

and service. Therefore, revision and correction of the situation is also urgently needed.

According to WHO statistics in 1968 from 100 institutions of higher learning in public health 78 have been functioning as schools of public health and remaining 22 as departments of public health science of the schools of medicine. The later group in addition to undergraduate teaching have been also teaching in graduate levels. Out of 78 schools of public health 25 which makes 30 percent of the schools in addition to their teaching and research activities on the graduate level also assume the function of the departments of public health sciences in the schools of medicine (like Teheran University School of Public Health).

In this paper after discussion the roles and the functions of the schools of public health and the departments of public health sciences of the schools of medicine it has been concluded that, in addition to the need for better and more utilization of the facilities and the possibilities of the schools of public health, more attention and support should be given in strengthening the departments of public health sciences of the schools of medicine. It has also been concluded that there is a great need in every country for making further studies and conducting research for planning new systems of delivery of health and medical care. In this respect the roles of universities with their faculties of medicine, public health and other faculties involved in training health personnel, from the stand point of teaching, research and service as well as their relation with community organizations and operating agencies should be identified and implemented.

Responsible health authorities, health planners and medical educators of the more advanced nations and of the less developed countries have to agree with John Bryant (1) that in spite of all progress and achievements to date, there is still a great need for new systems of health care to be developed that can bring better care to large numbers of people on limited resources, and that the systems of health care are inseparably linked to the education of the various categories of health personnel to be able to work as members of the health team.

#### SUCCESSES AND FAILURES OF EDUCATIONAL SYSTEMS

Universities and medical institutes in both the more developed and the less developed countries have, in general, been successful in the training of professional personnel who could provide high-quality care for individual patients in a hospital setting, but this system is limited in the number of people it can serve. Again as stated by John Bryant (2) in the more developed societies where

# THE RELATION SHIPS AND FUNCTIONS OF SCHOOLS OF PUBLIC HEALTH AND DEPARTMENTS OF PREVENTIVE AND SOCIAL MEDICINE IN UNDERGRADUATE MEDICAL SCHOOLS \*

Chamseddine M. H. Mofidi\*\*

Garegin Saroukhanian\*\*\*

**ABSTRACT** In spite of all the progress and achievements in the establishment and development of health services in the world to date, there is still a great and urgent need for new system of delivery of health and medical care particularly in developing countries.

Until now universities and medical institutions have been training high level professional personnel for delivery of hospital based medical care. But the health services needed in the country can not be met only through hospitals. In many parts of the world these services have evolved as a result of educational and research activities of the schools of public health.

Generally speaking the curriculum of the schools of medicine for the orientation of their graduates in social and preventive medicine looks adequate. Unfortunately this is true only in theory. In practice this has never been achieved, because of the attention of these units, (both from the standpoint of administration and management as well as objectives and operational support) has been always concentrated to hospital teaching

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\*\* University of Teheran.,

\*\*\* School of Public Health. University of Teheran

this educational pattern evolved there have been other mechanisms for meeting some of the health needs not met through hospital-based medical care, public health programmes, for example. It should be recognized, however, that these programmes emanated largely from the *schools of public health*, which have functioned quite separately from the medical schools.

Even though many health educators advocate the need for a revision in the organization and curriculum structures of the schools of public health (3) this recognition of the role of these schools in the promotion of health of nations is gratifying and worthy of careful study and evaluation. It is particularly so because the various attempts of universities to broaden their programmes beyond hospital-based medical education by establishing departments of public health, preventive medicine, social medicine or community medicine may have made valuable additions to the curriculum, but have not affected the orientation of the health care system, nor, as stated by Robert D. Wright, did they interest more than a handful of medical students in this speciality (5) This is in line with the experience of a few schools or institutes of public health, which did not have the same success in the teaching of their undergraduates at the medical schools with which they were associated or formed a part as they had with their graduate and postgraduate programme. Many schools with this experience are represented here, and it would be of the utmost value to hear from them on this, and from those with the opposite type of experience.

## FUNCTIONS OF SCHOOLS OF PUBLIC HEALTH

Generally speaking, the functions of schools of public health could be determined from the working definition adopted by the WHO Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel in its tenth report (6). In addition to research in public health and service to the community, they should create an educational atmosphere, conditions and possibilities for those who want to receive additional or advanced education (and obtain degrees) in one or more branches of health sciences, and to prepare themselves for careers in research and teaching, or to serve as public health workers able to carry out health programmes and administer comprehensive health and medical care.

Another activity of the schools of public health may normally be health education and the dissemination of information and the knowledge of health principles that may influence various professional groups and the public.

Finally schools of public health may play an important role in national health and manpower planning and in the promotion of health at the international level.

These functions are normally facilitated by the availability of adequate resources, qualified academic, technical and clerical staff, relationships with universities, ministries of public health and national development planning organizations.

Action - oriented research on health problems and their solutions carried out by these Schools (producing important information to be included in the medical school's curriculum), the important role they play in the Teacher Training for health personnel, the preparation of teaching materials, films, books, pamphlets, etc., and finally the organization of seminars, refresher courses and conferences are all of great use to the medical schools in general, and to the departments of preventive and social medicine in particular. If the school of public health also administers some research stations and/or health centres, these units could also be very well used for the field training of interested medical students and internes, together with graduate students and others, working as members of the health team, and together with students of other health disciplines, be exposed to the common environment of the community needs. (8)

#### FUNCTIONS OF THE DEPARTMENTS OF SOCIAL AND PREVENTIVE MEDICINE

The functions of the Departments of Social and Preventive Medicine, and the need for a "wholistic" and community approach in the medical education, have been amply and repeatedly dealt with since the turn of this century by various National and International conferences on Medical Education, Meetings of Expert Committees, governmental and inter-governmental organizations and other organizations and associations of Medicine and Public Health. As stated by the WHO Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel in its sixteenth report, (9) while responsibility for teaching should fall on several departments during both the preclinical and clinical years of the curriculum, in most medical schools the departments of social and preventive medicine have to bear the major responsibility for promoting community - oriented medical education, in coordinating the programme as a whole, and in carrying out their own teaching research and service functions. Theoretically the department must consist of a number of special units to meet the needs of its broad teaching programme and its varied service responsibilities in the community, in the teaching hospital and in developing research. The department

should be staffed for teaching the principles and practice of biostatistics, epidemiology, social sciences in medicine, nutrition, population genetics and dynamics, health administration and practice, including environmental health and health education.

Furthermore, in order to assure the practical aspect of their teaching, the departments of social and preventive medicine should have special units within a number of clinical-public health fields in health centres and in teaching hospitals.

In practice, however, the departments of social and preventive medicine have not developed, and have not always had enough support to develop along the lines mentioned above and are fighting to influence and attract the clinically-minded Faculty and student body, with a shortage of personnel and inadequate facilities. This is not a desirable situation and it should be urgently remedied.

RELATIONSHIPS  
OF SCHOOLS OF  
PUBLIC HEALTH  
AND  
DEPARTMENTS  
OF PREVENTIVE  
AND SOCIAL  
MEDICINE

It is necessary to realize that not all the countries which have medical schools have schools of public health, and in the countries where there exist one or more schools of public health, these schools operate normally on the national (and in a few cases, also on the international) level.

A tentative analysis of the organization and academic standing of schools of public health, listed in the World Directory of Schools of Public Health of the World Health Organization (10) shows, in Table 1, that out of 100 institutions responsible for higher education in public health, 78 have the standing of a School or Institute of Public Health, and 22 are Departments of Preventive and Social Medicine of Faculties of Medicine, which also offer graduate degrees. Of the 78 Schools or Institutes, 21 are Independent Schools of Public Health of Universities, 13 are with School or Institute standing, but are part of the Faculties of Medicine, 5 are Independent Schools of Public Health under the joint cooperation of the University and the Ministry of Health (and Social Welfare) and finally 39 are Independent Schools or Institutes of Public Health directly attached to the Ministries of Health. Table 1 also shows that in addition to the 22 Departments of Preventive and Social Medicine and the 13 Schools and Institutes of Public Health, which form part Faculties of Medicine, 11 Independent Schools of Public Health of Universities and one Independent School of Public Health attached to the Ministry of Health, are also in charge of teaching public health and preventive medicine to undergraduate medical students. In the majority of these cases, the Schools act as a

institutions in terms of qualified and experienced faculty members, action - oriented research programmes, field stations and health centres and other resources, have not been fully used in the development of community - oriented medical education. To facilitate these arrangements, as well as to reduce similar problems facing departments of preventive and social medicine of medical schools in fulfilling their missions, there is a great need for the development of new systems of health care, under which the role of universities, including medical schools and schools of public health are well defined and their approaches to the teaching of community health concepts and health care better rationalized.

Special research programmes with a view to evaluating the successes and failures of schools of public health which have been responsible for the teaching of undergraduate medical education, as compared with similar experiences in the departments of preventive and social medicine of medical schools, are badly needed, and may be very useful in the future development of community - oriented medical education.

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