

# **CHANGING PUBLIC HEALTH CURRICULUM**

by

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**For an official of operating agencies, a state bureaucrat, to talk about changing public health curriculum is obviously ridiculous. This is a complex and controversial subject that is constantly being discussed and evaluated by the best academic minds in the nation. I do not propose to compete with academicians on their levels and with their wealth of knowledge, but perhaps comments from a relative outsider may be of some interest.**

**I have been fortunate to have some limited contact with schools of public health and other graduate public health programs as a member (until recently) of the Council on Education for Public Health, which is the accrediting body for schools of public health, and as a sometimes member of ad hoc funding committees for the Health Resources Administration which is a funding mechanism for graduate public health programs. Schools of Public Health and students of public health have been given special recognition and opportunities by the government and various private foundations. There is some Latin expression which I forget for the moment, which translates to mean, "From those to whom much is given, much shall be required." Much has been given to schools of public health in terms of financial support, responsibility, challenging careers and public recognition. Much is expected in terms of training and developing qualified professionals to be effective in preventing and solving health problems.**

**Every speaker and author has a different definition for the educational purpose of schools of public health, so this leaves me free to offer my own. This purpose is to educate**

graduate students with a working knowledge of the principles and practices of public health to the end that such graduates will be effective in solving public health problems.

I am glad that your Honorable Dean chose the title that he did for this presentation. Using the word "changing" implies not only "making different" but also "becoming different." Certainly there are many changes at work that are making change, and it is equally true that public health curriculum has always been becoming different since the origins of formal education in public health in the United States. It is generally agreed that formal graduate public health education began sometime in the early 1900's, with formal designation of schools of public health in the 1920's. These early schools emphasized control of the serious communicable diseases of that era and catered to the then public health giants --- the health officers and engineers. From these early starts, other emphases such as epidemiology, vital statistics, environmental health, and public health administration developed. These courses developed into disciplines, programs, and eventually into departments. Also, these early-day schools emphasized and perhaps were held together by core curriculum requirements, and such rigid core curriculum requirements later became a requirement for accreditation by the Committee on Professional Education of the APHA. At this time, there are no rigid requirements or such core curriculum requirements, although a few schools still have such requirements.

The schools have changed, and changed significantly to meet changing problems, priorities, and to effectively utilize the latest techniques and knowledge. All have not changed at the same rate or in the same patterns, but some continuing change is obvious in all of them.

**Changes have been created by changing health problems, changing societal values and expectations, changing health priorities, and the emergence and development of a vast array of health programs, organizations, and institutions.**

**The changes have been created through internal academic decisions, recommendations from graduates, evaluation of the roles and needs of graduates, pressures from employers, gentle guidance from funding sources, accreditation mechanisms, and recommendations from other developments such as the Milbank Memorial Fund Commission for the Study of Higher Education for Public Health, which I will allude to a little later.**

**Not to patronize my audience today, but I have no doubt that students and graduates are now brighter and more mature than ever before. Students are demanding educational relevancy to a greater extent than in the past, and this pressure continues to have some effect on educational curriculum. Students are now wanting to know "more about something" (partly due to pressures from employers), and this has been one of the forces resulting in a greater variety of courses and more specialization in public health education.**

**It is obvious to everyone that the complexity of the total health delivery system is increasing, resulting in needs and demands for different types of personnel. Greater recognition has also been given to the premise that improved administrative skills will improve the effectiveness of the health delivery system. Creative grantmanship has resulted in the development of new, or at least re-titled, programs which are sometimes**

difficult to identify separately from pre-existing or concurrent program tracts: The popularity of planning which many of us are simplistic enough to view as a required ingredient of every-day management, has become a byword, a funding mechanism, and a rationale for developing scores of new courses relating to health planning. Many schools have broadened their definitions and perspectives of the environment from the traditional environmental health perspective to a more encompassing ecological viewpoint, and this has also resulted in changes in curriculum.

The changes in health problems which have been accompanied by changes in curriculum include the decrease in communicable disease as a major cause of death; the aging of our population with associated increase in a multitude of chronic disease; changing life-styles such as lack of exercise, obesity, smoking and social stresses with their implications for public health; increased recognition of the relationship between environmental pollutants and stresses in terms of cancer, heart disease and possible genetic effects. The increasing realization that the best answer to public health problems lies in prevention is having and will have an effect on changing public health curriculum.

Fragmentation, specialization, and multiplicity of courses and programs that have occurred in public health curriculum, have to some extent, obscured the common and overriding purposes of schools of public health. Examples can be found where a given school may offer specialized courses and programs in hospital administration, public health nursing administration, public health administration, medical care administration, and maternal and child health administration. Each of these may be the responsibility of a particular faculty group defending and promoting their own fiefdoms. This pattern exists despite the obvious commonality of principles involved in each of these. To some extent, this may have also been created by creative grantsmanship.

Awarding different degrees is similar to the foregoing. Sometimes the difference between the requirements for different degrees is difficult to discern. The matter of educational objectives, educational out-puts, or behavioral objectives continues to be controversial and viewed from different perspectives. Accrediting agencies increasingly seem to zero in on the alleged need for educational objectives as a basis for evaluating the institution and granting accreditation. Some educators properly feel there is a great potential for abuse of such objectives by faculty, administrators, and accrediting groups. Like developing magic requirements for numbers of books, laboratory space, or numbers of qualifications of faculty, educational objectives are sometimes viewed as something that is easy to evaluate, get a handle on, and impose. This has sometimes resulted in a chaotic move to mass produce such objectives which may be artificial, irrelevant, and of little value. Objectives do provide a useful tool for improving the educational process when properly utilized as a tool and a means to an end rather than an end unto themselves. Like management by objectives, educational objectives may have the effect of precluding those extremely significant educational opportunities which are not formally part of course design, intent, or prescription. This probably still leaves a middle ground for the utilization of a balanced approach to defined and undefined objectives. Perhaps educational objectives are more adaptable to skills than to the all-important matter of developing a public health philosophy. At any rate, I would suggest that the educational objectives or out-puts must be used in such a manner as to provide direction, but still allow for flexibility and creativeness regarding individual needs,

And while I am on the subject of accreditation, I should note that even after proudly serving as a member of the Council on Education for Public Health, I still have some

reservations about the heralded value of accreditation. The real value lies not in meeting the "letter of the law" in terms of accreditation requirements, educational objectives, etc., but in self-evaluation and peer review. I would hope that any school that has gone through the accreditation process would have gleaned reward from having gone through the process of self-evaluation and peer review.

Actually, I am no longer certain what a school of public health is. In the days of core curriculum and relative autonomy of schools of public health, we all thought we knew what a school of public health was. New patterns are developing which make one wonder. It is within the realm of possibility for an institution to be accredited as a school of public health and, perhaps (as an example), specialize only in one program such as health administration, epidemiology, or environmental health. I do not mean to indicate that that is desirable, however. Also, it must be admitted that, like the incident in "*Alice in Wonderland*," a school of public health is what it says it is. The University of South Carolina, for example, has a new school of public health with an extremely limited faculty that relies almost exclusively on utilizing the offerings from other components of the institution.

Other changes have been created by the necessity to prepare personnel for roles in health care as well as preventive programs. This is just another example of the fact that the diversity of health programs and organizational arrangements dictates greater variety in approaches; and curriculum.

**Other institutions are considering or developing external degree programs. Some public health educators are almost rabid in their resistance to this approach, while others are obviously promoting such external degree programs.**

**There has, no doubt, been changes in greater cooperation with, and utilization of, components of the academic institution outside the schools of public health, such as public administration, political science, law, engineering, social work, and education. This cooperative approach seems to be well-received by committees which recommend distribution of funds for public health education.**

**The Draft Report of the Milbank Memorial Fund Commission for the Study of Higher Education for Public Health deserves some specific comment. This body was charged with the tasks of reviewing the relevance and effectiveness of educational efforts preparing professional workers for public health activities, and suggesting improvements. The draft report has already been the subject of considerable disagreement, controversy, and debate. Perhaps schools of public health have been a little overly paranoid and defensive, but it is equally possible that some of the Commission's recommendations are inappropriate. I do not find that the Commission appropriately represented the interests of the schools of public health, but do feel that many of the Commission's findings are at least worthy of constructive discussions.**

**The Commission acknowledges public health education outside schools of public health and claims that such training is just as good and less expensive than that offered by schools of public health.**

I will not take the time to discuss all of the Commission's recommendations in detail, but do wish to allude to certain of them. The report expresses concern regarding the alleged lack of "superior" public health personnel, and recommends that schools of public health concentrate on training such personnel. The report further suggests a reorganization of schools to provide separate education for such top-level administrators and policy makers, and notes that the training of entry and lower level personnel should be separate but could also be in the schools of public health. The Commission also recommends that schools of public health should admit only people with a prior graduate degree or at least three years experience. The report notes that "graduate programs" in other schools of the university should assume major responsibility for educating professionals to function at the operating level in specialty fields such as health education, public health nursing, and health and hospital administration.

The report also recommends that: "It is obligatory for all institutions higher education for public health to structure their curricula on the knowledge base for public health which combines the content of many cognate fields, such as the clinical, biomedical, environmental, and social sciences with the three elements central and generic to public health.. These three are the central sciences of public health (epidemiology and biostatistics), the history and philosophy of public health as a distinct practice, and the principles of organization and administration of public health. This knowledge base may be modified with changes in techniques or in the nature and scope of health problems, but an approximate mix of its central elements with selected cognate fields is crucial to any program of education for public health."

**Another recommendation proposes that: "Every school of public health should have a clear statement of its commitment to education for executive functions in public health, to training of biostatisticians and epidemiologists, and to advanced training for executive functions in a specialty of public health. This statement must have the concurrence and support of the university administration."**

**Still another proposed that: "The schools of public health should provide leadership to develop an expansion of alternative means of training manpower for the field and should serve as a regional resource to consult and participate in academic planning with all graduate programs of higher education for public health within specified geographic areas."**

**The Commission found that, "It would seem logical for schools to organize their departmental structure around the three natural groupings from the knowledge base for public health. Thus there would be one main division consisting of the measurement sciences (biostatistics and epidemiology), another covering all material related to the environment and environmental health sciences, and a third embracing the broad area of the history and philosophy of public health, the dynamics of public policy and the principles and practices of management and administration. Another recommendation which would be difficult, if not impossible, to implement, reads that, "To avoid costly competition and duplication of resources., and to protect and support high standards, there should be mutual recognition by all schools of public health that specified departments are national centers of excellence, no matter where they exist, and all doctoral training should be given only at these centers."**

**Other recommendations include: "Educational institutions should develop reciprocal relationships with health agencies and community organizations to bring greater realism to the classroom and academic expertise to the field, and should solicit and respond to continuing curricular input from them."**

**"Faculty members in schools of public health should undertake periodic, if not continuous, formal responsibilities in the operation of community health services relevant to their areas of academic activity."**

**"Supervised programs of field experience in conjunction with academic activity must be an integral and major part of every student's education for public health responsibility:"**

**"Educational institutions preparing people for public health should expect faculty members to serve as informed advocates of effective health policies, programs and practices, and firmly support them even if such advocacy becomes controversial."**

**"Recognized centers at American schools of public health should continue to train foreign nationals but only in those areas of specialization for which appropriate education is not available in their home or other nearby countries. These centers should also carry out a systematic program of faculty exchange and collaborative research with foreign institutions."**

**"American students in public health and the other health professions should be given an international frame of reference to broaden professional perspectives to counteract provincialism through comparative analysis."**

**"Programs for the training of foreign nationals must give adequate consideration to the particular cultural, organizational, and socioeconomic needs of the individual student and/or nation."**

**Although I have referred to only part of the Commission's recommendations, I highly recommend reading the entire report. Whether one agrees or disagrees with the recommendations, it provides serious food for thought and will undoubtedly have some impact on changing public health curriculum.**

**Another recent report which is certainly worth mentioning is the Report on Survey of Graduates (1969-73) of the Tulane School of Public Health and Tropical Medicine, This report is exhaustive in detail and lengthy, but does provide one of the first reports based on a survey of graduates of a school of public health. Perhaps a few references to its findings are in order. The survey asked the graduates, "What specific valuable learning experiences in the school of public health proved to be of particular value to you in meeting the demands of your job?" The largest number of respondents referred to learning experiences in the area of administration and management, and the next numerous were citations in the area of epidemiology and biostatistics. Another interesting question, however, asked, "in retrospect, what else would have been valuable in meeting the demands of your job?" To this, the most numerous were citations of administration courses, followed by environmental health, then biostatistics, education-communications, epidemiology, and mental health.**

**The Tulane respondents also cited a need for "more applied, more practical, and/or more field experience," and "more experience in planning and development." There was also a relatively large reference to "political science, legislative process, and grant and contract proposals."**

**Respondents also indicated the next useful learning experiences and cited the administrative-managerial, area, and biostatistics on the basis that the specific courses had not been relevant and/or current.**

**Ninety-six% of the respondents were currently employed in health-related jobs, but only 54% believed that their current jobs were directly related to their school of public health programs. Nearly one-half of the respondents were employed in jobs which were primarily administrative-managerial in nature and, for all respondents, administration-management emerged as the single most important job function.**

**I would hope that a comprehensive summary of this survey will be published or otherwise made available in the near future.**

**Schools of public health will either continue to change or their functions will be absorbed by their competitors. I feel that the schools are rapidly changing in response to some of the forces previously mentioned, and in response to the need for new knowledge and expertise in solving various health problems. I hope that schools continue to be flexible and creative in developing personnel to solve health problems rather than merely functioning to produce personnel for current and projected health-related jobs. Well-trained personnel will not assure resolution of all public health problems, but resolution be impossible without them.**