelen, 1990).

According to Starfield (1992), community- oriented approach applies to the methods of clinical medicine, epidemiology, social sciences, and health sciences research and evaluation to the following tasks:

a. Defining and characterizing the community.

b. Identifying the community health problems.

c. Modifying programs to address these problems and

d. Monitoring the effectiveness of the program modification.

Based on this principle, the concept of community orientation refers to:

- Awareness of health and related issues and problems in the community
- Interest and willingness to address those issues and
- Able to work in and with the community

Medical students should be aware of health problems occurring in the community. They should understand and be able to identify the health and related problems in larger environment. The mindful knowledge of determinants of health is essential to find out the solutions for particular health problem. Their scientific knowledge of biomedicine and clinical medicine should not be confined in the clinical and hospital settings. This should be extended to the larger community setting. Therefore, in order to deliver the health care, medical students should be able to observe, recall and interpret the health and related issues in the community.

It is not sufficient for the students to be able to identify and be aware of the problems in the community. They must foster their interest and pay attention to the problems as well as possible solutions. They should be willing to address the issues and find out the possible intervention strategies to solve them. Nurturing the interest and willingness in the students could initiate their actual activities.

Is that all about for the students to have community orientation? The last but not the least criterion is that they must be able to work in and with the community. For the students to be community oriented, working in the hospital and giving the curative care to individual patients is not sufficient. Their activity should be directed towards the benefit of the larger population. They will become the leaders and managers of health team working in the community. They are expected to plan

community health system efficiently and effectively to be used as a mechanism to solve health problems of the community. They should teach, heal, lead and protect the community for its better health.

2.2.2 Reasons, assumptions and evidence

The systematic investigation on the attitudes of medical students about their community orientation in Myanmar is found to be deficient. That is one of the main reasons to propose this study. Therefore, it is difficult to present the clear evidence of poor community orientation among medical students. However, in Myanmar, in response to the experience of decreasing community orientation among medical students and aiming at the improvement of medical education, a total of five medical seminars had been held in last three decades. The fifth medical education seminar called for introducing and integrating the innovative medical education methods such as problem- based learning and community based learning into the medical curriculum. In 1982, a seminar on 'The Review of Under Graduate Medical Education for Community Orientation' was conducted to identify problems encountered in the implementation of community oriented medical education (Department of Medical Sciences). Although, it is not the direct evidence, it reflects the existence of problem situation.

Similarly, the lack of interest and willingness to address the health issues for the larger community could be reflected by the career choice among the medical graduates. Although interest is not the sole determinant for the career choice, it plays an important role. From this assumption, community orientation and interest in public health among medical graduates is found to be low. According to the available data, the career choice among medical graduates is reflected by the number of medical graduates who applied for entrance examinations for various specialty in Table 2.1.

Table 2.1 Specialty choice among medical graduates in Myanmar.

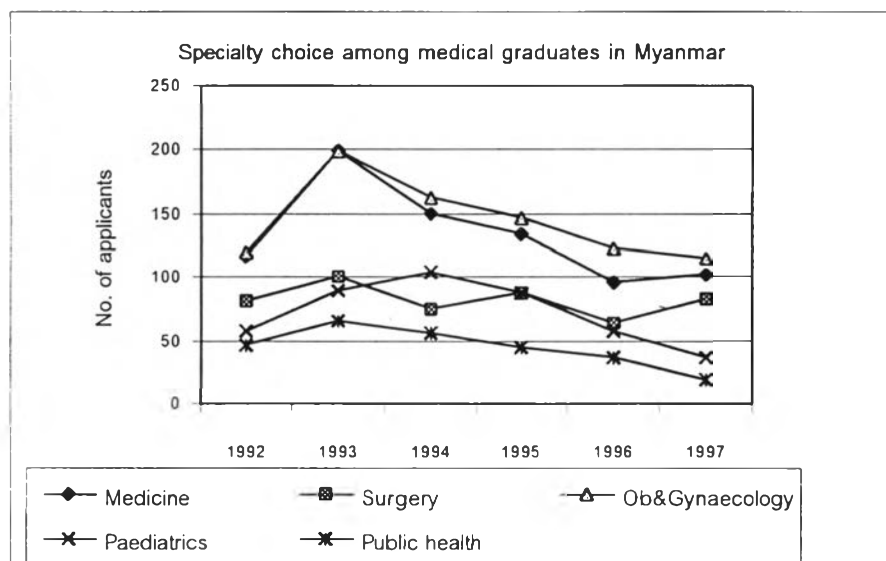
Years / Subject	1992	1993	1994	1995	1996	1997
Medicine	117	199	150	133	96	102
Surgery	82	101	75	88	63	83
Ob& Gynae	120	199	162	146	123	114
Pediatrics	57	89	103	88	58	37
Public health	46	65	56	45	36	19
Med : Pub H.	1: 0.4	1: 0.3	1: 0.4	1: 0.3	1: 0.4	1: 0.2

Source: Department of Medical Sciences, 1998

Table 2.1 shows that the popularity of public health among medical graduates is found to be lower than major clinical specialties. The ratio of medical graduates who chose public health as the specialty and those who chose major clinical subject such as medicine, as the specialty was 1: 0.4 in 1992 and found to be slightly fluctuated along the course of time. However, in 1997, it abruptly decreased to 1: 0.2 Therefore, it is found that the interest in public health specialty among medical graduates is decreasing.

The overall trend for the career choice among medical graduates is shown in Figure 2.1.

Figure 2.1 Line graph of specialty choice among medical graduates in Myanmar



According to Figure 2.1, the overall trend is found to be steadily decreasing in public health while there is some degree of fluctuation in other subjects. The trend for medicine and surgery is found to be upward again in 1997, while there is minimal variation in obstetrics and gynecology in 1997. In the same year, the number of career choice for public health fell to almost 50%. Therefore, medical graduates in Myanmar are found to be more clinical oriented and their interest in public health is steadily decreasing.

This agrees with the study at University of Michigan Medical School in Ann arbor on students' preference for specialty which showed only 27.3% of students expressed primary care as their first preference for medical specialty (Gorenflo, et al, 1994).

Moreover, we can assume that failure to join the government service reflects the lack of interest to work in the larger community. The number of medical graduates

who join the service becomes fewer which leads to the shortage of manpower for health care services. In response to that, the government has to adopt a three-year compulsory service for the new medical graduates in 1994 for the first time in our medical history.

Various organizations and health and medical education authorities worldwide also noticed the problem. Actual feeling of a need to change dated back to 1979. In that year, it was felt that medical education was no longer responsive to the health needs of large segments of populations. Primary goal of medical education is to prepare graduates for improving the quality of life in their communities. It was urged to extend the range of education settings into the context of the community with relatively larger portion of training period within an appropriate community setting (Schmidt, 1991).

In 1995, World Health Assembly adopted resolution of reorientation of medical education and medical practice for Health for All. It acknowledged and urged the medical schools to improve the relevance of medical education programs and to improve the contribution to the health care delivery (WHO, 1996). Moreover, Edinburgh declaration, adopted by World Federation of Medical Education, many governments and medical education bodies, called for worldwide change in health professional education such that the actions of graduates will contribute to improved health status of the population (Schmidt, 1991). In 1988, the world conference on medical education adopted 12 resolutions for medical education reform reflecting the community oriented medical education (Hennen, 1997).

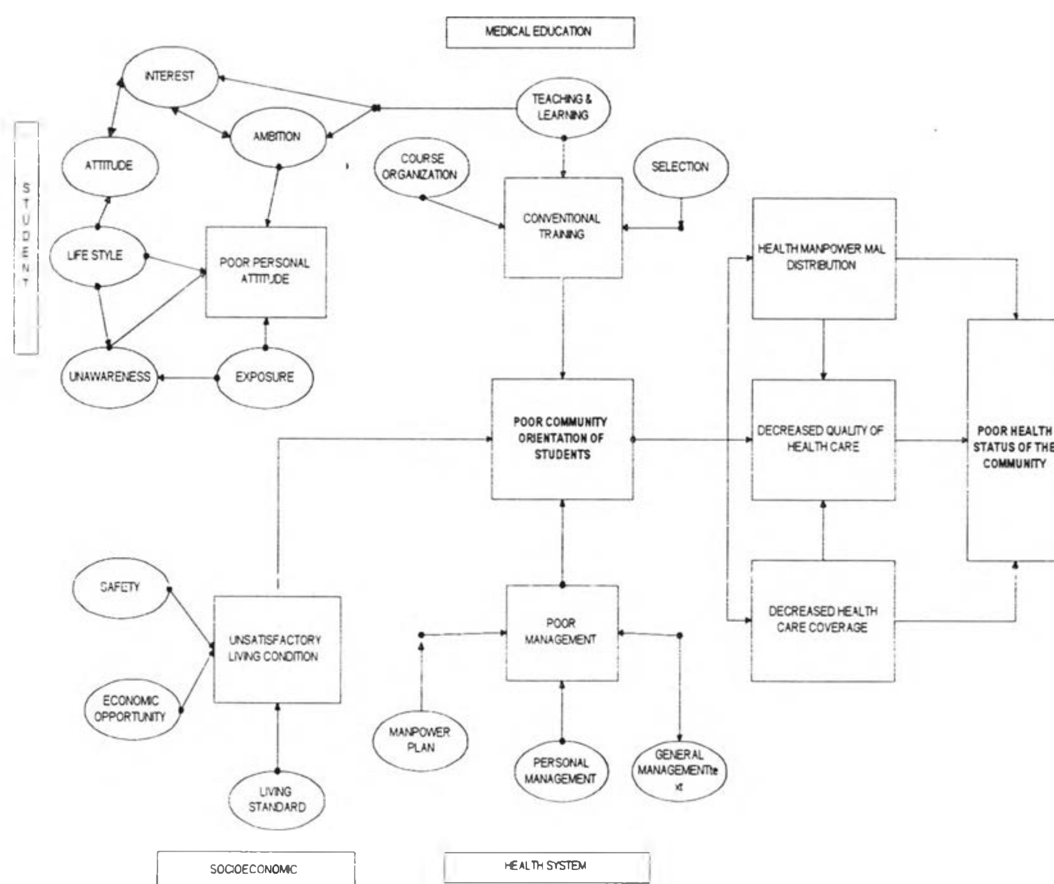
Several strategies are advocated to improve the effectiveness of medical education programs, which can produce more community- oriented medical students. One of those was WHO general guideline on global strategy for changing medical

education (WHO,1996). It stated that medical schools would require creative minds, pragmatism, courage and determination to produce the medical graduates who can fulfill the future community requirements. The community- oriented learning strategy was developed in 1979 by a group of representatives of 19 medical schools that was brought together by WHO (Schmidt, 1991).

2.3 The causal web of the problem situation

The problem situation is complex and a number of conditions are collectively contributing to it. The causes and consequences of problem situation are collectively described in Figure 2.2 as a causal web.

Figure 2.2 Causal web of problem situation



From Figure 2.2 it is found that many conditions are contributing to the problem situation. They are not mutually exclusive and are inter- relating with each other so closely that they can not be detached from each other. The problem situation is in the social context. The general socioeconomic environment influencing the living and working conditions in the rural community can be regarded as one of the determinants of the problem. This is inter- relating to and influencing on the students' perception and attitudes towards their future professional life. The characteristics of the medical students are also influenced by the way they are trained in their educational environment. Information and feed back about existing health system is also influencing the impression of students on their future professional life.

Therefore, these conditions can be broadly categorized as follows:

1. Personal characteristics of medical students
2. Medical education
3. General socioeconomic conditions and
4. Existing health system.

What will happen if medical students are not community oriented? As it is described in the causal web, three main consequences can develop. They are:

1. Manpower maldistribution
2. Poor health care coverage and
3. Poor quality of health care all leading to negative impact on general health status of the community.

3. The mechanism of problem situation

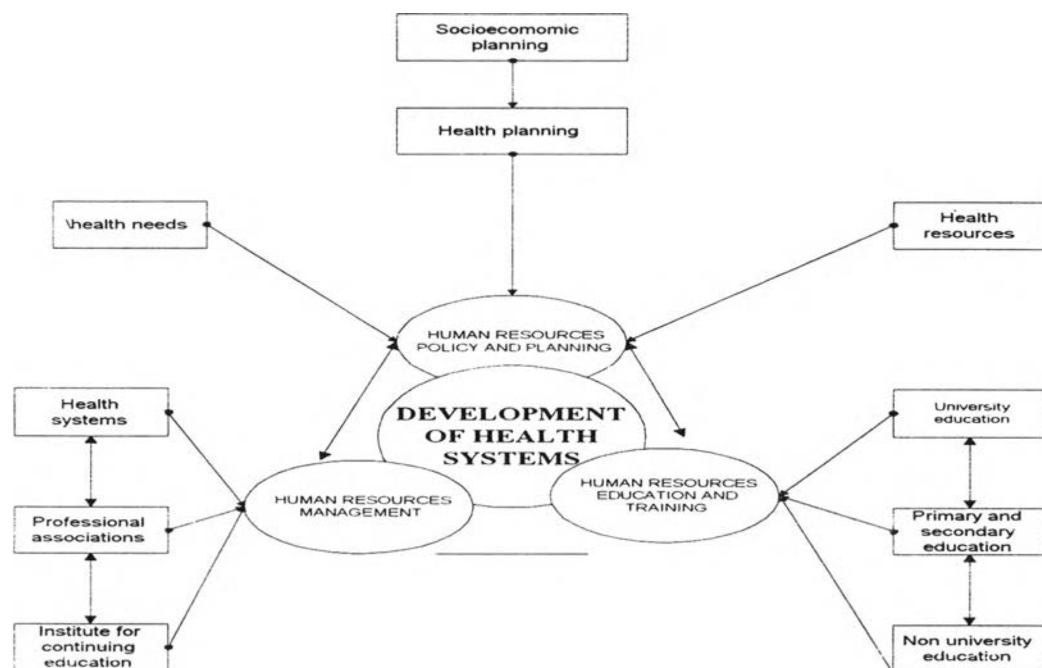
Why do they happen?

The contributing conditions to the problem solution are complex and inter-related to each other and influenced by the general socioeconomic environment.

3.1 Causes of problem situation

The Coordinated Health and Human Resources Development (COHHRD) model of WHO (WHO, 1990) is adopted to explain the problem situation.

Figure 2.3 Coordinated Health and Human Resources Development model



By using this model, we can see that the complex and inter- related in nature of development of health systems. From the model, there is a necessity of close cooperation and coordination between human resources policy and planning, human resources education and training and human resources management. Therefore,

human resources development is connected to human resources management and policy and planning. Each component of human resources management and human resources policy and planning can impose an effect on human resources development process. Therefore, socioeconomic situation and health needs can influence the human resources development through policy and planning. Similarly, existing health systems can influence the human resources development process through management. Moreover, education component can also contribute as a major factor for human resources development process.

All these conditions collectively influence the human resources development. Among the human resources, medical students are the most important because WHO stated that within the health workforce, they traditionally have held key positions in shaping and operating health care system (WHO, 1996). Therefore, this model is found to be able to identify the various conditions and mechanisms which could determine the development of human resources (medical students). All these factors together with personal characteristics of medical students are used to explain the mechanism of our problem situation.

3.1.1 Personal characteristics of medical students

The students themselves contribute to this problem. Their attitude, personal interest and ambition and life style are the main determinant for the problem situation.

3.1.1.1 Attitude, personal interest and ambition

The attitude of medical students in Myanmar is hospital oriented rather than community oriented, personal interest is on the diseases not on the health problems in the community and ambition is to become a clinician and medical specialist, not to become a public health care provider. This phenomenon is reflected by career choice of medical graduates. Although there may be other factors such as education, general

economic opportunity and peer pressure from families or friends, the personal characterics of attitude, interest and ambition play an important role for the career choice. WHO stated that more glamorous, lucrative or prestigious specialties attract on excessive number of candidates, whereas areas of great social interest have not been attracting enough candidates (WHO, 1974). The specialty preference by medical students is a complex decision process and variables affecting this are combination of demographic, attitudinal, social influence and income expectation
(Gorenflo, et al, 1994). Therefore, students' characteristics of attitude, interest and ambition can be regarded as one of the leading causes of our problem situation.

3.1.1.2 Life style of students

In our country, medical students are selected according to their performance in high school examination. As it is competitive in nature, most of the students who are eligible to enter medical institutes are mostly from the cities and large towns where the education opportunity is much better. Moreover, usually they are from well-off families. Their life style is very much different from that of those who live in rural areas. The way they grow up, the environment they are exposed to and society they are enjoying tend to have some degree of eliteness. They seem to be far removed from the general community and unfamiliar with the human suffering and socioeconomic problems. Therefore, their life style in general will partition them from the real world until they are matured enough and venture into it.

3.1.2 Medical education system

Undergraduate medical education in Myanmar is traditional in nature and it is campus and hospital based and clinically oriented. The student selection procedure, teaching method, learning environment, curriculum and nature of role models are

components of medical education. They are found to be partly responsible for the development of the problem situation.

3.1.2.1 Selection process of medical students

There is no role of medical institutes in selecting the students in our country. The selection of students is totally based on performance in high school examination. Among the applicants to the medical institutes, those who get the highest marks are selected. This selection is done by Department of Higher Education, which is not related to the health sector. Therefore, medical institutes are not in the position of deciding on selecting the students whether they are suitable for the current philosophy of health care in the country or not.

3.1.2.2 Teaching method

In our medical institutes, although there is an attempt to adopt the innovative approaches, most teaching methods still lead a student to know rather than what a student needs to know. There are twelve major medical subjects and are taught as subject wise by departmentalizing rather than integrating. During the first, second and third years, students intensively study the basic medical sciences. These courses have been traditionally taught through lectures and laboratories and tested by rote recall. Students are unfamiliar with the innovative teaching approaches such as problem solving, critical thinking and concept mapping which can help them identifying an addressing the problems. Therefore, the traditional teaching method is found to be unable to equip the medical students with knowledge, attitudes and skills which are essential to provide health care delivery to a larger population in the future.

3.1.2.3 Learning environment

During their 6-year period in medical institute, most of the learning of medical students takes place in the classrooms, laboratories and hospital settings. They are

regularly taught by scientists and clinical specialists. They have not been exposed to the community until final part one (4th year) where public health is taught as one subject. Contact with the community and public health physicians is usually not common. The learning environment of medical students is almost isolated from the community. In this type of learning, there is a risk of divorcing the students from the job they have to do and the population they hope to serve. As learning environment is foremost about medical science and only secondarily about the people, this can particularly affect the knowledge, attitude, interest and ambition of medical students.

3.1.2.4 Curriculum

The whole medical course lasts seven years including one- year period of internship. There are twelve major medical subjects, which are taught from second year onwards. The first year subjects are non- medical subjects.

The undergraduate medical curriculum (Appendix 1) is found to be lack of the subjects which can help and nurture the students to be more relevant to their professional life such as sociology, behavioral science and philosophy. Therefore, our curriculum is able to fulfil the technical role but deficient to foster social role in medical students which is essential for health care delivery for the larger population.

3.1.2.5 Characteristics of role model

Influence of medical teachers as role models on the students is also important. Teachers are important source to foster the right attitude in the students. Traditionally in Myanmar, students usually admire and emulate their teachers. The teachers serve as their role models, which can greatly influence on the students pertaining to their attitude, personal interest and ambition.

Most of the teachers both in the laboratories and in the hospital setting, are found to be unable to lead the students to the desired situation, that is, having

community-orientation. They are content experts in their specialties. They are interested in teaching the students to achieve depth of knowledge in their subject areas. However, they are not able to show as ideal example to their students. Moreover, students are exposed mostly to the scientists and clinicians through out their student life. The exposure to the public health physicians who are dealing with the whole community is very rare. Students are learning in the classrooms and hospitals while the ideal role models are working in the community. Therefore, there is very little opportunity for the students to regard the public health physicians as their role models. Instead, their role models are medical scientists and clinical specialists wearing the long white coats to whom they are mostly exposed which is essentially divorcing students from their ideal community- oriented role models.

3.1.3 General socioeconomic conditions

The situations and conditions currently availing in the general socioeconomic environment such as living and working conditions in rural areas, and changing economic opportunities could serve as the important feedback to the students. In our country, the living condition in the rural area is poor. Provision of both social and physical security for the doctors working there is still necessary to be improved. There are deficiencies in living accomodations and working facilities in the rural and remote areas. Inadequacy of social services such as good education for their children is common. Moreover, lack of continuing education for their profession and career development could discourage medical doctors to serve in the rural communities.

The economic opportunity is much better for the clinicians and medical specialists who are running their private clinics in the larger town. In addition to the professional economic opportunity, there are also some economic opportunities from

other areas of business in larger towns which can attract more business minded medical doctors.

All these socioeconomic conditions could discourage newly graduated medical doctors to go to the less developed areas. As the result, medical students are reluctant to go to and work in the community especially of rural and remote areas where the majority of our people lives.

3.1.4 Existing health system

The nature of the existing health system is highly influential upon professional life of its human resource component. Human resources management plays important role in the health system together with policy, planning and training. Management refers to the mobilization, motivation and development and fulfillment of human beings in and through work (WHO, 1990).

In Myanmar, general and personal management is found to be weak and need to be improved. For effective manpower utilization and mobilization, there should be a proper management system. Because of the weakness in this area, we are unable to use medical graduates effectively in the most needed areas. It is also found to be weak in mobilization such as posting and job allocation. Some of medical doctors who are serving in remote areas have to stay for a long time so that they are faced with poor living and working conditions while some who never go to those areas have a chance to live in the better living conditions in the larger towns.

Cooperation and coordination among different health sectors is also found to be weak. For effective manpower utilization, the user side should continuously assess the quality, attitude and skills of medical doctors and give regular feedback to the training side. However, it is found that such procedure is lacking and training side is not aware of the usefulness of their products in practice.

There are some incentives for the doctors who are working in the border and most remote areas by increasing salaries and providing living facilities. However, incentive and supporting in general is not sufficient enough to motivate and encourage medical doctors to work in the rural communities. In addition, opportunities for continuing education and career development are better in the more developed areas. It is necessary to negotiate and arrange reasonable environments and rewards for doctors to practice where they are needed (Hennen, 1997). Consequently, all these situations in health system could serve as a negative feedback to the medical students to make them less interested in community health services.

3.2 Consequences of problem situation

The possible consequences from the problem situation can be identified as follow:

- Mal distribution of manpower
- Poor health care coverage and
- Poor quality of health care

These consequences are related with each other and developed as the result of poor community orientation. All these consequences lead to poor general health status of the larger population.

3.2.1 Maldistribution of manpower

Manpower maldistribution could be divided into geographical and professional.

3.2.1.1 Geographical

When medical doctors are not aware of health problems in the community or not interested to address these problems, they will be reluctant to go to and work in those areas. Instead, they will turn to stay in the larger towns leading to a

congregation of doctors in cities and larger towns. Rural and less developed areas will suffer from shortage of qualified medical doctors. As the result, the geographical distribution of doctors in the country will be distorted.

Although the data about distribution of medical doctors in different geographical setting is not available, this problem is common in our country. The total population of Myanmar in 1997 is 45.57 million. The total number of doctors in the whole country is 13,202. There, the doctor population ratio is approximately 30 doctors per 100,000 population. This ratio is probably worse in the rural and less developed communities. In addition, medical doctors working in public sector is just 40% (5229) of total number of doctors in whole country (National Health Committee Report, 1998). This will lead to the fact that the Ministry of Health could not fully utilize the already insufficient human resource for health care delivery of larger community.

3.2.1.2 Professional maldistribution

Maldistribution of physicians occurs not only geographically but also among the specialties. Most of the medical students want to become clinicians after graduation which lead to a far lesser number of doctors who are devoted to public health services and community oriented health activities. The choice of postgraduate specialty among the physicians in recent years reflects this condition.

This problem is also found in other countries. Even the most developed country in the world like the United States is not the exception. Most of the growth of physicians in the United States since 1965 has been in specialists. The number of specialists rose from 56 in 1965 to 123 per 100,000 population in 1992. During the same period, the number of generalists changed from 59 to 67 per 100,000 population (Debas, 1997). In addition to that, by the year 2000, the United States will be short of

35,000 general physicians and have 115,000 surplus specialists, according to a new report from the Council on Graduate Medical Education (Nation's health, 1994).

Therefore, WHO (1974) concluded that problem of maldistribution of physicians, geographically and among specialties is a serious one and geography maldistribution is a problem that is more easily identified than corrected.

3.2.2 Poor health care coverage

Poor health care coverage is due to such factors as maldistribution, insufficient production and inappropriate training (Nasution and Verasai, 1979). While the number of medical doctors both specialists and generalists for 100,000 population is 190 in the US (Debas, 1997), there is only 30 medical doctors for 100,000 population in Myanmar (NHC report, 1998). In addition, as the result of maldistribution, there will be far fewer numbers of medical doctors in the rural and less developed areas where 80% of our population lives. Therefore, health care coverage for the rural communities by medical doctors becomes poor in our country. Similar situation was also found in China which lost more than 80% of qualified doctors from rural areas during 1980s (Youlong, et al, 1997).

3.2.3 Poor quality of health care

Due to maldistribution and poor health care coverage, there will be shortage of doctors in the community. That will lead the community to seek medical advice and solution of health problems from less qualified basic health staffs. Even there is the medical doctor to look for help, if he is not aware of community problems, his quality of care will not meet the modern philosophy of health care. It is no longer relevant to give the curative services to the sick people at the hospitals only.

To provide the good quality of care, in addition to their traditional expertise in treating disease, doctors are expected to be humanistic care givers, sensitive to the

needs and welfare of their patients and the community in order to deal effectively with the problems (Beaudoin, et al, 1998). He may be good enough for curative care. But the doctor who is not community oriented can not improve promotive and preventive services for the community. Effective health care is not limited to the treatment of disease itself. Medical doctor should consider the contexts in which illness occurs and the way the patients live.

As the result of poor health care coverage and personal attitude of the doctor, the quality of care for that particular community will become poor. Finally all these consequences lead to the major negative impact on general health status and ultimately, health related quality of life of our people in rural community.

4. Areas to be improved and priority problems

What are the priority problems?

Based on the conditions contributing the problem situation, the general areas to be improved could be identified as

- Medical education
- Management and
- Socioeconomic environment

As discussed above, there is no single root cause for the problem situation. All conditions are inter-relating and influencing each other. However, to improve the problem situation we should consider the criteria to choose the most possible area to be improved. In order to give priority, we should take into account, feasibility, practicability, urgency, sustainability, political will, cost, vulnerability, magnitude of importance and availability of resources.

Based on these criteria, medical education is the most suitable area to be improved. Compared to other areas, improving medical education is more feasible and practical. Our target population, medical students, may be nurtured in this area so that it is suitable to select medical education as priority area. Moreover, there is the political will as it is stated in National Health Policy, to produce efficient health professionals. If we can provide the systematic reform in medical education, the desired outcome and impact will be sustainable.

Therefore, medical education should be selected as the area to be improved. The priority problems in this area could be identified as:

1. Unsatisfactory learning environment
2. Conventional teaching approaches
3. Traditional curriculum
4. Unsuitable student selection procedure and
5. Poor role model.

5. Improving the problem situation

So what could we do to improve the situation?

The improvement in medical education as the primary focus together with some degree of improvement in feedback information from health care services will serve as the most logical combination to improve the problem situation. The underlying values and principles can be identified as follows:

- Changing the knowledge, attitude and behavior is not a simple task.
- The provision of necessary knowledge and changing attitude among the students should be initiated from the medical institutes.

- It is critically important to provide the students with effective flow of information about the desired goal, real situation in the community, the role of the care providers, the expectation of the community and health profession and changing philosophy of health and care.
- The innovative approach of teaching methods, the shifting of focus of learning environment from clinical oriented, teacher centered, hospital based to public health oriented, student centred, community based, the teachers acting as the role model for the students are the possible area of reform in medical education.
- The image of medical students on the physicians who are working in the communities in less developed areas and giving the health care services not only in curative care but also promotive, preventive and rehabilitative cares should be improved.

6. Mechanism of solution

How do solutions work?

The main purpose is to improve the attitude of medical students to become community oriented through educational reform. Innovative medical education reform will be able to result in sustainable effect on training and producing more community oriented medical students. Although there are many influencing conditions for the problem situation, the most important determinant is characteristics of students themselves.

Medical institutes are the initial places to nurture the students so that fostering meaningful learning is the most fundamental. Meaningful learning means that the information may be understood very well by learner (Pinto and Zeitz, 1997). Their

attitude, personal interest and ambition largely determine the development of problem situation. The main focus of medical education is to develop appropriate attitudes in medical students by improving the entire learning environment because attitude changes do not seem to persist unless they are supported and reinforced by the entire learning environment (Baten and Smal, 1997). By appropriate educational approaches, attitude can be developed in three distinct ways: through reasoning, action and direct assault on emotion (Taylor, 1990).

7. The proposed intervention

Which intervention should we make?

To develop the innovative educational approach, it should encompass eight fundamental issues. They are:

1. Identifying the need for instruction
2. Learner characteristics & selection criteria
3. Instructional objectives
4. Course content
5. Teaching - learning methods
6. Support services and technologies
7. Evaluation
8. Managing instructional development and change (King, 1998).

From these issues, the area of intervention is focused on teaching methods and learning environments. Learner characteristics and selection criteria are beyond our control. Reorganization of course content will consume more time in which intensive discussion among faculty members would be required. Therefore, the most appropriate area to intervene is teaching method and learning environment.

7.1 Teaching methods

Lectures should no longer be the sole instructional method. Lectures in the classrooms can not fulfill the desired out come. More innovative approaches should be integrated in the teaching methods.

It is necessary to apply Problem Based Learning (PBL). As the students will meet the problems in the near future, they should be familiar with the problems not only in clinical but also in the social, cultural and economics context. This approach could improve the student's awareness of problem and skill to address them. It may lead to the desired outcomes if attention is paid to defining priority health problems (WHO, 1993).

In addition to PBL, task- based learning should also be introduced. It is similar to PBL but it focuses on actual task addressed by health care professionals. It stimulates further learning by student. It results from the process of understanding the concepts and mechanisms underlying those tasks (Harden, 1996)

Concept mapping is another educational tools, which can improve the student's ability to deal with problems in the community. It encourages meaningful learning as students address the conceptual meaning of knowledge being learned and think this new information with previous knowledge. It is an active and creative learning activity in which concepts are organized according to their hierarchical relationships (Pinto, et al, 1997). This improves transfer of knowledge in future problem solving activities.

All these approaches are based on critical thinking skill. It could nurture the students to be able to identify the problem, its causes and consequences and to explore their interactions to reach the most logical solution. If the students are equipped with

critical thinking, they will become more reasonable persons who can deal with the challenges in the community.

7.2 Learning environment

Traditional learning environment is campus and hospital based. Students are trained in the classrooms and laboratories and hospitals. They are not exposed to community until final part one (fourth year). This learning environment should be changed. It should be more community oriented. It is desirable to expose the students to community as early as possible. In community oriented learning, the aims and objectives and basic principles of learning are determined by the needs of the community, which will be more comprehensive rather than a mainly curative approach.

This change of learning environment and activities should be made an integral part of their clinical learning. The early and longer exposure to the community can also improve the image of medical students on public health physicians working in the community. In addition, before they are spoiled by biomedical and clinical subjects taught later in the medical school, knowledge and awareness about health and related problems in the community can be developed in medical students. Therefore, this intervention in medical education, is expectea to be able to bring about our desired outcome, *improved community orientation in medical students*.

8. Conclusion

The community orientation in medical students plays an important role in health care delivery for the larger community. Therefore, it is important to foster that attitude in medical students especially in developing countries such as Myanmar where majority of people lives in the rural areas.

The conditions leading to the problem are complex and inter-relating with each other. It is not appropriate to choose a single solution to address the whole issue. It requires comprehensive and multi-sectoral approach. However, from the practical point of view, the most suitable area to be improved is the medical education. It is feasible and sustainable. In addition to this, it can serve as an agent to develop the desired outcome.

In the medical education environment, innovative teaching methods in combination with changing learning environment by early community exposure, is found to be the most logical approach. Therefore, we should develop an innovative training program in order to bring about our desired outcome, improved community orientation of medical students in Myanmar.

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