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PUBLIC HEALTH SPECIALISTS: OCCUPATIONAL DESCRIPTION IN TURKEY

Zafer Oztek

MD, Hacettepe University Faculty of Medicine Department of Public Health

Public health specialists: occupational description in Turkey

Public health encompasses all health problems and factors related with these problems and with the planning and implementation of activities to improve the health status of communities. Therefore, the public health field is universal as a science, but its implementation (activities) depends on the local problems specific to each community. Public health is a field of many sciences and should be open to people representing a wide variety of scientific backgrounds.

Since the factors affecting an individual's health are many and varied, public health professionals should be aware of and equipped to deal with all these factors and possible health risks. Therefore, this wide range of community health problems should appear in the training programs of public health professionals.

Health, social and natural sciences are the basic sciences of public health. Upon this knowledge, the trainees learn "epidemiology and biostatistics", which are the main diagnostic sciences of public health, and then the common existing and potential health problems as relates to environmental, occupational, reproductive, and child health, community nutrition, infectious and chronic diseases, geriatrics, mental health, disaster medicine, and accidents, etc. The public health professional, in order to effectively control a community's health problems, should also be educated in health care management and be able to conduct health education programs.

Turkish Society of Public Health Specialists has documented the job description and listed what public health specialists should know and be able to do.

According to this document: "The tasks of public health specialists are to determine the health status of the people, the existing and potential health problems, their reasons, and the health needs of the community; to develop public policies and strategies for solving these problems; to monitor and assess public health problems; to participate in the implementation of these programs; and to act as managers at all levels of health services. In realizing these tasks, public health specialists locate the sources of information and collect and analyze data. Regarding their managing tasks, they conduct planning, organizing, directing, supervising, staffing, coordinating. reporting, and budgeting activities. A public health specialist is directly in research, consultancy, development, the control of epidemics, public health education, health care management, and provision and supervision of preventive and curative services."

Spécialistes en santé publique : la description du métier en Turquie

La santé publique recouvre tous les problèmes de santé et leurs conséquences ainsi que la planification et la réalisation d'action destinées à améliorer la situation sanitaire des communautés. Ainsi, le domaine de la santé publique est universel en tant que science, mais sa mise en œuvre (ses activités) dépend des problèmes locaux spécifiques à chaque communauté. La santé publique est un domaine englobant plusieurs disciplines et elle devrait être ouverte à des personnes issues de formations scientifiques variées.

Du fait de la multitude de facteurs pouvant affecter la santé d'un individu, les professionnels de santé publique devraient en être conscients et prêts à aborder l'ensemble des paramètres et facteurs de risque sur la santé des personnes. C'est pourquoi cette vaste palette des éventuels problèmes de santé d'une communauté devrait faire partie des programmes de formation des professionnels se destinant à la santé publique.

Tout ce qui touche à la santé, aux sciences naturelles et au social sont les disciplines fondamentales de la santé publique. En plus, les étudiants étudient "l'épidémiologie et la biostatistique", qui sont les matières diagnostiques principales de la santé publique. Enfin, ils abordent les problèmes généraux de santé, réelss ou potentiels, liés à l'environnement, à l'activité professionnelle, à la procréation et à la santé de l'enfant, à la nutrition, aux maladies infectieuses et chroniques, à la gériatrie, à la santé mentale, à la médecine d'urgence et des accidents, etc. Le professionnel de santé publique devrait, pour maîtriser efficacement tous les aspects sanitaires d'une communauté, être également au fait du management des soins et être capable de conduire des programmes d'éducation sanitaire.

La Société Turque des Spécialistes de Santé Publique a établi une description des tâches et a dressé la liste de ce que les spécialistes de santé publique devraient connaître et être capables de faire.

D'après ce document, «Le rôle des spécialistes de santé publique est de déterminer le niveau sanitaire des individus. leurs problèmes de santé réels et potentiels, leurs motivations, ainsi que les besoins de santé de la communauté; Ils ont à développer des politiques publiques et des stratégies pour résoudre ces problèmes après les avoir contrôlés et évalués; Ils doivent participer à la réalisation de ces programmes; et agir comme managers à tous les niveaux des services de santé. En réalisant ces tâches, les spécialistes de santé publique localisent les sources d'information, recueillent et analysent les données, En ce qui concerne les tâches de gestion, ils conduisent la planification, l'organisation, l'embauche des personnels, la direction, la surveillance, la coordination, le contrôle et la budgétisation des activités. Un spécialiste de santé publique est impliqué directement dans la recherche, le consulting, le développement de programme, le contrôle des épidémies, la formation de santé publique, la direction des soins de santé, enfin la mise en place et la surveillance des services préventifs et curatifs,"

1- Occupational Description of the Public Health Specialist

Despite over a century of professional training, it is still difficult to say that the public health specialty is understood and defined consistently worldwide. This field is often confused with family medicine or hygiene and thus, public health specialists are frequently appointed to clinical departments or laboratories for which they were not trained. The problem of utilizing public health specialists inappropriately has also confused the issue from the trainers' perspective, and is reflected in uncertainty in the job description and in misdirected educational programs in some institutions.

In order to overcome these challenges, an important step would be to become decisive about the tasks and areas of responsibility of public health specialists and to define their list of required knowledge and skills accordingly. With this in mind, the Turkish Society of Public Health Specialists has documented the job description and listed what public health specialists should know and be able to do (1).

According to this document: "The tasks of public health specialists are to determine the health status of the people, the existing and potential health problems, their reasons, and the health needs of the community; to develop public policies and strategies for solving these problems; to monitor and assess public health problems; to participate in the implementation of these programs; and to act as managers at all levels of health services. In realizing these tasks, public health specialists locate the sources of information and collect and analyze data. Regarding their managing tasks, they conduct planning, organizing, staffing, directing, supervising, coordinating, reporting, and budgeting activities. A public health specialist is directly research, consultancy, in development, the control of epidemics, public health education, health care management, and provision and supervision of preventive and curative services."

A public health specialist works as part of a team in health services headquarters (ministries. health directorates. administrative offices of health units, etc.), identifies the health of the community (diagnosing the problems), determines the possible alternative strategies to overcome these problems (preparing a treatment strategy - curing the problems) and contributes to the development of programs in line with the strategy, as decided by the top managerial authority from among the alternatives proposed by the expert (planning the activities). Public health specialists are "policy seekers" and not necessarily "policy makers"; they play a key role in the policy development process and in assisting the policy makers in their decisionmaking. In other words, the public health specialist is an integral part of the management team but does not act primarily as a policy maker.

Public health specialists function like clinicians and conduct, in effect, diagnostic and curative activities. A comparison of their responsibilities is shown in Table 1.

Table 1 Comparison of Clinical and Public Health Specialists

Issues	Clinical Specialists	Public Health Specialists
Working objective	To diagnose and treat the illnesses of individuals	To determine the health- related problems of the community, prevent health problems and promote the health status of the community
Related sciences	Basic medical sciences (anatomy, physiology, etc.) and related medical disciplines	All medical, environmental and social sciences (sociology, anthropology, etc.)
Diagnostic methods used	Anamnesis, physical examination and laboratory analysis	Epidemiological methods
Curative methods used	Medical and surgical therapies	Health education and appropriate heath care
Place of service	Institutions (clinics)	Any location within a community (homes, places of employment, schools, clinics, field, etc.)

Traditionally, clinicians serve the individuals (patients) and diagnose and treat their diseases generally in institutions such as hospitals, dispensaries and clinical departments, utilizing medical and/or surgical approaches. To serve in this capacity, clinicians should possess knowledge of how the body functions (basic medical sciences) and know how to diagnose and treat the diseases of their patients. (See Fig. 1)

Figure 1
Individual Health Instruction: Individual health specialists (clinical specialists) stand on basic medical sciences, search for the somatic and mental problems of the body systems using pathological and other diagnostic methods and cure these problems using medical, surgical and rehabilitative techniques.

DIAGNOSTIC SCIENCES (Pethology, Radiology, Laboratory, etc.) BASIC MEDICAL SCIENCES (Anatorny, Histology, Physiology, Biochemistry, Microbiology, etc.) Phisics Chemistry Biology Mathmatics Social Sciences

Though with some differences, the above activities also pertain to the public health specialists. Like clinicians, public health specialists conduct diagnostic work, but these tasks are undertaken in homes, the individuals' work environment, schools, villages, cities, and in the field. Epidemiology is the main diagnostic tool utilized by the public health experts ⁽²⁾.

Clinicians use biopsy techniques for diagnosis, while public health experts use sampling techniques (biopsy from the community) to identify the health-related problems of a community. Just as clinicians measure blood pressure, palpate the tissues and organs, and analyze radiographs, public health experts use data collection techniques to analyze the health status criteria (morbidity, mortality rates etc.) of communities.

In order to heal his/her patient, the surgeon changes the anatomic and physiologic structure of the patient by means of surgical operations. Similarly, in order to solve the health problems and promote the health status of a community, the public health expert changes the sociologic and anthropological characteristics of the community using "health education" techniques and new strategies of intervention and by providing appropriate health care.

2- Dimensions of Public Health

These tasks and activities are very much in parallel with the concept of public health defined by Dr. Winslow in 1923: "Public health is the science and art of preventing disease, prolonging life and promoting health and efficiency through organized community efforts for the sanitation of the environment, the control of communicable infection, the education of the individual in personal hygiene, the organization of medical and nursing services for the early diagnosis and preventive treatment of disease, and the development of the social machinery to insure everyone a standard of living adequate for the maintenance of health, so organizing these benefits as to enable every citizen to realize his birthright of health and longevity" (3).

As the above statement defines clearly, public health is the science and art of promoting community health. Public health encompasses all health problems and factors related with these problems and with the planning and implementation of activities to improve the health status of communities. Therefore, the public health field is universal as a science, but its implementation (activities) depends on the local problems

specific to each community. In other words, public health professionals are trained more or less similarly in all countries, but the local health-related problems they encounter will differ. For example, a public health professional in Africa may deal primarily with acquired immunodeficiency syndrome (AIDS), while a similar expert in the Scandinavian countries may be concerned mainly with issues related with geriatrics. Public health is universal as a science, but local in practice.

Public health is not only a branch of medicine; it extends far beyond that as a science and practice related with both medicine and many non-medical sciences and activities. A better and more effective way of designing and implementing public health programs is to work in a team comprised of individuals of varied backgrounds who are trained and experienced in public health science and practice. Public health is a field of many sciences and should be open to people representing a wide variety of scientific backgrounds.

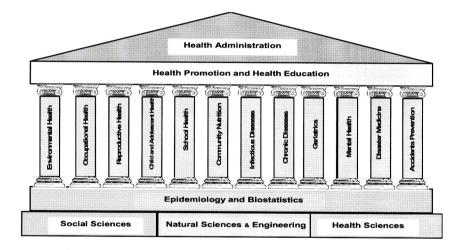
The field of "public health" is often confused with "family medicine". Family health is a clinical medical field and "family physicians" deal mainly with individuals and their pathologies. Public health, on the other hand, is a multidisciplinary field, and public health specialists deal with the health problems of communities and aim to promote the health status of the communities they serve.

3- Knowledge and Skills of the Public Health Specialist

Since the factors affecting an individual's health are many and varied, public health professionals should be aware of and equipped to deal with all these factors and possible health risks. Therefore, this wide range of community health problems should appear in the training programs of public health professionals. Health, social and natural sciences are the basic sciences of public health (Fig. 2). Upon this knowledge, the trainees learn "epidemiology and biostatistics", which are the main diagnostic

sciences of public health, and then the common existing and potential health problems as relates to environmental, occupational, reproductive, and child health, community nutrition, infectious and chronic diseases, geriatrics, mental health, disaster medicine, and accidents, etc. The public health professional, in order to effectively control a community's health problems, should also be educated in health care management and be able to conduct health education programs.

Figure 2
Public Health Instruction: Public health stands on basic sciences and epidemiology, the search for community health problems and the resolution and monitoring of these problems using educational and administrative techniques



In order to guide the universities and trainers, the Turkish Society of Public Health Specialists has listed the required knowledge and skills of specialists. This document covers a long list of items regarding public health-related issues, namely, social sciences for health, epidemiology, demography and health, environmental health, occupational health, public health laboratory, community nutrition, infectious diseases, disasters and accidents, women's health and reproductive health, child health, chronic diseases, health economy, health education, and health administration (1).

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