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Physicians and principle centered delivery of health services

Abstract

Health is the fundamental right of human beings and the constitution of Nepal also envisages that the state will follow the policy of developing health of the people to improve their living standards. The national health policy and the evolution of health services in Nepal reveal that there have been attempts to reach all the citizens with quality services. Health is defined and understood in different ways by different people. However, health of the population is determined by situation and services outside the purview of health services. The extent to which health services can influence health of the people is limited and there are groups of people who advocate that the physicians be active outside the area of health services and medical care to promote health.

Ideally the principles that guide the health services are equity, quality, relevance and cost- effectiveness, efficiency and compassion. The values of beneficence, non-malfeasance and autonomy also form the cornerstone of the health services. Review of the current health services in Nepal show that further efforts are needed for our health services to achieve those principles. The health services are yet to reach all the population, there is a variation in the quality of services available at different places of the country. There is not much information on the cost-effectiveness of the services. A perusal of the health literature from the developed countries recognize that medical harm is one of the important cause of illness but the similar studies is lacking in our country. The issue of autonomy is still in infancy in Nepal. There is not much evidence of efforts for quality assurance of the services available.

A functional collaboration between medical education, health services and medical practitioners is expected to achieve ideal values in the health services. There have been a number of international and national efforts to bring changes in medical education, medical practices and health care system to make the health services more equitable, relevant, and cost-effective and of high quality. The competences and attitudes the physicians must have in order to provide principle-centered health services have been identified by a number of studies. Similarly the ways to achieve those goals through better collaboration among the principal stakeholders as well as what physicians themselves can do with assistance from these stakeholders have been suggested.

Key words: medical education, medical practices, professional councils, health services, and principles of health services, equality and health.

Health and health care

In the modern times, enjoyment of health has been accepted as one of the fundamental rights of human beings. The preamble to the WHO constitution states that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief and social condition.[1] Similarly, the constitution of Nepal (1990), under its "state policies" has affirmed that "—the state will follow the policy of developing such basic needs as education, health, habitat and employment of the people in order to improve their living standards……"[2] Though enjoyment of health is one of the fundamental human rights, what constitutes health is open to many interpretations. The statistics used to describe population health rely mainly on such quantitative data as mortality rates, disability adjusted life years and morbidity rates. This approach to describe health status assumes health as absence of mortality, morbidity and disability.

WHO has defined health in a more comprehensive way and stated that health is a state of physical, mental and social well-being and not merely the absence of disease and infirmity.[1] The attainment of such a state would require a just as well as efficient sociopolitical, economic and health care system. Many a times, physicians and public health specialists feel inadequate to help people to attain such a state. Thus, a number of alternative definitions reflecting different viewpoints

have been put forward. Rene Dubos[3] equates health with a person's ability to do and become what the person wants. McDermott[4] has related health to the degree to which individuals can operate with effectiveness within the particular circumstances of his heredity, physical and cultural environment. There seems to be a number of views regarding what is meant by health, similarly, there are different views regarding the determinants of health.

Some public health specialists (McKewon)[5] argue that health as indicated by lower mortality rates and longer life expectancy is determined by improved nutrition, better sanitation and availability of contraception. According to McKewon, health services and advances in medicine have very limited contribution to the reduction of mortality rates. Some sociologists (Illich)[6] have gone to the extent of saying that "the medical establishment has become a major threat to health." All these statements reflect the different perceptions about health. Sen in his recent editorial in BMJ[7] has shown that there is no relation between peoples' perceptions about health and the actual health status. According to his observation, Bihar in India has a very poor health status as indicated by its high mortality rate but when studied for morbidity; US citizens with much lower mortality rates have much higher illness episodes, thus a higher morbidity rate. Sen concludes that perceptions about health are related to the economic status.

A better economic status is not a guarantee for a better health status if it is not equally distributed; cautions Wilkinson.[8] Citing the example of USA being at the lower end of Health Olympics, Bezruchka[9] states that US's greatest health hazard is its income inequality. Thus, in Bezruchka's opinion, physicians interested in promoting health of the people should fight for justice to reduce the gap between the rich and poor, advocate for child supportive environment, promote social and spiritual connections in the community, work to increase women's status and opportunities, and strive to end stressful, low paid work.

All of these are worthwhile activities and are likely to improve the health status of the population. However, in the context of health care system in which present day physicians work, it is rather out of the scope of physicians' training and work environment. According to Mechanic[10] medicine has three principal tasks: 1. To understand how particular symptoms, syndromes or disease entities arise, either in individuals or among group of individuals, 2. To recognize or cure these or shorten their course or minimize any residual impairment, and 3. To promote living conditions in human populations which eliminate hazards to health and thus prevents disease. Physicians interested in biomedical research engage themselves with the first task, physicians in the field of curative services are involved in fulfilling the second task and physicians who join public health and social medicine look after the third task. Even though one has to agree with the general observation that there is not much evidence that the illness care (which is what most of the curative medicine deals with) reduces morbidity or mortality significantly, it can reduce the costs of health care and protect from the harm arising from medical interventions. More important than that, health care will continue to be demanded as it satisfies a deep human need for someone else to provide help at the time of illness. Medical services, as we understand them, have further roles: it is needed to relieve pain and distress, and also to provide hope by not giving up when the outcome is death[11] (RJ Haggerty). In this context, physicians have become the 'central health provider, whose behaviour determines, to a large extent, the nature of care that will be offered to the individuals and the community' (U KoKo).[12]

Health care is mostly a matter of self care or care by the family members. When health care is sought outside the family, it can come in two forms: the public health system and the personal encounter physician led system. The public health system depends on the services provided by a wide range of professionals, which includes physicians in a more indirect way. In the physician led, personal encounter physician system, physicians provide services in a more direct way on a one to one basis. The activities of personal encounter physician fall into the following categories: expression of care and compassion, use of technology, supportive management to maintain physiologic functions and the technology based capability to report negatives authoritatively to maintain peace of mind.[4] (McDermott)

Health services or health care system

The health services or health care system consists of a network of personnel or institutions where a person with health problems can go and receive care. In the broader context, it also means a socio-cultural system that enables members of the society to remain healthy and chose a system of their choice when they fall sick. In the societies where health

insurance systems are in operation, health care system signifies a system for paying the wages of sickness. It includes a number of services available to a person with illness or for the prevention of diseases or for promotion of health. The provider of such services could be government, non-governmental charitable organizations or service providers for a fee.

Principles of health service delivery

According to Boelen,[13] health services should be planned and provided in such a way that they achieve the principles of equity, quality, relevance and cost-effectiveness. In addition, the code of ethics the physicians have to follow, require that they follow the principles of beneficence, non-malfeasance and autonomy.

1. Quality

The meaning of quality varies with the levels of social and cultural development, availability of skilled staff and technology. Medical and health professional councils, in setting standards of good practice, evaluation procedures and new technology; shape concept of quality. Concept of quality is also shaped by the beneficiaries' ability to understand the determinants of health and informed judgment of what may suit them best in the given circumstances. Efforts to assure quality in any health delivery system include establishing a system of medical audit. The audit is identified as a cycle of setting standards, monitoring performance and then implementing the changes to bring the performance up to the standard. The audit system works best if the people involved in the delivery of health services are involved in all the stages of audit process. However, experiences in UK suggest that medical audit can only succeed if factors such as allocation of resources, quality of training, configuration of service and development of effective patterns of care have been attended to.[14]

2. Equity

Equity in health services aims to eliminate discrimination based on socioeconomic status, geographical location, race, gender, religion and culture. Health services should install mechanisms by which everyone in community can be guaranteed access to a minimum set of services to ensure a productive life. Rights to have guaranteed access should be accompanied by another right- for all to be empowered to protect and promote their own health by being adequately informed about health and risks and opportunities and healthy life styles.

It has been argued that quality and equity are the opposing poles of the values and it is impossible to achieve both in any situation, more so in the context of developing countries with poor resources. Best quality services can be provided only for a few and the attempts to reach the whole population with health services will compromise the quality. The values of relevance and cost effectiveness are important if one is to prevent quality and equity being mutually exclusive.

3. Relevance

It aims at tackling the most important problems first. The health problems, and vulnerability of the people and the priorities of different groups determine relevance. It is assumed that with the application of the principle of relevance, resources are allocated in response to the priority health needs: best possible done to those who need it the most. It is expected to achieve both equity and quality.

4. Cost effectiveness

It means the best use of available resources in delivering a given service. Examples of attempts to increase cost effectiveness are: less educated or less costly health staff doing certain procedures with equal quality (nurse anesthetists, ultrsonologists, nurse practitioners, optometrists, ophthalmic assistants, health assistants), certain professional tasks carried out by generalists instead of specialists. Another attempt to increase cost effectiveness is assessment of evidences before introducing any new health technology.

In addition to these principles related to health services delivery, physicians also have to follow the ethical principles of doing good, doing no harm and respecting the autonomy of the patients. Thus, health service delivery should be based on the additional principles of beneficence, non-malfeasance and autonomy.

5. Beneficence and non-malfeasance

The actions taken by the physicians should do good and should do no harm to the patient to the best of physician's ability. Sometimes it may be difficult to understand this principle as physicians consider their every action in the interest of their patients and if something goes wrong it is accepted as a part of the side effects of the intervention. However, medical intervention has a great potential to cause harm, therefore, consideration of this aspect is an important principle to be followed while providing health services.

There are no systematic studies to report on adverse events following medical intervention in Nepal. A few studies from USA, UK and Australia have reported adverse events following medical intervention as an important cause of morbidity and mortality. The fact that a substantial proportion of these adverse events resulted from negligence and were preventable, make one consider the potential of medical practices in causing harm. Thus, it is an important principle to be followed while delivering health services.[15,16,17]

6. Autonomy

The patients if given adequate information, and if of sound mind and age, are able to decide for themselves, the course of action that is to be taken in case of illness. Physicians should inform the patients fully about the known facts about their condition, options available for treatment and let the patient decide the future course of action. This is also a difficult principle to follow in the developing countries with traditional societies. Physicians are expected to decide the best course of action by the patients, not to inform about bad prognosis to the patient but discuss this with the relatives. The relatives are supposed to decide for the patient.

All the efforts to improve medical education, medical profession and health services can be considered as the attempt to make the services more principle centered. The focus of change is sometimes teaching institutions (medical education), professional bodies (medical practices) and the government health services (health care system). It is suggested that a change in the focus of health care has to occur in order to make it more centered on the principles enunciated above. (Panel)

Changes in focus of health care:[18]

FROM	TO
The individual	The community
Cure of disease	Preservation of health
Episodic care	Continuous and comprehensive care
Individual approach, provided by single primary physician	Comprehensive, community based care provided by primary care team
Paternalism	Management negotiated in partnership between patients and physicians
Centralized systems	Health services that are primary care led
Reliance on in patient care	Increasing use of home, day and intermediate care
Anecdotal care	Evidence based medicine

An ideal health delivery system should address all the four principles in equal measures; and the physicians working in that system should follow the ethical principles listed above. However, the stress can vary among the stakeholders involved. The politicians and the government mostly stress on equity and cost-effectiveness. Our national health policy also stresses this aspect of health service delivery and its strategy of providing primary health care to all is its attempt to

ensure equity. Physicians want the best scientific knowledge and technology at their disposal in the services of their patients. Obviously, a physician is more concerned about the quality of services. The government health administrator, economists and sociologists are concerned about the issues of relevance and cost-effectiveness of interventions.

In a comprehensive review to identify the expectations from physicians and health services, Ewan[19] has published a review of expectations from patients, sociologists, allied health professionals, health administrators and governments. The expectations from different groups vary.

Patients would like a health service, which is accessible and convenient, ensures continuity of care, and is effective, affordable and provided with humaneness. Sociologists advocate that the patients be seen as worthy unique people and are treated as equal by the physicians and patients share in the decisions about their treatment, patients be treated with warmth and humaneness. Allied health professionals such as nurses, pharmacists, laboratory technologists, and physiotherapists expect respect for their professional training, awareness of their abilities and partnership in the team that treats the patients. Health administrators are interested in the cost recovery thus are concerned about the cost-effectiveness of the physicians' actions. They would like to promote standardized care that would limit physicians' clinical freedom. Governments expect that the physician's actions be such that they keep populations healthy, physicians are available in all parts of the country and they learn to prioritize in awareness of the cost issues. In summary, physicians are expected to restrain their so-called clinical freedom.

A health delivery system should strive to achieve a judicious combination of all the principles. Is that possible? What has happened internationally and nationally?

Progress towards delivery of principle centered health services

The principal stakeholders in medical education, health care system and medical practices need to share a common vision and collaborate efficiently to achieve these principles. A functioning network of relationships between these three sectors [(13)] is essential to achieve the desired goals. Changes introduced in medical education alone do not induce sustainable changes in medical practices and this in turn does not have lasting influence on health care and health status. In an ideal situation, changes in one sector are coordinated with changes in another sector. In its campaign to achieve the goal for "health for all", WHO has also recommended promoting coordinated efforts by health authorities, professional associations and medical schools to study and implement new patterns of practice and working conditions that would better enable general practitioners to identify and to respond to the health needs of the people they serve [(20).]
What have been the efforts in the sectors of medical education, medical practices and health services system?

Internationally, WHO and World Federation of Medical Education and its affiliates have influenced the changes in medical education. WHO, UNICEF and other UN agencies and World Bank have influenced the shape of development in health service sector. Similarly, WHO and medical councils have influenced the thinking of national medical councils. A short-listing of these efforts is as follows:

A. Innovations in Medical education

1. Innovative campaigns in USA: George Miller and his colleagues' initiatives in bringing the faculty in medicine and education together to improve the quality and relevance of education in medical schools started in 1960s.
2. WHO regional teachers training centers established in 1970s in Sri Lanka and Thailand in the region.
3. International influence in shaping the MBBS curriculum at the Institute of Medicine.
4. Establishment of the Network of schools with community oriented medical education
5. WHO/UNICEF campaign to promote Health For All by the year 2000 and its influence on medical education.
6. Reorientation of medical education (ROME) movement
7. World summits on medical education, 1988, 1993
8. Design of MBBS curriculum at BPKoirala Institute of Health Sciences.
9. Curriculum in the newer medical schools.

B. Salient features of innovation

The aims of innovation in medical education are to educate physicians, who are competent, compassionate, caring and willing to serve in their communities. The innovative schools provide learning experiences to develop required skills, attitude and knowledge in graduates. The physicians produced by such schools are expected to be a competent service provider(s), manager(s) of health systems, counselor(s) to individual patients and their families, efficient communicator(s) as well as a community mobilizer.

The goals of Reorientation of Medical Education (ROME)[21] campaign recommended and coordinated by WHO have been that within a certain period of time all medical schools should be producing graduates or specialists who are responsive to social and societal needs and who possesses the appropriate ethical, social, technical, scientific and management abilities to enable them to work effectively in comprehensive health systems based on primary health care.

The characteristics of a medical school curriculum that would produce physicians with these qualities are its community orientation and community based education, integration of learning experiences around organ systems instead of according to the disciplines, promotion of problem based, self-directed learning. These experiences would prepare physicians who would be encouraged to continue their learning during their practices.

C. Changes in the health services

1. WHO/UNICEF coordinated movement for HFA 2000 through Primary Health Care approach
2. National endorsement of HFA and PHC: National health policy 1991
3. Health services act, HMG/N
4. Rapid expansion and upgrading of the health institutions
5. Evidence based medicine[22]
6. Medical audit[23]
7. Assessment of technology, health finance unit[24]

D. Changes in the medical practices

1. Active professional organizations: Nepal Medical Association and several others
2. Empowered and active Nepal Medical Council and establishment of other councils
3. Licensing examination by Nepal Medical Council
4. Promotion of the practice of Evidence based medicine
5. Implementation of medical audit procedures

E. Other initiatives

1. Nepal Health Research Council established for identification of priority research topics and regulation, facilitation of essential research.
2. Delivery of specialized curative services through camps: Ministry of health has been relying on organization of surgical and medical camps to provide specialized services that can be offered by existing health institutions in the rural areas. There have been a number of non-governmental as well as individual initiatives of this nature to provide specialized surgery for eye, ear, general surgical and orthopedic and permanent sterilization services.
3. Physicians' role in establishing organizations in association with the patients and general public for the promotion of health, for example heart foundation, diabetes association, hemophilia society etc.
4. Establishment of trusts and non governmental organizations in the leadership of the physicians to promote relevant research and health services, for example: Mrigendra Samjhana Medical Trust, Impact Nepal, Kathmandu model hospital, Public Health Concern Trust.
5. Creation of health institutions: Several eye hospitals established under the management of non governmental organizations, orthopedic hospitals (Hospital for the rehabilitation of disabled children, Nepal disability association hospital), Kathmandu model hospital, Kali Gandaki hospital, AMDA hospital etc and several mission hospitals. In addition a number of hospitals have been established in the private sector as health service industry.

6. Expansion of pharmaceutical industries: There has been a rapid expansion in the number of pharmaceutical industries in the country, though it still needs to import more than 80% of its drugs from outside the country.

Effects

Have all these initiatives and changes resulted in the creation of a principled, value based health delivery system? Have we created physicians who are socially responsive, caring, compassionate and competent? Are our expectations rather naïve that changes in medical education and some changes in medical practice rules would achieve the idealized goals? A review of the situation in Nepal shows that continued awareness and efforts to achieve those principles need to continue.

Health care system in Nepal

In order to understand the growth of health care system in Nepal, it is convenient to divide the health care system prevalent in Nepal prior to 1951, what existed in 1951 and the current health services network. A quick look at the present health status will be helpful to identify the important issues in health services.

1. Prior to 1951, the growth of the health services reflected the principle that it is largesse of the rulers, offered as a charity to the people.[25] Different rulers established hospitals and health institutions more in order to enhance their own fame and glory. The services did not seem to evolve in response to any identified health needs. The development in the field of health services up to 1951 resulted in a mix of hospitals offering modern system of medical care and ayurvedic hospitals and dispensaries. There were two training institutions one each for ayurvedic medicine and for training paramedical staff. Similarly there was one manufacturing house for the production of ayurvedic medicines.[25]
2. There has been a rapid expansion in the number of hospitals, academic institutions for the training of physicians both in the government and private sector (more in this sector), general and specialty hospitals, technical training institutions, a number of pharmaceutical industries in addition to the ayurvedic medicine manufacturing plant. There has been a rapid expansion in the number, type and technical skills of the doctors and other health workers. There has been a rapid leap towards the goal of reaching the total population with primary health care services.[26,27]

Health services: Then and now

Then: 1951:
Hospitals: 33 hospitals
Ayurvedic dispensaries: Several
Number of medical schools: 2
Drug production unit: Singha Durbar Baidyakhana

Now: 2002:
Number of hospital beds: 6348
Number of different types of hospitals: 75 + specialized hospitals: Hospitals in Police and military, Teaching Hospitals (TUTH, BPKIHS and 9 medical colleges hospitals in different phases of development).
Number of medical schools: Two in government sector, 9 in the private sector
Number of specialized hospitals: 10 Eye hospitals, one cancer and one cardiac center, maternity hospitals, Kanti Children's hospital, 2 orthopedic hospitals
Number of Health Science University: Two (BPKIHS and National Academy of Medical Sciences)
Number of vocational training centers offering courses in health: 154 (registered with Council for Technical Education and Vocational Training)
Number of doctors: 3600 (registered with Nepal Medical Council)

However, creation of a large number of health service outlets is yet to take health services to all the sections of the society according to their needs. Even today centralized planning and logistic support system characterize the health services. The costs of providing services are mainly borne by the sick individuals and their families (out of pocket expenditure account for more than 70% of the total expenditure on health).[28]

The services are increasingly becoming dependent on technology that is alien, that has to be imported and are difficult to maintain locally. The rapid expansion of services in the private sector has attracted a sizeable proportion of human resources of health services to work in the private sector to the detriment of the public, low cost services. This development has drawn the criticisms of health services becoming more commercialized.

Health status:[29]

Table I: Health status: Mortality by area of residence

Area of residence	Infant mortality rate	Under 5 mortality rate
Urban	60.4	93.6
Rural	100.2	147.0
Mountains	132.3	201.0
Hills	85.5	131.3
Terai (Plains)	104.3	147.3

Table II: Health status: Comparison of "Deaths by cause" and DALYs lost by cause

Causes of death	Causes specific deaths as percent of all deaths	DALYs lost as percent of all DALYs lost
Group I: Infectious diseases and maternal, perinatal and nutritional problems	49.7	68.5
Group II: Non-communicable, congenital problems	42.1	22.8
Group III: Injuries and accidents	6.9	8.7
Unclassified	1.0	0.0

A quick reference to regional variation in the mortality rate and the causes of death and DALYs lost help to further identify the problems of health services in Nepal.

1. There is a great variation in the life expectancy and mortality rates of the different regions of the country. Similarly, the distribution of human resources in different regions shows a great discrepancy.
2. The infectious illnesses and pregnancy related illness account for the major proportion of mortality and disability. Though communicable diseases are the major health problems, non-communicable diseases come close second. Such behaviors as smoking and alcohol consumption that are likely increase the prevalence of non-communicable diseases are seen in majority of the above 19 years old.
3. Despite a tremendous increase in the number of doctors over the last five decades, government hospitals are still going without doctors.
4. The hospitals with doctors also function without adequate supplies and equipment. It is a common thing to read in the newspapers regularly about doctors functioning as assistant health worker due to lack of basic infrastructure.

Thus, inequality in the availability of health services as well as the doubtful quality of whatever health services are available are the main problems of the current health services in Nepal.

Medical education

Institute of Medicine was established in 1972 by amalgamating all the existing training institutions in health sector with a mandate to produce all categories of human resources in health and it was the sole producer of doctors in the country till 1993. Over the last 10 years a large number of medical colleges have started operating: two in the public sector and nine in

the private sector. All the medical colleges are yet to produce doctors. There has not been any systematic study to evaluate the qualities and abilities of doctors qualifying from different colleges. Thus, it is difficult to comment on the performance of these physicians in the light of curriculum they have passed through.

Graduates of Institute of Medicine have been serving as physicians for the last several years. There have been few attempts to find out how relevant and useful have they been in providing the services in the country. The general impression about the graduates from Institute of Medicine is favorable: they are considered willing to work in the rural areas and they work effectively in a team. There is a general impression that the Ministry of Health finds that the products of IoM provide better services and cause less trouble than the graduates trained abroad. [12] However, more objective studies are needed to champion the type of curriculum being followed at this institute. One of the reasons for better performance of these graduates was apparently related to the entry criteria that allowed more mature health workers who had already worked in the community to enter this programme. Over the years this flexibility has been removed, thus, it is difficult to comment on the performance of the recent graduates. Similar studies about other medical schools are yet to be carried out. More of such studies are required on this subject.

Perceptions and expectations

There is a growing understanding that the increase in number of physicians or creation of new health facilities do not automatically translate into desired type of health services. A brief look into the expectations of physicians from people from the different sectors shows that further improvements in our approaches are necessary.

1. An interview- based study conducted by Agrawal[30] et al in 1993 has listed the people's perceptions about physicians in a rather negative way. The physicians were seen more interested in money and being commercialized in their attitude. The perceptions that the physicians were seen as people with a sense of superiority and arrogance and unwilling to work in the rural areas are more alarming. The same study reported that the people want a generalist doctor who is capable of providing services for common ailments. Moreover, the people expected a doctor who is polite, sympathetic and with a cooperative attitude and professionally competent. Recently British Medical Journal, published an issue devoted to the question "what is a good doctor?"[31] The respondents included people from different sectors of the society. Majority of the respondents said that a good doctor is compassionate, empathetic, understanding, humane, courageous, creative, optimistic, just and a good human being. The question of professional competence was not very high up in the list of qualities of a doctor; apparently respondents assume that in a doctor any way.
2. Physicians' expectations: There are not many studies regarding what the physicians expect from the profession. If one goes by the responses of the new students who are trying to get into medical schools, every one has a very idealized view about their roles and expectations. One has to accept that the physicians are entering a profession after a very grueling training and they are committing themselves to provide service under difficult circumstances. It is reasonable to expect that they would like to earn a comfortable livelihood from it. It is unreasonable to expect that the role models of wealthy and famous doctors in the society would not motivate them to work where there are financial incentives. The expectation from the family to perform financially well is also an important pressure. Similarly what other members of the profession do also influence the physicians expectations and practices. All the physicians would like to practice according to their ability and earn an honest living out of it. However, financial security for themselves and their family members is a reasonable expectation of all the physicians. People concerned with the delivery of principle centered health services need to be aware of these influences as well. What physicians do is determined by what they learn in the medical schools but more so by the opportunities provided by the health care system. The rules and regulations of the medical councils play important role in shaping the physicians' performance. However, character of the training or the rules of medical councils are unlikely to compensate for the inadequacies of the health care system and the societal norms.

What is needed?

The efforts to improve the health services to meet the needs and expectations of the people never end at any point. The achievements in this field over the last five decades have been impressive in terms of expansion in different sectors,

however, the access to quality health services for the majority is yet to be achieved. The increasing cost and questionable relevance of some of the services are important issues to be addressed. Better collaboration between the different agencies involved is an obvious step towards achieving the desired goal. Developing linkages at the different stages of medical education and health service system have been identified as a key step to make the health services more responsive and relevant to the people's needs. Bandarnayake[32] has listed the areas for the coordinated action between medical schools and health services.

Areas for strengthening the linkages between health care and medical education start right from the process of student selection: students from remote areas or with certain experience being given preferential points for admission have been two examples of this linkage in Nepal. Similarly, the aims and objectives of the curriculum in medical schools can be developed in collaboration with the health service people. The location of learning experiences in the community based health institutions and not only in the hospitals is another important area for the linkage. Health authorities' being involved in the assessment of students' learning is another important area. Other areas include joint research, even joint administration, and collaborative action to develop postgraduate educational programmes as well as in designing the continuing medical education programmes. Finally, academic institutions and health service providers can participate in joint programme evaluation of health services and medical education.

Future challenges

In the present context, people responsible for medical education, health services in the public sector (ministry of health) and the professional councils have a responsibility to work together to accelerate the efforts to create a principle centered health service system. The health services need to address the issues of equity, quality, relevance and cost-effectiveness in equal measures. The physicians have a challenge to deliver the health services without causing unnecessary harm and with respect for the recipient of their services. The challenges for all are to develop a process of meaningful collaboration and cooperation in order not to work at cross-purposes and avoid duplication. At the same time, the policy makers and implementers of programs need to be aware of the needs of the physicians in order to involve them in the creation of an appropriate, value based health delivery system. Finally, for all the involved, it is important to clarify the role doctors have been recently taking as a health industry entrepreneur. The same person acting as the prescriber of a service or intervention and also as the dispenser of the services for a significant fees is not likely to enhance the credibility of the profession. How should this practice be regulated? Who should look into this aspect?

What individual physicians can do?

It is very important that the physicians be aware of their roles and responsibilities in terms of health of the population. According to one's own interest, one may get involved in the wider sociopolitical issues influencing health- but for that, it is not necessary to become a physician. Physicians need to be aware of the sociologists' viewpoint regarding their role in population's health and accept it rather than be unhappy with it. We can help people to understand our limitations and to have realistic expectations from the health services. The physicians need to continue to study and learn newer skills to maintain their competences. But focusing too much on technical competence will not prepare them to face the emotional stress associated with their work; thus it is important to develop emotional strength so that one can work with compassion and caring attitude and avoid the insensitivities associated with prolonged exposure to pain and distress. Physicians need to explore and utilize the opportunities to learn the communication skills that would improve their ability to listen and talk to the people with problems. We will have to learn to practice evidence-based medicine and utilize the different resources to enable us to do that effectively. There will be increasing questions from the society regarding the mechanisms of maintaining the competencies of the doctors. In response to this issue, medical councils would be required to develop systems for re-certification of doctors, as is the practice in developed countries. Physicians will have to accept this possibility and develop individual strategies for self-directed learning. Participation in self-assessment procedures will be of help in this process.

Who can help?

The process of working for the development of a health service delivery system based on the principles enunciated above need a concerted efforts in a collaborative way between the academic institutions, medical profession (represented by medical councils and association) and the health care services (represented mainly by ministry of health). Some of the actions that can help are suggested as follows:

1. Medical association can help by organizing educational activities on such subjects as medial ethics, communication skills, patient management issues and career counseling.
2. Specialty associations should focus more on the recent advances and help physicians to develop newer skills and in maintaining their professional competence through organization of continuing medical education programmes related to the specialties.
3. Medical council in collaboration with the association and professional bodies can help in the education of professionals and ensure their competence through certification and re-certification procedures. Medical council can help in the improvement of quality of health institutions by insisting on the implementation of standards of care and effective audit procedures. .
4. Health ministry has a very important role to play and it will have to help the councils to develop professionally. It is expected to develop and implement standards of care in health institutions, implement the process of medical audit, establish career counseling services and improvement of the service conditions and develop a process of assessment of effectiveness and relevance before introducing any technology or intervention before introducing it in the health care system.
5. Institute of health sciences: collaborate with health services, review the training programs to meet the needs of health services, develop partnership in providing services and in a joint system of programme evaluation.

Conclusions

The health care system that is satisfactory to every one is unlikely to be ever created. However, it should be as user friendly as possible and should cause as less harm as possible. Whatever may be its relevance to the health status of the populations, there will be a need for health services and its leaders: the physicians. Physicians are expected to perform according to the expectations of different groups of people but what the expectations of the physicians themselves are hardly studied in depth. The attempts to make the health care system and the physicians socially relevant and responsive have resulted in many changes in the approaches to medical education, medical practices and the health service delivery system. Still, a coordinated collaborative efforts need to continue. In that process, physicians themselves can participate and contribute by being aware, curious and caring.

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