

Special Article

Comparison of health management programs in Turkey and Greece

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Abstract

Introduction: Health systems worldwide become more complex and costly, placing additional demand on health services managers. Therefore redesign of health services management education is on the agenda around the world.

Aim: The aim of this study was to compare curriculum of the undergraduate and graduate programs on health management in Turkey and Greece.

Method: Programs at Ankara University in Turkey, at Technological Educational Institute of Athens, and at Technological Educational Institute of Piraeus in Greece are taking into account as a sample for the comparison of curriculum. A theoretical framework developed by the Association of University Programs on Health Administration to evaluate the educational programs on health management has been used for comparison. The comparison is based on the evaluation of the weight of three basic areas: management theories, health sector, and getting skills by training, project, seminar, homework, and written examination. The study also assesses the different practices about the educational systems like number of terms in one year period, language used for the education, and educational techniques. Employment opportunities are also discussed.

Results: The study provides that undergraduate and graduate programs at Ankara University have more similarities in general than the differences with the undergraduate program at Technological Educational Institute of Athens and graduate program at the Technological Educational Institute of Piraeus in terms of the curriculum, the duration of the education and the language of the education.

Discussion: More studies are needed for the comparison of the programs with other programs both in Europe and around the world.

Key words: Health services management, health services management education, Turkey, Greece

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Introduction

Health systems worldwide become more complex and costly¹⁻³, placing additional demand on health professionals. However professional education on health has not kept pace with these challenges, largely because of fragmented, outdated, and static curricula. Therefore, redesign of professional health education is necessary⁴.

Redesign of health services management education is on the agenda in Turkey since the beginning of 2000. When the Turkish Council of Higher Education decided not to accept students for Health Education Faculties in 2002, the health management education which was given in these faculties started to be discussed in various dimensions. The focal points of the discussions were constituted; i) should health management departments give undergraduate or graduate level education? ii) should health management departments take part in social sciences faculties/institutions or health sciences faculties/institutions? iii) how the contents of the programs should be? iv) what might an ideal curriculum for health services management include?

Health management education is given pre-undergraduate, undergraduate and graduate levels in Turkey (Table 1). Health management departments take part both in social science faculties/institutions and health sciences faculties/institutions. Two Health Education Faculties were restructured as Faculty of Health Sciences in 2006 and lot of health sciences faculties have been founded since then. Health management departments were taken place in these faculties mostly. Some of them were founded under the social sciences faculties or attached to them. Another important improvement experienced in that period was the attachment of the nursing and midwifery departments to the health sciences faculties. These departments were traditionally taken part under the vocational high schools. In addition new departments such as social

work, nutrition and dietetics, and child development have been founded under these faculties.

The importance of appropriate education for health services managers and redesign of the educational programmes according to changes in health systems are widely under discussion around the world⁴⁻¹⁴. There is widespread thought that health services management education is needed now more than ever. In seeking to answer the questions of the discussions on health management education in Turkey, a need for the investigation of the similar programs both in Turkey and in European Countries (EU) was come up. Firstly, a PhD thesis, namely 'effectiveness of health management departments of universities that train health managers in Turkey' was prepared by one of the staff in the Department of Health Management Faculty of Health Sciences University of Ankara in 2004¹⁵⁻¹⁶.

Secondly, as management education for health services managers is important for improving systems performance and should offer a broad curriculum, Department of Health Management Faculty of Health Sciences University of Ankara was implemented a Leonardo do Vinci Project during the period of 2007-2008, name of which was 'Better Health Managers for Better Health Systems'. The Project was given opportunity to academicians from the Department to visit, to observe and to investigate the similar programs deeply in United Kingdom, in The Netherlands, and in Greece. During the visit to Greece, the similarity of the problems about the education on health management and the similarity of the problems on the employment opportunities were drawn attention in 2008. This study has been stemmed from the idea that the comparison of the health education programs in Turkey and in Greece might contribute to the health management field and give opportunities for the further joint researches. A similar study namely 'Comparative Evaluation of the

Health Management Programs at the Ankara University with the Programs in Greece and The Netherlands' was presented at the Congress on Health and Hospital Administration held in Antalya from 22 to 26 October 2008¹⁷.

Objective and Method

The study aimed to compare the undergraduate and graduate programs on health management in Turkey and in Greece. Undergraduate and graduate programs at the Department of Health Management of Faculty of Health Sciences of Ankara University and undergraduate program at the Health and Welfare Units Administration of Faculty of Management and Economics of Technological Educational Institute (TEI) of Athens and graduate program of TEI of Piraeus have been used as sample. The reason for selection of the program in TEI of Athens is that it is the oldest undergraduate program within two in Greece (the youngest one is at the TEI of Kalamata). In addition the EU Leonardo program mentioned above was given opportunities to get detailed information from the academicians from both the TEI of Athens and TEI of Piraeus during the visit in 2008.

A theoretical framework has been used for the comparison of educational programs. The theoretical framework has based on the comparison of the weight of three principal area determined by the Association of University Programs on Health Administration (AUPHA) for the content of the education programs as typical program of study on health management. The first area is the study of management theory, concepts, and skills. Programs are expected to teach students leadership, financial management, economics, law, organisational behaviour, quantitative management, and planning. The second one is the study of the healthcare industry including epidemiology, health and human behaviour, and medical care organisations. In the third area students demonstrate that they have integrated the course material by applying management

concepts to the healthcare industry in a major project, paper, or exam¹⁸.

In addition, the study consists of the evaluations of the similar and different practices on education systems as well as employment opportunities. Similar and different practices on education systems include the semesters and languages of the educational programs, and different educational methods.

Health Management Education in Turkey and Greece

General Information

The knowledge, skills, and capability of the health managers who get various positions in health institutions, the management of which are the most complex and difficult naturally and consume more sources more and more have been changing rapidly ever more. The need of the professional management of the health institutions by the professional health managers who undertake extensive responsibilities to parallel the organisational size and complexity of the health institutions and systems have been recognised more than a century and the introduction of the undergraduate and graduate programs under the health and social departments of the universities has been followed.

The first program on health management namely 'Health Management Graduate Program' was introduced in the Chicago University in United States (US) in 1934. According to World Health Organisation (WHO), the first program in Europe was introduced as graduate program in 1960s¹⁹. Graduate programs are widespread around the world nowadays, while the undergraduate programs are also widespread in the US. According to AUPHA, there are 470 undergraduate and graduate programs, 60% of which are in the US around the world in 2003-2005¹⁸. AUPHA and Commission on Accreditation Healthcare Management Education (CAHME) which are accredited these programs have been operating in US since 1948. The coordination and

professional organisation of these programs in Europe have been done by the European Health Management Association (EHMA).

Health Management Education in Turkey

Parallel to the introduction in Europe, the health management education in Turkey was started in 1963 at the Health Administration Vocational High School belonged to Ministry of Health (MoH). Then in 1970, the Health Administration Vocational High School was set up under the Hacettepe University with a graduate program. In 1975, undergraduate program was started at this School. In 1981, both schools combined under the Health Administration Vocational High School of Hacettepe University and continued its education at the undergraduate, graduate and doctorate level until 2006. In 2006, in the line with the discussions about the education on health management in Turkey mentioned above, Department of Health Administration under the Health Administration Vocational High School was attached to the Faculty of Economics and Administrative Sciences of Hacettepe University.

Foundation period of other health management departments in Turkey is quite different. After a long time from the foundation of the first one in 1960s, two health management departments were set up under the Health Education Faculties belonged to Ankara and Marmara Universities in 1995. One of the aims of these departments had graduates from Gevher Nesibe Health Education Institutes attached to MoH, given three-year education on health management, and closed after the foundations of Health Education Faculties, completed the undergraduate program. The second aim was to educate contemporary human resources on health management. Some reasons the first aim was discontinued after a few years. As it is mentioned above Health Education Faculties were changed their names being Faculty of Health Sciences since 2006 and health management

departments continue their education under new faculties.

Other development on foundation of health management departments was affected some other departments like nursing and midwifery which have desire to take place in a faculty for very long time. Faculties of health sciences were found to be the best place for the nursing and midwifery departments. Actually new faculties of health sciences were mainly set up due to the pressure from these departments. As there must be at least three departments under a faculty roof according to Turkish Law and health management departments are not necessitate expensive technical infrastructure, some faculties of health sciences' preference was in favour of health management departments.

On the other hand, there is an increase in the faculty of health sciences and departments of health management recently. One of the reasons of this increase is the disharmony between the demand and supply of the education at the university level in Turkey. Only one third of the people who want to continue formal university education can enter a university program. Nowadays the government open or support to be opened (privately) more universities and departments increasing the quotas in order to meet demand. In addition, the increase in the faculties of health sciences and departments of health management in recent five years is also related to the health reforms in Turkey. Started with the '24th January Decisions' after the military coup in 1980 and fully implemented by the conservative Justice and Development Party since 2003, the neo-liberal health reforms are supported and widened the private sector in health care which require and increase the demand of professional health managers²⁰. For example, with coming up a bill on 'Public Hospitals Corporations', the demand and supply of the graduate programs on health management are increased. Another reason of the increased in supply is because of the increase in the private universities. Today nearly half of the

graduate programs on health management are under the private universities.

In 2009, there are totally fifty-one programs on health management at thirty-seven universities most of which belongs to public universities, including fifteen pre-graduates, fourteen undergraduates, seventeen graduates, and five doctoral programs in Turkey (Table 1). The main objectives of the programs are; to contribute health management science in the light of

the contemporary and universal values and to apply the knowledge on this field to health system, health services, and health institutions' organisational process; and to educate health managers who are deluxe by providing academic and professional development opportunities effectively for the delivery of quality, efficiency, effective health services for the future of the country.

Table 1 Study Programs on Health and Hospital Management in Turkey (2009)

Universities	Pre-undergrad.	Undergrad.	Graduate (MSc)	Graduate (PhD)
Acibadem University		+		
Afyon Kocatepe Univ.	+	+		
Ahmet Yesevi University			+	
Aksaray University		+		
Ankara University		+	+	
Anadolu University	+			
Arel Univ. (Istanbul)	+			
Atılım University			+	
Aydın Univ. (Istanbul)	+			
Bahcesehir University			+	
Baskent University		+	+	
Batman University	+			
Beykent University			+	
Bilecik University	+			
Corum Hittite University	+			
Cumhuriyet University		+		
Dokuz Eylul University	+		+	
Gazi University			+	+
Gaziosmanpasa Univ.	+			
Gelisim Found. (Istanbul)	+			
Gulhane Army Med.Acad.			+	+
Hacettepe University		+	+	+
Hacettepe University*			+	+
Halic University			+	
Istanbul University			+	
Istanbul Bilgi University	+			
Istanbul Bilim University	+	+		
Karamanoglu Mehmetbey Univ.	+			
Kırklareli University	+			
Kırıkkale University		+		
Lefke University (KKTC)		+		
Marmara University		+	+	+
Okan University	+		+	
Osman Gazi University		+		
Selcuk University		+	+	
Suleyman Demirel Univ.		+		
Yeditepe University			+	
TOTAL	15	14	17	5

(*) At the Department of Public Health at Medical Faculty.

(**) At the Department of Health Institutions Management at Medical Faculty.

Health Management Education in Greece

Education on health management in Greece started around forty years ago like Turkey. There are two undergraduate programs on health management in Greece. The first one is at TEI of Athens and the other one is at TEI of Kalamata.

TEI of Athens Faculty of Management and Economics has undergraduate program at the Department of Health and Welfare Units Administration more than 35 years. The Department of Health and Welfare Administration was renamed as such from the relevant Department of Hospital Administration and has been operating in its present form since 1983. TEI of Kalamata School of Management and Economics has similar undergraduate program at the Department of Health and Welfare Unit Management since 1990²¹.

There are three graduate programs on health management in Greece. One of them is the 'Health Services Management' program conducted by TEI of Piraeus with the collaboration of University of Piraeus²². The second of them is 'Health Services Administration' program at National School of Public Health. The third one is the 'Organisation and Management of Health Services - Information Technology for Health' program conducted jointly with the Faculty of Nursing and Informatics and Telecommunication at the National and Kapodistrian University of Athens, the General Faculty of Aristotle University of Thessaloniki, Faculty of Information Technology and Telecommunication at the Athens University of Economics and Business, School of Medicine at the University of Ioannina, Faculty of Production Systems Technology at the University of Piraeus²³. There is not a doctoral degree program on health management in Greece.

Undergraduate Programs in Turkey and in Greece

Undergraduate Program of Department of Health Management Faculty of Health Sciences University of Ankara

Department of Health Management was one of the departments of Faculty of Health Education at Ankara University. It was founded in 1994 and started its education in the academic year of 1996. As mentioned before the program has been continued under the Faculty of Health Sciences since 2006. The aim of the program is to train qualified and professional health manpower to plan, to apply and to evaluate national and international researches of defining and improving Turkish health background. Students are educated to obtain the needed knowledge and skills to manage, operate, plan and audit every health institution. In addition, students who have master's diploma in health management field can make academic studies²⁴. The education period of the program is four years and every year has two semesters. The language of the education is Turkish.

It has been seen from the Table 2 that students undertake fifty-nine courses (except Turkish Language, History of Revolution, and Physical Education/Music/Painting) thirty of which are related to management theory, concepts, and skills, twenty-nine of which related to health sector. Students undertake one-month course of training in the summer time after the sixth semester and one-semester course of training at the eighth semester. Students must undertake a seminar at the seventh semester. The total national credit of the program is 172, total credit based on ECTS is 246 excluding the credit of the course of trainings.

Table 2 Undergraduate Study Program of Department of Health Management Faculty of Health Sciences University of Ankara

1st Year* 1st Semester	2nd Year** 3th Semester	3th Year 5th Semester	4th Year 7th Semester
Accounting-I Economics-I Mathematics	Health Services Management Statistic-I Social Policy	Health Information Management-II Health Economics Hospital Organisation and Management-II Decision Making Methods of Health Institutions-I Financial Management of Health Institutions-I Speaking and Writing in Foreign Language Elective Course	Research Methods Health Law Marketing of Health Institutions Comparative Health Systems
Business Administration	Organisational Behaviour	Health Institutions-I	Health Policy
Public Health	Fundamental Concepts of Law	Elective Course	Seminar
Computer Office Programs	Health Sociology	Elective Course	Professional Foreign Language-II (English) Elective Course Elective Course
Ataturk's Principles and Revolution History Turkish Language Fundamental Foreign Language (English)	Cost Accounting in Health Institutions Basic Foreign Language	Elective Course	
2nd Semester	4th Semester	6th Semester	8th Semester
Behaviour Sciences	Public Finance	Human Resources Management	Strategic Management in Health Institutions Health Institutions Management Field Study Foreign Language for Working Life (English)
Management Science	Epidemiology	Decision Making Methods of Health Institutions-II Business Law	-
Business Mathematics	Health Information Management-I	Health Planning	-
Accounting-II	Production Management of Health Institutions Administration Law	Quality Management of Health Institutions Financial Management of Health Institutions-II Professional Foreign Language-I (English) Elective Course	-
Economics-II	Hospital Organisation and Management-I Statistic-II	Elective Course	-
Medical Terminology	Usage of Computer Package Program Basic Foreign Language (English)	Elective Course	-
A.P. Revolution History*			
Turkish Language-II			
Foreign Language (English)			
ELECTIVE COURSES			
For 3rd Year		For 4th Year	
Labour Law	Occupational Health and Safety	Home Care Services Management	
Health Criteria's	Health Insurance	Disaster and Crisis Management	
Public Relations	European Union and Health Policies	Quality Evaluation and Methods	
Human Relations of Management	-	Ethics of Health Management	

*There is one elective course from Physical Education/Music/ Painting in each semester in the first year.

** There is one month practical training in the summer time after the sixth semester.
Source ²⁴.

Some of the positions that graduates can find jobs are as follows: any MoH organisation at the local and central level; public or private health institutions; social security institutions and social insurance agencies; private institutions and NGO's operating in health services at different level; similar departments at the universities and departments that have health management courses; in the organisation of armed force (as a health officer); pharmaceutical and medical equipment companies; and health units of the media.

Undergraduate Study Program of TEI of Athens Faculty of Management and Economics Department of Health and Welfare Units Administration

The Department of Health and Welfare Units Administration consists of two programs of study: 1. Health and Welfare Units Administration, 2. Law and Economics.

The department's administrative bodies are: the General Assembly and the Board of the Department. Members of both the General Assembly and the Board consist

of educational staff as well as student representatives. The General Assembly and the Director of the Group are responsible for the two programs of study.

Studies at the Department of Health and Welfare Units Administration is organised based on semesters. The duration of the semester is 15 weeks. Both the Law and Economics and Health and Welfare Units Administration programs of the study include the courses at Table 3. Most of the courses are obligatory. Students from Department of Health and Welfare Units Administration have to take courses which are fundamental courses on the management and economics

from Law and Economics program in the first two year period. They have to take courses which are related to field from Health and Welfare Units Administration program in the last two year period except the second semester in the fourth year. From the third until the seventh semester, two elective courses are offered each semester and students can choose to sign up for one of the two. Every course includes one or more of the following teaching methods: theoretical knowledge, seminars, practical and laboratory exercises and essays.

Table 3 Undergraduate Study Program of TEI of Athens Faculty of Management and Economics Department of Health and Welfare Units Administration

1 st Year 1 st Semester	2 nd Year 3 rd Semester	3 rd Year 5 th Semester	4 th Year 7 th Semester
Mathematics for Economists Microeconomic Analysis General Accounting	Labour Law Elements Health Units-I Org. and Administration Office Automation	Economic Mathematics Health Economics Health Units-III Org. and Administration Health Information Systems Health and Welfare Units Law	Social Policy and Health Services Planning Health Service Total Quality Management Research Methods and Senior Students Seminar English Language-II Terminology Management of Medical and Technological Equipment* Health Promotion*
Introduction to Civil Law Statistics	Cost Accounting Services Marketing	Communication Relations* Sanitation and Safety in Work-Ergonomics*	-
Social Protection Systems -	Public Economy* Administrative Law*	6 th Semester Public Sector Management Financing and Evaluation of Health Services Welfare Units Organ. and Administration Managerial Administrative Practice Health Sociology and Biomedical Ethics* Public Sanitation and Epidemiology* -	8 th Semester Dissertation (6 months) Practical Training (6 months) - - -
2 nd Semester Macroeconomic Analysis Introduction to Business Administration Commercial Accounting Commercial Law Elements	4 th Semester English Language-I Terminology Statistical Data Processing Health Units-II Org. and Administration Human Resource Management		
Introduction to Computer Science-I Health Systems -	Social Security Law Economic Planning* European Union Law and International Organisations*		

* Elective Courses

Source: Special written note provided by Professor Dr. Sotiris Soulis, Director of Faculty of Management and Economics of TEI of Athens during the meeting of ATINER at 29th February 2008 for the EU Project.

New subject areas have been added to the existing program while the old ones have been revised. The revision of the curriculum based on the student needs as well as the health market.

The Department's course of study focuses on the implementation of new scientific methods on the management of health and welfare systems and social security organisations. Course subjects include law, economics, accounting, statistics, organisational issues, management, auditing, etc.

The main goal of the program is to create capable executives and managerial staff that can compete in the job market and adapt to the constantly changing conditions of the health management world. Students are provided with the theoretical background as well as practical experience in order to obtain a well - rounded perspective of their chosen field. The program gives to graduating students the opportunity to design and implement social planning programs for public and private hospitals, welfare units and social security organisations so as to help them operate effectively and efficiently.

The duration of the program is based on an eight semester course of study, seven of which focus on theoretical teaching and laboratory practice and the last of which focuses on practical training in productive areas, of the public and private sector with the 10 ECTS credits (Table 3). The first four semesters includes courses only on the management and economics. The fifth, sixth, and seventh semesters have courses on health sector. There is seminar at the seventh semester with the 7 ECTS credit. In order to complete the program, students select and develop a 20 ECTS credit dissertation topic under the supervision of the teaching staff. There are 28 courses on management and 17 courses on health field. Students have to take 40 of them as every semester from the third until the seventh offers two elective courses, however students can choose to sign up for one of the

two. The language of the program is Greek. There is a significant demand for the program and 70% of the graduates can easily find jobs usually as an assistant manager in hospitals.

Graduate Programs in Turkey and Greece

Graduate Program of Department of Health Management Faculty of Health Sciences University of Ankara

Department of Health Management was founded in 1994 under the Faculty of Health Education. Health Management Graduate Program has started in 1997-1998 academic year and still continues under the Faculty of Health Sciences since 2006. There are two master programs one of which is with thesis the other one is without thesis²⁴.

The program with thesis aims to give ability to students to access the scientific information and evaluate and interpret it by preparing a scientific thesis. The duration of the program is four semesters. Students have right to get additional two semesters if they want. The minimum credit is 24 the maximum one is 36 and students have to take at least one seminar during the course terms which is the first two semesters. In order to complete the program, students select and develop a thesis under the supervision of the teaching staff. The students whose thesis considered successful get the 'Science Expert' title.

The program without thesis aims to provide deeply information about health management and show how to apply it to the field. The program consists of the courses between the credits of 30 - 42 and a term project. The duration of the program is maximal 6 semesters. The preparation, acceptance and viva of the term project are similar to the master thesis. Successful students get 'Science Expert' title.

Both the programs with and without thesis have 5 obligatory health field courses, 20 elective health and 5 elective management field courses and 1 seminar (Table 4).

Table 4 Graduate Study Program of Department of Health Management Faculty of Health Sciences University of Ankara (With and Without Thesis)

OBLGATORY COURSES		
Health Services Management Organisational Behaviour in Health Institutions	Research Methods in Health Services Management Knowledge and Control Systems in Health Services Management	Health Economics
ELECTIVE COURSES		
Primary Health Care Services and Their Management	Quality Measurement and Monitoring	Inspection in Health Institutions
Human Resource Management in Health Institutions	Disaster Management in Health Services	Human and Patient Rights
Woman and Child Rights	Human Relations in Health Management	Usage of Statistical Package Programs
Sampling Methods	Stress Management	Important Health Problems
Health Policies	Health Services for Elderly People and Planning	Health Promotion
Public Health	Education Management in Health Field	Health Services Planning for Mentally Ill People
Biostatistics for Health Management	Insurance in Health Services	Seminar Preparation Methods for Health and Hospital Management
Management Accounting for Health Institutions	Health Services Planning	Organisational Development in Health Institutions
Total Quality Management in Health Services	Clinical and Professional Quality	

Graduate Program of TEI of Piraeus in Greece

Management and Economics Faculty of TEI of Piraeus has conducted graduate program on Health Services Management with the collaboration of Piraeus University. The program consists of 4 semesters in 2 years period. In the first semester students with first degree in business or economics have to take courses on health science while students with first degree in health science

have to take courses on business or economics (Table 5). A scientific committee decides who will get which courses. In other semesters the courses indicated in Table 5 are taking. At the last semester only 2 courses are taking and a thesis is preparing. There is an opportunity for starting to thesis at the 3rd semester. The language of the program is Greek.

Table 5 TEI of Piraeus Health Services Management Graduate Program

Core Courses		
1st semester	Students with first Degree in Business or Economics	Students with first Degree in Health Science
	Modern Treatment of Human Diseases	Principles of Economics
	Public Health and Epidemiology	Principles of Accounting – Cost Accounting
	Health Systems	Mathematics of Finance
	Social Policy and State Welfare	Statistical Methods
2nd semester	Marketing and Health	
	Human Resource Management	
Two electives from four courses	Business Strategy	
	Quantitative Methods	
	Financial Analysis	
	Total Quality Management	
3rd semester	Health Economics	
	Evaluation of Health Investment	
Two electives from four courses	Legal Framework and History of Health Systems and Social Welfare in Greece and the European Union	
	Insurance Schemes and Organisations in Greece	
	Health Policy and Social Welfare in Greece and the European Union	
	Secondary Health Systems	
4th semester	Information Systems	
One elective from three courses	Organisation and Management of Health Services	
	Financial Resource Management in the Health Sector	
	Inventory Control and Purchases in the Health Sector	

Source: ²²

The program has 14 courses: 9 are obligatory and 5 are elective courses. Students can choose 5 from 11 elective courses.

Evaluation, Results and Discussion

When the undergraduate and graduate programs on health management in Turkey and Greece are investigated according to the weight of three fundamental areas that stated in the method of the study namely management area, health area, and demonstration that students have integrated the course material by applying management concepts to the healthcare industry in a major project, paper, or exam, some similarities and differences are stand out.

Similarities between the undergraduate programs on health management in Turkey and Greece

The undergraduate program at Ankara University is similar with the undergraduate program at TEI of Athens in terms of the names and contents of the courses and the distribution of courses according to the different areas. However the program at Ankara University has more courses. The program at TEI of Athens has 45 courses and 40 of them are obligatory. On the other hand the program at Ankara University has 59 courses (except seminar, two History of Revolution and two Turkish Language courses) and 6 of them are selected from 11 elective courses. Comparing with the similar programs in other countries over the Europe both programs in Turkey and Greece has high number of courses. For example, the

undergraduate health policy and management program at the Health Policy and Management Institute of Erasmus University in the Netherlands has only 19 courses²⁵. One of the reasons of the high number of courses at the program in Ankara University is because of the number of foreign language courses which is 8 while it is only 2 at the program in TEI of Athens. The distribution of the courses according to the management and health area are approximately half and half for both programs while the program at Ankara University has 29 courses on management and 30 courses on health field whereas the program at TEI of Athens has 25 courses on management and 20 courses on health field.

Both programs have seminar and practical training. The program at TEI of Athens has a 7 ECTS credit seminar whereas the program at Ankara University has a 3 ECTS credit seminar at the seventh semester. The program at Ankara University has one month summer practical training and 14 week in term practical training. Similarly the program at TEI of Athens has 6 month practical training at the eighth semester, although the duration of it is much more.

The third similarity is about the elective courses. The program at the Ankara University has totally 6 elective courses, 2 elective courses per the fifth, sixth and the seventh semesters during the program, while the program at the TEI of Athens has totally 5 elective courses, 1 elective course per third, fourth, fifth, sixth, and seventh semesters. 6 elective courses in the program at Ankara University are chosen from 11 elective courses whereas 5 elective courses are chosen from 10 in the program at TEI of Athens. There is difference for the distribution of the elective courses according to semesters. In the program at the Ankara University only three semesters have elective courses however in the program at the TEI of Athens elective courses are distributed to five semesters.

The fourth similarity is on the duration of the programs. Both programs have four-year education instead of three-year as it is common among the similar

programs over the Europe like the program in the Netherlands. Both programs have also two semesters per year.

The fifth similarity is the language of the education. Both programs have education with the national languages.

Differences between the undergraduate programs on health management in Turkey and Greece

The main difference that observed is the differences between the credits of the courses in terms of theoretical and practical weight. Except the eighth semester, the program at the TEI of Athens consists of 66% theoretical courses (when calculated with the national credit system, there are 100 theoretical credits, 51 practical or laboratory credits). The theoretical weight of the program at Ankara University is higher with the 80% of the all credits (when calculated with the national credit system, there is 145 theoretical credits, whereas there is 38 practical or laboratory credits. Practical trainings are not included for the both programs.

The second difference is about the dissertation. The program at TEI of Athens has a dissertation which takes 6 months with 20 ECTS credits at the eighth semester. The program at Ankara University does not have a dissertation. However students are preparing a research for the seminar and they prepare practical training reports after the practical trainings. These studies can be considered like dissertation.

The third difference is the representation of the students at the boards. The program at the TEI of Athens allows the representation of the students both at the Faculty Boards (namely General Assembly in Greece) and Department Boards, while the students are represented only at the Faculty Board in Ankara University.

Around 70% of the graduates from the TEI of Athens can easily find job usually as an assistant manager in hospitals. The employment of the graduates is a problem in Turkey as most of the hospitals are belonged to MoH and MoH does not open positions for

the graduates for a long time. In this case, if the graduated student has already a position in the public sector can have a chance to get suitable and upper position related to his/her graduation (generally if they are closed to the ruling party), while others can only be employed by the private sector. The main reason that the MoH does not open the positions for the graduates from the departments of health management is that MoH prefers to use these positions which are generally at the administration level for its partisans. As there is not an alumni program it is difficult to know how many percent of them are employed and where they are working.

Similarities between the graduate programs on health management in Turkey and Greece

The first similarity that can be brought up is the huge demand to the graduate programs both in Turkey and Greece. Even the current programs are not met the demand. Academicians in this field in Greece state that around 1000 people want to study at the graduate level yearly however only 100 of them can have a chance to do it.

The second similarity is the special arrangements for the students that have different backgrounds in order to top up their background. For this purpose students that have business and economics background at the TEI of Piraeus have to take courses on health field and student that have health background have to take courses on business and economics field in the first semester. Similarly students that have different background at the Ankara University have to take some courses from the undergraduate program. Department Board at the Ankara University is decided the courses that the students with different backgrounds have to take. After the fulfilment of the background, students start to take common courses in both programs with and without thesis.

The third similarity is about the number of courses. The program at TEI of

Piraeus has 14 courses: 9 are obligatory, 5 are elective courses (choosing from 11 elective courses). Similarly the student continuing the program at Ankara University has to undertake around minimum 12-15 courses depending the credit of the course which are usually around 2 or 3 credits in order to complete the required credit which is around 24 -36 credits for the program with thesis and 30-42 credits for the program without thesis. The program at Ankara University offers 5 obligatory and 26 elective courses.

Other similarities between the graduate programs are usually related with the other educational arrangements like: the two programs have two semesters in one year period, the courses have to be succeeded in maximum four semesters, and the languages of the education are national languages.

Differences between the graduate programs on health management in Turkey and Greece

The first difference between the graduate programs is related to the authority of the TEI of Piraeus and Ankara University. Like other TEIs in Greece, TEI of Piraeus does not have authority to open a graduate program by itself. It can do it only in collaboration with a university according to the Greece law. The program at the Ankara University can open a graduate program by itself. However it has to get permission from the Higher Educational Council.

Only students graduated from economics or business or medical sciences are accepted to the program at TEI of Piraeus. On the other hand, there is not a specific definition for the backgrounds of the students for the program at the Ankara University, although generally students with the social or health sciences apply to the program.

The third difference is the absence of the master program without thesis at TEI of Piraeus.

The fourth difference is the absence of some courses such as Mathematics of

Finance, Marketing and Health, Business Strategy, Legal Framework and History of Health Systems and Social Welfare in Greece and the European Union, Health Policy and Social Welfare in Greece and the European Union, Quantitative Methods, and Inventory Control and Purchases in the Health Sector in the program at the Ankara University.

TEI of Piraeus has a technical infrastructure for giving courses via video conference that the program at Ankara University has none.

The developed countries realised 70 years ago that neither the health nor the social sciences rules and approaches are enough for the professional management of health sector. Therefore the health management discipline is borne as a special discipline including both the health and social sciences rules and approaches. The health management discipline has been introduced to Turkey around 45 years ago with the acceptance of this approach. However although around half century passed, health management discipline is not

Bibliography

1. World Health Organisation. The World Health Report 2000 Health Systems: Improving Performance. 2000. Geneva.
2. Organisation for Economic Co-operation and Development - The World Bank. OECD Reviews of Health Systems: Turkey. 2008.
3. Yenimahalleli Yasar G, Ugurluoglu E. Health Care System in Turkey. In Rout HS (ed). World Health Systems (forthcoming). India.
4. Frenk J, Chen L, Zulfiqar AB, Cohen J, Crisp N, Evans T, Fineberg H, Garcia P, Ke Y, Kelley P, Kistnasamy B, Meleis A, Naylor D, Pablos-Mendez A, Reddy S, Scrimshaw S, Sepulveda J, Serwadda D, Zurayk H. Health Professionals for A New Century: Transforming education to strengthen health systems in an interdependent world. The Lancet, December 4, 2010; 376: 1923-1958.

at the place as it should be in Turkey. Therefore universities and academicians have important responsibilities for improving the standards of the discipline. One and important way for this improvement is the improvement in the programs at the universities.

More studies are needed for the comparison of the programs in Turkey and Greece with other programs both in Europe and around the world.

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5. Davies S. Health services management education: why and what? J Health Organ Manag, 2006; 20(4):325-34.
6. Aaronson WE, Counte M and Ramirez B. A Comparative Perspective on Contemporary Trends in Global Healthcare Management Education. The Journal of Health Administration Education, 2008; 25 (1-4): 175-190.
7. Von Krause JW. The HSPH Master in Hospital Management Program: Thoughts and Options for the Curriculum. Available at http://www.hsph.edu.vn/nckh/system/files/The+HSPH+Master+in+Hospital+Management+Program_0.pdf, Access date [23 December 2010].
8. Merson M, Schulman K. Health Systems Strengthening through Human Resources and capacity Building: A Landscaping Study on the Supply of Health Systems Training Programs and the Demand for Health Financing, Health Policy and Health Management Experts. Strengthening Health Systems Capacity &

- Leadership Bellagio, Italy 27-31 October, 2008. The Rockefeller Foundation.
9. Pillay R. Managerial competencies of hospital managers in South Africa: a survey of managers in the public and private sectors. *Hum Resour Health*, 2008; 6:4.
 10. Meyer LD, Hodgkinson AR, Knight R, Ho MT, di Corpo SK, Bhalla S. Graduate capabilities for health service managers: reconfiguring health management education @UNSW. *Aust Health Rev*, 2007 Aug; 31(3):379-84.
 11. Papa PA, Rector C, Stone C. Interdisciplinary collaborative training for school-based health professionals. *J Sch Health*, 1998 Dec; 68(10):415-9.
 12. Klein, R. "Management in health care: the politics of innovation", *International Journal of Health Care Planning and Management*, 1985; 1: 57-63.
 13. Akbulut Y, Esatoglu E.A. Education on Hospital Management: An Investigation on Education on Hospital Management at the Pre-undergraduate Level. I. National Symposium of Vocational Schools of Health Services. 11-12 May 2006, Ankara (oral presentation) [In Turkish].
 14. Bradley EH, Cherlin E, Busch SH, Epstein A, Helfand B, White WD. Adopting a Competency-Based Model: Mapping Curricula and Assessing Student Progress. *The Journal of Health Administration Education*, 2008; 25 (1-4): 37-51.
 15. Karagoz S. Effectiveness of health management departments of universities that train health managers in Turkey. Unpublished PhD Thesis. Institute of Social Sciences, Ankara University. 2004. [In Turkish].
 16. Karagoz S and Balci A. Effectiveness of health management departments of universities that train health managers in Turkey. *International Journal of Health Planning and Management*, 2007; 22 (4): 263-288.
 17. 2003-2005. Washington: AUPHA 2003, xviii.
 18. Sahin I, Sargutan E, Tarcan M. Health Management Education in Turkey and in the World. *Health Services and Institutions' Management in the Years of 2000s*. Tatar M, Sahin, I, Eriguc G. Eds. I. National Health Administration Congress' Book. Ankara, 2000: 1-16. Also available at http://www.sabem.saglik.gov.tr/akademik_metinler/linkdetail.aspx?id=1685, access date [25 September 2008], 2000 [In Turkish].
 19. Yenimahalleli Yasar G. 'Health transformation programme in Turkey: an assessment' *International Journal of Health Planning and Management* Yenimahalleli Yasar, G, Esatoglu, AE, Agirbas, I, Onder, OR and Sarp, N. Comparative Evaluation of the Health Management Programs at the Ankara University with the Programs in Greece and the Netherlands. Presented at the Congress on Health and Hospital Administration (with the international participation) held in Antalya-Turkey during the dates of 22-26 October 2008 and published in the Congress Book, 2008: 147-159. [In Turkish]
 20. The Association of University Programs in Health Administration. *Health Services Administration Education Directory of Programs Management*, 2010 ; Published online in Wiley Online Library. (wileyonlinelibrary.com). DOI : 10.1002/hpm.1065
 21. Technological Educational Institution of Kalamata. Available at <http://www.teikal.gr>, access date [30 July 2009].
 22. Technological Educational Institution of Piraeus. *State Recognised Post-Graduate Programs*. Piraeus-Greece: 2006: 19-20.
 23. National and Kapodistrian University of Athens. *School of Law, Economics and Political Science*. Athens: 2004: 43.
 24. Ankara University. Available at <http://www.ankara.edu.tr>, access date [30 July 2009].
 25. Erasmus Medical Centre Rotterdam. *Institute of Health Policy and Management Activities Report 2005-2006*. Institute of Health Policy and Management. Rotterdam: 2005: 8.