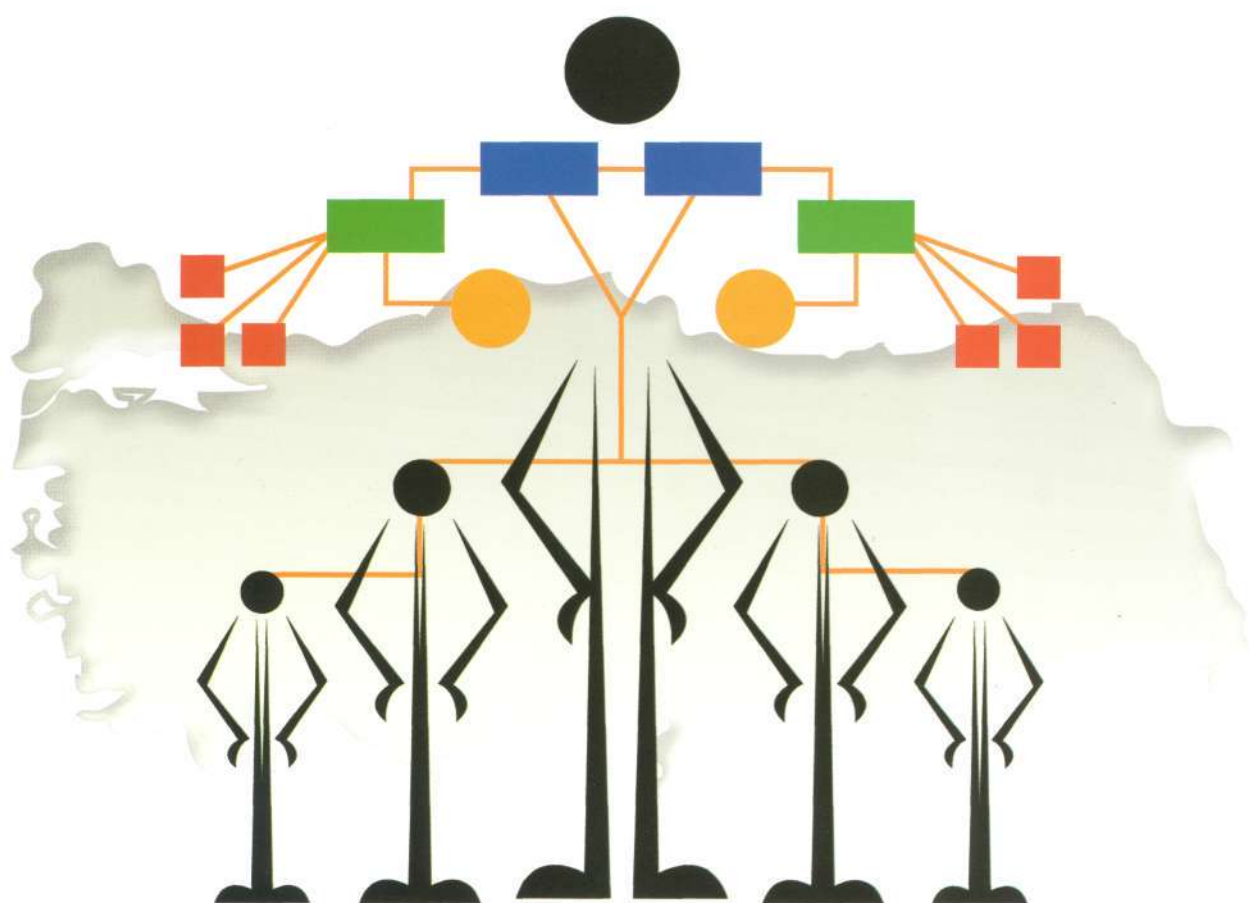




THE MINISTRY OF HEALTH OF TURKEY

HUMAN RESOURCES IN HEALTH AND POLICY DIALOGUE WORKSHOP



**The Ministry of Health of Turkey ■ Refik Saydam Hygiene Center,
School of Public Health**

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PREFACE

Protection of the right to health is a challenging process from individual health to community health. As the national model in our Healthcare System, “Human Comes First” is central to every step in the field of health. Our goal is to provide to individuals the deserved modern, effective, efficient, equitable, qualified and accessible healthcare service. In this context, the “Health Transition Project” is being implemented as a national model in order to overcome the bottlenecks in our Healthcare System and to offer modern healthcare services to our citizens.

Being one of the integral parts of human workforce planning, which has a very important place in the development plans of modern countries of the present day, “Healthcare workforce” is one of the most important subheadings of the Health Transition Project. A process has been initiated by our Ministry for the purpose of preparing human workforce that is suitable and well-equipped for the operation of the Healthcare System, to implement undergraduate and graduate education programs compatible with the said policies, and to develop an effective and efficient service industry in the field of healthcare.

The insufficiency of the absolute number and the geographically unbalanced distribution of healthcare professionals especially of physicians and nurses, is one of the most important problems of our Healthcare System. While our Ministry has managed, through existing policies in force, to minimize this important problem in our Healthcare System, shortage of physicians and nurses in our country is still an important issue. As our population grows older and health awareness increases, the need for healthcare services and, thus for physicians, is bound to increase. If we want healthcare services to be sufficient and efficient in the future, we are required to bridge our healthcare personnel gap. While the number of professors in the Medical Faculties of our country increases rapidly, there is a noteworthy decline in the number of students. Inter-professional imbalance in the distribution of healthcare workforce is an important part of this problem. While the total number of specialized physicians in our country is relatively sufficient, distribution into specialization branches is unbalanced. The incoherence in the ratios of physicians and supporting healthcare personnel is yet another noteworthy element of the problem.

Another of the most important components of our Ministry’s “Health Transition Project” is the practice of Family Medicine. The Family Medicine practice provides the foundation for easier access to healthcare services and complying with modern norms in healthcare services. Involved in the selfless practice of this profession all along, the general practitioners will have the opportunity to go out into the field to serve within their own working area with their own office and own patients, in an environment where they can freely pass their experiences on the patients, and in a system which patients prefer them.

“Performance Management System,” which is a systematical management tool which is intended for obtaining more effective results from the Healthcare System by means of motivating healthcare professionals in a way that they will realize their own potential, and consists, to that end, of well-defined objectives, performance standards, goals, measurement, feedback and rewarding stages, is one of the important milestones of the Health Transition Project. This system has been assessed as a continuous learning and improvement process, started from the plainest and the most easily applicable structure and improved for future by means of making inferences from the outcome of present implementations. Performance Management does not only measure results,

but gives the organization a direction which is in line with established objectives. It ensures the improvement of services toward planned outcomes. In this way, a change of understanding has been created in public healthcare services. It has been made possible to reward those who shoulder the burden of service.

In public healthcare services, the prevailing approach is now to meet the demand rather than determine the supply. The patient-oriented approach encouraged by the system has increased the weight of patients in implementation, and has placed at the top of the agenda the search for quality in services. Saying “Human comes first!” our government attaches great importance to participation in relation to the restructuring of the Healthcare System and to Health Transition.

With the belief and hope that these activities, which are carried out as one of the milestones in the development of policies and strategies for national healthcare workforce planning, will prove useful for all institutions and organizations related to the healthcare industry, I would like to extend my respect.

Prof. Recep AKDAĞ
Minister of Health

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The School of Public Health

INTRODUCTION

The activities for improving healthcare services continue to be the basic and priority issue of not only developing countries like Turkey, but of developed countries as well. Within recent years, the need for Human Resources planning in health has increased and the importance it holds at national level has come to be understood better in time. Availability of proper, qualified and required Human Resources is essential for the operation of the Healthcare System.

It is imperative that healthcare professionals be competent in terms of their approaches to and practices in primary healthcare services. Thus, it is necessary to improve the professional perspectives of healthcare professionals, and to teach them modern techniques. It will, in this way, be possible to better plan and organize healthcare services offered to the public, to address existing shortcomings, and to rapidly solve problems. It is therefore essential that the Ministry of Health and relevant institutions and organizations come together to discuss and put forward solutions for the capacity of Human Resources in Healthcare and issues in Turkey.

Need-based healthcare workforce planning plays an important role for an effective and efficient healthcare industry within the scope of the Public Administration Reform defined in the Government Program and in the Emergency Action Plan prepared with reference to the aforesaid program, and starting out from the basic goals intended for the field of healthcare under the title “Health for Everyone.”

A process has been initiated by our Ministry under the Health Transition Project for the assessment of Human Resources in Healthcare. This process was designed in a way to comprise the evaluation of the current situation and to define policies and strategies. This process first deals with an analysis of the current situation of Human Resources in Healthcare. In planning future health policies, technical, administrative and educational capacities will be taken into account. In this way, the national policy will be defined after establishing the new practices needed in healthcare.

I would like to take this opportunity to thank everyone who has contributed to this work, which dwells on the current situation and issues of Human Resources in Healthcare in Turkey; and I would also like to thank the School of Public Health and employees thereof who have made this information available to the public through this book for the use of decision-makers, planners and the healthcare professionals, with the belief that this report for policymaking in Human Resources in Healthcare will contribute to relevant future work.

Dr. Salih MOLLAHALILOĞLU
Director of the School of Public Health

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Abbreviations used in this book

(HS)	Health System
(I)	Institutional Factors
(P)	Personal Factors
(S)	Social Factors
HEC	Higher Education Council
CRMS	Core Resource Management System
GD	General Directorate
MHGDP	MoH General Directorate of Personnel
EU	European Union
HRMS	Human Resources Management System
SPH	School of Public Health
HTP	Health Transition Project
MoF	Ministry of Finance
MoH	Ministry of Health
MoND	Ministry of National Defense
MoNE	Ministry of National Education
MSE	Medical Specialization Examination
NTL	New Turkish Liras
OECD	Organization for Economic Cooperation and Development
PBPS	Performance-Based Payment System
PDS	Personnel Distribution Scale
SII	Social Insurance Institution
SPO	State Planning Organization
SSI	Social Security Institution
SSPC	Student Selection and Placement Centre
TAF	Turkish Armed Forces
TGNA	Turkish Grand National Assembly
TSI	Turkish Statistical Institute
VSoH	Vocational Schools of Health
WHO	World Health Organization

Annex

Annex 1: The Human Resources in Health Policy Dialogue Workshop Evaluation Report written by World Bank.

EXECUTIVE SUMMARY

The opinion that one needs to effectively manage healthcare workforce in order to ensure effective, efficient and equitable healthcare services in Turkey has gradually gained importance in the recent years. The issues related to healthcare workforce planning, which is dealt with among the basic principles of the Health Transition Project, have been included under certain components of the Project for Supporting the Health Transition Project, and expressly stated under component D as “well-equipped and highly-motivated healthcare workforce.”

Within the Ministry of Health organization, the responsibility of workforce planning rests with the General Directorate of Health Education. Since the subject has a very wide scope and is pertaining to other departments except this DG, the General Directorate of Personnel, General Directorate of Primary Health Care, General Directorate of Curative Services, Department of Strategy Development, Department of Information Processing, Department of EU Coordination and the School of Public Health Directorate continue their studies on planning health labor force.

Activities of the School of Public Health Directorate on healthcare workforce started in June 2006. Following the collection of required data, a quick analysis study was conducted as of the beginning of 2007 in cooperation with the World Health Organization and Harvard School of Public Health, which study yielded to a report showing the current situation. As an outcome of these activities, the “Turkey Human Resources in Health Policy Dialogue Workshop” was organized between 24th and 28th April 2007 during which the previously prepared current situation report was presented to the participants followed by work by four parallel workgroups.

The Current Situation of healthcare Workforce in Turkey:

In Turkey, there are 97.818 physicians as of April 2007. Out of this, 49.740 are specialized physicians, 29.936 are general practitioners, and 18.142 are assistant physicians. What is noteworthy in the assessment conducted according to the existing population projections of the Turkish Statistical Institute is that, since 2000, the number of specialized physicians per 1000 persons increased while the number of general practitioners has actually decreased. Existing data reveal that there is a recent increase in the tendency of physicians toward specialization. While the total number of permanent staff announced in the four-year period of Medical Specialization Examination (MSE) covering the years 1999-2002 was 17.523, this figure increased to 23.428 in the four-year period covering the years 2003-2006. Comparing the existing healthcare workforce in Turkey with OECD European Region Countries on the basis of population, one sees that the number of healthcare workforce per 1000 persons is notably low in Turkey. On the other hand, opinions were presented during the quick assessment analysis conducted prior to the workshop, which suggested that it would not be prudent to compare the number of personnel to OECD European Region Countries on the basis of population. Therefore, one should also look at the situation of healthcare workforce level on the basis of workload as well.

Within recent years in Turkey, certain noteworthy developments have taken place in primary healthcare services. While the annual number of examinations per physician at health centers increased in 2007 by 85% compared to 2002, the number of examinations per polyclinic room decreased by 20%. This is a result of efficient use of existing workforce. Because, while the number of polyclinic rooms in health centers in 2002 was 45% of the number of physicians, this

rate became 95% in 2006. The initiation of the Family Medicine practice is another development in primary healthcare services. Presently implemented in 11 provinces, Family Medicine was assessed through a survey held in the province of Düzce, where 77,5% out of the 4110 participating households expressed that they are satisfied with this system.

In addition to these developments in the primary healthcare services, there have been changes in certain indicators related to hospitals as well. In 2006, there was an increase in the number of patient examinations per physician and the number of hospitalized patients per physician at MoH hospitals compared to the year 2002. While this initially indicates an increase in the workload of physicians, it is also related to removing the barriers for access to health services and an increase in the number of full-time physicians through determined policies.

Looking at the geographical distribution of healthcare workforce in Turkey, one notices imbalances between different provinces. For various professions, the provinces in best conditions include one province each from Central Anatolia, Marmara, Black Sea and the Eastern Anatolia Regions. And, while the provinces in worst conditions are mostly from Eastern and Southeastern Anatolia, the one province where the population per general practitioner is highest is Istanbul. Existing data suggest that unbalanced distribution of workforce in Turkey has complex socio-cultural and socioeconomic reasons. If one looks at the imbalance in the distribution of healthcare workforce only from the MoH workforce perspective without including universities and private sector in the picture, the results appear to be more of a positive nature. Comparing the population per specialized physician between the regions in best and worst conditions, one sees, thanks to the determined policies that are currently in practice, that the difference of 13,9 times in 2002 has decreased to four times in 2007. The same applies to general practitioner, nurse and midwife workforce.

As of the 2006-2007 educational year, the total number of students studying at departments of health sciences is 90.892 in Turkey. Out of this, 16.156 are associate degree students, while 74.746 are bachelor degree students. About three fourth of the bachelor degree students are students of Medical Faculties and nurse and midwife departments. At departments at the associate degree level, students of Healthcare Management and Health Technology hold the majority. In addition to associate and bachelor degree education, a total of 34.957 students are studying in 11 branches at MoH Vocational Schools of Health.

In Turkey as of the 2006-2007 educational year, the total number of students studying at Medical Faculties is 32.781. The number of newly-enrolled students is 5.018, while the number of 2006 graduates is 4.406. Looking into the number of students and professors of Medical Faculties in Turkey and some European Countries, one sees that the number of students per Medical Faculty in Turkey is rather low compared to that in other countries. A similar situation exists in terms of the number of students per professors. Keeping in mind that physicians in Turkey tend in recent years to specialize, solutions must be devised for this situation, which is posing a risk for primary healthcare services, and the number of Medical Faculties must be increased in view of the shortage of physicians.

Comparing with 2001 the number of existing students in nurse and midwife departments of universities in Turkey in 2007, one sees that both departments have increased by around 1,5 times. Within the same period, the number of persons to graduate within a time period of 1 year has increased by around 2,5 times in the nurse department, and around 4,5 times in the midwife department. Keeping in mind that the number of nurses per physician in Turkey is notably low,

one could say that these developments are in line with the needs. Nurse and midwife education is still given by the vocational schools of health under the Ministry of National Education. At vocational schools of health as of the 2006-2007 educational year, there are 5011 students in nurse departments, and 2423 students in midwife departments.

One of the most important issues influencing the effectiveness and efficiency of healthcare workforce in Turkey is the financing of workforce. From full-time or part-time employment of MoH physicians to new personnel recruitment, many issues are related to finance. Thanks to such policies as the recent practice of performance-based revolving fund and recruitment of contracted personnel, positive progress has been made in the financing of healthcare workforce.

While additional payments to personnel at MoH affiliated institutions amounted in 2003 to 485.000.000 NTL; it increased, following the changes introduced to the payment system, to 1.071.300.365 NTL in 2004, to 2.217.179.210 NTL in 2005, and to 2.923.133.053 NTL in 2006. With the initiation of the practice of performance-based revolving fund and with the required improvements, a substantial increase took place in the rate of full-time specialized physicians at Ministry of Health organizations. The rate of full-time specialized physicians, which was 11% in 2002 increased to 58,7% as of April 2007.

Turkey Human Resources in Health Policy Dialogue Workshop:

Turkey Human Resources in Health Policy Dialogue Workshop, which was held between 24th and 28th April 2007 with inter-sectoral participation, was built on four main group works. The first group dealt with the adaptation of healthcare workforce to needs; the second group discussed the elimination of imbalances in Human Resources in order to ensure better access to healthcare services; the third group focused on the creation of a more attractive working environment for healthcare professionals; and the fourth group worked on the financing of Human Resources in Healthcare – and Partnership. The general report of the workshop was formed by means of combining the reports which contained the results of the activities conducted in four different groups and under four different topics. The report of the first group was included in the first part since it reflects on the existing situation in relation to the need for and the preparation of healthcare workforce, and the topics dealt with by the other groups were handled together since they are related to employment. During the workshop, a basic consensus was reached that there are problems in the need-based employment and preparation of healthcare workforce in Turkey, and that the employing and preparing parties are not sufficiently integrated with one another.

In studies focusing on healthcare workforce production and need in Turkey, firstly the current situation has been defined. As of 31 December 2006, 67% of all hospitals and 68% of all hospital beds in Turkey belong to the Ministry of Health. While the share of the private sector in hospitals is 25%, their share in the hospital beds is only 7%. Except for the dentists and pharmacists, majority of whom practice in the private sector, more than half of the remaining healthcare workforce is employed in the Ministry of Health.

According to the 2006-2007 Educational Year Statistics from the Student Selection and Placement Centre, education is presently provided in Turkey for 54 different levels and professions including 11 in Vocational Schools of Health, 26 in Schools giving associate degrees, and 17 in bachelor degree faculties. While most of these groups are officially recognized, job definitions are not available as of yet with some of these. It is observed in healthcare workforce planning in Turkey that physicians, dentists, pharmacists, health officers, nurses and midwives are typically considered, while there is a gap with respect to the other professions.

In Turkey, specialized training is given in 73 fields of normal and higher specialization. As of 2006, 19070 persons have been attending these programs. Within 2006, a total of 2.448 specialists graduated, while 5.264 persons started attending a specialization program.

During the workshop, different ideas were put forward in relation to healthcare workforce needs in Turkey, and a consensus has formed for creating workgroups in order to determine the need according to each group of professions and branch of expertise, and to establish with which educational institutions and within how much time this need can be met. It was noted as a problem that there are graduates at high school, associate and bachelor degree levels at the same time in certain professions, and it was emphasized that the changing needs of the society must be taken into account in the planning of healthcare workforce. Among other issues discussed during the workshop are collaboration between the Ministry of Health, the Ministry of National Education and the Higher Education Council so as to ensure the preparation of the kind of workforce that is in line with the needs, ensuring standardization in education by means of eliminating curriculum differences between universities, and the improvement of continuous education mechanisms after graduation.

During the workshop, unbalanced distribution of healthcare workforce in Turkey was discussed. Significant breakthroughs have been made in recent years in relation to imbalance, which has a negative impact on quality and efficiency. While there was a difference of 13,9 times, as of December 2002, between the provinces in best and worst condition in terms of the population per specialist physician, this ratio came down to 4 times as of April 2007. The difference which was 8,6 times for general practitioners in the same period decreased to 2,5 times, and that of 7,9 times for nurses and midwives decreased to 5,2 times. While important steps were taken in recent years in relation to the imbalance in the distribution of workforce, the reached point is not yet good enough.

In the light of the analysis conducted on the basis of existing data, it is concluded that the biggest failure in solving the problem of imbalance between provinces took place in nurses, and therefore, it is listed as a main priority to reduce the imbalance in the distribution of nurses between provinces, within provinces and between institutions. The other main priority is to reduce the imbalance in the distribution of specialized and general practitioners between provinces, within provinces and between organizations. Again, the number of nurses per physician must be increased. Another priority is to improve working conditions and to provide an attractive working environment for healthcare workforce. Inequalities in wages must be eliminated, and the performance-based additional payment system must be further developed. It is seen in certain modules (Human Resources in Healthcare, well-equipped and highly-motivated healthcare workforce) previously agreed under the Health Transition Project, that main problems related to the working environment have been previously defined. Under the Health Transition Project, active involvement of healthcare administrators in workforce planning will be ensured by means of creating a decentralized workforce planning and management capability.

During the workshop; short-, medium- and long-term policy options have been established in order to improve the existing situation:

Policy options for short-term goals:

- Improving working hours and conditions,
- Increasing worker's safety,

- Providing sufficient technical equipment,
- Providing career opportunities for contracted nurses,
- Employing contracted physicians and nurses,
- Organizing in-service training activities,
- Employing unemployed nurses,
- Re-evaluating the practice of duty exemptions for nurses,
- Reducing imbalances in the distribution of administrative personnel,
- Taking precautions in relation to the general health condition of employees,
- Strengthening supervision capacity,
- Making appointments on the basis of the needs for each specific work.

Policy options for medium-term goals:

- Ensuring the continuation of the Family Medicine system,
- Increasing the supply of family medicine specialists,
- Continuing with decentralization activities,
- Revising the terms of references,
- Appropriate employment of unused physicians in the first step,
- Tele-medicine practices,
- Elimination of drawbacks in the planning of in-service training activities,
- Ensuring coherence between specialist distribution policy and employment policy,
- Improving socio-cultural conditions,
- Improving remuneration and incentive systems,
- Improving physical conditions,
- Increasing social amenities,
- Satisfaction with the senior management,
- Improving institutional culture,
- Reducing non-institutional factors.

Policy options for long-term goals:

- Ensuring the continuity of the Family Medicine system,
- Increasing the supply of family medicine specialists,
- Decentralization,
- Improving socio-cultural conditions.

In order to be able to implement the policy options established during the workshop for the purpose of solving the problems in healthcare workforce in Turkey, there are certain roles to be played, in addition to the Ministry of Health, by the Ministry of Finance, the Higher Education Council, the Ministry of National Education, Governorships, Provincial Directorates of Health, educational institutions, legal authorities and the non-governmental organizations. Critical success factors for implementing the established policies were laid out as follows:

Two critical factors were taken into account in order to ensure success of the policy options established for reaching short-term goals:

1. Close cooperation for ensuring stakeholder (healthcare industry employees, NGOs and educational institutions) support,

2. Providing sufficient finance for those policies that require additional finance.

Following are the critical factors were taken into account in order to ensure success of the policy options established for reaching medium- and long-term goals:

1. Close cooperation for ensuring stakeholder (healthcare industry employees, NGOs and educational institutions) support,
2. Creating technical capacity for the Provincial Health Directorates for Family Medicine and decentralization practices to take place in the primary healthcare,
3. Creating internal administrative and technical capacity at central organization due to the modified role of the MoH in decentralization,
4. Providing sufficient finance for implementing all of the foregoing.

CHAPTER 1

CURRENT SITUATION OF HUMAN RESOURCES IN HEALTHCARE IN TURKEY

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1.1 INTRODUCTION

Every individual is entitled to a healthy life and access to healthcare services in a balanced, continuous, quality way at the highest level. Decree in Power of Law no. 181 appoints the Ministry of Health (MoH) for delivering this service, which is described in Article 56 of our constitution⁽¹⁾. The opinion that one needs to effectively manage healthcare workforce in order to ensure effective, efficient and equitable healthcare services in Turkey has gradually gained importance in the recent years. The issues related to healthcare workforce planning, which is dealt with among the basic principles of the Health Transition Project, have been included under certain components of the Project for Supporting the Health Transition Project, and expressly stated under component D as “well-equipped and highly-motivated healthcare workforce.”^(2,3)

Effective and efficient use of healthcare workforce is possible through long-term planning activities. Plans should foresee the existing, short-term and long-term needs of the country, and take into account its targets. A cost-effective and sustainable healthcare workforce planning which meets these criteria is one of the most important pressing issues for Turkey.

In Turkey, the three institutions which take part in the making of healthcare workforce policies are the State Planning Organization (SPO), Higher Education Council (HEC) and the MoH, and the other stakeholders are the Ministry of Finance (MoF) and the State Personnel Dept. According to applicable legislation, General Directorate of Health Education is responsible for workforce planning within the MoH. Since the subject has a very wide scope and is pertaining to other departments except this DG, the General Directorate of Personnel, General Directorate of Primary Health Care, General Directorate of Curative Services, Department of Strategy Development, Department of Information Processing, Department of EU Coordination and the School of Public Health Directorate continue their studies on planning health labor force.

One of the activities of SPH within the scope of Human Resources in Healthcare is the “Turkey Human Resources in Health Policy Dialogue Workshop.” The workshop, the general report of which is presented in the second part of this book, was held between 24th -28th April 2007 in Ankara with nearly 100 participants of all the stakeholders in the healthcare industry. SPH continues to engage in future healthcare workforce planning activities at national level in cooperation with national and international institutions and organizations including, especially, the World Health Organization (WHO).

This chapter which lays out the current situation in HRH was arranged so as to cover the recent developments in Human Resources for Health Policy Development Workshop (Workshop on Policy Development for Health Human Resources) but could not be updated since it reflected the views and discussions in the workshop report.

1.2 LEVEL OF HEALTHCARE WORKFORCE IN TURKEY

In Turkey, there are 97.818 physicians as of April 2007. Out of this, 49.740 (50,8%) are specialized physicians, 29.936 (30,6%) are general practitioners, and 18.142 (18,5%) are assistant physicians. Comparing the numerical situation of existing workforce with 2002, one observes that there is an increase in professions except pharmacists and general practitioners. Looking at the number of personnel per 1000 persons, one sees increases or decreases in different professions between 2002 and 2007. A more accurate interpretation of this matter will be possible after the publishing of the “Address-Based Population Registry System” conducted by the Turkish Statistical Institute (TSI) in 2007. What is noteworthy in the evaluation conducted according to existing population projections of TSI is that while the number of specialized physicians per 1000 persons increased, the number of general practitioners has actually decreased. In addition, it is observed that the number of assistant physicians has been included in the number of general practitioners in the studies conducted so far. Yet assistant physicians, like specialized physicians, provide services that are related to their own branch, and do not work in primary healthcare services. Handling the number of assistants together with the number of general practitioners causes errors especially in planning and evaluation activities. The question as to whether the number of specialist physicians is sufficient or the problems encountered in the distribution of specialized physicians into branches are a topic for discussion in itself. If the number of specialized physicians is more than that of general practitioners in a country, this indicates that there is a specialized physician oriented Healthcare System. One needs to increase the number of general practitioners in order to be able to reverse this situation, reduce costs and establish the Family Medicine system. In this context, the number of specialized physicians per 1000 persons is 0,67, assistant physicians 0,24 and general practitioners 0,40 as of April 2007. Since assistant physicians will be specialized physicians in next a few years, with the number of assistants added the number of specialized physicians per 1000 persons is actually 0,91. Existing workforce and workforce per 1000 persons in Turkey are shown in Table 1.1.

Table 1.1: Healthcare workforce in Turkey and employment per 1000 persons*, 2002-2007

		Physician	Spc. Physician	Pract. Physician	Asst. Physician	Dentist	Pharm.	Medical Officer	Nurse	Midwife
Number of Personnel	2002	95.190	43.660	38.076	13.454	17.108	22.322	49.324	79.059	41.513
	2007**	97.818	49.740	29.936	18.142	18.599	21.748	58.255	80.985	43.050
No. of personnel per 1000 persons	2002	1,37	0,63	0,55	0,19	0,24	0,32	0,71	1,14	0,59
	2007**	1,32	0,67	0,40	0,24	0,25	0,29	0,78	1,09	0,58

Source: MoH General Directorate of Personnel, active personnel survey, April 2007.

*Excluding data pertaining to the healthcare professionals working under the permanent staff of the Turkish Armed Forces, Kızılay, Hygiene Center, and MoH Central Organization, and those working at other Ministries and foundations.

**Since there are certain shortcomings relating to the private sector in the 2007 data about dentists, pharmacists and medical officers, 2005 data of the MoH Department of Strategy Development have been used as private sector data.

*** Excluding 32.449 healthcare personnel to be newly employed by the Ministry of Health in 2007.

Existing data reveal that there is a recent increase in the tendency of physicians for specialization. While the total number of permanent staff announced in the four-year period of Medical Specialization Examination (MSE) covering the years 1999-2002 was 17.523, this figure

increased to 23.428 in the four-year period covering the years 2003-2006⁽¹⁾. While 4.532 physicians graduated from Medical Faculties in the 2006-2007 educational year, 5.262 physicians made their way into an assistant position through the MSE⁽⁹⁾. Although both the Development Plans of the State Planning Organization and the action plans of the government state that importance would be attached to protective healthcare services and primary healthcare services, the practical implementation reflects the exact opposite, which is a clear indicator of a lack of inter-sectoral cooperation and coordination. This situation, which we will touch upon again in the section related to the education of healthcare workforce, is regarded as an issue that might pose a risk in the future in terms of primary healthcare services.

Looking into the distribution of healthcare workforce in Turkey by employment areas, one sees that a majority of such population is employed by the MoH with the exception of the dentists and pharmacists who are mostly employed in the private sector, and the assistant physicians more than half of whom are employed by universities. As of 2007, 60% of specialized physicians, 88% of general practitioners, 75% of nurses and 95% of midwives are employed by the MoH. Distribution of the Turkish healthcare workforce by employment areas is given in Table 1.2.

Table 1.2: Distribution of healthcare workforce in Turkey by employment areas, 2007

Personnel Title	MoH		Universities		Private Sector		Total	
	Number	%	Number	%	Number	%	Number	%
Physician	58.327	59,6	22.451	23,0	17.040	17,4	97.818	100
<i>Specialist</i>	24.408	49,1	11.668	23,5	13.664	27,5	49.740	100
<i>Practitioner</i>	26.328	87,9	232	0,8	3.376	11,3	29.936	100
<i>Assistant</i>	7.591	41,8	10.551	58,2	-	0,0	18.142	100
Dentist	4.063	24,0	103	0,6	*12.781	75,4	16.947	100
Pharm.	1.127	5,6	152	0,8	*18.866	93,7	20.145	100
Med. Officer	44.087	81,3	1.601	3,0	*8.567	15,8	54.255	100
Nurse	61.066	75,4	9.724	12,0	10.195	12,6	80.985	100
Midwife	40.711	94,6	180	0,4	2.159	5,0	43.050	100

Source: MoH General Directorate of Personnel, active employee survey, April 2007.

*MoH Department of Strategy Development 2005.

Healthcare workforce data per 1000 persons in Turkey and OECD European Region Countries are summarized in Table 1.3. Comparing the existing healthcare workforce in Turkey with OECD European Region Countries on the basis of population, one sees that the number of healthcare workforce per 1000 persons is notably low in Turkey. In that Turkey takes the last place among these countries in terms of the total number of physicians, nurses and dentists; and takes the fourth last place in terms of the number of general practitioners, specialized physicians and pharmacists. On the other hand, opinions were presented during the quick assessment analysis conducted both during and prior to “Turkey Human Resources in Health Policy Dialogue Workshop” which suggested that it would not be prudent to compare the number of personnel to OECD European Region Countries on the basis of population. Turkey takes the second last place among the 53 countries in the WHO-EURO Region which includes, next to Turkey, the Eastern European, Balkan and some Central Asian countries in terms of the total number of physicians per 1000 persons⁽¹⁷⁾. It is, of course, not sufficient to compare healthcare personnel on the basis

of population, and one needs to also take into account such different indicators as job definition, workload, number of annual applications, disease burden, cultural, social, etc. Yet even the comparison of population-based workforce, which is a very simple benchmarking and evaluation method, points at the importance of this problem.

Table 1.3: Number of personnel per 1000 persons in Turkey and OECD European Region Countries*

	Total Physician	Pract. Physician	Spc. Physician**	Dentist	Pharm.	Nurse***
Austria	3,5	1,4	2	0,5	0,6	9,3
Belgium	4	2,1	1,9	0,8	1,2	6
Czech Republic	3,5	0,7	2,7	0,7	0,6	8,1
Denmark	3	0,7	1,3	0,8	0,2	7
Finland	2,4	0,7	1,4	0,9		7,6
France	3,4	1,7	1,7	0,7	1,1	7,5
Germany	3,4	1	2,4	0,8	0,6	9,6
Greece	4,9	0,3	3,3	1,2	0,8	3,8
Hungary	3,3	0,7	2	0,5	0,5	8,6
Iceland	3,6	0,8	2	1	1,3	13,7
Ireland	2,8	0,5	0,7	0,6	1	15
Italy	4,2	0,9		0,6	1,2	5,4
Luxembourg	2,8	0,9	1,8	0,8	0,8	12,7
Netherlands	3,6	0,5	0,9	0,5	0,2	14,2
Norway	3,5	0,7	2	0,8	0,4	14,9
Poland	2,5	0,1	2,1	0,3	0,7	4,9
Portugal	3,4	0,5	2	0,6	0,9	4,4
Slovakia	3,1	0,4	2,3	0,5	0,5	6,3
Spain	3,4	0,7	1,5	0,5	0,9	7,4
Sweden	3,3	0,6	1,8	0,8	0,7	10,3
Switzerland	3,8	0,5	2,5	0,5	0,5	10,7
Turkey	1,32	0,4	0,91	0,25	0,29	2,45
UK	2,3	0,7	1,6	0,5	0,5	9,2

Source: OECD HEALTH DATA 2006.

* Data belonging to the OECD European Region Countries are generally from 2004, and existing data from the latest year were used for those countries lacking such data; April 2007 data were used for Turkey.

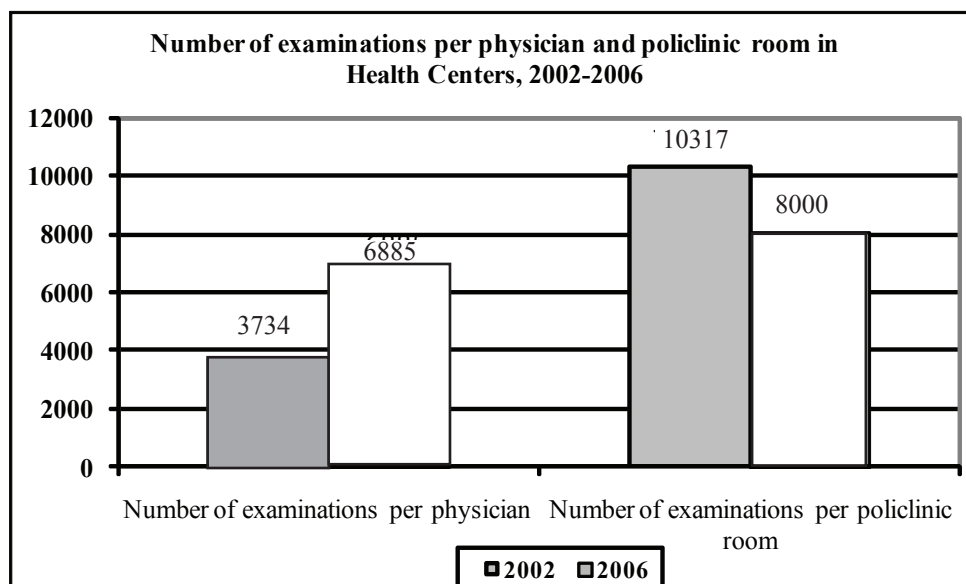
** Assistant Physicians in Turkey are listed as within specialist physicians.

*** Number of nurses in Turkey include midwives and health officers.

Within recent years, certain developments have taken place in the primary healthcare services in Turkey which call for strong emphasis. In health centers, the annual number of

examinations per physician is approximately 3.750 in 2002 and 6.900 in 2006. While data clearly indicate that the number of examinations per physician has increased, it is also observed that the number of polyclinic rooms in health centers was 6.300 in 2002 and 15.000 in 2006; and the number of examinations per polyclinic room was 10.317 in 2002 and 8.000 in 2006. This is a result of the effective and efficient use of existing workforce. Because while the number of polyclinic rooms in health centers in 2002 was 45% of the number of physicians, this ratio became 95% in 2006^(5,1). As a result, opportunity was created for the active service of those physicians who are in the system, but remain unused because of shortage of spaces. Approximate doubling of the number of examinations per physician in health centers within the last five years is an indicator of people's continued demand in the services and access to healthcare services. Since this number will continue to increase in the future, this will need to be taken into account in workforce planning activities. The number of examinations per physician and polyclinic room in health centers is shown in Figure 1.1.

Figure 1.1: Number of examinations per physician and polyclinic room in Health Centers*, 2002-2006



Source: Health 2006, Department of Strategy Development, 2006

*Data from 2002 include Social Insurance Institution (SII) dispensaries.

One of the important developments in primary healthcare services is achieved in the field of epidemic diseases. Measles vaccination rate, which was 82% in 2002, reached 96% in 2007, vaccinating 18 million children during national measles vaccination campaigns. As an outcome of such activities, a great breakthrough has been made against measles, which is known to cause epidemics every couple of years in Turkey, and the total number of confirmed measles cases in 2006 was 34⁽¹⁾. The progress made in primary healthcare services point at the importance of increasing healthcare workforce level and also effective and efficient use of existing workforce.

The initiation of the Family Medicine practice is another development in primary healthcare services. Family Medicine practice started for the first time on 15.09.2005 in Düzce as a pilot province. Through the Approval of the Office no. 1538 dated 16 February 2006, 10 more provinces (Adıyaman, İzmir, Elazığ, Isparta, Samsun, Edirne, Bolu, Eskişehir, Gümüşhane, Denizli) were included in the scope of the pilot scheme, which marked the starting of Family Medicine practice in the new pilot provinces. In addition to the aforesaid 11 provinces, 13 more provinces were

included in the scope of the pilot scheme through approvals of office in February and March 2007, in which provinces the Family Medicine practice is planned to start by the end of 2007. A survey was conducted between 7-15 July 2007 in Düzce, which is the first pilot province in the Family Medicine practice, and out of the 4110 households that participated in the survey, 77,5% expressed satisfaction with this practice⁽¹⁵⁾. The provinces where Family Medicine is presently practiced and the starting dates of the practice are shown in Table 1.4, and the pilot provinces approved in February and March 2007 are shown in Table 1.5.

Table 1.4: Provinces where Family Medicine System has been implemented as of July 2007

PROVINCE	STARTING DATE
Düzce	15 September 2005
Eskişehir	17 July 2006
Bolu	16 October 2006
Edirne	1 December 2006
Denizli	25 December 2006
Adıyaman	25 December 2006
Gümüşhane	29 December 2006
Elazığ	4 January 2007
Isparta	18 January 2007
Samsun	1 March 2007
İzmir	14 May 2007

Table 1.5: Other pilot provinces chosen in 2007 upon Approval of the Office

Pilot provinces chosen in February 2007 upon Approval of the Office	
Adana	Karaman
Amasya	Manisa
Bartın	Çorum
Bayburt	Osmaniye
Burdur	Yalova
Erzurum	Sinop
Karabük	

* No. 01269 dated 05.02.2007; No. 03031 dated 16.03.2007

Family Medicine discussions aside, from the Human Resources perspective, needs and expectations have started to change with the transition into the Family Medicine system. There is a need to revise the human resources planning taking into consideration the lower and upper limits in the number of population per one family physician, the job description, the expectation of the people, the annual number of applications per capita, the type and number of healthcare personnel to be included in the team, etc.

In addition to these developments in the primary healthcare services, there were also changes in certain indicators related to hospitals. While, in 2002, the annual number of examinations at MoH hospitals per physician was around 3.400, this figure increased to 4.800 in 2006; while there is a slight increase in University Hospitals in the same period, a decrease was noted in

Private Hospitals. Similar results are true for hospitalized patients as well. While the increase in the number of examinations per physician at MoH hospitals indicate, at first glance, an increase in the workload of physicians, this situation is also a result, as we will see in the coming sections, of the fact that the number of full-time physicians have been increased through various policies. The number of examinations and the number of hospitalized patients per physician at MoH hospitals, University Hospitals and Private Hospitals are shown in Table 1.6.

Table 1.6: Number of examinations and hospitalized patients per physician in hospitals

	Examination / Physician*		Hospitalized Patient / Physician*	
	2002**	2006	2002**	2006
MoH Hospitals	3.403	4.831	129	137
University Hospitals	508	559	45	51
Private Hospitals	1.259	892	151	71

Source: MoH Hospitals statistical annuals 2002- 2006, MoH General Directorate of Personnel, active working personnel survey, December 2006.

*Number of Physicians include specialists, assistant and general practitioners working in hospitals.

** 2002 data include SII hospitals.

1.3 GEOGRAPHICAL DISTRIBUTION OF HEALTHCARE WORKFORCE IN TURKEY

Looking into the geographical distribution of healthcare workforce in Turkey, one sees that there are some imbalances between provinces. Table 1.7 shows, as of 15 April 2007, the imbalance of healthcare workforce between provinces including MoH, Universities and the private sector.

Table 1.7: Geographical distribution of healthcare workforce *

	Province in best condition	Province in worst condition	Turkey in General	Median
Total number of physicians per 1000 persons	1,79 (Ankara)	0,53 (Şanlıurfa)	0,88	0,76
Population per specialist physician**	542 (Ankara)	4.408 (Şırnak)	1.331	2.281
Population per general practitioner**	1.574 (Yalova)	3.026 (İstanbul)	2.221	2.169
Population per nurse	461 (Trabzon)	2.315 (Şırnak)	817	798
Population per midwife	445 (Tunceli)	3.683 (Van)	1.537	1.307

Source: MoH General Directorate of Personnel, active working personnel survey, April 2007.

* Includes MoH, university and private sector. Population calculations take into account the MFF (midwife follow-up form) population.

** Excluding assistant physicians.

*** Excluding 32.449 healthcare personnel that the MoH will newly employ in 2007

As one can see in Table 1.7, there is an imbalance between provinces in all examined branches of healthcare workforce. While the imbalance is greater with the number of specialized physicians, midwives and nurses, it is relatively smaller in the number of general practitioners and total physicians. Another outstanding point is that the provinces in best and worst conditions are not necessarily always from the same region. For various professions, the provinces in best conditions include one province each from Central Anatolia, Marmara, Black Sea and the Eastern Anatolia Regions. And, while the provinces in worst conditions are mostly from Eastern and Southeastern Anatolia, the one province where the population per general practitioner is highest (in worst condition) is Istanbul. Existing data suggest that unbalanced distribution of workforce in Turkey has complex socio-cultural and socioeconomic reasons.

If one looks at the imbalance in the distribution of healthcare workforce only from the MoH workforce perspective without including universities and private sector in the picture, the results appear to be more of a positive nature. As a result of the determined policies that are currently in practice, MoH has made significant progress in the elimination of unbalanced distribution of its own workforce in the recent years. Through the recruitment of contracted personnel, which is a practice introduced in order to address the shortage of healthcare personnel in regions with development priority, employment has been ensured in these regions especially in terms of non-physician healthcare personnel. Obligatory Public Service was first abolished in an attempt to ensure employment through volunteering and additional wage policies. Upon failure of this policy for various reasons, an increase is observed, through the reintroduced Obligatory Public Service, in the number of specialized physicians and general practitioners working in these regions. A good number of new personnel was appointed to the permanent staff of MoH between 2004-2007; and furthermore the MoH announced on 30.05.2007, following talks with the MoF, that 32.449 contracted personnel are to be recruited in 2007. Out of the announced 32.449 permanent staff positions, 9.234 are nurses, 8.154 are emergency medicine technician and 3.874 are midwives⁽¹⁴⁾. The number of personnel newly appointed to MoH permanent staff positions between 2004-2007 is shown in Table 1.8.

Table 1.8: New personnel employment in the Ministry of Health since 2004

Title	2004	2005	2006	2007*
Spc. Physician	1.556	1.950	2.828	866
Pract. Physician	4.185	2.263	4.267	1.083
Assistant	716	2.265	1.177	8
Nurse	3.552	1.490	6.918	2.174
Midwife	4.599	1.622	3.185	8
Medical Officer	5.468	2.311	3.036	47
Other Personnel	2.618	1.214	2.944	321
TOTAL	22.694	13.115	24.355	4.507

Source: MoH General Directorate of Personnel, 1 June 2007

* 2007 data cover the period from 1 January to 31 May 2007. Excluding announced 32.449 personnel.

As a result of the policies implemented for the purpose of eliminating inter-regional imbalance in the distribution of MoH workforce, positive progress was made between 2002 and 2007. Comparing the population per specialized physician between regions under best and worst conditions, one sees that the difference of 13,9 times in 2002 went down to 4 times in 2007. Table 1.9 shows a comparison of the difference between the provinces in best and worst conditions in relation to the population per personnel.

Table 1.9: Comparison of the difference between the provinces in best and worst condition in terms of population per personnel

	2002	2007
Spc. Physician	1/13,9	1/4
Pract. Physician	1/8,7	1/2,5
Nurse - Midwife	1/7,9	1/5,2

Source: AKDAĞ, R. 2007 Fiscal Year Budget Submission.

MoH General Directorate of Personnel, active employee survey, April 2007.

1.4 HEALTHCARE WORKFORCE EDUCATION IN TURKEY

The task of coordination at the stage of preparing and employing the needed healthcare personnel rests, legally, with the MoH. Healthcare Services Law no. 3359 states that the MoH is to collaborate with the HEC for this purpose. Yet, problems are experienced in practice, and it is not possible to say that the opinions and recommendations of the MoH are duly noted in the process.

In Turkey, undergraduate health training is given through faculties, four-year schools, two-year associate degree programs and Vocational Schools of Health (VSoH); post graduate health education is given at universities in the form of specialization, doctorate and master degrees. The educational institutions in Turkey which, as of the 2005-2006 educational year, prepare healthcare workforce, and the levels of education thereof are summarized in Table 1.10.

Table 1.10: Educational institutions preparing healthcare workforce in Turkey, and the number and level of education of these institutions

Name of Educational Institution	Level of Education	Number
Medical Faculties*	Bachelor	52
Medical Faculties**	Medical Specialization	48
Ministry of Health Training and Research Hospitals	Medical Specialization	46
Dental Faculties	Bachelor / Postgraduate / Doctorate	15
Faculties of Pharmacy	Bachelor / Postgraduate / Doctorate	12
Health Sciences Faculty	Bachelor / Postgraduate / Doctorate	1
Faculty of Health Education	Bachelor / Postgraduate / Doctorate	2
Health School	Associate	71
School of Nursing	Associate	10
School of Healthcare Management	Associate	1
Health Services Vocational School	Associate	43
Health Sciences Vocational School	Associate	1
Vocational Schools of Health	High School	272

Source: Higher Education Statistics (2005-2006), Student Selection and Placement Centre (SSPC) Publications; Health 2006, MoH Department of Strategy Development, 2006.

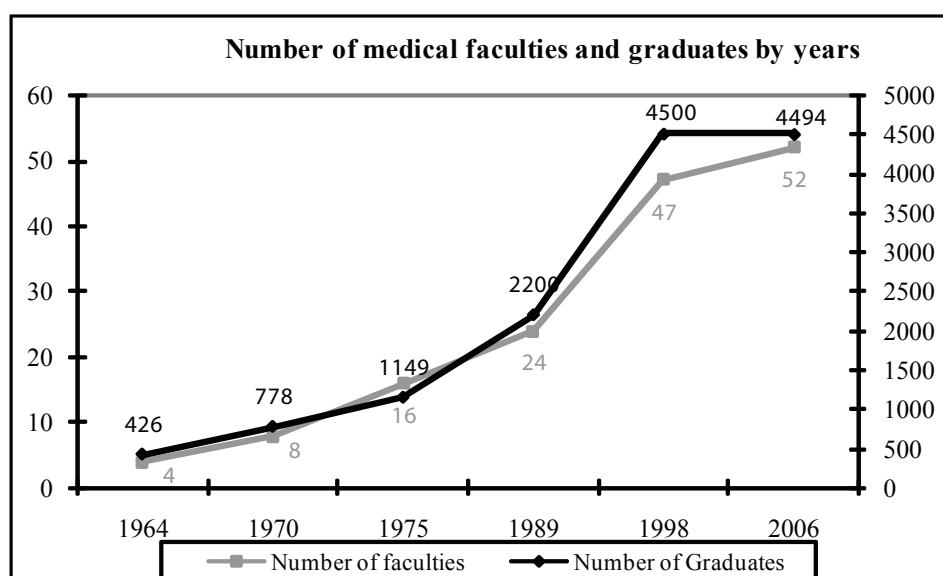
* Including Gülhane Military Medical Academy and Foundation Universities.

** Including Gülhane Military Medical Academy and the Forensic Medicine Institution.

In Turkey as of the 2006-2007 educational year, the total number of students studying in departments of health sciences is 90.892. Out of this, 16.156 are students studying in associate, and 74.746 at bachelor degree level. About three fourth of bachelor degree level students are students of Medical Faculties, nurse and midwife departments. And in departments at associate degree level, students of Healthcare Management and Healthcare Technology departments hold the majority⁽⁹⁾. In addition to the education at associate and bachelor degree level, there are also a total of 34.957 students in 11 branches at VSoHs under the Ministry of National Education (MoNE)⁽¹⁰⁾. While detailed data are available related to the healthcare workforce education in Turkey at bachelor degree level, associate and high school level, it is not dealt with in detail here since the report in the second part of this book will contain such detailed data.

In Turkey as of the 2006-2007 educational year, the total number of students studying at Medical Faculties is 32.781. The number of newly-enrolled students is 5.018, while the number of 2006 graduates is 4.406⁽⁹⁾. The number of Medical Faculty graduates, which started to grow rapidly as of 1960s, is observed to have reached stagnation since 1998. Because while 47 Medical Faculties produced 4.500 graduates in 1998, 52 Medical Faculties produced 4.494 graduates in 2006. Number of Medical Faculties and graduates in Turkey is shown by years in Figure 1.2.

Figure 1.2: Number of medical faculties and graduates by years in Turkey



Source: MoH General Directorate of Health Education, 2006.

Looking into the number of students and professors of Medical Faculties in Turkey and some European Countries, one sees that the number of students per Medical Faculty in Turkey is rather low compared to that in other countries. A similar situation exists in terms of the number of students per professors. This kind of a situation is likely to have a wide variety of reasons. First of all, one should question how balanced the importance given to educational activities and to curative services at Medical Faculties, and by assessing the education efficiency given at Medical Faculties student capacities must be discussed without disturbing the existing quality. In addition to the foregoing, it is also essential to encourage professors for full-time work, and put on the table and discuss many issues and problems including personal rights in order to prepare future workforce of appropriate numbers and quality. Keeping in mind that physicians in Turkey tend in recent years to specialize, solutions must be devised for this situation, which is posing a risk for

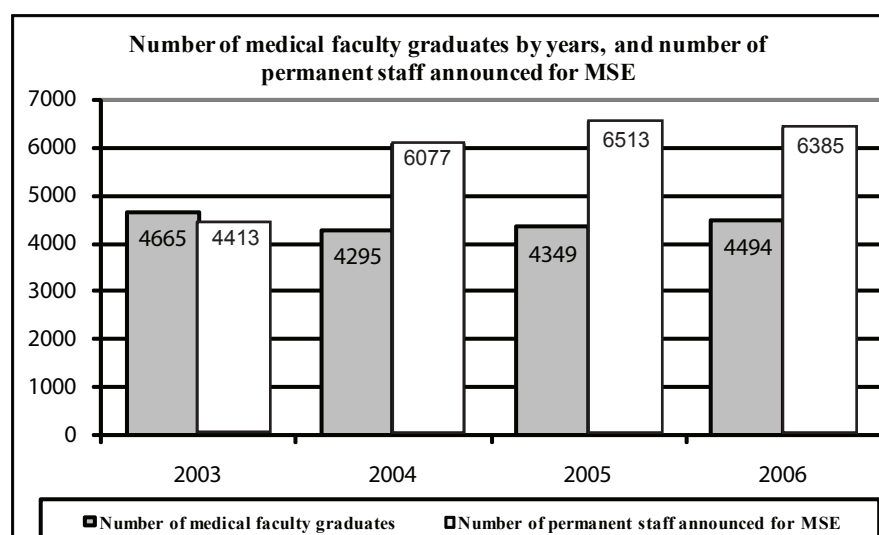
primary healthcare services, and different steps must be taken immediately in view of the shortage of physicians. The data pertaining to the number of Medical Faculties, professors and students in Turkey and some European Countries is shown in Table 1.11.

Table 1.11: Medical faculties, professors and students outlook in Turkey and some European Countries

COUNTRY	COUNTRY POPULATION	MEDICAL FACULTY	LECTURER	STUDENT	STUDENT/LECTURER	STUDENT / MEDICAL FACULTY
GERMANY	82.633.200	36	3.550	79.866	22,50	2218,5
SPAIN	41.895.600	28	2.500	36.049	14,42	1287,5
ITALY	57.987.100	39	12.583	148.157	11,77	3798,9
FRANCE	60.011.200	44	5.847	62.921	10,76	1430
SLOVAKIA	5.381.200	3	893	6.561	7,35	2187
SLOVENIA	1.954.500	1	285	1.717	6,02	1717
FINLAND	5.231.900	5	698	3.583	5,13	716,6
DENMARK	5.397.600	3	1.570	6.598	4,20	2199,3
TURKEY	72.000.000	52	9.020	32.985	3,66	634,3

Source: MoH General Directorate of Health Education, 2006.

Figure 1.3: Number of medical faculty graduates by years, and number of permanent staff announced for MSE



Source: Health 2006, MoH Department of Strategy Development, 2006.

Figure 1.3 clearly shows that the number of assistant staff announced for MSE is higher than the number of Medical Faculty graduates since 2003. This situation points at certain shortcomings in the planning of the education of physicians and specialized physicians. Seeing that the specialization of the physicians at the same rate is a risk for primary healthcare services, new plans must be prepared in cooperation with the SPO, MoF, HEC and MoH.

While there is an increase in Turkey in the total number of students of faculties of dentistry and pharmacy compared to past figures, no obvious progress has been observed since 2001. The increase in the number of students compared to past years was behind the increase in the number of faculties, which meant a decrease in the number of students per faculty. Similar results were observed in relation to the number of students per training staff member, making the increase in the number of training staff members higher than the increase in the number of students. For example, while the number of students per professor was 7,1 in faculties of dentistry and 10 in faculties of pharmacy, these figures were 3,8 and 5,5 respectively in 2006. The numerical course of the dentistry and pharmacy faculties is shown in Table 1.12.

Table 1.12: Data pertaining to the number of faculties, students and training staff members at Faculties of Dentistry and Pharmacy by years

	Faculties of Pharmacy				Faculties of Dentistry			
	No. of Faculties	No. of Students	No. of Graduates	Student / Training staff member	No. of Faculties	No. of Students	No. of Graduates	Student / Training staff member
1984	7	3.667	524	10	8	3.598	450	7,1
2001	8	4.025	503	5,2	14	5.222	373	3,9
2002	9	4.149	461	5,2	14	5.167	369	3,5
2003	11	4.120	375	5	14	5.256	375	3,7
2004	11	4.266	388	5,3	14	5.343	382	3,9
2005	11	4.324	393	5,4	14	5.422	387	3,9
2006	12	4.572	381	5,5	15	5.609	374	3,8

Source: Higher Education Statistics (1983-2006), SSPC Publications

Nurse and midwife education in Turkey is given by universities at bachelor degree level and by the VSoHs under the MoNE at secondary education level. As one can see in Table 1.13, the total number of students in nurse departments of universities as of the 2006-2007 educational year is 18.252, and that in the midwife departments is 5.906. Comparing the existing number of students in nurse and midwife departments of universities with that from 2001, one sees that both have increased by around 1,5 times. In the same period, the number of people who graduate from the nurse department in one year has increased by around 2,5 times, and that from the midwife department has increased by around 4,5 times⁽¹¹⁾. Keeping in mind that the number of nurses per physician in Turkey is notably low, one could say that these developments are in line with the needs. Nurse and midwife education is presently continuing at VSoHs under MoNE as well. In VSoHs as of the 2006-2007 educational year, there are 5.011 students in nurse departments, and 2.423 in midwife departments⁽¹⁰⁾. Pursuant to Article 7 of Law no. 5634, recruitment of students into the nurse and midwife departments of the VSoHs will continue until 2012.

Table 1.13: Number of Students in the nurse and midwife departments of universities

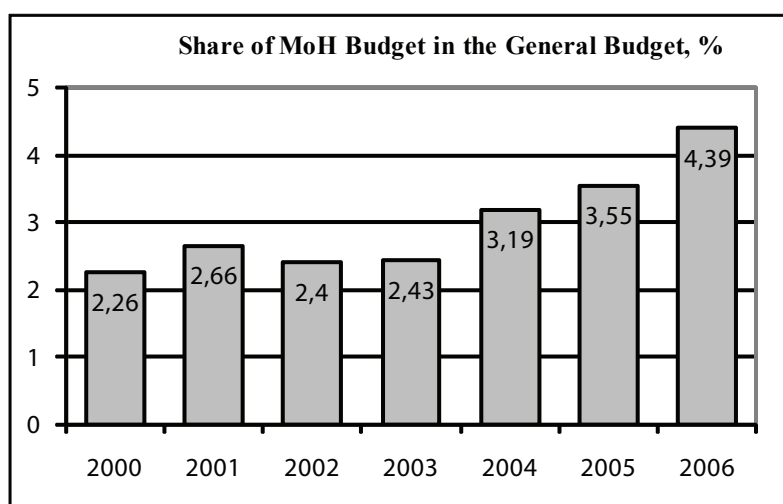
	Nurse Departments		Midwife Departments	
	Total number of students	Number of graduates	Total number of students	Number of graduates
2001	13.408	1.451	3.781	296
2002	14.849	2.124	4.409	575
2003	16.000	2.487	5.085	537
2004	16.884	2.902	5.431	838
2005	17.417	3.210	5.653	979
2006	17.658	3.534	5.719	1.101
2007	18.252	3.651	5.906	1.169

Source: SSPC Higher Education Statistics, 2001-2007

1.5 HEALTHCARE WORKFORCE FINANCE IN TURKEY

One of the most important issues influencing the effectiveness and efficiency of healthcare workforce in Turkey is the financing of workforce. From full-time or part-time employment of MoH physicians to new personnel recruitment, many issues are related to finance. Thanks to such policies as the recent practice of performance-based revolving fund and recruitment of contracted personnel, positive progress has been made in the financing of healthcare workforce.

The share of MoH Budget in the general budget is 4,39% as of 2006. Compared to 2000, the share of MoH Budget in the general budget has increased by 1.9 times. Within the total cost of MoH, the share allocated for healthcare workforce was 57,4% in 2005, while it regressed to 53,1% in 2006. MoH spends out of its general budget and its revolving fund revenues as healthcare workforce cost. Therefore, workforce costs must be evaluated with the expenditure from both sources. The share of the MoH budget in the general budget by years is shown in Figure 1.4'de, and the healthcare workforce expenditure out of both the general budget and the revolving funds are shown in Table 1.14.

Figure 1.4: Share of MoH Budget in the General Budget (Central Management Budget)

Source: Health 2006, MoH Department of Strategy Development, 2006.

Table 1.14: Healthcare workforce costs in MoH costs (Thousand NTL)

Years	2005	2006
MoH General Budget Costs (excluding green card)	4.960.154	5.624.693
MoH Revolving Fund Costs	6.725.233	9.784.378
MoH General Budget Healthcare Workforce Cost*	4.398.013	4.854.398
MoH Revolving Fund Healthcare Workforce Cost	2.305.065	3.054.146
MoH Total Healthcare Workforce Cost (general budget+revolving fund) fffffund capital)	6.703.078	7.908.544
MoH Total cost (general budget+revolving fund)	11.685.387	15.409.071
Healthcare workforce cost in MoH general budget costs (%)	88,7	86,3
Healthcare workforce cost in MoH revolving fund costs (%)	34,3	31,2
Healthcare workforce cost in MoH total cost (%)	57,4	51,3

Source: Obtained from the expenditure made in MoH 2005 and 2006 Fiscal Year, and from the MoH Single Order Accounting System Data.

* Covers personnel payments, social security premiums, and treatment and funeral costs.

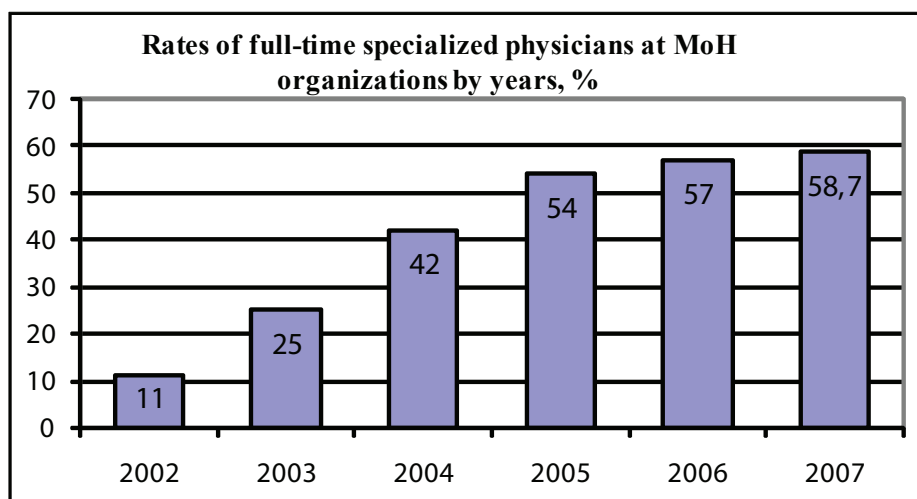
Important breakthroughs were made in recent years in Turkey in relation to the financing of healthcare workforce. Through Additional Payment Directive no. 1863 dated 18.06.2003 at MoH-affiliated primary healthcare institutions, the practice of performance-based revolving fund has been initiated. Following pilot implementation in 2003 at 10 hospitals, performance-based additional payment practice was extended on 01.01.2004 in a way to cover MoH-affiliated secondary and tertiary healthcare institutions as well⁽¹³⁾. The additional payment rate ceilings, which were originally limited to 100% of the wage basis for physicians and dentists and 80% for the other healthcare personnel, was increased in the 2004 Fiscal Budget Law. The additional payment rate ceilings laid out in 2004 Fiscal Budget Law are shown in Table 1.15.

Table 1.15: Additional payment rate ceilings decided in the 2004 Fiscal Budget Law according to personnel groups

Personnel	Additional payment rate ceiling (% according to wage basis)
Full-time specialized physician	700%
Part-time specialized physician	500%
Full-time general practitioner and dentist	500%
Part-time general practitioner and dentist	300%
Other personnel (personnel working at operating room, emergency, maternity ward, dialysis, intensive care unit)	200%
Other personnel	150%

Source: Health 2004, MoH Department of Strategy Development, 2005.

While additional payments to personnel at MoH affiliated institutions amounted in 2003 to 485.000.000 NTL; it increased, following the changes introduced to the payment system, to 1.071.300.365 NTL in 2004, to 2.217.179.210 NTL in 2005, and to 2.923.133.053 NTL in 2006⁽¹⁾. With the initiation of the practice of performance-based revolving fund and with the required improvements, a substantial increase took place in the rate of full-time specialized physicians at Ministry of Health organizations. Figure 1.5 shows the rate of full-time specialized physicians working at MoH organizations by years.

Figure 1.5: Rates of full-time specialized physicians at MoH organizations by years

Source: Health 2006, MoH Department of Strategy Development, 2006; MoH DG of Personnel; active personnel survey, April 2007.

1.6 CONCLUSION

Healthcare workforce planning covers many disciplines and sectors. As access to healthcare services, frequency of making use of services, improvements in patients' rights and the coverage of health insurance increases, the demand for healthcare services will rapidly increase.

Having many problems today, there are many tasks to be performed in the planning and management of Human Resources. Creating the job descriptions of the professions which do not have one, revising existing job descriptions, increasing the number of quality of personnel in accordance with medium-term goals taking into account the morbidity and mortality indicators, revising undergraduate and graduate vocational education, preparing personnel in line with the needs of the country and the field, increasing the satisfaction of the service provider as well as of the beneficiary of the service are some of the said tasks.

By inviting all potential stakeholders, the “Turkey Human Resources in Health Policy Dialogue Workshop,” the outcome of which is specified in the second part, was held between 24-28 April 2007. This workshop is regarded as an important step for bringing together the whole sector in order to introduce a holistic perspective to the matter at hand and to look for solutions.

CHAPTER 2

GENERAL REPORT OF HUMAN RESOURCES IN HEALTH POLICY DIALOGUE WORKSHOP

2.1 INTRODUCTION

Ministry of Health has initiated a process in order for the current situation and policies of health human resources to be reviewed and policies and strategies to be developed. In this context, capacity has been built at the School of Public Health (SPH) for cooperation and implementation of this process. On 24-28 April 2007, the SPH organized the “Turkey Human Resources In Health Policy Dialogue Workshop” to discuss the current situation, problems, and proposals of solutions with all stakeholders in the sector and to identify the innovations that are needed by analyzing present and future status of human resources for health. To this end, all stakeholders in the sector were invited to the workshop and a great many of the invited institutions and organizations participated in the workshop. Participants were selected by respective institutions and organizations. Groups which participated in the “Turkey Human Resources In Health Policy Dialogue Workshop” studied on identifying the current situation and needs of health workforce in Turkey on one hand and dealt with health workforce employment (demand) and educating (supply) parties separately on the other hand.

The institutions and organizations which are the employers of health workforce in Turkey were considered in two separate categories about provision and financing of health services. In the first category of health service provision, there are the Ministry of Health (MoH), Universities, Ministry of National Defense (MoND), Municipalities, private sector and voluntary organizations. In the second category of health service financing, there are Social Security Institution (SSI), MoH, Ministry of Finance (MoF), private insurance organizations, and third party management organizations. The parties training the health workforce are consisted of the Universities, Ministry of Education (MoE), and MoH for training specialist physicians.

The workshop was structured onto four main group studies. The first group studied on “Adapting Production of Health Workforce to Needs”; second group studied on “Tackling imbalances for better access to health services”; third group studied on “Creating an Attractive Working Environment” and the fourth group studied on Financing and Partnership. During the workshop, participants reached consensus on the fact that there were problems in employment and training of health workforce in Turkey in accordance with necessity and that the plans of parties demanding and supplying are not sufficiently integrated.

The general report of the workshop came out of the combination of the results from those studies conducted in four groups and topics. Report of the first group comes in the initial part since it is dealing with the current situation on necessity and supply of health workforce. Other topics are related to the employment so they will be dealt with together.

2.2 PRODUCTION OF AND NEED FOR HEALTH WORKFORCE

2.2.1 CURRENT SITUATION

There are 1205 hospitals and 196.667 hospital beds in Turkey as of 31 December, 2006. MoH owns % 67 of the hospitals and % 68 of the hospital beds. Over 6000 health centers and

300 Centers of Maternal-Child Health and Family Planning, where primary and preventive health services are provided, operate under the MoH. Private sector proportion among hospitals in total is % 25 percent; however bed capacity proportion of private sector is % 7 percent. Table 2.1 depicts the distribution of number of hospitals and beds in Turkey by institutions.

Table 2.1: Distribution of number of hospitals and beds by institutions, Turkey as of 31 December 2006

INSTITUTION	Number of Hospitals	Number of beds	Percent distribution of beds
TOTAL	1.205	196.667	100,0
Ministry of Health	769	133.168	67,7
Ministry of National Defense	42	15.900	8,1
University	56	29.700	15,1
Municipalities	6	1.191	0,6
Foundation/Association	19	2.176	1,1
Foreign	3	232	0,1
Minority	5	593	0,3
Private	305	13.707	7,0

Source: MOH- General Directorate of Curative Services, 2007

In Turkey, there are 54 different officially recognized health professions but for some of those, job descriptions are not defined clearly¹. Even there exist ambiguity in job descriptions of some internationally valid professions such as nursing and midwifery. Among the health professions in Turkey, only medicine, dentistry, pharmacy, and nursing have their specific laws. Although professions like midwifery, health officers' work, dietetics, physiotherapy do not have their specific laws, they are defined in "Law on the Practice of Medicine and Medical Sciences" and "Regulation on the operation of in-patient treatment institutions".

Health professions in Turkey can be divided into four groups as those providing medical attention, those providing administrative service, those providing technical service and those providing support service. Each mentioned group consists of workforce graduated from different school levels. Table 2.2 depicts distribution of health professions in Turkey into these four groups by school level; Table 2.3 depicts departments of schools providing health education in Turkey by bachelor, associate and high school degree.

Table 2.2: Distribution of health professions in Turkey by school level of graduation and service group.

Service Groups	Health professions by school level		
	High school	Associate degree	Bachelor degree
Providing medical attention	4	1	11
Providing administrative services	-	3	4
Support services	2	3	1
Technical services	5	19	1

Source: SSPC, 2006-2007 academic year statistics

¹ Number of bachelor degree, associate degree and high school level branches according to Student Selection and Placement Center (SSPC) statistics of 2006-2007 academic year.

Table 2.3: Departments of schools providing health education in Turkey by bachelor, associate and high school degree.

Class	Degree	School
Medical Attention	Bachelor	Medicine
		Dentistry
		Pharmacy
		Nursing
		Midwifery
		Health Officer
		Physical Therapy and Rehabilitation
		Nutrition and Dietetics
		Psychology
		Emergency Care and First Aid (Public Health)
		Medical Biology
	Associate	Nursing
	High school	Emergency Medicine Engineering
		Nursing
		Health Officer
		Midwifery
Administrative	Bachelor	Health Education
		Health Management
		Health Institutions Management
		Health Administration
	Associate	Health Administration
		Health Institutions Management
		Hospital Management and Organization
Support	Bachelor	Social Services
	Associate	Medical Documentation and Secretarial Training
		Social Services
		Environmental Health
	High School	Environmental Health Engineering
		Medical Secretary
Technical	Bachelor	Biomedical Device Technology
		Dialysis Science
		Physical Medicine and Rehabilitation Science
		Prosthesis-Orthosis Science
		Anesthesia Sciences
		Radiological Sciences
		Audiometrical Sciences
		Optometry Sciences
		Medical Laboratory Sciences
		Radiotherapy Science
		Electroneurophysiology
		Operating theatre technician
		Ambulance and Emergency Care Science
		Surgical Sciences

Table 2.3: Departments of schools providing health education in Turkey by bachelor, associate and high school degree. (cont.)

Class	Degree	School
Technical (continue)	Associate (continue)	Forensic Medicine Technician
		Biomedical Device Technology
		Oral Health Technician
		Dental Prosthesis Technician
		Hydrotherapy Technician
		Work and profession therapy
	High school	Anesthesia Technician
		Dental Prosthesis Technician
		Laboratory Technician
		Orthopedic Technician
		Radiology Technician

Source: SSPC, 2006-2007 academic year statistics

It is observed that physicians, pharmacists, health officers, nurses and midwives are taken into consideration when planning health workforce in Turkey, and there is a gap in terms of other professions. Except from dentists and pharmacists the majority of whom provide service in private sector, more than half of the other health workforce is employed by the MoH, and the second largest employment area is the universities. Table 2.4 depicts the distribution of health workforce in Turkey, by areas of employment.

Table 2.4: Distribution of health workforce in Turkey by areas of employment, 2007

Personnel's Title	Ministry of Health	Universities	Private Sector	Total
Physician	58.327	22.451	17.040	97.818
<i>Specialist</i>	24.408	11.668	13.664	49.740
<i>General Practitioner</i>	26.328	232	3.376	29.936
<i>Assistant</i>	7.591	10.551	-	18.142
Dentist	4.063	103	*12.781	16.947
Pharmacist	1.127	152	*18.866	20.145
Health Officer	44.087	1.601	8.567	54.255
Nurse	61.066	9.724	10.195	80.985
Midwife	40.711	180	2.159	43.050

Source: MoH General Directorate of Personnel (MHGDP), active working personnel survey, 15 April 2007,

* MoH Department of Strategy Development, 2005

* MoH Department of Strategy Development, 2005

If we examine the health workforce targeted for 2005 in the 8th five year development plan and realized in the same year, it is noteworthy that objectives were realized or close to be realized in each topic. In the Development Plan the point that no target related to professions except physicians, nurses, and dentists was set up and to what extent the set objectives reflect the needs can be discussed. The number of physicians was determined as 89.000 and the number of

nurses was determined as 77.100 in the plan, and this estimation does not technically comply with two nurses per physician objective. Besides, the fact that no targets were determined in terms of the workforce in other profession groups indicates a major deficiency. Table 2.5 depicts the data on the health workforce targeted for 2005 in the 8th five year development plan and realized in the same year.

Table 2.5: VIII. Development plan, goals for 2005 in health indicators and realized current situation.

Criteria	Current Situation*	VIII. Plan 2005 goals
Number of beds	192.685	200.000
Population per bed	374	351
Bed occupancy ratio (%)	63.9	75
Number of physicians	98.697	89.000
Population per physician	730	789
Number of dentists	18.599	16.000
Population per one dentist	3.874	4.389
Number of pharmacists	21.748	-
Population per pharmacist	3.313	-
Number of health officers and technicians	58.255	-
Population per health officer	1.237	-
Number of nurses	83.015	77.100
Population per nurse	868	910
Number of midwives	43.364	-
Population per midwife	1.661	-

Source: MoH- Department of Strategy Development

(*) the data include the number of hospitals and personnel in the whole sector.

2.2.2 TRAINING HEALTH WORKFORCE

a) High School Level Education:

Health Vocational Schools of Health (VoSH) under the MoE in Turkey provides education in total eleven branches. In the group providing medical attention, there are nursing, midwifery, emergency medicine engineering, and health service divisions; in the administrative group, there is medical secretary training; and in the technical group, there is laboratory, radiological, anesthesia, environmental, dental and orthopedics engineering departments. Students are no longer admitted to nursing, midwifery, and health service programs after VoSHs were ceded to MoE; it was decided to admit students for nursing and equivalent health services departments for the following 5 years in accordance with the Law No: 5634 which was published in the Official Gazette of May 2nd, 2007 and entered into force thereupon. Currently, there are 4.794 teachers and 35.055 students at total 272 VoSH. Table 2.6 depicts the department at VoSH and the number of students in 2006-2007 Academic year.

Table 2.6: Number of students in vocational schools of health by departments, 2007

DEPARTMENT	NUMBER OF STUDENTS
Emergency Medicine technician	11.396
Nursing	5.011
Laboratory Technician	4.837
Medical Secretary	4.515
Anesthesia Technician	2.667
Midwifery	2.423
Radiological Technician	2.006
Environmental Technician	1.128
Dental Technician	467
Health Services	435
Orthopedics Technician	170
Total	35.055

Source: MOE, 2007, www.meb.gov.tr

b) Associate level education:

The departments of two year programs at Turkish universities award an associate degree in 26 different professions with various titles. According to SSPC data, there are 16.000 students enrolled in these two year associate degree programs and 4000 students graduated in 2005-2006 Academic year. There is no information related to how the branches and number of students are determined. 89 professors in total work at 2 year associate degree programs at Universities. Table 2.7 depicts the number of training staff members by departments in 2006-2007 Academic year, and table 2.8 depicts students at two-year associate degree programs by areas of education.

Table 2.7: Number of training staff members at higher education programs awarding associate degree by areas of education, 2007.

Area of Education	Prof.Dr.	Assoc.Dr.	Ass.Dr.	Lecturer	Total
Total	3	5	16	64	89
Medicine	-	1	1	6	8
Nursing	-	1	4	8	13
Environmental health	-	-	1	1	2
Health Technology	1	3	8	24	36
Health Administration	1	-	1	19	21
Social Services	-	-	-	-	1
Physiotherapy	-	-	-	2	2
Health Management	1	-	1	4	6

Source: SSPC, 2006-2007 Academic Year Higher Education Statistics, www.osym.gov.tr

Table 2.8: Number of students at associate degree level by areas of education, 2007.

Area of Education	2006-2007 Academic year		2005-2006 Academic year Number of Graduates
	Number of new	Total number of students	
Total	6.437	16.156	3.960
Dialysis	68	166	53
Nursing	-	1	1
Physical Medicine and Rehabilitation	153	388	126
Physical Medicine and Rehabilitation	29	78	22
Prosthetics Orthotics	124	310	104
Health Administration	1.637	3.728	1.098
Health Administration	88	188	53
Medical Documentation and Secretarial T	1.371	3.258	968
Health Institution Management	60	60	-
Health Management and Organization	118	222	59
Health Technology	4.174	10.910	2.466
Anesthesia	452	1.181	244
Radiology	698	1.793	490
Audiometrics	112	328	102
Medical Laboratory	1.443	3.719	845
Radiotherapy	55	136	41
Optometry	166	402	96
Electroneurophysiology	16	47	9
Operation technician	30	65	31
Ambulance and Emergency Care technician	378	800	249
Surgical technician	40	68	10
Forensic Medicine technician	21	41	-
Biomedical Devices Technology	763	2.330	349
Oral and Dental Health	207	584	136
Oral and Dental Health	50	129	44
Dental Prosthesis	157	455	92
Hydrotherapy	75	134	33
Social Services	58	78	-
Environmental Health	30	88	31
Work and occupation therapy	35	79	16

Source: SSPC, 2006-2007 Academic Year Higher Education statistics, www.osym.gov.tr**c) Bachelor degree education:**

Bachelor degree education at Turkish universities is conducted in minimum four year programs and these programs leads to a degree in 16 different professions holding various titles.

12.219 students graduated from these bachelor degree programs in 2005-2006 Academic year and there are 74.746 enrolled students. The majority of bachelor degree students are enrolled in medicine and nursing departments. % 70 percent of the students enrolled in four year bachelor degree programs in 2006-2007 Academic year are in medicine and nursing departments. If the current situation is preserved, it can be assumed that to fill the needs for nurses and physicians in our country may take long years. Another issue is the sufficiency of other professions. How the future health professions will meet the quantitative and qualitative needs is also an important issue. Table 2.9 depicts the data on the bachelor degree programs in Turkey for the 2006-2007 Academic Year.

Table 2.9: Number of students at bachelor degree level by areas of education 2007

Areas of Education	2006-2007 Academic year		2005-2006 Academic Year Number of Graduates
	Number of new students	Total number of students	
Total	14.540	74.746	12.219
Medicine	5.018	32.781	4.406
Medical Biological Sciences	-	47	59
Public Health	29	48	-
Emergency Care and First Aid	29	48	-
Dentistry	1.078	5.873	763
Pharmacy	997	4.666	869
Nursing	5.624	24.158	4.820
Nursing	4.286	18.252	3.651
Midwifery	1.338	5.906	1.169
Physical Medicine and Rehabilitation	435	1.919	361
Health Administration	921	3.545	552
Health Administration	53	319	50
Health Institution Management	17	110	4
Health Officer	851	3.116	498
Health Technology	-	1	1
Biomedical Device Technology	-	1	1
Social Services	293	942	124
Nutrition and Dietetics	145	677	133
Health Education/Management	-	89	131
Health Education	-	37	61
Health Management	-	52	70

Source: SSPC, 2006-2007 Academic Year Higher Education Statistics, www.osym.gov.tr

Approximately %85 percent of the professors and lecturers at the universities that provide bachelor degree education in health at the faculties of medicine. The percentage at other faculties and schools is quite low when compared to the faculty of medicine. This high amount in number is actually not surprising since the professors in faculty of medicine are also in active medical duty. However it should be discussed whether this huge difference is due to this fact or not and to what extent the staff is organized considering the needs. On the other hand, it is not clear to what extent the number of professors at nursing, dentistry, and similar departments meet the needs. Table 2.10 depicts the training staff members working at bachelor degree programs in Turkey by the areas of education.

Table 2.10: Distribution of training staff members working at bachelor degree programs by areas of education, 2007.

Area of Education	Prof.Dr.	Assoc.Dr.	Ass.Dr.	Lecturer	Total
Faculty of Medicine	4.016	1.821	2.272	382	8.491
Faculty of Dentistry	422	118	209	14	763
Pharmacy	204	83	106	22	415
Nursing	56	27	170	239	492
Health Technology	3	1	4	1	9
Health Administration	4	4	16	20	44
Social Services	7	5	8	2	22
Nutrition and Dietetics	15	2	5	-	22
Faculty of health education	7	4	13	8	32
Total	4.734	2.061	2.790	680	10.258

Source: SSPC, 2006-2007 Academic Year Higher Education Statistics, www.osym.gov.tr

d) Specialization Training:

Medical specialization training in Turkey has being given in seventy three specialty or post-specialty branches. 2.448 specialists graduated in 2006; in return, 5.264 persons started their specialization program. There are 19.070 persons in these programs as of 2006. No technical study has been conducted on how many people from which specialty branches are needed in Turkey. Although some studies on the current situation and necessities exist, still reliable data is not available. Table 2.11 depicts the data on doctors in specialty training programs.

Table 2.11: Distribution of physicians working for their residency according to Medical Specialization By-laws by areas of education, 2007.

Area of Education	2006-2007 Academic Year						Residency completed in 2006
	Appointed for residency			Residents			
	University	Other edu. Inst.	Total	University	Other edu. Inst.	Total	
Total	3.234	2.028	5.264	11.884	7.186	19.070	2.448
Medicine	3.234	2.028	5.262	11.884	7.186	19.070	2.448
Medical Biology	23	1	24	69	2	71	1
Medical Biology	1	1	2	12	2	14	-
Biostatistics	2	-	2	6	-	6	-
Genetics	15	-	15	37	-	37	1
Medical Biology and genetics	5	1	6	14	2	16	-
Anatomy	48	1	49	99	3	102	1
Physiology	46	-	49	98	1	99	-
Biophysics	3	-	3	8	-	8	-
Biochemistry	72	34	106	269	106	375	35
Histology and Embryology	28	1	29	86	1	87	1
Microbiology	49	2	51	202	39	241	20
Microbiology	49	2	51	200	39	241	18
Parasitology	-	-	-	2	-	2	1
Virology	-	-	-	-	-	-	-
Biochemistry and Clinical Biochemistry	2	2	4	9	24	33	5
Deontology and History of Medicine	1	-	1	3	-	3	1
Forensic Medicine	24	-	24	81	1	82	3
Pharmacology	38	-	38	96	1	97	6
Psychiatry	102	114	216	438	317	755	100
Psychiatry	75	113	188	332	314	646	79
Pediatric Psychiatry	27	1	28	106	3	109	11
Radiology	197	146	343	703	401	1104	123
Radiology	69	132	201	259	332	591	51
Radiodiagnostics	95	8	103	335	24	359	59
Radiation Oncology	33	6	39	109	45	154	13
Internal diseases	567	611	1.178	2.055	1.738	3.793	484
Internal diseases	290	129	419	1.091	519	1.610	215
Cardiology	136	67	203	502	256	758	102
Infectious Diseases	17	10	27	60	69	129	21
Chest dis. And Tuberculosis	6	14	20	23	105	128	20
Underwater and Sea Medicine	-	1	1	11	2	13	-
First and Emergency Aid	90	83	173	259	95	354	46
Family Medicine	28	303	332	109	671	780	67
Allergy	-	1	1	-	2	2	1
Endocrinology	-	67	67	-	256	256	35
Hematology	-	-	-	-	-	-	2
Nephrology	-	-	-	-	3	3	2
Rheumatology	-	-	-	-	-	-	2
Oncology	-	-	-	-	1	1	1
Gastroenterology	-	2	2	-	10	10	3
Geriatrics	-	1	1	-	2	2	-

Table 2.11: Distribution of physicians working for their residency according to Medical Specialization By-laws by areas of education, 2007.(cont)

Area of Education	2006-2007 Academic Years						Completed residency in 2006
	Appointed for Residency			Resident			
	University	Other ed. Inst.	Total	University	Other ed. Inst.	Total	
Pediatrics	324	137	461	1.084	564	1.648	215
Pediatrics	314	126	440	1.046	533	1.579	210
Cardiology	4	4	8	18	8	26	4
Neurology	-	2	2	2	8	10	-
Infectious diseases	2	-	2	2	-	2	-
Pathology	4	3	7	16	6	22	-
Allergy	-	-	-	-	1	1	-
Hematology	-	-	-	-	2	2	-
Nephrology	-	-	-	-	2	2	1
Oncology	-	1	1	-	1	1	-
Neonatology	-	1	1	-	3	3	-
Nuclear medicine	41	1	42	136	13	149	14
Neurology	109	59	168	389	215	604	85
Dermatology	53	21	74	258	99	357	39
Physical Medicine and Rehabilitation	96	44	140	362	185	547	55
Physical Medicine and Rehabilitation	89	44	133	342	185	527	55
Sports Medicine	7	-	7	20	-	20	-
Public health	46	-	46	158	2	160	16
Pathology	67	23	90	227	123	350	43
General Surgery	139	55	194	548	401	949	152
Chest Cardiovascular Surgery	118	35	153	401	203	604	99
Chest Cardiovascular Surgery	3	-	3	15	-	15	2
Chest Surgery	36	10	46	104	67	171	32
Cardiovascular Surgery	79	25	104	282	136	418	65
Pediatric Surgery	49	16	65	172	38	210	29
Pediatric and Cardiovascular Surgery	-	-	-	-	3	3	-
Neurosurgery	69	23	92	290	161	451	58
Plastic and Reconstructive Surgery	54	25	79	227	112	339	44
Gynecology and Obstetrics	116	143	259	556	610	1.166	175
ENT	69	69	138	317	264	581	69
Ophthalmology	94	96	190	394	319	713	67
Urology	71	51	122	302	218	520	85

Table 2.11: Distribution of physicians working for their residency according to Medical Specialization By-laws by areas of education, 2007.(cont)

Area of Education	2006-2007 Academic Years						Completed residency in 2006
	Appointed for Residency			Resident			
	University	Other ed. Inst.	Total	University	Other ed. Inst.	Total	
Orthopedics and Traumatology	118	76	194	423	301	724	119
Anesthesiology	242	221	463	837	579	1.416	191
Clinical Bacteriology and Infectious Diseases	34	4	38	111	11	122	23
Chest diseases	81	9	90	319	85	404	69
Microbiology and Clinical Microbiology	19	2	21	72	7	79	12
Medical ecology and Hydroclimatology	1	-	1	4	-	4	-
Infectious dis. And clinical microbiology	22	6	28	76	39	115	19
Pharmacy	-	-	-	1	-	1	-
Pharmacology	-	-	-	1	-	-	-
Medical Information	2	-	2	4	-	4	-

Source: SSPC, 2006-2007 Academic Year Higher Education Statistics, www.osym.gov.tr

e) Institutes:

In Turkey, total number of professors employed at the Health Science Institutes and specialty branch related institutions like Gastroenterology Institute, Neurology Institute and etc. is 123. Considering the role of these institutes as providers of patient care and research rather than medical training, it can be argued that these professors can only support the students in their specialty training. Table 12 depicts the number of professors at various institutes in Turkey.

Table 2.12: Number of of training staff members at institutes and research centers by areas of education, 2007.

Area of education	Prof.Dr.	Assoc.Dr.	Ass.Dr.	Instructor	Total
Health Sciences	1	1	8	5	15
Medicine	65	25	13	-	103
Child Health and Education	-	-	5	-	5

Source: SSPC, 2006-2007 Academic Year Higher Education Statistics, www.osym.gov.tr

2.2.3 NEEDS

Besides studying on the health workforce necessities, the groups participated in Human Resources in Health Policy Dialogue Workshop have studied on the needs for educational institutions and trainers that will supply the workforce. Group studies on necessities focused on six titles below.

1. Participants had different views on health workforce needs in Turkey; while some participants argued that there were more physicians than needed in Turkey, some others suggested that the physician need in Turkey may not be filled for years. The participants agreed on the view that technical study groups should be formed to identify the needs for fifty-nine health professions and seventy-three specialty branches in Turkey and to determine through which educational institutions these needs can be met and how long it will take.

2. The fact that both high school degree and associate degree level workforce has been supplied in some professions and the number of students is not planned in accordance with the needs was seen as an important problem.

3. During the group studies, the participants emphasized that the changing needs of the society should be taken into consideration when planning the health workforce, and these changing needs were examined in four groups. The results of the discussion are as follows:

Socioeconomic variation: While Turkey once had had a population providing agricultural production and living in rural areas, today, approximately %75 percent of the Turkish population live in urban area, and more than %60 provides industrial based production.

Cultural structure: While Turkey once had had a close structure of society; televisions, generalization of universities, development of tourism, and improvement in the transportation and communication opportunities have led Turkey into a global cultural aspect.

Demographical structure: Expected life span in Turkey exceeds 70 years and some age related chronic diseases and illnesses are expected to be seen more.

Epidemiological structure: Epidemiological pattern of Turkey has been changing from the situation in which form a widespread communicable diseases and into the situation in which important problem chronic diseases like cancer, diabetics, and hypertension will seen more frequently.

Health services, and accordingly, health workforce should be adapted to these changing patterns. The need for specialists in areas such as geriatrics, physical treatment and rehabilitation, physiotherapy, dietetics, psychiatry, and psychology is constantly increasing. To supply workforce in new professions like home care nursing should be included in the agenda.

4. Another issue discussed by the participants is the necessity to identify the health workforce needs for the future and in periods as well as they are identified for the present day. Thus, deficiency and surplus can be determined comparing the current workforce quantity, and the number of students to be admitted in educational institutions can be planned through these estimations. Following the studies in this scope, the capacity of the organizations supplying health workforce should be determined and professor and other resource needs should be stated.

5. Participants also emphasized the qualitative deficiency of health workforce and the institutions supplying this workforce as well as their quantitative shortage. They discussed some other issues affecting the quality of workforce and these are defined as follows:

- Legal gaps related to and ambiguities in job and authority descriptions of professions and specialties that exist or that are planned to be formed,
- Ineffectiveness in employment and lack of knowledge/skill caused by that ineffectiveness resulting as decrease in service quality, employment imbalance at nationwide,
- Trained personnel quality cannot be increased due to the deficiencies in infrastructure, workforce, system and curriculum of educational institutions and organizations,
- Lack of quality and accreditation systems that will provide constant development both in service provision and in educational institutions do not exist or are not widespread yet,
- MoH, MoNE and Higher Education Council (HEC) are not successful in realizing the desired cooperation,
- Self-assessment capacity of organizations and individuals is low.

6. Participants agreed on the view that VoSH situations should be identified clearly, and for this aim they suggested that a research dealing with the issues above should be conducted:

- Competency of academic staff in terms of quantity and educational skills,
- Infrastructural conditions like facilities, laboratories, etc.,
- Validity of trainings methods,
- Problems encountered during practicing,
- Compliance of curriculum with defined professional practices and responsibilities,
- Distribution of schools at nationwide,
- Consistency of student quantity still being recruited to provide education without destructing quality of education.

2.2.4 LACK OF INFORMATION

The views on the lack of information which were composed during the “Human Resources in Health Policy Dialogue Workshop” are as follows:

1. There is the lack of situation analysis and national strategic plans on the training of health professionals. Consistency and strong mind could not be achieved in relation to the issue of techniques to be used in these plans. There was skepticism about the quality of the data due to the variations in the quantities of existing workforce. For instance, there is no data on the proportion of health professionals working in occupations other than health service.

2. Changing socio-demographic and epidemiological patterns in society and the developments in health and educational technology are not sufficiently considered and this fact eliminates the opportunity to conduct an effective necessity and capacity assessment.

3. The personnel, who will use universally accepted methods and techniques for health workforce planning, is quantitatively and qualitatively incompetent.

2.2.5 SUGGESTIONS

In the light of their studies, the groups that participated in Human Resources in Health Policy Dialogue Workshop have focused on the suggestions below, in terms of health workforce supply and necessities:

1. The changing patterns of socio-demography and epidemiology in society and the developments in health technology should be considered in the studies for planning health workforce,
2. Plans and production of health workforce should be associated with service provision,
3. Health managers should have standardized skills of training and management; and those lacking these skills should not be employed in management level,
4. The people should be employed in occupations consistent with their job descriptions,
5. Curriculum variations between universities in terms of bachelor degree and postgraduate education should be eliminated; standardization in parallel with sectoral needs should be achieved; accordance to “Core Training Program” should be carried out,
6. Service provision and quality of education in health professions should be constantly improved; accreditation system should be implemented,
7. Post graduate continuous education mechanisms should be enforced and generalized, appraisal and revalidation studies should be initiated.

2.2.6 ROLE OF GOVERNMENT

Below are some points determined during the workshop related to the role of government:

1. Providing coordination between associated shareholders in health sector.
2. Leading the technical studies on health workforce planning and establishing valid techniques.
3. Making necessary legislative changes and fulfilling the gaps.
4. Putting monitoring and evaluation mechanisms in force for a more efficient service provision.

2.2.7 CRITICAL FACTORS FOR SUCCESS

Below are the critical factors for success, which were pointed out during the Human Resources in Health Policy Dialogue Workshop, related to planning the production and necessity of health workforce:

1. Mentioning physical characteristics in job descriptions for a person who would work in the sector (for instance, not employing a weak person as an emergency medicine technician, etc.)

2. Not allowing professionals to work other than their own areas.
3. Defining the limits for postgraduate education and specialization trainings.

2.3 TACKLING IMBLANCES FOR BETTER ACCESS TO HEALTH SERVICES, CREATING OF AN ATTRACTIVE WORK ENVIRONMENT AND FINANCING-PARTNERSHIP

2.3.1 WHERE ARE WE IN THE PROCESS OF IDENTIFYING POLICIES FOR IMBALANCED DISTRIBUTION OF WORKFORCE?

Participants came to agreement on the view that we have been going through the first two stages of policy development process (analysis of current status and planning) to bring a solution to imbalanced distribution of health workforce and create attractive work environment for employees in health sector. However, we are at different stages of policy development process in different fields due to wide scope of the Health Transformation Program (HTP). Some participants asserted that policy-making is a dynamic process and interventions are made sustainable so as to improve the system or make it excellent. Finally, participants did not come to agreement on the existing stage of policy-making for human resources process.

2.3.2 ANALYSIS OF CURRENT SITUATION

2.3.2.1 WHAT'S THE PROBLEM?

It is a well known fact that distribution of workforce in Turkey is not balanced. However, this imbalance should immediately be eliminated and work environment should be made attractive for employees. Criteria were assessed, which could be used to detect problems in order to present the existing problem in figures. International reference figures, professional norms and population are included in such criteria. Since it may not be compatible with country facts to make assessment based on the figures of another country – for a great number of reasons- it may be a more appropriate approach for a country to develop her own norms rather than making use of the international figures. Even though being available, professional norms could turn out to be inadequate to diagnose the problem of imbalance just because they only indicate future workforce which could be created in long run. As an example standard positions at the MoH-affiliated health care institutions were determined. However, in order to achieve this standard the MoH has to possess 2.5 times as much workforce. Instead of indicating the standard positions of health care institutions MoH Personnel Distribution Scale (PDS) is a position scale which is made up of balanced distribution of existing health professionals (10% more) to the health care organizations by using population priority criteria. In this context to provide the personnel distribution according to PDS criteria will not require a long term process. Although providing the distribution of workforce by population based on the number of present employees could be used as a method, there is a great number of factors that have influence on appointments.

Health workforce is distributed according to the PDS at present. PDS Tables, main pillar of which is population, are designed depending on some criteria such as geographical conditions, population movement on daily basis (tourism and industrial regions), whether university or

private hospitals are existing in a particular region and technical infrastructure of health care organizations.

Financing problems were also handled at the workshop. It was underlined that financing sources are adequate but they are not used in effective and efficient manner, there are some inequities in salaries, and performance-based payment system should be improved more. On the other hand the points of social needs which need to be improved were emphasized. Training and career improvement, which are essential instruments of health workforce, were also handled and it was commented that in-service trainings are too much in number but less effective in achieving their goals and financing of in-service trainings is increasingly becoming a severe problem for the sector. When planning in-service trainings, target and goals should be clearly identified and revolving fund could be used as a financial source.

Also it was emphasized that there are some issues noticed by the HTP regarding workforce problems, there are HTP components which might play role in solving these problems and components relevant to the issue were put under discussion. Human Resources for Health is one of the modules which was primarily adopted under the HTP. In this context, qualifications of managers, improvement of physicians and nurses-oriented trainings and promotion of health workforce with regards to quality and quantity were emphasized. Main problems were detected under “highly motivated, well trained and well qualified health workforce” title of “easy-to-access, widespread and friendly provision of services”, which is another component of the HTP. It is thought that HTP will help to build capacity of decentralized workforce planning and management skills and thus contribute to active participation in workforce planning of managers.

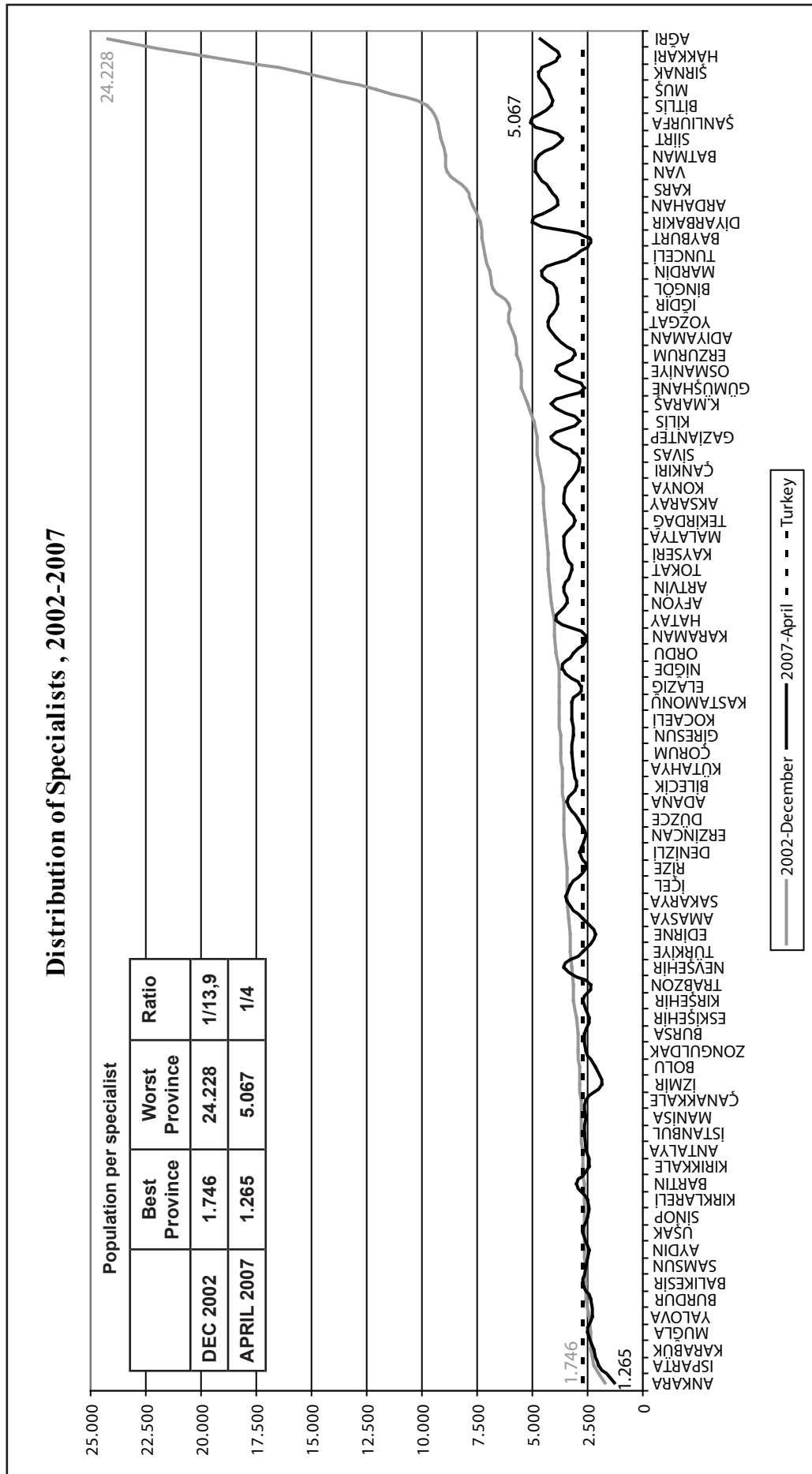
2.3.2.2 WHAT ARE DIMENSIONS OF IMBALANCE AND WORK ENVIRONMENT-SPECIFIC PROBLEMS?

It is important to find out the cause for imbalanced workforce in order to detect sources, decide priorities, and identify targets and policy options. Imbalance in distribution of workforce could be assessed in two aspects: geographical (among regions, among provinces, in-city and rural-urban areas) and service levels (primary, secondary and tertiary health care).

MOH-PDG is the sole authorized body to provide data that could be used to make assessment of imbalanced workforce problem. However, participants at the workshop had to use data in hand since the MOH-PDG did not manage to review and update data just before the workshop started. Data in hand covers distribution of physicians, nurses and midwives among by provinces from 2002 to 2007.

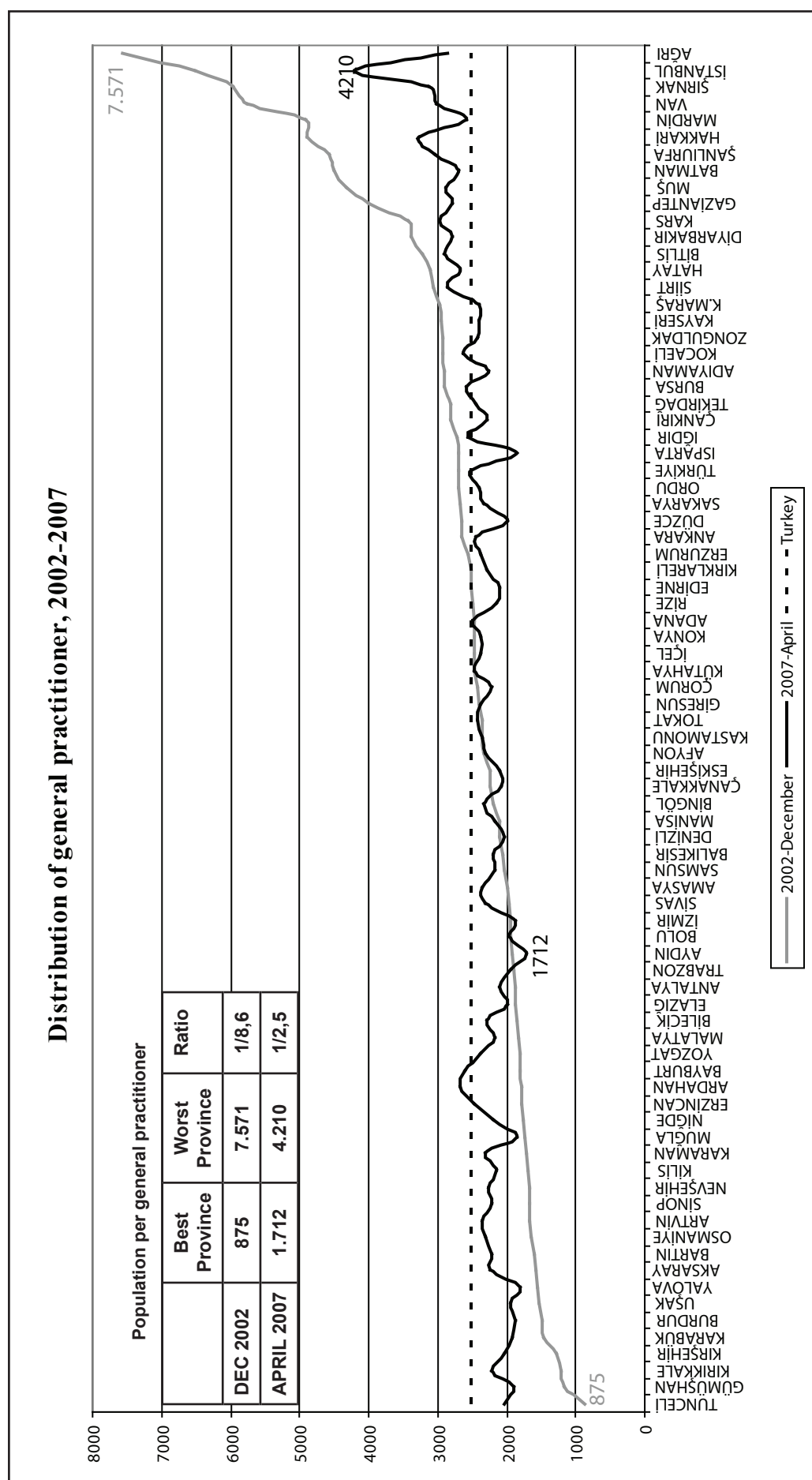
Eastern and Southeastern Regions were at the end of the list with respect to distribution of specialist physicians in December 2002, but conditions in these two regions were then outstandingly improved by February 2007. In 2002, provinces, which were at the top of the list, had 13, 9 times as much the specialists than the provinces which were at the end of the list with respect to the number of specialist physicians per capita. In 2007, the gap diminished and decreased to 4 times. Similarly, distribution of general practitioners and nurses got more balanced. In 2002, provinces, which were at the top of the list, had 8, 7 times as much the general practitioners than the provinces which were at the top of the list and in 2007, the gap decreased to 2, 5 times. As for nurses and midwives, figures are 7, 9 in 2002 and 5, 2 in 2007. Though some progress has been made in recent years, it is not satisfactory yet. Figure 2.1 presents distribution of specialists, Figure 2.2 presents distribution of general practitioners, and Figure 2.3 presents distribution of nurses and midwives in the following.

Figure 2.1: Distribution of Specialists by Provinces*



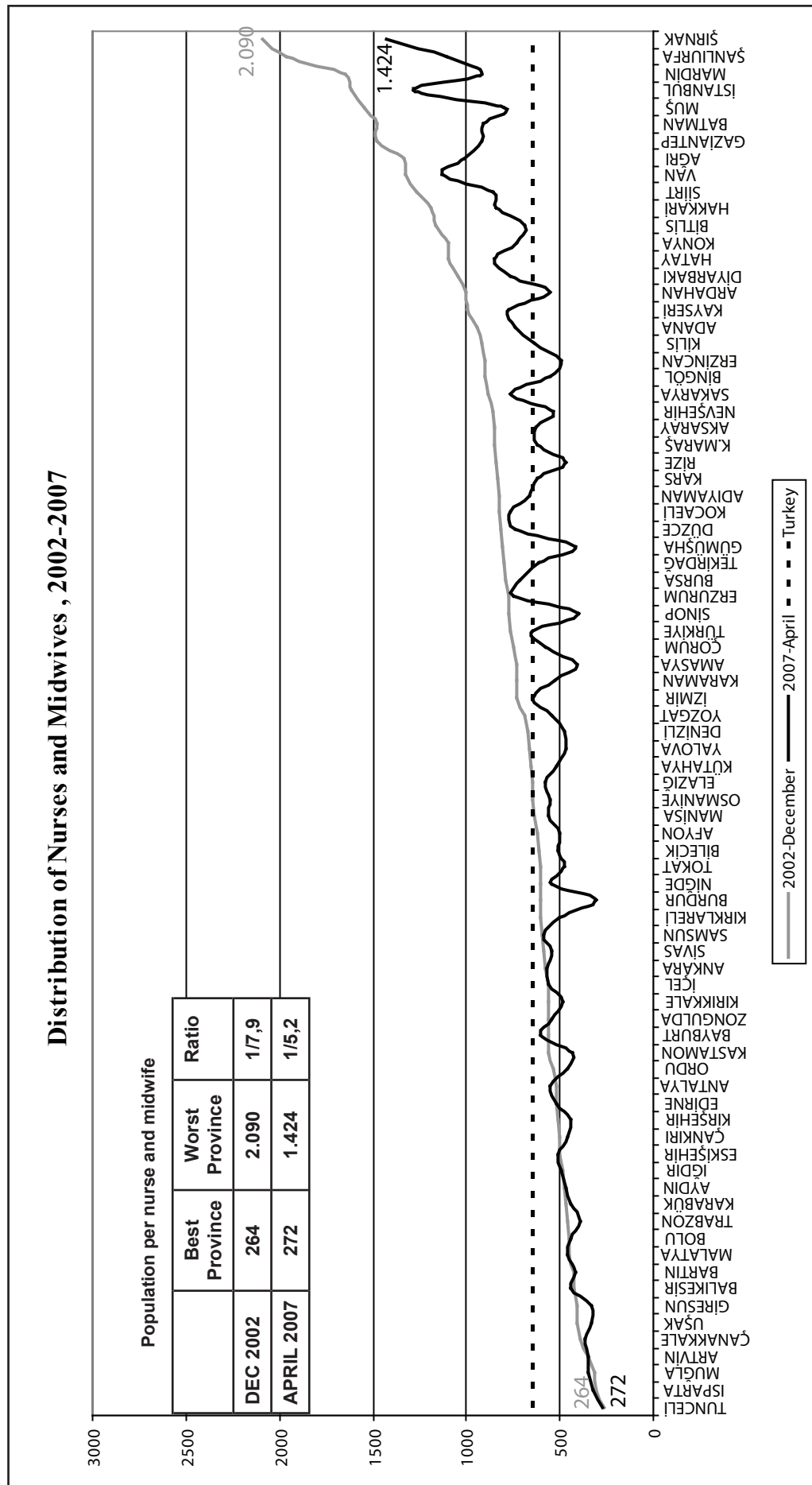
Source: AKDAĞ, R. 2007 Fiscal year Budget Presentation (*) MoH personnel is covered, the data regarding 2007 is added during the workshop.

Figure 2.2: Distribution of GPs by Provinces*



Source: AKDAĞ, R. 2007 Financial Budget Presentation for 2007 (*) MoH personnel is covered, the data regarding 2007 is added during the workshop.

Figure 2.3: Distribution of Nurses and Midwives by Provinces *



Source: AKDAĞ, R. 2007 Financial Budget Presentation for 2007 (*) MoH personnel is covered, the data regarding 2007 is added during the workshop.

Quality of data used was evaluated with respect to reliability, validity and access, and regarded “reliable” for two reasons: 1) no other source of data is available for comparison, 2) MoH-PDG (Ministry of Health-affiliated Personnel Directorate General) authorities expressed that they received data from Provincial Health Directorates on weekly basis and confirmed data with other sources, as well.

However, it is not the same for data “validity” since data used covers MoH, Universities and private sector-embedded workforce and does not cover the information on MoND and other ministries. Data, indicating various aspects of imbalance, is available in the MOH-PDG, yet, access to such data was too much limited due to restricted time. The standards determined regarding health workforce at MOH organizations and the current situation by 25.04.2007 are indicated in the following table 2.13. Although table 2.13 indicates standards determined for MOH institutions, as we have mentioned earlier standard positions are taken out of the agenda recently and personnel distribution is made according to PDS criteria.

Table 2.13: Health workforce-specific standards* at MoH organizations and current situation by 25.04.2007

TITLE	Standard	Existing	Active Work	Need according to existing numbers by standards
Specialist Physician	85.885	26.603	24.408	59.282
General Practitioner	68.567	29.233	26.328	39.334
Nurse	177.066	62.259	61.066	114.807
Midwife	105.843	41.961	40.711	63.882
Dentist	14.509	4.271	4.063	10.238
Pharmacist	7.415	1.438	1.127	5.977
Health Technician	185.887	49.126	45.188	123.452
Biologist	2.220	682	612	1.538
Child Development Specialist	1.084	58	46	1.026
Dietician	2.828	543	486	2.285
Physiotherapist	1.816	696	607	1.120
Psychologist	7.057	512	464	6.545
Health Physician	54	7	7	47
Social Worker	6.412	297	280	6.115
Medical Technologist	7.188	1.312	1162	5.876
Veterinary	328	13	7	315

Source: MOH-PDG, 25 April 2007 data

* Standard positions are taken out of the agenda recently and personnel distribution is made according to PDS criteria.

There are difficulties in terms of starting to create an attractive work environment problems exist. Number of medical school graduates is less than demand in Turkey, which leads to delays in health service provisions. System has difficulty in holding hardworking employees in institutions after specific time of the day especially in primary and secondary care and solutions about how to improve these problems are not being sufficiently discussed.

Disorder in distribution of personnel, inadequate incentives working environment and bothering work conditions diminish efficiency and effectiveness, and thus give rise to problems in financing. Besides, a part of trained health workforce are not integrated to the system for some reasons and are working in other sectors. To this end, HEC should also be consulted and associate consensus should be accomplished on health workforce planning.

2.3.2.3 WHY ARE IMBALANCE AND WORK ENVIRONMENT-SPECIFIC PROBLEMS IMPORTANT?

Imbalance in distribution of health workforce has an adverse effect on equality (with respect to utilization of health care services, out-of-pocket expenditures and financial protection), quality and efficiency, which are accepted as basic performance indicators of the health system. Participants at the workshop said that inequities in health care services are true for many regions in Turkey and critics usually target state policies of appointment and this view emphasizes negative effects of imbalance on equality. Those who demand health care services have to go to other provinces or private sector organizations, which is a factor that lengthens waiting hours to receive service and thus increase the cost of service.

Inadequate health workforce is directly reflected on service quality. Inadequate number of physicians leads to allocation of less time to patients for treatment in addition to medical faults and delays, as well. Similarly, when workforce is not sufficient in a professional groups, then other groups in the institution have to replace them and undertake additional tasks and responsibilities, which restricts efficient use of workforce and thus lead to negativeness in service provision. At this point one of the most important problems is lack of workforce and defects in planning the existing workforce in a right way.

2.3.2.4 IS THERE MISSING INFORMATION ON IMBALANCE AND WORK ENVIRONMENT-SPECIFIC PROBLEMS?

The workshop managed to assess the problem of imbalance merely on the MOH-affiliated health care institutions employed specialists, general practitioners, nurses and midwives' distribution by provinces. In order to identify the problem more accurately and in details and to develop appropriate solution proposals at least following data is needed regarding physicians and nurses.

- By making use of data set that covers information (and is valid) for of all the workforce and is about specialist physicians, general practitioners, nurses and midwives, at the MoH, universities, private sector, MoND and other ministries.
 - 1) distribution of physicians and nurses in general 2) distribution of specialists by branches and nurses, among regions, provinces and in provinces regarding service levels;

- Distribution of specialists, general practitioners and nurses by among regions, provinces and in provinces regarding service levels and areas of specialization in public and private sector.

When implementing health workforce policies about creating an attractive work environment and solving problems in work environment, there are some missing information. To give example, a large scaled assessment data set is not available for performance measurement. Similarly, the fact that not all of the hospitals having human resources department cause difficulties while solving problems.

Furthermore, the Core Resource Management System (CRMS) and Human Resources Management System (HRMS) and Personal Distribution Scale (PDS), which are used by the MoH, gives broad scope of data on quantity and quality of health workforce. However, data obtained from separate sources can not be combined on a joint data basis and thus can not be converted into concrete information. Besides, statistics, which are reported by different institutions such as TSI, MoH and HEC, are not consistent with each other, which arises concerns regarding reliability of data.

2.3.2.5 WHAT ARE THE REASONS FOR IMBALANCE AND WORK ENVIRONMENT-SPECIFIC PROBLEMS?

Factors of imbalance in distribution of physicians and nurses can be put in four groups: Health System (HS), Institutional Factors (I), Social Factors (S) and Personal Factors (P). Work environment and financing and partnership-specific problems could be evaluated in one of these four groups, as well. Participants expressed their views on these factors at the workshop and these views are listed in the following:

- Political interventions **(HS)**,
- Ambiguous duration of compulsory service. Different than the personnel in other ministries (judges, prosecutors, policemen and military personnel, for example), the MoH personnel does not know exactly when they will return from the place they gone for compulsory service. Compulsory service causes delays in personnel's private life and career path. Thus, personnel, who are assigned with compulsory service, usually resign from work. To solve this problem, the MoH resolved to seize diplomas of specialists and GPS and banned them to work at any health care facilities unless they gave compulsory service. (Except that GPs take and succeed the Medical Specialty Examination while they are giving compulsory service). However, this situation causes dissatisfaction among physicians **(HS)**.
- Inefficient employment of physicians and nurses:
 - Ineffective chain or referral and inefficient employment of physicians and nurses in primary, secondary and tertiary care **(HS)**,
 - Imperfect job descriptions for effective and efficient employment of physicians and nurses **(HS)**,
 - Employment of physicians incompatible with formal education. For example, thoracic specialists in Tuberculosis Eradication Centers and gynecologists in Mother-Child Care and Family Planning Centers are not assigned with active tasks and not employed appropriately for their work requirements **(HS)**,

- Exemption of some nurses (training nurses) from guard duties **(HS)**,
 - Long working hours, guard duties and managers' strict control over work **(HS/I)**,
 - Excessive work load **(HS/I)**,
 - Imbalanced distribution in other professional groups. For example, pharmacies are usually located in town centers and thus patients have to go there to buy medicine, which directs rural residents to physicians living in towns. Apart from this, the MoH does not have adequate number of administrative personnel, which makes physicians and nurses obliged to undertake administrative tasks **(HS)**,
- Lack of coordination and cooperation between relevant stakeholders. For instance, medical specialty quotas and MoH employment quotas are not consistent **(HS)**,
 - Insufficient financial incentives (salaries etc.). A study on problems and satisfaction of specialists and GPs working in the East and Southeast listed low income at the first rank **(HS/I)**,
 - Public institutions not being able to make partnership arrangements on provincial level **(HS)**,
 - Inadequate in-service trainings, lack of capability to promote personnel's knowledge and skills and to utilize them more efficiently in institutions **(P/I/HS)**,
 - Unemployed nurses **(HS)**
 - Uncomfortable work environment, lack of instruments and technical equipment **(I)**,
 - Dissatisfying studies on risk assessment and employee's safety (such as radiation, infection, cytotoxics and etc.) **(S)**,
 - Inappropriate geographical conditions **(S)**,
 - Low economic level **(S)**,
 - Frustrating socio-cultural conditions. According to our data, distribution of nurses is most imbalanced in the Eastern and Southeastern Regions. In current surveys, however, did not assert security problem as a reason for dissatisfaction with working in these regions for specialists and GPs, on the other hand **(S)**,
 - Lack of continuous training opportunities. Particularly contracted nurses are not provided with career promotion options **(I)**,
 - Bad transportation facilities **(S)**,
 - Inadequate attractive factors (inadequate educational facilities for children, spouses or spouses working in different institutions are not being appointed or not having career options, little monetary incentives separate from income, lack of social housing and etc.) **(P/S)**,

Since problems diagnosed at the workshop were based on present data, the afore-listed reasons are rather true for physicians, nurses and midwives. Study groups at the workshop,

however, also discussed reasons for imbalance in distribution of other professional groups to be useful in other studies. The reasons may give tips for ensuring efficient health workforce, as well. The causes are listed below:

- Biologists are allowed to work in laboratories although medical technologists are available. In this respect, the MoH should be persuaded on need for a variety of professionals from different groups.
- Dentists associations prohibited dental technicians to work in oral and dental health centers because they do not have the competence and experience required. Graduates are allowed to work in laboratories only. Therefore, they are allowed to work in rural areas only when it is needed.

2.3.3 PLANNING

2.3.3.1 PRIORITIES

One of the priorities is to alleviate imbalanced distribution of specialists and GPs in the provinces, between the provinces and institutions. As a result of the analysis based on existing data, participants at the workshop concluded that in terms of solving imbalanced distribution in the provinces nurses are the most unsuccessful health profession. Thus, to alleviate the imbalanced distribution of nurses by provinces (in and between) and facilities is another priority. One of the other priorities is improving work conditions and creating an attractive work environment for employees.

2.3.3.2 TARGETS, POLICY OPTIONS AND STRATEGIES

Removing the imbalance in distribution of nurses and physicians was included in the medium and long-term goals as for the prioritization which was envisaged at the workshop on the basis of available data. It was targeted to decline the imbalance of specialist physician's distribution to 12 % in short-term, to 20 % in medium-term and to 40 % in long-term while targeted figures were 15 % in short-term, 25 % medium-term and 50 % in long-term as for the imbalanced distribution of general practitioners and nurses.

Participants pronounced different views in increasing especially the supply of physicians so as to identify policy options which would help with achieving goals. Some participants alleged that the number of physicians in Turkey was adequate in comparison with the world average and Turkey might come across the risk to train more physicians than needed when trying to catch up with the European Union (EU) average while some others assert that physicians did not have the risk to lose their jobs and thus the current health labor force had to be increased.

Finally, no matter it is less or more than the actual need, shall influence health system performance. Insufficient supply of physicians shall diminish quality and productivity by increasing costs while excessive supply of physicians shall aggravate unnecessary utilization of health care services and increase in health expenditures as a result of demand increased by service provider (supplier-induced-demand). Similarly, low supply of nurses shall lead to less qualified service provision and inefficiency of physicians while high supply of nurses shall lead to training of waste workforce unless effective recruitment and retention policies are implemented.

When identifying targets-oriented policy options, efficiency producing options were given importance than increasing supply of physicians and nurses. However, there is still a big need for a series of studies which will improve work conditions. Following are the policy options identified to achieve short, medium and long term targets:

a) Policy Options for Short-Term Targets:

Work hours and conditions: There are policy options to develop institutional solutions to work hour-related problems, decrease work hours from 45 to 40 hours a week, to make additional payment for extra one hour work and to make flexible work hours suggestions for appropriate departments. Yields of such suggestions in short and medium term should be estimated carefully and required conditions should be considered. Restriction of guard duty payments with 80 hours should be reviewed. Keeping in mind that decreasing work hours from 45 to 40 hours/week is equal to 10 % loss of workforce, and the impact of this should be assessed and solutions should be developed to reduce the negative effects.

Employee's Safety: In current situation adequate precautions are not taken regarding job safety and security. Hospital managements in leadership of MoH do not conduct studies on this issue and such risks can not be consider in performance assessment. The MoH, and MoLSS-affiliated Directorate General of Job Safety and Security are not in collaboration. In addition to this individual insurance system (profession insurance) is available for medical malpractices happening when health care personnel in prosecution of their duties. Obligatory profession insurance legislation is enacted but could not be made applicable because of the veto of the presidential authority.

Ensuring necessary technical equipment: Not having the necessary technical equipment available prevents the personnel to work efficiently. It also leads to the waste of workforce and time.

Providing contracted nurses with career opportunities: There restrictions for contracted nurses about participating in some training programs. Yet, restriction on taking dialysis courses was removed and contracted nurses are allowed to take dialysis courses up to three months now.

Employment of contracted physicians and nurses: According to some views, physicians and nurses are regarded as cheap workforce and thus shift their jobs due to the contracted personnel model. But if we keep in mind that the contracted personnel have much more salary to what extent these views are accurate can be discussed. Contracted personnel model, on the other hand, might help to solve workforce problem in the East, Southeast and rural areas, as well. Besides, physicians and nurses are informed of their work conditions before they start working and the model is based on free will. Thus, the model might be seen as an effective policy to alleviate imbalance in short run.

In-service trainings: There are problems in reflecting the effects of in-service trainings on performance, considering in career planning and associating promotions with such trainings and job experience. For example, congress and/or trainings in which employees participate are deducted from their paid leaves. To solve such problems, training coordination unit should be founded first and once every department determine their own needs for training, this coordination unit should come to final decision whether employees should attend such programs. Personnel to participate in in-service trainings should be identified more rationally, program content and participants should be organized so as to improve quality of services. Financial support should

be obtained from revolving funds and local administrations for these trainings. Participation in national and international congresses should be encouraged, presentations should be assessed by crediting system and all of such assessments should be included in career planning. Specialization of health workforce in their own profession should be encouraged.

Recruitment of Unemployed Nurses: Though exact figures are not known, it is estimated that a great number of nurses are unemployed. Employing such nurses in provinces of imbalance might solve the problem but what needs to be done first is to find out the exact number and develop incentives. (Editor's note: In this scope, the MoH shall employ 32,449 health professionals since June 2007 and it is estimated that 9,234 nurses and 3,874 midwives are included in total. However due to the fact that all of the positions for nurses are not filled the claim about existence of unemployed nurses is disproved).

Re-assessment of Exemptions from Shifts of Nurses: According to regulations, some nurses (such as training nurses and etc.) are exempted from shifts. Thus, most nurses attempt to work in departments where shifts do not exist, which is an outstanding reason for not having nurses available for shifts and imbalance in distribution of nurses in institutions.

Alleviating imbalances in distribution of administrative personnel: MoH does not have sufficient number of general administrative personnel and thus such tasks are undertaken by physicians and nurses, which aggravates imbalance in distribution.

General health status of employees: New arrangements in order to be useful for general health status of employees should be made and the foundation should be laid for opportunities to raise health awareness and to make health follow-ups regularly. Health sector-specific exhaustion and being tired of compassionate levels should be handled and proper precautions should be taken as well.²

Strengthening supervision capacity: As for the upcoming policies, the MoH is likely to take advantage of external sectors for decentralization and health care provision purposes, which might lead to the problem of supervision. Considering future role of the MoH that focuses mainly on planning, organization and supervision rather than service provision, it could be easily seen that there is urgent need for qualified and competent personnel to be specifically trained in these fields. Besides, improvement of existing institutional performance measurement system will certainly give positive results in assessment of the Ministry-affiliated health care organizations.

Work requirements-compatible appointments: More than necessary appointment of trained physicians and nurses with administrative positions and some other non-professional decreases the effectiveness of trained workforce. Therefore, job requirements should be determined clearly and appointments of employees should be made according to these requirements.

b) Policy Options for Medium-Term Targets:

Family Medicine: Family medicine system, is a policy option which could prevent inefficient employment at all levels of service provision which occurs due to not being able applying the chain of referral. On condition that the system creates effective operating mechanisms, it would decrease the work load in secondary and tertiary care and grow workforce pool in provinces with imbalance.

² Participants at the workshop stated that the issue could be listed among priorities under "Employee's Rights and Safety" title.

Increasing family physicians supply: Supply of family physicians is inevitable due to ongoing family medicine system.

Decentralization: With regards to public sector functions, decentralization is defined as devolution of power and authority from central organizations to sub-national public institutions or autonomous institutions. Workforce planning is among other health-specific issues in which power and authority (in narrow, moderate and wide scopes) could be transferred to local authorities. In short run, by decentralization in primary care, imbalance because of inefficient recruitment of physicians and nurses may be alleviated. In primary care, local authorities should be granted moderate or wide scope of power regarding health workforce planning. According to the family medicine system, which is still being implemented in eleven provinces, the recruitment of the contracted personnel is devolved to Provincial Health Directorates. This model is defined as deconcentration type of decentralization. Though not being a real decentralization model such as devolution, this model is an appropriate policy for Turkey.

Revision of job descriptions: In addition to family medicine and decentralization policies, effective job descriptions are alternate options to solve the problem of inefficiency in physician and nurse employment. If works, which need to be done by nurses in fact, are done by physicians, then new job descriptions will narrow physicians' scope of responsibility and thus excessive physicians could be appointed in provinces where the problem of imbalance exists. Similarly, if works, which need to be done by medical secretaries in fact, are done by physicians and nurses, then new job descriptions could facilitate both groups to work more efficiently. Renewal of job descriptions, apart from all these, could also alleviate problems of service quality likely to occur due to unnecessary work load on physicians and nurses, as well. Based on the structure defined by the Regulation on In-Patient Health Facilities, each unit should determine their job descriptions and job requirements by institutional notice in accordance with their own necessities. According to some other views, data on excessive work load is subjective, work load should be analyzed by objective methods and every other hospital should make its own arrangements..

Proper employment of inactive working in primary care: Excessive physicians at Tuberculosis Eradication Dispensaries and Mother-Child Care/Family Planning centers could be appointed to hospitals running in provinces which suffer from imbalance.

Tele-medicine: Tele-medicine could be used in order to increase efficiency of physicians. Wherever no physicians are available, patients could consult with reference physician by distant consultation model.

In-service Trainings: Knowledge and skills of physicians and nurses could be enhanced and thus efficiency could be improved.

Enabling consistency between specialist distribution and employment policy: Quotes of medical specialty branches should be consistent with the MoH employment posts.

Improvement of socio-cultural conditions: Keeping in mind that imbalanced distribution of nurses is rather common in the Eastern and Southeastern provinces, the promotion of socio-cultural conditions in medium term will provide opportunity to reduce the imbalanced distribution. The case also proves that elimination of imbalances in distribution of personnel is closely related to economic conditions in the country and the MoH, in cooperation with other Ministries and public institutions, needs to develop long term plans to solve the problem.

Payment and Incentives: Benefits of the Performance-based Payment System (PPS) should be searched in the light of cost analysis and its effective results on quality should be identified on evidence basis. When implementing the PPS, targets should be clarified well. What is the goal? To improve the quality or to make excess payment? Second point is that the PPS applied to physicians should be analyzed and in-depth analysis should be made for a better system. Targets should be also be clarified well when deciding to introduce a new system. Other health professionals should be associated with this method and assessments should be based on not only quantity but also quality, as well.

Physical Conditions: Health care organizations should make use of spaces ergonomically, build necessary infrastructure and make arrangements as for the missing technologic equipment. Health complexes should be built and for emergency cases, easy-to-access health centers should be located on main arteries for patients in urban areas. Local administrations should determine their priorities for health and support health care organizations.

Social Facilities: Employees should be provided with social facilities such as public housing, kindergarten and camp. Municipalities should support the system to this end.

Satisfaction with senior management: Precautions should be taken in order to foster employees' satisfaction with high-ranking managers. Managers should be selected from those who have managerial and leadership capacity. They should believe in some basic principles such as fair management and participation in decision-making. In addition to all these, it is also essential for employees to consult with managers about their problems. Control list should be prepared which covers the process and procedures-specific criteria and mechanisms should be developed in order for personnel's level of satisfaction with top management to be assessed by feedback.

Institutional Culture: Institutional identity and culture should be created which would increase synergy and sharing among employees. High-ranking managers and employees should come together from time to time and a climate of tolerance and reconciliation should be created in professional relations.

Non-institutional Factors: Domestic conditions should never be ignored when adapting EU and any other foreign legislation to the Turkey. In the light of protocols signed with the MoD, MoNE and Ministry of Justice, privileges granted to some employees should be revised since they might have harmful effects on equity. Precautions should be taken in order to prevent any possible interventions of non-institutional factors in assignments, appointments and promotions.

c) Policy Options for Long-Term Targets:

Family Medicine: Family medicine policy shall also apply in long term since full implementation could only be achieved in long run.

Increasing family physicians supply: Increase in the supply of family physicians is inevitable in long term since supply shall reach to an adequate level in long run.

Decentralization: Strengthening primary care services by family medicine in medium term and thus increasing the number of specialist physicians and nurses for secondary and tertiary care may not be sustainable in long run. As a result of family medicine system, decrease in the number of visits to hospitals may lead to decrease in additional payment for specialist physicians,

which might turn out to be a factor that complicates assigning specialist physicians in regions suffering from inadequate health workforce. Decentralization in secondary and tertiary care seems a significant policy choice as an instrument to prevent this problem. Within the scope of on-going hospital autonomy policy, it is thought to devolve workforce planning to hospitals by using delegation which is a type of decentralization. Because of the above mentioned rationale that type of decentralization model is appropriate for Turkey. Authorizing hospitals for the below-listed items may facilitate hospitals to employ more physicians and nurses at hospitals which are located in rural areas suffering from imbalance.

- **Employment of contracted specialist physicians and nurses:** The fact that physicians and nurses knowing the duration of their assignments in a particular region, might be seen as a factor to increase efficiency.
- **Employment of adequate number of administrative personnel:** There are problems in the number administrative personnel even in the current situation. Considering such inadequacy is one of the factors that lead to imbalance, personnel capacity including professional managers should also be increased in case of hospital decentralization.
- **If permanent staff will be employed determining salary levels:** It is rather difficult issue. Because a complex infrastructure is needed for hospitals to identify levels of salaries. For instance, hospitals in the UK were granted authority on this issue, however, most of them had to use centralized salary scales since they did not have adequate infrastructure. Alternately, amount of payment, in addition to the centralized salary scales, could be identified by hospitals. In other words, hospitals might be authorized moderately regarding salaries.
- **Joint use of capacities:** Strategic partnership is one of the most common strategies nowadays which is increasingly used in the USA particularly. It creates some advantages for hospitals such as lessening competition in weak markets, access to innovative technologies, sharing knowledge, decreasing duplication of services and increasing efficiency. Thus, hospitals could avoid inefficiency because of duplications by taking advantage of partnerships. Savings obtained this way might be spent for monetary and non-monetary instruments of motivation, which could attract specialist physicians and nurses.
- **In-service trainings:** Hospitals, in order to promote knowledge and skills of physicians and nurses, and also to make them work efficiently, should attach importance to in-service trainings.

Promotion of socio-cultural conditions: In order for imbalanced distribution of nurses by regions to be alleviated, socio-cultural conditions should be improved and if improvement is achieved in medium term, the process should be maintained.

2.3.3.3 TASKS AND RESPONSIBILITIES

MoH shall primarily be responsible for implementing policy options identified for short term. Since policies in this period shall necessitate additional financial sources MoF is one of the actors to play role in this process. In-service trainings shall be given in collaboration with the MoH, health care institutions and educational institutions.

In medium term, family medicine policy and decentralization – a part of it- shall be implemented by Provincial Health Directorates, Governor's Offices and legal authorities under the MoH responsibility. Success of this policy, however, should be measured by not only the MoH but also unbiased research institutions in order to prevent subjectivity. MoH and educational institutions shall undertake the responsibility to increase family physicians' supply. Facilitated by educational institutions and non-governmental organizations, MoH, on the other hand, could be responsible for the revision of job descriptions. As for employment of inactive working physicians in primary care, responsibility is owned by the MoH while the MoH, HEC and educational institutions are together responsible for ensuring consistency between the supply and employment of specialist physicians.

On long term Provincial Health Directorates affiliated to the MoH, Governor's Offices and legal authorities shall be responsible for implementing, family medicine policy; MoH, HEC, educational institutions and MOF shall responsible for increasing the supply of family physicians; and MoH, legal authorities, MoF and hospitals shall be responsible for decentralization policy.

2.3.3.4 CRITICAL FACTORS FOR SUCCESS

In order to achieve short term targets and determined policy options to be successful two critical factors are considered:

1. Communication in close to receive stakeholders' support (health sector employees, non-governmental organizations and educational institutions),
2. Adequate level of financing for policies that require additional financing.

Following are critical factors considered important for achieving Policy Options to achieve medium and long term targets:

1. Communication in close to receive stakeholders' support (health sector employees, non-governmental organizations and educational institutions),
2. Building technical capacity in Provincial Health Directorates for family medicine and decentralization to be implemented in primary care,
3. Building administrative and technical capacity in the MoH central organization because of the role which will change by decentralization,
4. Ensuring adequate financing to implement all these

Table 2.14: Summary of Targets, Policy Options, Action Plan and Critical Factors for Success

Targets	Policy Options	Action Plan	Critical Factors for Success
Short-Term			
<ul style="list-style-type: none"> To alleviate imbalance in distribution of specialists and GPs by provinces up to %12 and %15 To alleviate imbalance in distribution of nurses by provinces up to %15 	<ol style="list-style-type: none"> 1. Work Hours, Conditions 2. Employee's Safety 3. Ensuring necessary technical equipment 4. Providing contracted nurses with career opportunities 5. Employment of contracted physicians and nurses 6. Compulsory Service 7. In-service trainings 8. Recruitment of unemployed nurses 9. Re-assessment of Exemptions from Regular Turn for Nurses 10. Alleviating imbalances in distribution of administrative personnel 11. General health status of employees 	<ol style="list-style-type: none"> 1. MOH, MOF 2. MOH 3. MOH 4. MOH, MOF 5. MOH, MoF 6. MOH, 7. MoH, Health Care Institutions, Educational Institutions 8. MOH, MOF 9. MoH 10. MOH 11. MOH 	<ul style="list-style-type: none"> Communication in close to receive stakeholders' support (health sector employees, non-governmental organizations, education facilities and etc.) Adequate level of financing
Medium Term			
<ul style="list-style-type: none"> To alleviate imbalance in distribution of specialists and GPs by provinces up to %20 and %25 To alleviate imbalance in distribution of nurses by provinces up to %25 	<ol style="list-style-type: none"> 12. Family Medicine 13. Decentralization 14. Revision of job/task definitions 15. Proper employment of inactive working in primary care 16. Increasing family physicians supply 17. Tele-medicine 	<ol style="list-style-type: none"> 12.. MOH, Provincial Health Directorates, Governor's Offices, legal authorities 13.. MOH, legal authorities, MoF, hospitals, 14. MoH, HEC, Educational Institutions, MoF 15. MOH 16. HEC, MOH 17. MoH 	<ul style="list-style-type: none"> Close communication to receive stakeholders' support Building technical capacity in Provincial Health Directorates Building managerial and technical capacity at MOH central organization Adequate level of financing

Table 2.14: Summary of Targets, Policy Options, Action Plan and Critical Factors for Success (cont.)

Targets	Policy Options	Action Plan	Critical Factors for Success Factors
Medium Term			
<ul style="list-style-type: none"> To alleviate imbalance in distribution of specialists and GPs by provinces up to %20 and %25 respectively To alleviate imbalance in distribution of nurses by provinces up to %25 	18. In-service trainings 19. Enabling consistency between specialist distribution and employment policy 20. Promotion of socio-cultural conditions 21. Payment and incentives 22. Physical conditions 23. Social benefits 24. Satisfaction with senior managers 25. Corporate culture 26. Non-institutional factors	18. MOH, Health Institutions, Education Facilities 19. MoH, MoF 20. Respective Ministries 21. MoH, MoF 22. MoH, MoF 23. MoH 24. MoH 25. MoH 26. MoH	<ul style="list-style-type: none"> Communication in close to receive stakeholders' support Building technical capacity in Provincial Health Directorates Building managerial and technical capacity at MOH central organization Adequate level of financing
Long Term			
<ul style="list-style-type: none"> To alleviate imbalance in distribution of specialists and GPs by provinces up to %40 and %50 respectively To alleviate imbalance in distribution of nurses by provinces up to %50 	27. Family medicine 28. Increasing family physicians supply 29. Decentralization: a. Employment of contracted specialists and nurses b. Employment of sufficient number of administrative personnel c. Determining wage levels for permanent staff (payroll personnel) d. Joint use of capacities e. In-service trainings 30. Promotion of socio-cultural conditions	27. MOH, Provincial Health Directorates, Governor's Offices, legal authorities 28. MOH, HEC, Education Facilities, MOF 29. MOH, Legal authorities, MOF, hospitals 30. Respective Ministries	<ul style="list-style-type: none"> Communication in close to receive stakeholders' support Building technical capacity in Provincial Health Directorates Building managerial and technical capacity at MOH central organization Adequate level of financing

Table 2.15: Short, Medium and Long Term Target Recommendations, Policy Options, Feasibility, Executive Source and Assessment

SHORT TERM						
TARGET	POLICY CHOICE	FEASIBILITY	WHO'S RESPONSIBLE??	SOURCE	MEASURING SUCCESS	DESIRABLE RESULT
To search reasons for inactive working health work force capacity's not working and to identify incentives	Procurement of service	Fairly applicable	MOH			Identifying the inactive working capacity and employment options
To shift health workforce in different sector(s) and re-direct to work in health sector	Encouragement, making shift in title examinations at shorter intervals, making arrangements in examination format	Fairly applicable	MOH		Enhancement of health workforce working in health sector	Enhancement of health workforce working in health sector
To continue recruitment of contracted personnel	Making some arrangements for employees' rights	Fairly applicable	MOH	Institution's revolving fund, if necessary		
To strengthen supervision and auditing capacity	Developing institutional performance system	Fairly applicable	MOH		Assessment of employees and patients satisfaction	Productive, effective and fair services

Table 2.15: Short, Medium and Long Term Target Recommendations, Policy Options, Feasibility, Executive Source and Assessment (cont.)

	TARGET	POLICY CHOICE	FEASIBILITY	WHO'S RESPONSIBLE?	SOURCE	MEASURING SUCCESS	DESIRABLE RESULT
SHORT TERM (continuing)	To eliminate internal, external and individual inequities regarding payments by reviewing existing wage policies	Developing equity principle-based wage policies and inter-sector cooperation	Weakly applicable	Government			
	To develop curriculum, ensure standardization between sectors and develop certification systems by quick overview of in-service trainings with respect to efficiency and productivity	Ensuring effective training management	Fairly applicable	MoH Central and Rural Organization			

Table 2.15: Short, Medium and Long Term Target Recommendations, Policy Options, Feasibility, Source and Assessment (cont.)

	TARGET	POLICY CHOICE	FEASIBILITY	WHO'S RESPONSIBLE?	SOURCE	MEASURING SUCCESS	DESIRABLE RESULT
MEDIUM TERM	To introduce inactive working health work force capacity to the sector	Identifying sector-based cooperation for employment model which considers incentive factors	Mildly applicable	MoH		Health workforce ration warranted for the sector	
	To identify personnel training inventory	Collecting and analysis of current data	Fairly applicable	MoH			To meet health workforce deficiency with internal sources
	To promote social facilities for health employees (kindergarten, guest house, camps, training and rest home)	Implementing the legislation existing on this issue	Weakly applicable	MoH			
LONG TERM	To promote work conditions of health workforce						

2.3.4 MAIN MESSAGES

- Most problems, which we have analyzed, mainly occur mainly due to insufficient workforce and number of qualified personnel in many fields.
- It is recommended to the Ministry of Health to shift their understanding from personnel management to workforce management
- Questionnaires of validity and reliability for better access to objective and systemic knowledge and to implement appropriate structuring for making work load analyses and cost analyses is recommended
- It is recommended to found workforce departments at institution level which shall be responsible also for conducting training, career planning, source planning and job analyses other than personnel rights and responsibilities, assignment, appointment. Besides these such departments shall also help to enhance employees' motivation level, loyalty to their jobs and to create an attractive work environment.
- Methods should be developed for comparison and awarding which shall provide encouragement for good practices.
- It is recommended to identify medium and long term opportunities and threats for workforce migration.
- Based on the existing data and because of the family medicine policy increase in supply seems to be an inevitable solution to settle the problem of imbalances in family medicine system.
- Focus should be shifted towards Policy Options in order to eliminate imbalances in distribution of specialists, general practitioners and nurses, and in order to improve existing personnel's efficiency. In this context, family medicine, decentralization and revision of job definitions should be considered a Policy Option likely to make significant contribution for alleviating the problems. Besides, existing enterprises should be sustained attentively and with resolution.
- No matter how "rational" Policy Options are, they may not always be easily applicable and sustainable. Thus, stakeholders' support is essential to minimize deviations from targeted policy recommendations and effective communication mechanisms should be set up with stakeholders in order to tackle with imbalances.
- Additional sources might be created to some extent by decreasing the part of revolving funds which is transferred to treasury. So, it might be easier to recruit personnel and improve quality of services.
- It is recommended to distribute health workforce according to demand by regions and develop salary policies and incentives to provide employment of physicians and other health personnel especially in rural areas.
- Besides the importance attached to additional payment, basic salaries should be promoted as well as retirement and pension conditions.

- Facilities of local administrative units (metropolitan municipalities, particularly) and Private Provincial Administrations might be utilized, as well.
- Promotion of mobile health services in rural areas might also help to improve financial efficiency.
- Being financial sources, sponsors might be better used for both planning and implementing in-service trainings, public training and distant learning programs.
- Conducting cost-effectiveness analysis not only in administrative but also clinical services, external sources might be preferred, if necessary.
- Additional payment of institutional performance-based system might be improved and thus pave the way for standardization to foster job peace.
- Supervision should be established in performance-based payment system (including university and public).
- There are health professionals whom might be considered inactive working with respect to work status. Thus, job descriptions of such employees might be reviewed and they might be assigned with more convenient tasks. Incentives might be discussed in order for physicians and allied health personnel to go back to work in field. Incentive advertisements could be made in order to have the workforce, which is shifted to different sectors or not working in active manner to work again and amelioration of retirement conditions might also facilitate them to be regained in the system.
- Precautions should be taken to enable access to health workforce data in private sector.
- Revolving funds and financial sources of central and local administration budgets might be used to create an attractive work environment for health employees.

2.4 FEEDBACK FROM INTERNATIONAL CONSULTANTS ABOUT THE EVALUATION OF THE WORKSHOP

The following notes summarize the conclusions which the facilitators shared with the participants at the end of the workshop. These are followed by a list of proposals regarding work that should be conducted to follow-up on the discussions and comments made during the workshop.

Conclusions and recommendations

- The workshop revealed the need to address information gaps and inconsistencies by “standardizing” data collection and promoting collaboration between the various data gathering agencies.
- The increased use of data and evidence to inform policy-making will require the development of good analytical capacity: statistical analysis; policy development and research.
- Another important need is to strengthen linkages and collaboration (coordination) between funding, planning, recruitment, education and regulatory institutions with responsibility for health workforce quantity and quality.

- Support to policy change will be facilitated by systematic involvement of stakeholders at national level.
- The definition of probable costs of the various policy proposals should be done within a medium term expenditure framework.
- Management capacity will have to be increased in the context of decentralization of health services.
- Priority is to be given to rapid, systematic and objective assessment of workforce imbalances and levels of unemployment, by occupational groups and regions, with the objective of improving workforce efficiency and equity of access.
- Next steps to be considered include: the consolidation of reports of the Rapid Assessment Report and the Report of this workshop, possibly a policy seminar at a more senior level, and a technical course on HRH policy development targeting a selected number of key players.

In summary, HRH issues are complex and to address them in a comprehensive manner is a very challenging exercise. The workshop participants came up with sound ideas and proposals which will now have to be refined and operationalized. They are a significant and useful contribution to the development of a HRH policy. The assessment which has been conducted focused on the identification of issues, but left opened the policy options proposals, which will be the next step.

Work to follow-up the workshop:

Participants handled Turkey HRH –specific problems and proposals for solutions at the Workshop. However, changes were made to some of them after the workshop because the process was so dynamic. To give example, the workshop put emphasis on unemployable health personnel (and especailly nurses) but the MoH announced on 30.05.2007that 32.4449 health personel would be employed. Facilitatirs, throughout the workshop, recommended a series of activities that would sustain and enrich the study, which could be summarized in the following:

- Conduct a mapping of data bases: identify and describe available data, assess their validity, reliability, and accessibility
- Conduct a mapping of the regulatory environment
- Conduct a mapping of the political environment including mapping the ongoing work by various groups in relation to HRH issues
- Conduct a mapping of education institutions and training programs active in the health sector
- Conduct a mapping of pay rates, working hours, other incentives for different health occupations in the public and private sectors; compare with some comparable occupations
- Assessment of health workforce requirements and projections based on demographic information (sex and age structure of health occupations, by specialty if possible), and on the health policy of the country
- Collection, synthesis of gray literature: theses, dissertations, research reports, government publications, international agencies, NGOs
- Review of published literature

**Annex-1: Assessment Report on Human Resources in Health Policy Development
Workshop organized by The World Bank.**

“Human Resources in Health Policy Dialogue Workshop” was held between 24-28 April 2007 in Ankara. 54 of the 91 participants in the workshop involved in the process of course evaluation by %59 through Evaluation Forms prepared by the World Bank.

41 persons participated in each activity (%76), 12 persons participated in most of the activities (%12), and only one of them participated in less than half of the activities (%2). Looking at the participant profiles, it is observed that among the 53 participants, 34 of them were men (%64), and 19 of them were women (%36) and none of the participants were from the World Bank.

78% of the participants claimed that this activity was relevant to their current work or function; 56% of the participants claimed that they have acquired information that is new to them; 61% of the participants claimed that the information that they had acquired were useful; 46% of the participants claimed that this activity was focused on what they specifically needed to learn; 61% of the participants claimed that the content of this activity matched the announced objectives; 83% of the participants claimed that this activity was overall useful.

In conclusion, 78% of the participants claimed that this workshop was relevant to their current work or function which means the topics of the workshop were selected appropriately. 56% of the participants claimed that they have acquired information that is new to them which means that the topics of workshop were adequately impact and detailed. 61% of the participants claimed that the information that they had acquired were useful which means that the content was useful for the activities in Turkey. 46% of the participants claimed that this workshop was focused on what they specifically needed to learn which means that the participants were not satisfied with the content sufficiently due to the fact that they have command in this general view. 61% of the participants claimed that the content of this workshop matched the announced objectives which mean that the content of the activity was consistent with what was notified earlier. We have finally come to the conclusion that this workshop was useful since 83% of the participants claimed that this workshop was overall useful.

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