MENTAL HEALTH SERVICES IN ISLAMIC REPUBLIC OF IRAN

A REVIEW

Dissertation submitted to Jawaharlal Nehru University in partial fulfillment of the requirements for the award of the degree of

MASTER OF PHILOSOPHY IN SOCIAL MEDICINE AND COMMUNITY HEALTH

BY

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15/06/2011

CERTIFICATE

This dissertation entitled, "MENTAL HEALTH SERVICES IN ISLAMIC REPUBLIC OF IRAN- A REVIEW" is submitted in partial fulfillment of the requirements for award of the degree of Master of Philosophy, of Jawaharlal Nehru University. This dissertation has not been submitted for any other degree of this University or any other University and is my original work.

Zahra Jafari
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We recommend that this dissertation be placed before the examiners for evaluation.

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Acknowledgment

This is indeed a privilege for me to be able to formally thank all those who were instrumental for making my studying here at JNU. Let me start with my supervisors Prof. Mohan Rao and Dr. Ramila Bisht, who were a constant source of guidance, supervision and encouragement in my time of distress, apprehension and anxiety during the writing of this dissertation. I hereby thank for putting me on the right track. I also thank the chairperson, Prof. Rama V. Baru for always supporting me. My special thank and gratitude to all the members of the faculty at the Center for Social Medicine and community health who initiated me into the field of public health. I sincerely thank all the staff members at CSMCH office, documentation Centre and library staff for their cooperation.

I am extremely thankful to ICCR Organization for supporting me during doing MPhill and heart filled thanks to my classmates and friends Kaushik, Maryam, Sara, Smitha, Sabina and Yasir.

Last, but not the least my sincere expression of gratitude to my parent. I dedicated this study to both of them.

Zahra Jafari

Abbreviations

MOH	Ministry of Health
ICMH	International Congress of Mental Health
PHC	Primary Health Care
MHS	Mental Health Services
NMPH	National Mental Health Programme
WHO	World Health Organization
GDP	Gross Domestic Product
PPP	Purchasing Power Parity
MOH and ME	Ministry of Health and Medical Education
NCDS	Controlling National Center for Disability Services
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNDCP	United Nations Office on Drugs and Crime
NOC	National Oil Company
M.Sc	Master of Science
IPA	Iranian Psychiatric Association
INMHP	Iranian National Mantel Health Programme
OPD	Out Patient Department

CIA	Central Intelligence Agency
IMH	Integration of Mental Health

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INTRODUCTION

Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. The clearly identifiable aspects to health are mental health, structural health and chemical health[1,2].

Mental health is an integral and essential component of basic health. The improvement of mental health in the last half century has put aside the superstition and false ideas about these illnesses and proven that the mental disorders/ illnesses are preventable and also if they are detected and treated in time, there is a possibility of avoiding their consequences. Health promotion is based on the principle that the behaviors we engage in, and the circumstances in which we live, have an impact on our health[3].

According to the estimation by World Health Organization, around 25% of the world population suffers from one of the neurological-mental-behavioral disorders[4,5]. Incapability and disability due to the mental illnesses are often severe and perennial and have a heavy burden on the patient, their families and the society. In Iran, 10.6% of the global burden diseases are related to mental illnesses and by calculating the approximate years of the disability of the adjusted life, it increases to 28%[6].

The field of this research is focused on Mental Health Services in Islamic Republic of Iran. Iran has a great history and a flourished background on medical sciences. The ancient Iranian medicine has inseparable ties with Zoroastrianism mentioned in Avesta 1800 years ago[7]. The mental health situation in Iran was almost unchanged till 1941 during which medical schools and hospitals were set up with concerted efforts on establishing a comprehensive mental

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[1] Saxena, Sh. et. al. 2011, *Atlas of headache disorders and resources in the world 2011*, Italy, WHO

[2] World Health Organization. 2010, http://www.who.int/topics/mental_health/en/

[3] Crossley, Michele. 2000, *Rethinking health Psychology*, USA, Philadelphia

[4] World Health Organization. 2010. *op cit*

[5] Naik, Abhijit. 2010, *Mental Illness Statistics*, http://www.buzzle.com/articles/mental-illness-statistics.html

[6] Pakravan Nejad, M & Sadeghi, Majid. 2005, *Mental Health. [بهداشت روان]*. Tehran, Tehran University

[7] Nafisi, Abootorab. 1977, *History of medical in Iran*, [تاریخچه پزشکی در ایران]. Esfahan, University of Esfahan

health care service. As a result health associations related to mental health and hospitals were set up. Also more universities specializing in mental health studies were started. Changes in the perception of health care and improvement in healthcare services were the most significant changes that happen in Mental Health Services field in 1979 during Islamic Revolution.

The changes in governmental structure also affected mental health services. The most important period of the development of the mental health services began in October 1986, when the National Programme of Mental Health (NPMH) was initiated by the government as a strategic move to merge the mental health activities with the primary health care system[8].

Further expansion of this integration in healthcare system has led to major improvements in the provision of mental health services. The program was reported to be a very successful especially in rural areas, but the achievement was much less in urban areas where most of the country's population resides[9].

The mental healthcare services provided by public section is not the only system for referring mental health services in Islamic Republic of Iran .The private sector plays a major role in providing mental health services, especially in urban areas of Islamic Republic of Iran[10]. Nonetheless there is no holistic research to show a comprehensive view of mental health services in Iran. Hence, this research tries to have a critical look at the mental health services in Islamic Republic of Iran beyond the limitations of data available.

Mental Health Services in Islamic Republic of Iran is facilitated through the Ministry of Health and Medical Education, Ministry of Science, Research and Technology, and Ministry of Welfare and Social Security.

In this research the focus of study is about the facilities provided by Ministry of Health and Medical Education which controls the provision of mental health care via hospitals, mental

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[8] Mohit, Ahmad. 1998, *Mental health in our future cities.* [آینده سلامت روان در شهرهای مختلف], Tehran, Tehran Psychiatric Institute and Mental Health Research Centre

[9] Sharifi, Vandad. Amini, Hamid. 2006, "Roozbeh home care program for severe mental disorders; a preliminary report"; *Iranian Journal of Psychiatry*, 1: pp 31-34

[10] Vahid dastjerdi, Marzieh. 2009, *Official annual report of Ministry of Health and Medical Education of Islamic Republic of Iran*, Government of Islamic Republic of Iran, Report number: 15, Tehran

health hospitals, psychiatrists and registered clinical psychologists. The data was collected from Ministry of Health and Medical Education which registers the data on healthcare facilities provided to the general public and from Statistical Center in Islamic republic of Iran.

This study involves four chapters. In the first chapter, health services in the Islamic Republic of Iran are discussed. In the second chapter Mental Health Services in Islamic Republic of Iran (focus on Ministry of Health and Medical Education) is described in detail. In the third chapter provision of mental health facilities in the Islamic republic of Iran is studied. And in the fourth chapter, conclusion and implications are drawn on Mental Healthcare Services in the Islamic Republic of Iran.

Key concepts

Mental health is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community[11].

Mental health which is considered as a part of general health peruses the following items:

- Identification and the early detection of mental disorders and treating them.
- Preventing the disease's consequences and its recrudescence and rehabilitating the patients
- Prevention of the mental illnesses through prevention and treatment of the physical illnesses[12].

In fact, mental health can be considered as one of the oldest pursued topics. Due to this fact, around 400 BC Hippocrates had believed that the mental illnesses should have been treated the same as other physical illnesses. It was almost from 1930, i.e. after the foundation of the first international mental health congress that the mental health as a major became a part of the Medical Science and the psychiatric organizations and Prevention Centers started their activities in the developed countries. In 1930, the first International Congress of Mental

[11] Saxena, Sh. et. al. 2011. *op cit*

[12] Pakravan Nejad, M and Sadeghi, Majid. *op cit*

Health was held in Washington with the participation of the representatives of 50 countries. In this congress, these mental health problems and issues such as the establishment of hospitals, outpatient treatment centers, centers for mentally retarded children and the like were discussed. Eighteen years later, i.e. in 1948, in the 3rd International Mental Health Congress was held in London, where World Mental Health Federation was founded and in the same year, this federation became the official member of UNESCO and World Health Organization. And since, the World Health Organization in Geneva has taken the chairmanship of World Mental Health Federation· Following this event; there has been an international meeting annually and a World Congress every four years. Due to the consistent efforts of the members, 7th of April has been announced as the World's Health Day all over the world and the health issues of the countries are being explored[13].

Mental illnesses are medical conditions that disrupt a person's thinking, feeling, mood, ability to relate to others and daily functioning. It can affect persons of any age, race, religion, or income[14].

Mental disorders take many different forms and affect people in different ways. Schizophrenia, depression and personality disorders are all types of mental health problem. Diseases such as dementia generally develop in old age, whereas eating disorders are more common in young people. There is no single cause of mental health problems and the reasons they develop are complex[15]

Mental Health Services is a part of primary health care system of Iranian health system. The actual treatment of severe disorders is available at the primary level. Mental health delivery for severe illnesses is one of the objectives in rural and deprived areas of Islamic Republic of Iran. Regular training of primary care professionals is carried out in the field of mental health. Postgraduate training facilities for medical and nursing graduates are available. Training facilities for general physicians and mental health workers or *Behvarz* is also

[13] *ibid*

[14] Kaplan and Sadock. 2009, *Comprehensive Textbook of Psychiatry*, 8th ed, USA, Lippincott Williams & Wilkins

[15] Smith, Edward. et. al. 2003, Introduction to psychology, 14th ed, India, Thomson

present[16].

There are community care facilities for patients with mental disorders. Mental health is integrated into the primary care system whose basis is community care. Community participation in the form of religious establishments' involvement and educational seminars during the mental health week for common people is carried out in order to promote better understanding of mental health[17].

Although in Iran since the time of Zakaria Razi and Avicenna after him, patients with mental health problems (called lunatics at that time) were attended to and different remedies and various procedures like indoctrination were used. Since 1931, the formation of Primary Health Care (PHC), a psychiatric illness' network and teaching programs had been started in Tehran University, however, by accepting the PHC strategy, mental health topic has been accepted as the 9th part of the First Aid Services in Iran and currently is considered as one of the most prerequisite topics in Iran[18].

Treatment for mental illness has changed dramatically since the 1960s when effective pharmaceutical treatments and new forms of psychosocial interventions were made available[19].

Community based Mental Health Services was brought to Iran during the 70s to decentralize services, decrease reliance on hospitalization and integrate the everyday life of chronic patients into the mainstream of social life[20].

The decade of 1980s was turning point for the development of health in Iran. The important steps were taken during that time included: Integration of health provision and medical education which was practically achieved through the formation of the new "Ministry of Health and Medical Education" and the development of a network of 'Primary Health Care'[21]. These developments coincided with the assignment of Professor Narendra Wig to the

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[16] Vahid dastjerdi, Marzieh. 2009. *op cit*

[17] Gelder, Michael. et. al. 1996, *Text book of psychiatry*, 3th ed, London, Oxford University

[18] Ravvaz, Kourosh. 2005, *Tehran University of medical sciences and health services.[* دانشکده علوم پزشکی تهران و امکانات بهداشتی*]*, Tehran, Tehran University

[19] Desjarlais, Robert. Esienberg, Leon. 1995, *World mental health*, UK, Oxford University

[20] Mohit, Ahmad. 2009," A Brief Overview of the Development of Mental Health in Iran, Present Challenges and the Road Ahead';, *Iranian Journal of Psychiatry and Behavioral Sciences*, 3(2): pp 1-3

[21] *ibid*

post of "Regional Adviser of Mental Health" in the Eastern Mediterranean Region of WHO. He came from India to Iran in 1985 and helped in drafting the Iranian "National Mental Health Programme" in which, "Integration of Mental Health in PHC" was to be the main strategy. The first pilot programme of this integration in Iran started in 1986 in Shahr-e-Kurd city before the national programme was officially approved in 1987 and in 1989 it was done in Shahreza city[22,23].

Objective of the Study:

Mental Health Services in Islamic Republic of Iran has only received limited attention from the government. With the emerging private health care providers, it is necessary to understand the state of the services both in the public and the private sectors. This research aims to highlight the highs and low of the healthcare system in Iran. The details of main objectives of this analysis are as following:

1. To study the ways in which mental health services are offered by the 5 (Central, North, South, East and West) sections in Islamic Republic of Iran.
2. To study and analyze the shortages and deficiencies in the mental health facilities.

Methodology:

The present study adopted a qualitative research methodology. For the data collection, the study relied mostly on the secondary data which has been collected from archival sources including the data compiled by Iranian government and some non-governmental organizations as well as WHO.

Islamic Republic of Iran, as a vast country with more than 70 million populations, outspread in different parts of it. Analyzing the status of mental health care in Iran would be relatively difficult accounting to its vast geographical differences. Hence, for a more exact analysis of

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[22] *ibid*

[23] Gharraee, B. Shariat, V. 2007, "Case finding in integration of mental health services into primary health care system: Systematic review of the studies conducted in Iran in recent two decades"; *Iranian Journal of Psychiatry*, 2: pp 165-173

the available mental health facilities in Iran, the 32 province country has been divided to 5 main sections. This division was based on the geographical circumstances and the common cultural issues. These sections include Central, North, South, East and West.

In order to be more accurate with the analysis of the mental health condition in Iran, the various geographical features and historical events that took place in each divisions of Iran are taken into consideration. For carrying out this research, historical knowledge on mental health scenario in Iran was obtained from library sources.

Limitations of the Study:

Most of the data for the research was collected from the data available in Ministry of Health and Medical Education and Statistical Center of Islamic republic of Iran. However due to policy restrictions on access to complete information on mental health by Ministry of Health and Medical Education and Statistical Center of Islamic republic of Iran, there has been a lack of information and data available on some districts. Also firsthand data from government personnel and others involved in development of mental health care facility is lacking in this study.

CHAPTER ONE

HEALTH SERVICES IN ISLAMIC REPUBLIC OF IRAN

A BACKGROUND

HEALTH SERVICES IN ISLAMIC REPUBLIC OF IRAN- A BACKGROUND

About Iran:

Topography

Iran is an ancient country located in the southwest Asia, a region between Asia, Europe, and Africa and borders the Gulf of Oman, Persian Gulf, and Caspian Sea. Iran is 16th largest country in the world with an area of 1,648,195 square kilometers[24].

Its mountains have helped to shape both the political and the economic history of the country for several centuries. The mountains enclose several broad basins, or plateaus, on which major agricultural and urban settlements are located. Until the 20th century, when major highways and railroads were constructed through the mountains to connect the population centers, these basins tended to be relatively isolated from one another[25].

Typically, one major town dominated each basin, and there were complex economic relationships between the town and the hundreds of villages that surrounded it. In the higher elevations of the mountains rimming the basins, tribally organized groups practiced transhumance, moving with their herds of sheep and goats between traditionally established summer and winter pastures. There are no major river systems in the country, and historically transportation was by means of caravans that followed routes traversing gaps and passes in the mountains. The mountains also impeded easy access to the Persian Gulf and the Caspian Sea[26].

The center of Iran consists of several closed basins that collectively are referred to as the central plateau. The average elevation of this plateau is about 900 meters, but several of the mountains that tower over the plateau exceed 3,000 meters. The eastern part of the plateau is covered by two salt deserts, the *Dasht-e Kavir* (Great Salt Desert) and the *Dasht-e Lut.*

[24] Azizi, Ebrahim. 2010, *Official annual report of Statistical Centre of Iran,* Government of Islamic Republic of Iran, Report number: 6, Tehran
[25] *ibid*
[26] Ilkhan, Mahmoud. 2009, *Official annual report of National Geographical Organization of Iran,* Government of Islamic Republic of Iran, Report number: 16, Tehran

Except for some scattered oases, these deserts are uninhabited[27].

There are no major rivers in the country. Of the small rivers and streams, the only one that is navigable is the 830 kilometers -long Karun, which shallow-draft boats can negotiate from Khorramshahr to Ahvaz, a distance of about 180 kilometers and Zayandeh River, which is 300 kilometers long. Several other permanent rivers and streams also drain into the Persian Gulf, while a number of small rivers that originate in the northwestern Zagros and Alborz drain into the Caspian Sea[28].

Iran has variable climate. In the northwest, winters are cold with heavy snowfall and subfreezing temperatures during December and January. Spring and fall are relatively mild, while summers are dry and hot. In the south, winters are mild and the summers are very hot, having average daily temperatures in July exceeding 38 °C. On the Khuzestan Plain, summer heat is accompanied by high humidity. In general; Iran has an arid climate in which most of the relatively scant annual precipitation falls from October through April[29] .

Provinces

Iran has been divided into provinces "*ostan*" and each is under the jurisdiction of a governor "*ostandar*". Provinces are further divided into counties "*Shahrestan*" further into districts "*bakhsh*" and "*bakhsh*" sub districts. According to the report released by government of Islamic Republic of Iran in 2010, the country has 31 provinces, 336 districts, 1016 cities or town and over 65000 villages[30].

Demography

Iran's population has faced a dramatic change after the Islamic revolution (1979). In 1979, the population was 35 million, but it increased to 70 million in 2006[31]. After Islamic Revolution, Ayatollah Khomeini solicited Iranian people to increase their population. The

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[27] *ibid*
[28] Azizi, Ebrahim. 2010, *op cit*
[29] Ilkhan, Mahmoud. 2009, *op cit*
[30] Azizi, Ebrahim. 2010, *op cit*
[31] Madad, Mohammad. 2005, *Official report of Statistical Centre of Islamic Republic of Iran.* Government of Islamic Republic of Iran, Report number: 5, Tehran

goal of his idea was to increase the size of "Islamic generation" and breed "soldiers for Islam"[32]. The growth rate of Iran's population was reportedly 3.92 percent in the first decade after revolution, 1.96 percent in the second decade and 1.62 percent in the third decade[33]. Thus presently, Iran is a young country with almost 50 percent of the population under 20 years old[34].

Estimates indicate that 68.5 percent of the population resides in urban areas while 31.4 percent are in the rural areas[35]. There has been a distinct trend of migration towards the rural area. Most of the increase in population migrated to urban centers and found jobs in industry and services, as opposed to agriculture. Statistical Center of Islamic Republic of Iran reported in 2002, indicates that 65 percent of the population had migrated to towns or cities, compared with just 31percent in the late 1950s[36]. Yet, major cities are expanding and more than 13 million citizens live in Tehran (capital) province[37].

The official language of the country is Persian and more than 99 percent of the population consists of Muslims (91 percent Shia and 8.5 percent Sunni), 0.2 percent is Christian, 0.07 percent is Zoroastrian and 0.05 percent is Jewish[38].

Young and skilled Iranians continue to have a major problem in relation to securing employment. Unofficial estimates report that almost more than 200,000 young Iranians leave the country each year to seek better employment opportunities in Europe and North America[39].

Economy

The economy of Islamic Republic of Iran is the eighteenth largest economy in the world by Purchasing Power Parity (PPP)[40]. Iran's economy is a mixture of central planning, state

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[32] Rajabi, Hasan. 1992, *Life history of Imam Khomeini.[زندگینامه امام خمینی]*, Kosar, Tehran
[33] Madad, Mohammad. 2005, *op cit*
[34] *ibid*
[35] *ibid*
[36] *ibid*
[37] *ibid*
[38] *ibid*
[39] Jahromi, Mohammad. 2008, *Official report of Ministry of Labour and Social Affair of Iran*, Government of Islamic Republic of Iran, Report number: 7, Tehran

[40] Hosseini, S.Sham. 2010, *Official annual report of Ministry of Economic Affairs and Finance of Iran,*

ownership of oil and other large enterprises, village agriculture, and small-scale private trading and service ventures. Its economic infrastructure has been improving steadily over the past two decades but continues to be affected by inflation and unemployment[41].

In the early 21st century the service sector contributed the largest percentage of the Gross Domestic Product (GDP), followed by the industry (mining and manufacturing) and agriculture. In 2006, about 45 percent of the government's budget came from oil and natural gas revenues, and 31percent came from taxes and fees[42].As in 2007, Iran had earned $70 billion in reserves, which was mostly (80 percent) from the crude oil exports. In 2009, GDP was $336 billion ($876 billion at PPP), or $12,900 at PPP per capita. According to the World Bank report, Iran's economic growth in 2008 and 2009 increased by 2.5 percent and 1 percent respectively[43]. The economy of Iran, its growth and development all depend on its major export resources which are oil and gas, to its allies[44].

Iran's budget deficit has been a constant problem for Iran, which was mostly due to the large-scale state subsidies, totaling more than $84 billion in 2008 for the energy sector alone. According to the World Bank report, the budget revenue of Iran in 2009 was $105.7 billion and the expenditure was $98.83 billion[45]. In 2010, the economic reform plan was approved by parliament to cut subsidies gradually and replace them with targeted social assistance. The objective is to move towards free market prices in a 5-year period and increase productivity[46].

Iran has gained a lead in of the field car-manufacturing, transportation, construction materials, home appliances, food and agricultural goods, armaments, pharmaceuticals, information technology and power[47,48].

Nearly a quarter of Iran's lack of employment and labor force is unemployed in 2006. Around 70 percent of Iran's population is under 35 years old. According to Ministry of Labour and Social Affair of Islamic republic of Iran 21.8 percent youth unemployment rate has announced that nearly doubled the average rate of unemployment in Iran. Unemployment

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Government of Islamic Republic of Iran, Report number: 25, Tehran

[41] *Ibid*

[42] *ibid*

[43] *ibid*

[44] *ibid*

[45] Central Intelligence Agency. 2010, https://www.cia.gov/library/publications/the-world-factbook/geos/ir.html

[46] Hosseini, S.Sham. 2010, *op cit*

[47] *Karami, Mostafa. 2009, Safety and the health in occupation. [امنیت و سلامت محیط کار], Tehran, Omidmehr*

[48] Hosseini, S.Sham. 2010, *op cit*

varies in different provinces of Iran[49].

The provinces of Lorestan, Sistan and Baluchistan, Kurdistan, and Kermanshah have double-digit unemployment rates and Qazvin and Hamedan cities have faced to increasing unemployment more than the other cities. The data confirms the age of unemployed are between 15 to 29 years and the number of unemployment female is more than male[50,51].

Governance:

The political system of Islamic Republic of Iran is the result of the Islamic Revolution in 1979, the first of its type in the world. Therefore, Iran political system established afterward should have been defined according to the ideals of such a revolution[52].

Ayatollah Khamenei was given the control of leadership of the Islamic Revolution. Iran's leadership is the backbone of Iran's political system. Next to the leader, the president shall be the highest official state authority who is responsible for the implementation of the constitution and, as the chief executive, for the exercise of the executive powers, with the exception of those matters that directly relate to the leader[53].

The number of ministries available in Islamic Republic of Iran is twenty one in 2010[54]. Health issues are under Ministry of Health and Medical Education. The funding for health sector in the country's 2009 budget bill to the whole country reached $ 5.7 billion[55]. Overall the budget in 2006, 3% of health care expenditures by the government health department is directed towards mental health. Of all the expenditures spent on mental health, 18% is directed towards mental hospitals[56].

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[49] Jahromi, Mohammad. 2008, *op cit*
[50] Karami, Mostafa. 2009, *op cit*
[51] Jahromi, Mohammad. 2008, *op cit*
[52] Tahaie, Javad. 2004, *View of Islamic Revolution in Iran. [نمایی از انقلاب اسلامی در ایران]*, Tehran, Pajohesh
[53] *ibid*
[54]Hamshahri. 2010, *Introduce ministries of Iran*, http://www.hamshahrionline.ir/news-113209.aspx

[55] Vahid Dastjerdi, Marzieh. 2009, *op cit*
[56] Razzaghi, E.M. et. al. 2006, Mental health system in Iran. [روان در ایران سیستم بهداشت], Tehran, WHO

Literacy

The adult literacy rates in Iran is 82 percent with the female literacy rate (77 percent) being less than that of the male literacy rate (88 percent). The literacy rate for adult males showed an increase from 48 percent in 1970 to 88 percent in 2007, nearly doubling in 30 years. Female literacy has climbed even faster, rising from less than 25 percent in 1970 to more than 77 percent in 2007[57].

The increasing geriatric population poses a major concern to the state of Iran with increasing health problems, unemployment and their decreasing income. Today, a major percentage of the nation's senior citizens, especially old women, are illiterate. Illiteracy, unemployment, lack of income, especially among old men, and the slow, yet continuing increase in their numbers challenge the state with respect to their welfare, social & economic developments treatment and health section[58].

Education System in Iran

1.1- School education

The education system in Islamic Republic of Iran is highly centralized over facility and course. The initial 12 years of education is supervised by the Ministry of Education and thereafter the higher studies are supervised by the Ministry of Science and Technology[59].

The Stage wise education system is well defined by Ministry of Education as follows: primary stage is called "*Dabestan*" commences from the age of 6 for a period of 5 years. This is followed by middle school stage, called "*Rahnamayi*" for a period of three years, i.e. from the sixth to the eighth grade. The last stage is high school, which is called "*Dabirestan*" and lasts for the duration of 4 years. But in the recent years this duration has been divided into two parts, a three years in high school in which a student must choose the major of the study among 5 main groups that are mathematics, science, literature, vocational studies, and practical studies. After a period of three years the student is awarded with a diploma in the

[57]Gezairy, Hussein. 2007, *Demographic social and health indicators for countries of the Eastern Mediterranean*, Tehran, WHO

[58] *ibid*

[59] Haji Babaee, H.R, 2009. *Official report of Ministry of Education of Islamic Republic of Iran*, Government of Islamic Republic of Iran, Report number: 8, Tehran

selected subject, the fourth year is dedicated to pre-university course which is only for the students of the first 4 majors who wish to continue their studies[60].

1.2- Higher education

Universities, institutes of technology, medical schools and community colleges, provide the higher education. The requirement to enter into higher education is to have a high school diploma, and finally pass the national university entrance's exam called "*Konkoor*"[61].

Higher education is sanctioned by different levels of diplomas: "*Fogh-e-Diplom or Kardani*" equal to the Associate Degree in other countries after 2 years of higher education[62].

"*Karshenasi*" or "*licence*" (Bachelor's degree) is delivered after 4 years of higher education. "*Karshenasi-ye Arshad*" (Master's degree) is delivered after 2 more years of study, after which another exam allows the candidate to pursue a Doctoral program (PhD)[63].

Health

World Health Organization defines health as "being a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity[64]".

In 1986, WHO also made the following statement: "Health is a resource for everyday life and not the objective of the living. Health is a positive concept emphasizing social and personal resources as well as physical capacities[65,66]. A good health system delivers quality services to all people, and also when and where they need them. The exact configuration of services varies from country to country, but in all cases requires a robust financing mechanism; a well-trained and adequately paid workforce; reliable information on which to base decisions and policies; well maintained facilities and logistics to deliver quality medicines and

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[60] *ibid*
[61] *ibid*
[62] Zahedi, M. Mehdi. 2007, *Official report of Ministry of Science, Research and Technology of Islamic Republic of Iran*, Government of Islamic Republic of Iran, Report number: 7, Tehran
[63] *ibid*
[64] World Health Organization, 2010, *op cit*
[65] *ibid*
[66] Bahador, Hamid. 2005, *Public health. [بهداشت عمومی]*, Tehran, Iran University

technologies[67].

Iran ranks 70th on the human development index out of 169 countries in 2010[68]. Undernourishment across the country is very low and rates of immunization against infectious diseases and measles are very high, at 99% and 97%, respectively[69]. Deaths from respiratory diseases are relatively low, and the incidence of tuberculosis is below the global (140 in per 100 000 pop globally and 16 in per 100 000 pop in Iran[70]). The past several decades have seen large investments of capital, research and programs in problems of health and health care throughout the world. Family planning and the health of infants have been the focus of active programs in the international health community[71].

The term "Mental Health" describes either a level of cognitive or emotional well-being or an absence of a mental disorder. According to the World Health Organization, "mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". However, despite official definitions, the term mental health, and the question of whether or not an individual is 'mentally well', remains a subjective assessment[72].

Life Expectancy

According to World Economic Forum on important indicators of life expectancy among the 194 countries, Islamic Republic of Iran ranks at 70[73]. The life expectancy (total) at birth in Iran is 71.9 years[74]. The life expectancy has seen a dramatic improvement due to improvements in humanistic development factors. The life expectancy improved from 53.9 years in 1970-75 to 68.9 years in the year 2000[75]. Providing basically health services such as healthier foods and drink, nutrition security, drug supply, family planning and population

[67] World Health Organization, 2010, *op cit*
[68] Klugman, Jeni. 2010, *Human Development Report by the United Nations Development Programme*, USA, New York
[69] Vahid Dastjerdi, Marzieh. 2009, *op cit*
[70] World Health Organisation. 2010, *Tuberculosis fact sheet*, http://www.who.int/mediacentre/factsheets/fs104/en/
[71] Helmseresht, P. Delpisheh, E. 2003, Population and family planning.[جمعیت و تنظیم خانواده], Tehran, Chehr
[72] World Health Organisation. 2010, *op cit*
[73] Central Intelligence Agency. 2010, *op cit*
[74] Klugman, Jeni. 2010, *op cit*
[75] *ib id*

control, vaccination, hospital equipment, medical education and skilled manpower are some factors affected life expectancy in Iran[76]. Additionally, dealing with seasonal diseases, infectious diseases, maternal and infant mortality, cardiovascular and infectious diseases, as well as basically training on health are only parts of the ensuring acts implemented in this case[77].

World Development Indicators estimate that the crude birth rate was 18.52 per thousand people [78] and crude death rate was 5.94 per thousand in 2010[79]. The fertility rate also reported a decline from 6.7 in 1980 to 1.89 births per woman in 2010[80]. The infant mortality rate in Iran is 36.93 per thousand live births[81].

History of medicine in Iran:

Medicine in Iran dates back to the dawn of civilization. The ancient Iranian medicine has inseparable ties with Zoroastrianism mentioned in Avesta[82]. According to some ancient Iranian myths, practicing medicine can be traced back to the era of *Jamshid*, (the fourth mythical king of Iran around 1800 years ago) and the oldest evidence of surgery demonstrated was a case of the trephination on a 13 year old hydrocephalous girl which was performed approximately years ago which in discovered by archeological in Shahr-e Soukhte ancient site belongs to third millennium BC. Medicine in pre – Islamic era reached its zenith when the University of Jondishapoor was founded by the Sassani monarch; Shapoor the 1st (224-651). Jondishapoor remained as one of the most important universities of the ancient civilized world for several centuries and attracted many scientists from all over the world, especially from Greece and Rome[83].

In 10 -11th centuries A.D, medicine achieved its supreme with the works of Mohammad Zechariah Razi (Ray, 865-925), Ali ebne Abbas Majusi (Ahvaz, 932-994), and Avicenna

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[76]Marandi, Alireza. et. al. 1998, *Health in Islamic Republic of Iran.*[سلامت در جمهوری اسلامی ایران], Tehran, Unicef

[77] *ib id* Marandi, Alireza. et. al. 1998, op cit

[78] Central Intelligence Agency. 2010, *op cit*

[79] *ib id*

[80] *ib id*

[81] *ib id*

[82] Vahid Dastjerdi, Marzieh. 2008, *On the occasion of 75th anniversary of the establishment of Tehran university of medical sciences*, [هفتاد و پنجمین سالگرد تاسیس دانشکده پزشکی دانشگاه تهران], Tehran, Tehran university

[83] *ibid*

(Bukhara, 980-1037)[84].

Avicenna was the greatest Iranian physician, whose works embody the culmination of medical science. He wrote 100 books in many subjects including his most famous compendium, "Canon of Medicine". Qanoun was the most affective, most read medical book and it was reprinted numerous times in Europe during Renaissance[85].

Modern medicine flourished under the Qajar dynasty after Amir Kabir (Arak, 1807-1852) who established Dar-ol-Fonoon School in Tehran in 1851 in which medicine, pharmacology, mathematics was taught through employing foreign teachers and sending a number of students abroad in 1858. The school came to play a key role in the development and education of modern medicine[86].

By 1880s most major cities of Iran had department of the Sanitary Council. Appointment of several inspectors was accorded in different parts of Iran including Sari, Yazd, Kerman, Kermanshah, Sanandaj, Semnan, Bushehr, Shiraz, Rasht,Tabriz, Sabsevar, and Saveh cities. The inspectors were in direct contact with the Sanitary Council in Tehran. Gradual appointment of 48 health officers in many towns managed to continue its activities, making it the main public health authority under the guidance of Ministry of Interior [Ministry of Interior of Iran is an administration equivalent to Home Ministry in some of countries] eventually, during the reign of Ahmad Shah Qajar (Tabriz, 1898-1930), the Sanitary Council was transformed into a ministry known as "*Vezarat-e Sehhyeh va Omuore Kheiryyeh*" (Ministry of Health and Charity Affairs) and Dr. Ali Asghar Nafisi was appointed as the first Minister of Health in 1920[87].

As already stated, there was no Ministry of Health between 1921 and 1941. *Sehhyeh-e Koll-e Mamlekati* (Public Health Administration) somehow managed the medical affairs. This administration was under the Ministry of Interior[88].

In 1934, the name of the *Sehhyeh-e Koll-e Mamlekati* was changed to "*Edareh-e Koll-e*

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[84] Rahbar, M.R. 2009, *Series of health report in Islamic Republic of Iran. [* مجموعه ای از گزارش سلامت در جمهوری اسلامی ایران], Tehran, Ministry of Health and Medical Education of Islamic Republic of Iran

[85] *ibid*

[86] Vahid Dastjerdi, Marzieh. 2008, *op cit*

[87] Ebrahimnejad, H. 2004, Public Health in Qajar State, Pattern of Medical Modernization in Nineteenth–Century Iran, UK, Brill

[88] Hedayaty, Javad. 2002, *The History of Contemporary Medicine in Iran.* [تاریخچه پزشکی در ایران], Tehran, Iran University

Behdari" (Department Of Health). This was initially established by a law cleared by the parliament in 1926. This organization became an important health insurance provider by 1971[89]. During the reign of Mohammad Reza Shah Pahlavi (1941 – 1979), an independent organization called "*Vezarat-e Behdari*" (the Ministry of Health) was established. In fact, the Public Health Administration or "*Edareh-e Koll-e Behdari*" was transformed into Ministry of Health based on a law passed in the parliament in 1941[90].

In 1949 the establishment of the worker's social organization had expanded its coverage from workers to the other government employees by 1954. There was an improved government health services by the Iranian Red Cross, also known as *Shir O Khorshid*. The year 1947 saw the creation of the Imperial Organization for Social Services to provide health care in remote areas, prepare and distribute affordable drugs, and train assisting health workers. The first pharmaceutical manufacturing factory has been established since 1910 in Iran and some of medicine requirement was ensured by the domestic factories[91].

The organization for the protection of the pregnant mothers was created in 1940. In 1951 the health service department for the National Oil Company was created for all oil producing areas and also to replace the old Anglo-Iranian Oil Company health system. [A reflection nationalization of Iran's oil industry]. In 1952, National Society for Child Protection was enacted.

In 1960 the health care was decentralized to enable rural population to access health care without travelling to the cities. In 1964 the Health Corps was established. In this enactment, young men and women travelled to rural areas on projects about rural health and sanitation as part of the military services. Ministry of Health and the Iranian Armed Forces sent semi mobile units to remote areas to undertake health services[92]. Hassan Ali Mansur, Prime Minister of Iran from 1963-1965, created the Health Corps, modeled after the Literacy Corps, to provide primary health care to rural areas. The members of this corps were chosen from younger technocrats and this policy continued by the successor[93].

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[89] *ibid*
[90] Azizi, Mohammad. 2007, "The historical backgrounds of the Ministry of Health Foundation in Iran"; *Archive of Iranian medicine*,10(1): pp119- 123
[91] Hedayaty, Javad. 2002, *op cit*
[92]Azizi, Mohammad. 2007, *op cit*
[93] Hedayaty, Javad. 2002, *op cit*

In the year 1975, the two Ministries of Public Health "*Vezarat-e Behdari*" and Social Welfare "*Vezarat-e Refah-e Ejtemaee*" were merged. The name of the merged body was changed to "*Vezarat-e Behdari va Behzisti*" (Ministry of Health and Welfare)[94].

POST- ISLAMIC REVOLUTION:

Iran's Islamic Revolution took place in 1979. Mohammad Reza Shah (1919-80) had been the King of Iran from 1941 to1979. By using the secret police known as the *Savak,* he was able to control the country, bringing the country near to falling into a civil war[95]. Pahlavi phylum and Ayatollah Khomeini (1902-1989) led the Iranian revolution in 1979, and by January the revolution took place, bringing about the change of government and the renaming of the country to the Islamic Republic of Iran. He was a Shia Islamic religious leader, a scholar, a philosopher and specialist on theologies of the Shia version of radical Islamism in Islamic Republic of Iran for 10 years[96].

The medical education was taken over by the Ministry of Health in 1986 and it was called Ministry of Health and Medical Education "*Vezarat-e Behdasht va Amuzesh-e Pezeshk*". However, before the Islamic Revolution on 1979, medical education was overseen by the medical schools supervised by the Ministry of Higher Education[97].

In 1979, the Ministry of Health "*Vezarat Behdari*" codified the policies and strategies for the substructure of providing health treatment services. The most important ones were:

- Priority of villages and deprived areas over cities
- Priority of health and health prevention activities over treatment
- Priority of flying treatment over hospitalization
- Priority of general treatment over special treatment[98].

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[94] Hashemian, Ali. 2005," The early steps in the foundation of Ministry of Health and Medical Education in Iran"; *Iranian Contempt History*, 8: pp 103-107

[95]Pirani, Ahmad. 2000, Private life of Mohammad Reza Shah Pahlavi. [زندگینامه محمدرضا پهلوی]. Tehran, Behafarin

[96] Rajabi, Hasan. 1992, *Life history of Imam Khomeini.[زندگینامه امام خمینی]*, Kosar, Tehran

[97] Hedayaty, Javad. 2002, *op cit*

[98] Naghavi, Mohsen & Jamshidi, Hamidreza. 2004, Health change aspect in rural area in Islamic Republic of Iran. [دگرگونی سیمای سلامت در روستانشینان ایران],Tehran, Barge Rezvan

During the last three decades, the general health indicators have significantly improved. These achievements are partly due to Primary Health Care (PHC) services[99].

Primary, secondary and tertiary health services are facilitated by the public sector. The emphasis of the government on primary health care over the last two decades has made the public sector the main provider of primary health care services across the country. Some primary health care services such as prenatal care and vaccination are provided free of charge in public facilities. The public sector also provides a considerable part of secondary and tertiary health services in the province. The private sector plays a significant role in health care provision in Iran. The private sector mainly focuses on secondary and tertiary health care in urban areas. Many NGO's along with several other non-governmental organizations are providing health services in the treatment of diseases like cancer, breast cancer, diabetes, thalassemia besides a few others[100].

The first years after revolution required some programmes for improved nutrition, because of poor economic conditions due to a growing population and limited resources malnutrition was very common in Iran. One of the most successful programs was producing iodized salt since 1988 to goiter prevalence[101].

In recent years, the Ministry of Health and Medical Education has been planning around school health programmes. Some of the plans were health care in school, physical education, health services, counseling, psychology and social services, schools and health promotion and environmental health staff. The expansion of school health services has increased from 53 percent in 1987 to 80 percent in 2005[102].

The family planning and population control were the other steps which had been taken at the end of 1980s and the early 1990s after the revolution. The early years after the revolution, the population growth was 3.9 percent, when the Iranian government realized that the costs of this burgeoning population were going to exceed its capacity for providing adequate food, education, housing and employment. Consequently, it embarked an ambitious program of family planning to counter the mistakes of previous policies of the government[103]. The policy

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[99] *ibid*
[100] Eastern Mediterranean Region. 2006, *Health system profile Islamic Republic of Iran*, Tehran, WHO
[101] *ibid*
[102] Vahid Dastjerdi, Marzieh. 2009, *op cit*
[103] Hashemi, Ali. 2009, *Family Planning Program Effects in Rural Iran*, USA, Virginia Polytechnic Institute and State University

makers created a population control program with three major goals: first, to postpone the frst pregnancy, second to increase the gap between two births and the last to limit the family size to three, which led the population growth to decrease to 1.4 percent in 1995[104].

After Islamic Revolution, many steps were taken to establish a generic drug industry and efficient distribution of drugs. According to this plan, the lists of drugs on the market were given serious review, resulting in the removal of thousands of drugs from the market. This led to the commercial importation of drugs manufactured in the country. In the years prior to the revolution, only 25 percent of the country's pharmaceutical needs were produced, increasing to 95 percent in recent years[105].

Improving health is central to the millennium development goals, and the public sector is the main provider of health care in developing countries. To reduce inequities, many countries have emphasized primary health care, including immunization, sanitation, access to safe drinking water, and safe motherhood initiatives. Natural and man-made environmental resources – fresh water, clean air, forests, grasslands, marine resources, and agro-ecosystems – provide sustenance and a foundation for social and economic development. The need to safeguard these resources crosses all borders[106]. Today, the World Bank is one of the key promoters and financiers of environmental upgrading in the developing world. Its data cover forests, biodiversity, emissions, and pollution.. Cities can be efficient as easier to provide water and sanitation to people living closer together, while access to health, education, and other social and cultural services is also much more readily available. However, as cities grow, the cost of meeting basic needs increases, as does the strain on the environment and natural resources[107].

Ministry of Health and Medical Education:

Planning, monitoring, and supervising of the health related activities for the public and private sectors in Iran are managed by The Ministry of Health (MOH). This ministry has a unique structure that distinguishes it from health ministries in other countries as in 1986 the medical education was integrated into the MOH; it is now called the Ministry of Health and

[104] Marandi, Alireza. et. al. 1998, *op cit*
[105] Vahid Dastjerdi, Marzieh. 2009, *op cit*
[106] Rahmani, Khaled. 2009, *Textbook of Public health. [بهداشت عمومی]*, Tehran, Esharat
[107] Central Intelligence Agency. 2010, *op cit*

Medical Education. This was to establish and achieve a better focused approach to health care provision and medical education[108].

The Iranian health system is subsidized by different organizations and is based on the model of public provision of services. The tiers of medical governance are

- National: At the national level Ministry of Health and Medical Education cover and govern policies, draft policies, plan, and finance and monitor the existing programmers.
- Provincial: The provincial level of governance in this area is the responsibility of the universities of medical health .There is responsible for health services and environment health.
- Township and rural: Finally at the township and rural Level, district health network includes a district health center, urban and rural health centers, health posts and health houses[109].

Insurance companies and the social welfare organizations also support provincial and district units. The peripheral units (health houses/rural health centers) offer health services free of charge. The other Units charge a nominal amount for the services[110].

After the Islamic Revolution private insurance companies were suspended till 1983. This was the time that some public insurance companies emanated by emerging the previous pre-revolution companies[111].

The Ministry of Health and Medical Education control the main policy in the country. It has a direct responsibility for preventive and treatment in whole Islamic Republic of Iran[112].

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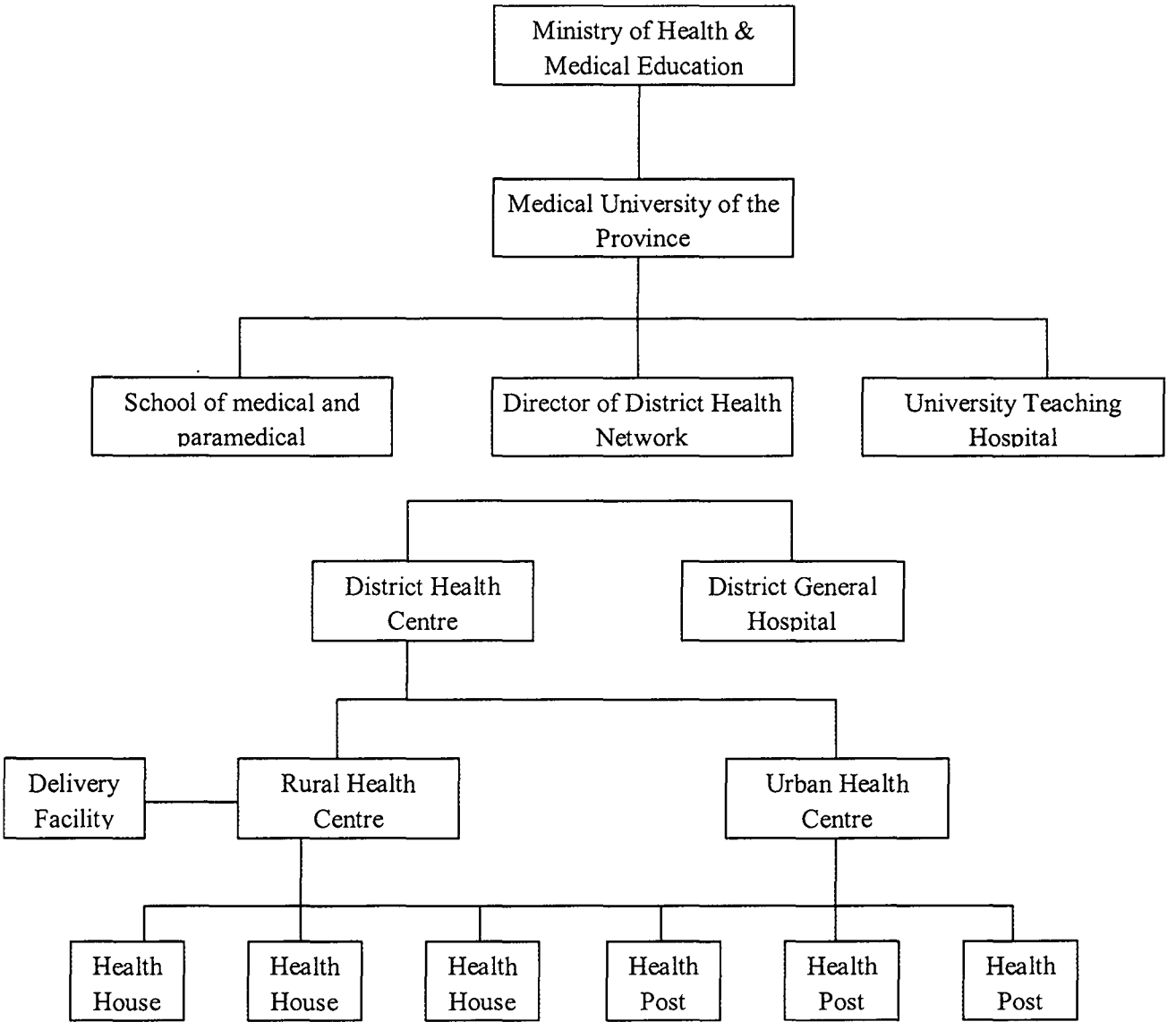
[108] Eastern Mediterranean Region. 2006, *op cit*
[109] *ibid*
[110] *ibid*
[111] *ibid*
[112] *ibid*

1.1: Organizational structure



Source: Ministry of Health and Medical Education, 2010

In Islamic Republic of Iran the Ministry of Health and Medical Education is responsible for the medical education (and related sciences) and also providing health services to all the people all over the country. In each province of the country, there is one centre and in some limited number of small provinces two or more universities and medical universities and health care services are responsible for these two major responsibilities in provincial (or local) area. Under the supervision of the Ministry of Health and Medical Education, medical universities have been established in different parts of the country to teach different courses of medical science. Total universities are 41 in number for medical education and health

services - at least one university in each of the 32 provinces. Some universities also have schools for paramedical and nursing education. Regional centers, additionally, with in-service training facilities also exist. The networks between universities has increased the possibility of more cooperation, designing curriculum and teaching along with providing the health care services forms the main base of the health research organization[113] This cooperation has helped the provisioning of effective services, more stable health organization[114].

From what has been designed as the health and care network, the caring process, the patients' movement and the information related to it from before, some parts did not manifest completely because of rapid political, social, economical, population and epidemiologic changes that happened after revolution. What was designed in the area of general and special hospitals, of course wasn't achieved completely.[115] The complex caring processes, referring the patients, learning information about the patients and action for the continuation of taking care of the patients outside the hospital was not formally formed[116].

Ministry of Health and Medical Education is primarily responsible for providing the primary health care in Iran, but several ministries and organizations provide secondary and tertiary medical care to their respective employees and their families. Currently almost all of the Iranian ministries, the armed forces, major banks, oil companies, railways, municipalities, and government run not for profit organizations for health care although all of them perform under Ministry of Health and Medical Education [117]. This would mean that all decisions, policies, resource planning is made at the central level by the Ministry of Health and Medical Education[118].

The Ministry of Health and Medical Education is empowered legally to monitor license and operations in governmental and private sectors. Health needs are usually estimated on the basis of nationwide surveys or conclusions made through data collected on a routine basis[119].

The undergraduate and the postgraduate staff for their medical and paramedical training are

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[113] Naghavi, Mohsen. et. al. 2005, Utilization of health services in Iran. [در جمهوری بهره مندی از خدمات سلامت اسلامی ایران], Tehran, Tehran University

[114] Vahid Dastjerdi, Marzieh. 2010, *Officional annual report of Ministry of Health and Medical Education*, Report number: 16, Tehran

[115] *ibid*

[116] Naghavi, Mohsen & Jamshidi, Hamidreza. 2004, *op cit*

[117] Eastern Mediterranean Region. 2006, *op cit*

[118] Eastern Mediterranean Region. 2006, *op cit*

[119] Vahid Dastjerdi, Marzieh. 2009, *op cit*

handled by the deputy minister for medical education. The human resource issues are addressed by the office of the deputy minister for logistics and management development. *Behvarz* training for both pre-service and in-service training is imparted by the *Behvarz* training centers. A directorate general for management development under the deputy minister for logistics has the responsibility for the in-service training of the health managers[120].

Iran has 15,400 health houses, 25,000 *Behvarzes*, 2,200 rural health centers, 300 health posts, and 1,900 urban health centers[121]. Iran has 98,000 hospital beds, 1.6 per each 1000 of the population. 76 percent of the beds are in State hospitals, 6 percent in Social Security Office (SSO), 10 percent in the private sector, and the remainder in charity and NGO hospitals[122]. There are few data on utilization, but hospital occupancy rates are believed to be below 60 percent in state and SSO hospitals. Iran has 0.8 physicians, 0.5 midwives and 2.3 nurses per each thousand people of the population. 4,000-5,000 new physicians graduate each year in Iran. Doctors must provide 3-5 years of service to the Ministry of Health and Medical Education after graduation before they can go into private practice[123].

The number of medical students' admission capacity peaked at about six hundred people before the revolution, to about six thousand people a year since. In 1979, the total number of physicians with medical ID number was about seventeen thousand; whereas in the past thirty years, about 120 thousand physicians in medical universities throughout the country are training. 35 percent of faculty members are women and 72 medical schools are dedicated to women. Specialized courses were also developed for the first time in 1987, with 21 super specialty fields were established in the years after the revolution in Iran. There had been only one medical university offering PhD course, whereas there are 35 universities offering courses[124].

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[120] ZareNejad, A & Akbari, Majid. 2009, *Three decades of endeavor on health care front. [* سه دهه تلاش در جبهه مراقبت های بهداشتی*]*, Tehran, Ministry of Health and Medical Education of Islamic Republic of Iran

[121] Vahid Dastjerdi, Marzieh. 2009, *op cit*

[122] *ibid*

[123] Madad, Mohammad. 2005, *Official report of Statistical Centre of Islamic Republic of Iran.* Government of Islamic Republic of Iran, Report number: 5, Tehran

[124] Vahid Dastjerdi, Marzieh. 2010, *op cit*

Table 1.1: Number of physician works in Ministry of Health and Medical education according to their field

Year	Total	General Physician	Total	Specialist Physician																		Dentist	Veterinarian	Pharmacist
				Internal Medicine	Cardiologist	Epidemiologist	Pediatrician	Psychiatrist	Dermatologist	Surgeon	Urologist	Orthopedic	Neurologist	Otology geologist	Optometrists	Obstetrician	Plastic surgeon	Anesthesiologist	Radiologist	Pathologist	Other			
1992	17453	8754	5995	528	170	112	776	239	108	768	162	295	107	267	320	589		564	328		662	1541	99	1064
1997	19585	9057	7423	801	288	164	1008	226	167	852	220	375	236	304	422	790	45	375	430	183	537	1748	92	1179
2002	21175	8568	9066	1029	372	201	1193	312	205	821	180	410	281	359	470	948	45	926	511	349	454	1945	527	1069
2003	21496	8693	9282	933	390	222	1216	320	216	804	321	453	304	366	481	937	45	931	463	368	512	1911	527	1083
2004	22758	9814	9668	840	433	255	1555	370	217	834	364	483	251	383	488	998	46	642	587	370	552	2122	70	1084
2005	24661	10705	10505	852	475	231	1762	399	85	864	396	533	184	196	543	1024	47	1070	972	393	479	2279	65	1107
2006	26564	11361	11366	941	512	253	1391	430	89	909	486	564	279	404	616	1156	57	665	1153	416	1045	2517	74	1246
2007	29937	13485	12258	1102	604	347	1340	509	257	1024	431	702	398	445	615	1285	58	1189	635	478	839	2786	81	1327

Source: Report by Ministry of Health and Medical Education of Islamic Republic of Iran, 2009

Ministry of Welfare and Social Security

The Ministry of Welfare and Social Security is new ministry and it was formed in 2004 in Islamic Republic of Iran. This ministry is mainly responsible for planning and implementation of national social security programme for the people. The programmes of international and multilateral organization are also coordinated by this ministry along with the national programmes[125].

Ministry of Science Research and Technology

Ministry of Science Research and Technology (formerly known as the ministry of science and higher education) are responsible for development of science, research and technology, extend science, education, human values and promote Islamic art and aesthetics and scientific heritage of Iranian and Islamic civilization, Providing professional staffing and human resource development in the country, promoting knowledge and technical skills development and promoting scientific thinking in society, evaluating and approving patents, discoveries and innovations in collaboration with other scientific and research centers in the country[126]..

Primary Health Care

Near the end of 1970s, the WHO officially published reports on the health of 100 million people of the world[127]. According to these reports, more than half of the world population did not have access to enough health care. The International conference on primary health care in Alma-Ata, Kazakhstan, in 1978, brought together 134 countries and 67 international organizations (China was notably absent). The conference defined and granted international recognition to the concept of PHC as a strategy to reach the goal of health for all in 2000, as indicated in the declaration released at the conclusion of the conference[128,129].

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125 Mesri, A.R. 2006, *Official report of Ministry of Welfare and Social Security of Islamic Republic of Iran.* Government of Islamic Republic of Iran, Report number: 2, Tehran

126 Zahedi, M. Mehdi. 2007, *op cit*

127 Freeman, Melvyn. 2005, *WHO resource book on mental health, human rights and legislation, China, WHO*

128 Shadpour, Pejman. 1993, *Primary health care in the Islamic Republic of Iran. [* مراقبتهای اولیه بهداشتی در جمهوری اسلامی ایران *]*, Tehran, Ministry of Health and Medical Education

129 Chan, Margaret. 2008, *Return to Alma-Ata*, http://www.who.int/dg/20080915/en/index.html

According to the declaration of Alma Ata, primary health care, is "essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination"[130,131].

Local human resources have helped extending the accessibility of the health network to the most remote spots of the country, and have caused significant changes in the establishment and sustainability of the public health. Some of the local people are selected among the volunteers to convey health care messages to the public after the primary training. Moreover, the increase of human resources, equipments, facilities, and their appropriate distribution has contributed to improved service delivery in Islamic Republic of Iran[132].

Iran's first two health care system levels are covered by the PHC network out of the total three level systems. According to a report called Utilization of Health Services (2005) the Basic PHC levels include:

1) Catchment population of 1500 staffed by *Behvarzes*.

2) Rural health centers having health workers and a physician .i.e. Nurses, midwives, dental technician, environmental health workers. These cover a number of health houses with a population of 9000.

3) Urban health posts

4) Urban health centers (for example the average urban coverage of mental health program has been around 30% in 2005)

5) The second system level is the district health centre responsible for the planning, supervision and support on the PHC network as well as the district hospitals. Provincial and specialty hospitals are under the third category[133,134,135].

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[130] *Declaration* of *Alma-Ata*. 1978, *International Conference on Primary Health Care*, *Alma-Ata*, USSR, http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf
[131] *ibid*
[132] Milanifar, Behrooz. 1991, *Mental health*.[سلامت روان], Tehran, Ghomes,
[133] Shadpour, Pejman. 1993, *op cit*
[134] Yasamy, M.Taghi. 2008, "Mental health challenges and possible solutions"; *East Mediterr Health Journal*, 14: pp 114-122
[135] Naghavi, Mohsen. et. al. 2005, *op cit*

PHC has an accessibility of almost 90% for the rural populace. Urban coverage is comparatively less in percentage but the private health sector covers up for the PHC deficiency. The primary concern with the PHC networks has been a systemic expansion and control[136].

In most large cities, economically well-off persons use private clinics and hospitals that charge high fees. About 73% of all Iranian workers have social security coverage. In 2000, 94% of the population could access local health services, according to the WHO[137]. Access ranged from 86% in rural areas to 100% in urban areas. Between 80% and 94% of the population could access affordable essential medicines in 1999[138].

Health Care Center in Rural area

The rural unit has "one to five" health house under its supervision. One general physician and some skilled workers called "*Kardan*" and other service staffs work in this unit. The location of rural health center is generally in big villages which are on the roads to cities[139].

Rural network management is responsible for the coordination of providing health and treatment care activities in rural area. The rural health center and hospitals are supervised by this management[140].

Rural health center is a management stage which is responsible for the performance of the processes like planning, evaluation, resource support, doing of technical and more complex services in the realm of health services in rural area[141].

The health house is the most peripheral rural facility in the network, covering an average of approximately 1500 people. A male and a female villager known as *Behvarz* staff work in each health house their principal duty is the provision of PHC services for the covered population[142].

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[136] Madad, Mohammad. 2005, *op cit*
[137] Freeman, Melvyn. 2005, *op cit*
[138] Vahid Dastjerdi, Marzieh. 2009, *op cit*
[139] Rahbar, M.R. 2009, *Series of health report in Islamic Republic of Iran. [* مجموعه ای از گزارش سلامت در جمهوری اسلامی ایران], Tehran, Ministry of Health and Medical Education of Islamic Republic of Iran
[140] *ibid*
[141] *ibid*
[142] *ibid*

Health Care Center in Urban area

Basically it is similar to the rural health care center and supervises three to five health centers. At least two general physicians provide services by doing the supervision responsibilities of the center (specially supervising over the centers' activities) and also receiving the referral cases into the urban health care center. Health center operates with support from some service staff, and the organizational combination of urban health care center[143].

Providing services in the health houses and health care centers include taking care of the mother and the baby, family planning, discovery of disease and the prevention of epidemics and preservation of the health status (cases like tuberculosis, malaria, mental disorders, blood pressure, and diabetes), environmental health services, professional health, school health and oral health. Also provides treatment to the referral patients and emergency cases are done in the health care centers[144].

Each health center supervises and takes care of almost twelve thousand people. In each health center three family health skilled workers called "*kardan*", one environmental health skilled worker also known as a "*kardan*" and one midwife provide services[145].

Primary Health Care Information System

The focuses of work in primary health care are on rural area. Today health houses cover 86% of the rural population and addition to this by broadening the health centers has increased the number of people under its coverage in the urban areas[146].

The network system could start a registering of current information system by the use of special means and procedures. The parts of this system are for current registering of information, mainly including the family cases, the monthly caring notebooks, the monthly statistical reports form, life calendar and the network system software[147].

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[143] *ibid*
[144] *Ravvaz, Kourosh. 2005, Tehran University of medical sciences and health services.[* دانشکده علوم پزشکی تهران و امکانات بهداشتی*]*, Tehran, Tehran University
[145] Vahid Dastjerdi, Marzieh. 2009, *op cit*
[146] *ibid*
[147] Naghavi, 2004, op cit

On the account of many reasons including the various needs of the planners and legislators, the current information registration system, does not cover all the required health planning designs and performances, so the usage of some other procedures are going to be needed in a periodical way for gathering the required information. These procedures mainly are: regional and country's periodical researching studies by sampling and registering the medical information in the caring centers[148].

In Iran Non-communicable diseases cause the most disease burden: 45% of males and 33% of females from all cause of total burden for both sexes[149]. National NCD risk factor surveillance system of Iran has been established since 2004 through which 4 national large-scale surveillance surveys conducted to find out the existing situation of NCD risk factors in 15 to 64 yr old in Iranian citizens and following the trend of these risks[150].

Controlling National Center for Disability Services (NCDS) seems difficult by the well equipped PHC centers which are being ill prepared. This leads to lowering the morale of the *Behvarz*. The health care organization is dominated by the hospital principles based on the curative services although the problem of the low bed occupancy contradicts the expansion in the number of hospital's beds which has caused more problems[151].

Health system organizations:

Private and Public Health Care Systems

The health care system in Iran is the responsibility of the Ministry of Health and Medical Education and Ministry of Social Welfare. The government's health centers and hospitals and controls other public and private hospitals are under the Ministry of Health and Medical Education. In Islamic Republic of Iran the health care also available through private centers, like hospitals and clinics, about 85% of health care is provided by the government and 15% is private.

148 Vahid Dastjerdi, Marzieh. 2009, *op cit*

[149] Asgari, H. et. al. 2009, "Non-Communicable Diseases Risk Factors Surveillance in Iran"; *Iranian Journal of Public Health*, 38(1): pp.119-122

[150] *ibid*

[151] *Vahid Dastjerdi, Marzieh. 2009, op cit*

The health service is free in rural areas[152]. There are 272 government hospitals, 694 government clinics and 150 private hospitals in Iran[153]. Despite large number of hospitals in Iran, data management has always been an issue. Only limited data is available._National Health Accounts reports private health care participation of only 10% of hospital beds and 20% of total health expenditure[154].

Doctors work in hospitals, clinics and private offices. The large number of doctors works in public and private sector. The private sector is estimated to contribute between 10 to 20% to the health care system[155].

Health care services (public and private sector)

Islamic Republic of Iran has a well defined private health sector with prime concentration on urban areas and plays a major role in the provision of secondary and tertiary care. It also controls almost the whole of pharmaceutical industry and drug distribution system and accounts for a large share of laboratory and diagnostic facilities. This affects the prices of productions and people have to expend on treatment depend on the kind of their health insurance[156].

Iran boasts of many NGO's and charities involved in the health care systems and delivery. The NGOs are providing training programmes and preparation of packages on primary prevention. Some NGO's are funded and operated by the government. Imam Khomeini's Relief Committee or *Committee Emdad* is examples of large NGO's working for people welfare. It was founded in 1963 but actually got its operational credit in 1979 through a decree of the Late Imam Khomeini (1900-1989). Headquartered in Tehran, it has branches in many cities supreme leader, Ayatullah Ali Khamenei, directly oversees its operation[157,158,159].

The NGOs related to health care are mostly connected with the government. Voluntary

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[152] *Coupr, ID et.al* , 2004, "Medicine in Iran: A brief overview"; *SA Fam Pract, 46(5): 5-7*
[153] Vahid Dastjerdi, Marzieh. 2010, *op cit*
154 Sadighani, Ebrahim. 2004, *Hospital accreditation and audit standards. [استانداردهای ممیزی و اعتباربخشی بیمارستان]*, Tehran, Social Security Research Institute
155 *ibid*
156 Eastern Mediterranean Region. 2006, *op cit*

[157] ibid
[158] Marandi, Alireza. et. al. 1998, *op cit*
[159] Mesri, A.R. 2006, *op cit*

participation is seen in finance, organization and provision of health services as charitable acts. In reality, many famous hospitals and health centers owe their existence to these charities. Ministry of Health and Medical Education was subsequent creations. Even today there are a large number of health facilities, ranging from outpatient clinics to hospitals and institutions run by the charitable community groups. Among the more modern NGOs created over the past few years, a considerable number concentrate on health problems related to the specific groups like children with cancer.[160].

Mahak is one of the main NGO in Iran which was register in 1991 in Tehran by focusing on charity in the field of medicine, research, prevention, treatment, services, health, hospital, and welfare for supporting children with cancer[161]

Many NGO's are active in drug control and prevention while they are also supporting people with HIV/AIDS issues[162]. *Jamiate Aftab* is largest registered NGO in Iran and the UN list has 12 years experience in the fields of prevention and treatment activities on drug dependency. There is a center of *Jamiate Aftab* in different cities and the facilities available are free[163].

Likewise, although not organized as an NGO, due to the supportive stance on NGOs and other forms of civil society participation of the president Khatami (1997-2005), NGO movement has received a greater attention from the UN agencies over the past few years; and most of such support has come from UNFPA (United Nations Population Fund), UNICEF (United Nations Children's Fund), and UNDCP (United Nations Office on Drugs and Crime)[164,165].

Private sector lays more importance on the use of herbal medicine. Being a traditional country, homeopathy and procedures such as cupping, leeching are also still in use. Herbal medicinal system is dealt by a directorate in the office of the deputy minister for food and drugs. The Iranian national formulary lists a number of herbal medicines. There is also an institute of medicinal herbs as a part of school of pharmacy, Tehran University of Medical Sciences[166,167].

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[160] Bahador, Hamid. 2005, *op cit*
[161] Vahid Dastjerdi, Marzieh. 2010, *op cit*
[162] Marandi, Alireza. et. al. 1998, *op cit*
[163] Vahid Dastjerdi, Marzieh. 2010, *op cit*
[164] Ravvaz, Kourosh. 2005, *op cit*
[165] Mesri, A.R. 2006, *op cit*
[166] Ravvaz, Kourosh. 2005, *op cit*

There are four government-controlled health insurance schemes. All come under the jurisdiction of the high council for health insurance, consisted of seven ministries and presided by the minister of health. The high council is responsible for making changes to the social insurance provisions of each scheme, and sets the fee schedule for payment of providers. All health insurance schemes use the same fee schedule. The statutory public health insurance scheme established by the public health insurance law, is actually non-compulsory, and only employed persons and military personnel who are covered by quasi-mandatory health insurance. Private insurance schemes are relatively underdeveloped in Iran and are usually used by foreign expatriates and their families but locals may purchase it as a supplementary plan[168,169].

In addition to medical universities and health care services which are the substitute for the Ministry of Health and Medical Education in the province and by using the health and care net works and hospitals for providing health care services and medical education, other public and semi public organizations also provide health care services (mainly care services)[170].

Some of these organizations are:

Social Welfare Organization: These organizations provide the simple standing treatment (OPD) services and hospitalization in its own buildings. These people who are receiving the health care services from this organization are mainly insured by this organization. Additionally the insured citizens can also receive their required services from the private sectors which are in contract with the organization or other public sectors[171,172].

Other people (non insured by the organization) can also use the provided services of this organization by paying the public costs[173].

Armed forces health care insurance covers the complete armed forces of Islamic Republic of Iran. These include the army personnel, *Sepah Pasdaran*, *Entezami forces*. Forces also have hospitals and clinics for their military and non military staff. These people can also use the services of the private sectors in contract with the armed forces insurance and other public

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[167]Hatami, H. et. al. 2007, *Text book of public health. [کتاب جامع بهداشت عمومی]*. 2nd ed, Tehran, Arjmand
[168] Marandi, Alireza. et. al. 1998, *op cit*
[169] Mesri, A.R. 2006, *op cit*
[170] *ibid*
[171] Marandi, Alireza. et. al. 1998, *op cit*
[172] Naghavi, 2004, *op cit*
[173] *ibid*

sectors[174,175].

These are providing services directly to their staff and their families:

- Oil Ministry: provides standing health care hospitalization services to its staff and their families.

- *"Bank Markazi"* (central bank of Islamic Republic of Iran), Tehran Municipality, Ministry of Justice, and Ministry of Education also act directly to provide health care and hospitalizing services to their staff.

- Health care services insurance organization and *Komite Emdad Emam*: These two organizations don't act directly in providing health care services or in other words, they have no health care centers.

Health care services insurance organization covers all the official public employees, villagers and business men. *Komite Emdad Emam* provides some facilities for the vulnerable poor income people of the society by covering their health needs with its facilities[176].

Health care services insurance organization, as public insuring organization, has the widest insuring coverage. The insured of this organization and those of the *Komite Emdad Emam* can use the health care services for hospitalization and standing treatment of the private sectors in contract with these two organizations by paying the official amount and also use the services of the centers, hospitals and policlinics under the supervision of medical science universities[177,178].

- *Bonyad Shahid and Bonyad Janbazan*: These two organizations provide health care services of hospitalization and standing treatment directly to the injured of the Iran-Iraq war (1980-1988) and their families and the families who lost a member in the war in their centers[179].

- *Behzisti Organization*: This organization provides rehabilitation services mainly to the physical and mental and socially injured. These services are mainly free of cost[180,181].

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[174] Marandi, Alireza. et. al. 1998, *op cit*
[175] Naghavi, Mohsen. et. al. 2005 *op cit*
[176] Mesri, A.R. 2006, *op cit*
[177] Marandi, Alireza. et. al. 1998, *op cit*
[178] Mesri, A.R. 2006, *op cit*
[179] Marandi, Alireza. et. al. 1998, *op cit*
[180] Mesri, A.R. 2006, *op cit*

Summary

The main aim of this chapter was to give a background and overview of health services in Islamic Republic of Iran. It explains very briefly the history of Islamic Republic of Iran, its topography, provinces, and demography. It also gives brief idea of the economy, government, education system and literacy for a better understanding of the Islamic Republic of Iran and the health indicators such as life expectancy, history of medicine in Iran before and after Islamic Revolution as a backdrop to the existing Ministry of Health and Medical Education facilities in the country. The plan of the Ministry of Health and Medical Education of Islamic Republic of Iran for primary health care system and organization in rural and urban area are being focused on in this chapter and the study shows that Iranian health care system and all its available facilities are controlled by the Ministry of Health and Medical Education, Ministry of Welfare and Social Security and Ministry of Science Research and Technology.

Planning, monitoring, and supervising the health related activities for the public and private sectors in Iran are managed by the Ministry of Health and Medical Education. The plan focuses mainly on primary health care system in rural area and the existing health houses cover 86% of the rural population.

There has been a marked increase in the facilities and the number of physicians after the Islamic Revolution. According to the last statistic (2004),[182] Islamic Republic of Iran has 15,400 health houses, 25,000 *Behvarze*, 2,200 rural health centers, 300 health posts, and 1,900 urban health centers. Iran has 98,000 hospital beds for its 70 million population, that is, one bed for more than 700 people[183]. Although there have been some improvements in the provision of general health facilities, Iran has to go a long way in developing comprehensive health care services.

About 73% of all Iranian workers have social security coverage[184]. The private sector is estimated to contribute between 10 to 20% of the health care system in Iran[185]. Some organizations such as Oil Ministry, Armed forces of Islamic Republic of Iran, *Bank Markazi*, *Komite Emdad Emam* , *Bonyad Shahid* and *Bonyad Janbazan*, *Behzisti* Organization provide standing health care and hospitalization services to its staff and their families and are under

[181] Naghavi, Mohsen. et. al. 2005 *op cit*
[182] Madad, Mohammad. 2005, *op cit*
[183] *ibid*
[184] Freeman, Melvyn. 2005, *op cit*
[185] Mesri, A.R. 2006, *op cit*

the control of Ministry of Health and Medical Education[186]. However, mental health issues are not covered by insurance services.

As it was mentioned in this chapter, Iranian health care system is outspread and depended on many ministries and organizations which are mostly ruled or controlled by government. It worth mentioning that special focus of this thesis is on the facilities available for mental health care services such as clinical psychologist, psychiatrist and mental health hospital that work under the Ministry of Health and Medical Education. A general scheme of health care system in the Islamic Republic of Iran with some references to mental health care was explained in this chapter. The next chapter has a special focus on mental health in the Islamic Republic of Iran to get closer to the objective of this thesis.

[186] Marandi, Alireza. et. al. 1998, *op cit*

CHAPTER TWO

MENTAL HEALTH SERVICES IN

ISLAMIC REPUBLIC OF IRAN

Achievements and areas of improvement

Mental health care is an indispensable part of health which usually is not given enough attention appropriate to its importance[187]. As it mentioned in the first chapter, the proportion of physical health compared to mental health in health resources can illustrate this situation. This vitality is reflected to definitions are given in different sources.

A mental illness is a psychiatric disorder resulting from disruption in the thought processes, feelings, moods, and communicational skills[188]. Mental illness is distinct from the legal concept of insanity[189]. Since the end of the last century, mental illnesses have been medicalized in a more restricted sense. They have been viewed as a special category of medical diseases. The "neuropsychiatric disorders" have been subject to clinical and basic science research and are the domain of a significant sector of health services[190].

Even within psychiatry, the mental illnesses have been viewed as a set of discrete disorders (therefore illnesses in the plural), acute or chronic in forms, which can be more or less successfully treated (as like other diseases) by specific drugs, psychological interventions, and rehabilitative care. The extent to which the cause of these conditions are either specific or biological or are more general, social, or psychological remains a matter of controversy. The cross cultural validity of particular categories of illness, their universality versus cultural specificity is far from certainty[191].

Iran is one of the pioneering countries of the Middle East region, in implementing primary health care programmes with mental health programmes as an integral component of the primary health care. The eight years war of Iran and Iraq also provided impetus for

[187] Kaplan & Sadock. 2009, *op cit*

[188] Smith, Edward. et. al. 2003, *op cit*

[189] *ibid*

[190] Desjarlais, Robert. and Esienberg, Leon. 1995, *op cit*

[191] *Ibid*

understanding mental health issues related to both ordinary people and war victims[192].

The mental health services in Iran can be studied over four different periods of time:

The first period of the development of mental health was from 1800 till 1941, when the conditions of mental health facilities were extremely poor throughout Iran including major cities like Tehran, Isfahan, Shiraz and Hamedan. Most of these facilities were either an extension of the building in which homeless beggars stayed or connected to this building[193,194].

The second period of the development of mental health services was from 1941 till 1971 which witnessed the establishment of medical schools in Iran with psychiatry as an important branch of modern medical schools. The first psychiatric ward was opened in the general hospital that belonged to Tehran University in the 1940s. An independent hospital for psychiatry treatment was put up in early 1950s. This ward was later moved to Roozbeh hospital and become the first Iranian teaching psychiatric hospital. Residency training in psychiatry was started during 1960s at Tehran University and followed by others universities such as Shiraz, Isfahan, Tabriz and Mashhad[195,196].

The third period of development of mental health services was from 1971 till 1986 when efforts were made to achieve a comprehensive mental health care, by the association of the Tehran Medical University which started the programme for rehabilitation and community mental health services for the disabled. After the Islamic Revolution in 1978, the educational research programs of Tehran Medial University psychiatric ward was separated to form the Tehran psychiatric institute. During the same period a number of new psychiatric hospitals and centers came up around the country with teaching and training facilities[197].

The fourth period of the development of the mental health services began in October 1986, when the National Programme of Mental Health (NPMH) was initiated by the government as

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[192] ZareNejad, A and Akbari, Majid. 2009, *op cit*

[193] Murthy, R.S. 2005, "Mental health in the Islamic Republic Of Iran"; *Andeesheh va Rafar - A Journal of Psychiatry and Clinical Psychology*, 7(4): pp 40-58

[194] Vahid Dastjerdi, Marzieh. 2009, *op cit*

[195] Murthy, R.S. 2005, op cit

[196] Vahid Dastjerdi, Marzieh. 2009, *op cit*

[197] Murthy, R.S. 2005, *op cit*

a strategic move to merge the mental health activities with the primary health care system. The first pilot projects were started at Sharre Kord and Shahreza (cities of Iran), and later on expanded to the entire county through the general health system. This programme was evaluated by the eastern Mediterranean regional office of WHO, in collaboration with the Government of Islamic Republic of Iran and division of mental health and prevention of substance abuse programme of World Health Organization in Geneva, Switzerland[198,199].

Mental Health Training

Presently in Iran psychiatry is being taught as an independent subject in all medical schools and all the medical students have mandatory training on clinical psychiatry. The duration of compulsory training in psychiatry are governed by the respective university policies and curriculum and have variation from university to university[200].

As of now there are 39 medical schools in Islamic Republic of Iran. The medical education in Islamic Republic of Iran is regulated by Ministry of Health and Medical Education and the medical schools are part of the state universities. Apart from the state medical schools, 'Azad University' which is a private university offers medical education as prescribed and regulated by the Ministry of Health and Medical Education. All these medical schools offer undergraduate, post graduate and research training in behavioral sciences and psychiatry[201]. The utilization of general psychologists (Bachelor of Science) in mental health services started before the revolution, during that time the psychiatric services were being offered by the society for rehabilitation of the disabled, which is a government agency for the people with different kinds of disabilities. By early 1970 the Post graduate training in clinical psychology (Master of Science in clinical psychology) was started by Tehran University[202]. After the revolution, the Tehran psychiatric institute started the new revised curriculum for both post graduate and doctoral programmes. Presently the higher education system in Iran

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[198] Murthy, R.S. 2005, *op cit*

[199] Marandi, Alireza. et. al. 1998, *op cit*

[200] Yasamy, M.T. et. al. 2001,op citYasamy, M.T. et. al. 2001, "Mental health in Islamic republic of Iran: achievements and areas of need"; *Estern Mediterranean Health Journal*, **7(3): pp 381-391**

[201] Murthy, R.S. 2005, *op cit*

[202] Mohit, Ahmad. 1998, *Mental health in our future cities.* [آینده سلامت روان در شهرهای مختلف], Tehran, Tehran Psychiatric Institute and Mental Health Research Centre

offers 4 professional post graduate degrees in psychiatry and allied subject. These include M.Sc in clinical psychology, M.Sc personal psychology, M.Sc in psychiatric nursing, M.Sc in psychiatric occupational therapy. Apart from these the courses in social work and nursing also include psychiatry as a subject[203].

The first professional body of psychiatrist and psychologist Iranian Psychiatric Association (IPA) was established in 1966 in Tehran. Iranian Psychiatric Association is a non-governmental organization that was established by the effort of psychiatrists who were well known pioneers in conducting scientific research and activities in the field of psychiatry. According to the records, Iranian Psychiatric Association was one of the most active scientific association in Iran until 1986 and is still very active in research and advocacy in issues related to psychiatric health services[204,205].

Mental Health Services

The aim of mental health services is to provide and protect individuals and society from illness/disorders and help them have an enhanced quality of life, such that one can perform the routine work well and have good relations with family and other people. Mental health services include three types of activities:

(a) Prevention of mental and emotional disorders.

(b) Helping the patient to recover through treatment and adoption of suitable behavior.

(c) Rehabilitation and prevention of mental disabilities by persuading the patient to perform activities of their interest[206].

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[203] *ibid*

[204] Jalali, Ahmad. 2008, "Iranian psychiatric association"; *Iranian journal of psychiatry and behavioral science*, 3: pp 54-63

[205] Marandi, Alireza. et. al. 1998, *op cit*

[206] Bolhari, J. and Ansari, M. 2003, *Mental Health for Iranian Multipurpose community health workers (Behvarz). [سلامت روان بهورزان]*, Tehran, Sarshar

Mental Health Program of the Islamic Republic of Iran

The government of Islamic Republic of Iran established the rural area network for delivery of health services in 1985 and the National Mental Health Program 1986 was made a part of the health services to be provided through these networks. The main objective of this program was to integrate the MHP in the PHC. The general physicians in the rural health houses diagnosis the cases needed to treatment and refer them to the urban specialty hospitals. The program, as mentioned here, aimed to provide health education, case finding, treatment, referral and the follow up of major psychiatric disorders[207].

With increase in the number of psychiatrics, clinical psychologists, social workers in recent years the facilities for the mental health services (preventive, curative and rehabilitative) have improved manifolds in Iran. The extraordinary importance assigned to mental health in the 4th National Development Program has been marked as one of the major achievement in the recent past. The focus on the mental health component in the 4th National Development Programmes was to reduce the mental disorders by 10% by initiating various strategies for efficient utilization and mobilization of available resources at optimum level. Currently, the Ministry of Health and Medical Education seeks to improve mental health services. The goals they strive to achieve are:

a) Expansion and qualitative promotion of psychiatric services (treatment and rehabilitation of mental disorders);

b) Promotion of public mental health status;

c) Scientific capacity building in order to fulfill major mental health requirement at national and local levels

d) To integrate the importance of mental health in major health policies and legislations of the country[208].

Several programs are being implemented to achieve the above goals including expansion of community based approach for health services, designing multi- level services in the urban areas, promotion of hospital care through setting up of psychiatric-specific standards, extension of the number of psychiatric beds in the general hospitals, and revision and

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[207] Vahid Dastjerdi, Marzieh. 2009, *op cit*

[208] Rahimi, Afarin. et. al. 2008, *The geographical distribution of psychosocial disorders. [توزیع جغرافیایی اختلالات روانی اجتماعی و اعتیاد]*, Tehran, Ministry of Health and Medical Education of Islamic Republic of Iran

promotion of mental health services in PHC network[209]. In addition, promote the 'suicide and domestic violence prevention programs' such as: post-disaster psychosocial support, life skills training for school and university students and other target groups, and parenting trainings are being integrated into services provided by health networks to improve the mental health status of the population[210]. Moreover, a number of programs are being held in order to build up the scientific capacity in the system, to provide the major public mental health services to suit requirements of patients and strengthen the basis of the educational and research systems[211].

The last revision of the mental health plan was in 2004 and includes following ingredient; developing community mental health services, building psychiatric wards in general hospitals, developing a mental health component in primary health care, human resources, advocacy and promotion, human rights protection of users, equity of access to mental health services across different groups, financing, quality improvement, and monitoring system[212].

Integration of Mental Health in Primary Health Care System

The decade of 1980s was an important time for development of health in Islamic Republic of Iran. The integration of health provision and medical education which was practically achieved through the formation of the new Ministry of Health and Medical Education and development of a network of PHC was important strategically during that time. The Integration of Mental Health in PHC committee was chaired by Professor Davidian and Dr Mohit and also Dr Wig that came from India to Iran to help the Iranian National Mantal Health Programme[213].

The national programme was officially approved in 1987. One year before the national programme, the first pilot programme of integration started in Shahr e Kurd, a city of Chaharmahal & Bakhtiari provine, by the Director of the Tehran Psychiatric Institute and

[209] *ibid*

[210] Bagheri Yazdi, A. and Malekafzali, H. 2001, "Evaluation of functions of auxiliary health workers (behvarzes) and health volunteers in mental health care delivery in the framework of PHC system in Brojen city, Chaharmahal and Bakhtiary province"; *Hakim Research Journal*, 2: pp 100-109

[211] Rahimi, Afarin. et. al. 2008, *op cit*

[212] Razzaghi, E.M. et. al. 2006, *op cit*

[213] Mohit, Ahmad. 2009, *op cit*

other prominent psychiatrists with support from the Ministry of Health. The pilot project included 22 villages with a population of 28903 people[214,215]. The aim of the study was about the effect of training to improve knowledge. All primary care workers in the pilot area, including 27 *Behvarzes* and five general practitioners, received mental health training. Pre- and post-training assessments showed that their knowledge improved significantly[216].

Another pilot programme in preparation for the W HO's inter country meeting for the Eastern Mediterranean Meeting on mental health started in 1989 by Isfahan University of Medical Sciences in Shahreza city[217].

A series of successful pilot study conducted between the period of 1988 to 1990 in Shahr-e-Kord and Shahreza cities indicated an increase in knowledge level and improvement in skills among health workers. The result of the pilot studies helped to formulate national strategies for mental health services[218].

From 1988 to 1990 successful pilot studies were implemented in Shahr-e-Kord and Shahreza, which showed significant increased knowledge of health workers and improved skill in patient screening compared with the control area. Following this, a number of developments occurred in the country that led to a more rapid expansion of the programme. Several factors seem to have contributed to this acceleration. The Creation of a mental health unit at the ministry of health and medical education was a suggestion for expanding the programme. Meanwhile, it was recommended that the mental health would be announced as the ninth component of the primary health care[219,220]. The Formation of a national mental health advisory committee composed mainly the members of the faculty of the medical faculties is the other solution that mentions in the pilot study. Some other results this study brings in reference to regulations, ensured the education at all levels of health establishment (1988) - review of program and workshops all over the country on mental health (1991), health

[214] *World Health Organization, 2004.* Nationwide integration of mental health into primary care, www.who.int/entity/mental_health/policy/services/Iran.pdf

[215] Mohit, Ahmad. 2009, *op cit*

[216] *World Health Organization, 2004. op cit*

[217] Mohit, Ahmad. 2009, *op cit*

[218] *ibid*

[219] Sharifi, Vandad. 2009, "Urban Mental Health in Iran: Challenges and Future Directions"; *Iranian Journal of Psychiatry and Behavioral Sciences,* 3(1): pp 9-14

[220] Bolhari, J. and Mohit, A. 1995, "Integration of mental health into primary health care in Hashtgerd"; *Andeeshe va rafter*, 2: pp 16-24

research methodology (1993), annual celebration of mental health week from October of 1985, awareness of other health staff through workshops, seminars and conferences and promotion of public awareness about mental health through the media[221].

Mental Health in Urban and Rural area

The rapid urbanization across the countries around the world is probably one of the world's most important demographic shifts over the past century. In the early nineteenth century around 5% of the world's population was urban, but now half of the world's populations live in urban areas[222].

The effect of urbanization on mental health is complex. People experience the consequences of increased stressors, and adverse events such as overcrowding, pollution, poverty, slums, rising levels of violence, changes in social structure, inequality, poor social support, etc. These factors contribute largely in inducing problems like increasing suicide rates, alcohol and drug abuse creating challenges to mental health professionals in urban set up[223].

The lack of awareness in rural areas in recognizing mental health disorders makes it very difficult to estimate and plan mental health services in rural areas. More over the house doctors and the *Behvarz* who are placed in the rural areas also have limited knowledge about the diagnosis of mental health among the population. The delay in diagnosing the syndromes when it is in chronic stage by a doctor, and also the delay to start the treatment for a patient are the main problems in the rural area[224].

Prevalence of Mental Disorders

The mental health survey conducted in 1999 to assess the prevalence of mental disorders, in the population of age group 15 and above, found that some form of mental disorder was

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[221] *ibid*

[222] United Nations report. 2008, *World Urbanization Prospects, the 2007 revision, NewYork*

[223] Sharifi, Vandad. and Amini, Hamid. 2006, "Roozbeh home care program for severe mental disorders; a preliminary report"; *Iranian Journal of Psychiatry*, 1: pp 31-34

[224] Bolhari, J. and Mohit, A. 1995, "Integration of mental health into primary health care in Hashtgerd"; *Andeeshe va rafter*, 2: pp 16-24

prevalent in the group, to the extent of 22% of the population of the respected age group[225].

As per the data from Ministry of Health and Medical Education of Islamic Republic of Iran, the total number of suicides committed during the year 2004, was a considerable figure of 3235[226]. This amounts to 6.5 suicides per 100,000. The rate varies from 0.4 in Qom province to 24.4 in Lorestan province. The three western provinces, namely Lorestan, Hamedan and Kermanshah, reported a higher rate of suicide. As Tehran has not yet been included in the death registration system of the MOH, there is no comparable data available for that province[25].

Mental Health in Children and Adolescents

For the last twenty years, there has been a gradual shift in the age of the Iran's population. There is a distinct shift towards the larger percentage of the population in their younger years of age[227]. It is therefore important that the mental health programs also shift its focus towards the relevant age group. The government of Islamic Republic of Iran over the years has taken several initiatives to address the mental health issues among the younger age group population. For example "School Mental Health Program" was launched in *Damavand*, a city with a population of 250,000 people, located 100 kilometers north of Tehran in 1997. This training significantly brought about a change in the knowledge and attitude of students and their parents about mental health and the way for improving their self confidence. The students were able to handle their problems with the help of their teachers as well as their parents quite well. The fear in the mind of the students such as fear of physical punishments from teachers and fear of examinations were also addressed to a large extent. The students were able to handle attend schools regularly. This initiative on mental health also reduced the sexual harassment behavior among the students and decrease in the smoking habits of students was also observed. This was a clear example to demonstrate that holding such programs in schools were of a great help for better mental health status and awareness among

[225] Vahid Dastjerdi, Marzieh. 2009, *op cit*

[226] *ibid*

[227] *ibid*

students[228].

A program in collaboration with UNICEF and WHO was launched in 2005 to address prevailing concerns of child abuse as well as violence against women.. This five-year programme focused on four main areas including "Integrated early childhood development", "girls' education and women's empowerment", "child protection" and "HIV/AIDS and adolescent-friendly services"[229]. The projects were launched to understand and determine the evaluation of the reasons for mental behavior. Based on these evaluations, the training modules were formulated. Four day training workshop was conducted with the help of practitioners as well as health workers in four provinces Hormozgan, Sistan and Baluchistan, West Azerbaijan and Kerman and the theme was "rights of the child". It's however felt that issues such as child abuse and violence, physical and sexual harassment against women should be part of the curriculum taken up in the school health programs for better results[230].

According to a study done with Dr Noorbala and his group in 2002, to determine the mental health status survey of the adult population in Iran, with The 35014 people sample from fifteen years old and above. He found some factors such as gender, age, marriage, education and employment have effect on mental disorders. The women had a relative risk of mental disorders compared with men. The risk of mental disorder increases with age and the married people are more at risk of mental disorders compared to unmarried people. The decrease in the educational level and unemployment are the highest risks of the mental disorders[231]. Another study that has been done with Dr Emami, in 2006 about investigating mental health in Iranian adolescents, particularly in high school students from urban areas showed that the girls experienced such disorders more frequently than the boys[232].

Suicide

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[228] Mohit, Ahmad. 1998, *op cit*

[229] Government of the Islamic Republic of Iran, and United Nations Children's Fund (UNICEF). 2009, Country Programme Action Plan 2005-2009, http://www.unic-ir.org/directory/e-directory.htm#unicef

[230] Yasamy, M.T. et. al. 2001,*op cit*

[231] Noorbala, S. et. al. 2004, "Mental health survey of the adult population in Iran"; *British journal of psychiatry*, 184: pp 70-73

[232] Emami, Habib. 2007, "Mental Health of Adolescents in Tehran, Iran"; *Journal of Adolescent Health*, 41 (6): pp 571-576

According to statistics of the World Health Organization, suicide is among the tenth leading cause of death for all ages in those countries for which information is available. In some countries it is among the top three causes of death for people between 15 and 34 years[233]. There are several risk factors for suicides have been identified and it is include male sex, low social class, unemployment, previous suicide attempts, mental disorders including depression, and drug and alcohol abuse and the most suicide victims suffer from major depression around the time of death[234].

In Islamic Republic of Iran suicide is the second leading cause of death. The number of suicides among married women is above that of single men and the number of single male suicides is more than single females. Family and marital problems are the main reasons behind the high suicide rates, especially in rural areas[235].

Kohkiluyeh & Boyerahmad province ranked first in suicide by setting oneself ablaze and Boushehr and Ilam were the second and third. In terms of using arms, Ilam was first, Kurdestan and West Azarbaijan were second and third compared to other provinces[236]. The most common form of suicide amongst women in Ilam province is self-immolation. The reason for high rate of suicide is the nomadic migratory nature of population in these provinces which are close to the western frontiers of the country and being near the war fronts the people had access to firearms[237,238].

Substance Abuse

Islamic Republic of Iran has a long history of opium consumption. In some part of Iran opium is served to guests as an old custom and removing such a habit is time taking. Also locating Iran on the transit of drugs from Afghanistan is another threat for this country.

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[233] Fleischmann, Alexandra. et. al. 2010, *Effectiveness of brief intervention and contact for suicide attempters: a randomized controlled trial in five countries*, http://www.who.int/bulletin/volumes/86/9/07-046995/en/

[234] Mofidi, Naser. 2009, *Studies on mental health in Kurdistan – Iran*, PhD thesis, Umea University, Sweden

[235] Askari, Somayeh. 1998, Women, *Main victims of suicide in Iran*, Farhang-eTosee, pp 37-42

[236] Vahid Dastjerdi, Marzieh. 2010, *op cit*

[237] *ibid*

[238] Askari, Somayeh. 1998, *op cit*

Because of this, there is a great emphasis by the policy makers to ensure reduction of the availability of opium freely to the general population. In 1981, the previous policies curbing were countermanded unless the act related to intensification penalties for smugglers and addicted people. In the year 1991, a new policy with stringent measures was implemented to address this problem[239]. The consumption of opium is completely understood as a crime by the legal administration in Iran and was a punishable offence with indefinite detention in prison. There was no rehabilitation or therapy for substance abuse available to address this problem. in 1994, the Government of Islamic Republic of Iran recognized substance abuse as a problem and as a criminal offence and the first National Program to deal with the problem of substance abuse was launched. The first outpatient clinic was established as a part of the Public Health Centre in 1994 in Tehran and it was a government clinic[240]. At the same time, an "Anonymous Narcotics Self Help Group" was created with the help of a few members. Today the same group has 10000 members. Clinics with Out-Patient Department (OPD) facilities are now about 130 in number. More than 300 beds available for treatment of drug users in the government health centers[241]. The new approach of the government towards the drug users, conducting of workshops for physicians, nurses and social workers to treat such patients also helped in the reduced consumption of opium[242].

Different health authorities in Iran have reportedly inducted several policies for managing health problems related to drug abuse. It is also reported that 60,000 drug users report to the government facilities annually for treatment and rehabilitation. According to the data available on drug use in Islamic Republic of Iran, it is estimated that 1/5 (1.5) million are still drug dependent individuals. Out of the drug abuse substances consumed, 37% drug users use opium, 21 % use cannabis and 19 % use heroin. The average age of the drug user is 33 years while the average age of starting substance abuse is about 22 years. Out of the entire drug users 29% are intravenous drug abuser. Sixty three percent of these drug users are infected with HIV and AIDS[243].

A total of 4841 death due to substance abuse was reported by the legal medicine organization

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[239] Yasamy, M.T. et. al. 2001,*op cit*

[240] Hatami, H. et. al. 2007, *op cit*

[241] Vahid Dastjerdi, Marzieh. 2009, *op cit*

[242] Hatami, H. et. al. 2007, *op cit*

[243] Vahid Dastjerdi, Marzieh. 2009, *op cit*

in 2005. Therefore, the mean death rate due to substance abuse has been 6.08 per 100,000 populations. A West Azarbayejan and South Khorasan province have had the lowest mortality. Hamedan and Lorestan provinces have been the top ranking (22.49 and 20.87 per 100,000, respectively) in deaths due to drug abuse. Tehran and South Khorasan have had the highest and lowest crude number of deaths due to substance abuse, respectively[244].

Mental Health in Natural Disasters

The geographical location of Islamic Republic of Iran makes it susceptible to earthquakes and floods. Such natural disasters have always caused a lot of morbidity as well as put pressure in the economy[245]. In the past, there has been a lot of focus on the health system to check and reduce the mortality rate as well as the causes of physical injuries caused by the natural disasters. These disasters cause post traumatic disorders in the population with long lasting effects. Recently there has been a combined activity planning between the Ministry of Health and Medical Education, the Interior Ministry and the Red Cross society on the health and mental health related programs for the people affected by such disasters. A comprehensive study on the psychological effects of disasters on survivors and an assessment of the needs of such survivors was conducted and National Program of Mental Health proposed an intervention for the population affected by natural disasters[246].

Mental Health Promotion

The National Mental Health Plan has its main strategic approach towards the mental health promotion. But there is a need to have a more specific approach towards mental health plan. A commemoration was seen in the country in the last week of October of 1985, purely on the development and improvements for the mental health plan. Similarly, the mental health week in 2001 had 245 programmes and seminars on mental health. Training sessions was also held

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[244] *ibid*

[245] Hatami, H. et. al. 2007, *op cit*

[246] Yasamy, M.T. et. al. 2001,*op cit*

hands on with radio broadcasting and television media for far reaching results[247,248].

Prevention of Mental Illness in Islamic Republic of Iran

1.1- Primary prevention (first level)

It is important to integrate the mental health care with the PHC and the continuous deployment of this strategy in the rural areas. Statistics indicate that 37% of the rural population is still not covered even after five years of implementation of PHC program. The primary health care providers are not sensitive to the core mental problems while screening patients. It is therefore necessary to improve certain schemes such as retaining of medical workers for continuity of standard work[249,250].

Primary prevention consists of all the activities which lead to the prevention of a disease, such as vaccination in general medicine. Primary prevention in psychiatry is not possible easily because of the disease's multi factorial etiology, so the main objective of prevention in this level is to strengthen the society members, especially the vulnerable members of society against the mental disorders by inhabilitatiing and controlling the genetic, hereditary, environmental and family abnormalities[251]. While all the members of society form the target group and the following objectives are being followed specifically in different levels involve; the effect of environmental conditions and environmental pollution, social and economic circumstances on mental health, the role of genetic factors in the occurrence of mental disorders, the social consequences of tribal, premature marriages and marrying people with imperfect gene, the relation between the mental status during pregnancy and the infant's mental health after birth, the human needs in different levels of growth such as infancy, childhood, adolescence, middle age and elderly, he role of parents and family environment on

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[247] Bolhari, J. and Ansari, M. 2003, *op cit*

[248] Davidian, Haratoon. 2009, *History of psychiatry in Iran. [تاریخچه روانپزشکی ایران]*, Tehran, Naslefarda

[249] Rahimi, Afarin. et. al. 2008, *op cit*

[250] Vahid Dastjerdi, Marzieh. 2009, *op cit*

[251] Mousavi, Fatemeh. et. al. 2006, *Textbook of Community Medicine and Health: Family Health. [درسنامه پزشکی اجتماعی و بهداشت: بهداشت خانواده]*, Tehran, Eshraghieh

the mental health of the children and adolescents and the way they face the stressful social and environmental factors[252].

1.2- Secondary Prevention (second level)

The main objective in this level is to prevent the consequences of mental disorders in the society members by identifying the disease in time, and providing proper and early treatment along with regular pursuance[253].The target of secondary prevention is at different levels that include; disease detection ,identification of abnormal symptoms ,the unbalanced behaviors in people, immediate, early and complete treatment, for eliminating the light symptoms of disorders among the identified people, prevention of the Relapse of the disorders' symptoms, , prevention of the severe symptoms occurrence among the patients and establishing a balance between them and their families, preventing the increase of the disease's level and the number of hospitalization and providing the surveillance services[254].

1.3- Tertiary Prevention (third level)

The main goal is to prevent the continuation of chronic mental disorders among people with disabilities and the reduction of individual, social, occupational and familial disabilities resulting from them[255]. To reach this goal, it is necessary to follow different factors such as; identifying patients with chronic mental disorders, supporting the known patients for preventing the probable consequences caused by disorders, such as suicide, addiction, escape from home, prostitution and the other social deviations through involving the families and other related authorities, practical activities for rehabilitation of the patients through employment, financial support and employment in the part time centers, providing surveillance services, establishing rehabilitation centers in the psychiatric sections and educating families to know how take care of their sick members and accepting the

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[252] Pakravan Nejad, M and Sadeghi, Majid. 2005, *op cit*

[253] Hatami, H. et. al. 2007, *op cit*

[254] Pakravan Nejad, M and Sadeghi, Majid. 2005, *op cit*

[255] Marandi, Alireza. et. al. 1998, *op cit*

responsibilities of their patients [256].

The primary complaints of 80% of the mental patients are physical complaints (such as headache, heart throb, indigestion, weakness, insomnia, etc). For this reason, the first visit of the majority of the mental patients, i.e. nearly 80% of them, is to doctors other than psychiatrist and preferably to a general physician[257]. Also the truth is that the majority of the patients, whose obvious disease symptoms are psychological symptoms, prefer to go to a general physician rather than a direct call to a psychiatrist. So, the general physician's role in early detection and in time and proper treatment of the mental disorders is vital. Hence their role in preventing the disease and reducing the unnecessary expenses and eliminating the useless and regular hospitalization is also obvious. So the general physicians' productive participation in making the mental health programs successful has a special importance and should be given priority[258].

Specialized Mental Health Facilities in Islamic Republic of Iran

The facilities available for mental health in Islamic Republic of Iran under Ministry of Health and Medical Education are:

1.1- Tehran Psychiatric Institute

The foundation of what later on became Tehran Psychiatric Institute was laid as a enter for training of the human resources required to run the mental health structure of the country. The center's educational activities began in 1977 with the selection of the first group of psychiatric residents and the graduate students of Master of Science degree in psychiatric nursing. It was a subsidiary of the Iranian Society for Rehabilitation *(Anjoman e Tavanbakhshi e Iran)* which was founded for the care of all people with disabilities[259]. Policy making, administration and all the day to day work related to psychiatry and mental health by

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[256] Hatami, H. et. al. 2007, *op cit*

[257] Sadighani, Ebrahim. 2004, Hospital accreditation and audit standards. [استانداردهای ممیزی و اعتباربخشی بیمارستان], Tehran, Social Security Research Institute

[258] Pakravan Nejad, M and Sadeghi, Majid. 2005, *op cit*

[259] Mesri, A.R. 2006, *op cit*

Ministry of Health and Medical Education were under the supervision of this society. In addition to educational activities, the society was also in charge of a research department carrying out many research activities, including a number of epidemiological research projects related to mental health[260,261].

1.2- Psychology and Counseling Organization

The Psychology and Counseling Organization of Islamic Republic of Iran was established in 2005 and it is an independent non-governmental organization to achieve the objectives and tasks set in psychology. The organization has goals such as; efforts to promote knowledge of psychology and counseling, protection of the rights referred and support of union rights of psychologists and counselors[262].

The person intending to be part of the organization should have a minimum of master's degree accredited by the Ministry of Health and Medical Education or Ministry of Science, Research and Technology in one of the fields of psychology and counseling, to become a member of the organization. For all employees to have a career in psychology and counseling system is required to receive an ID code and eligibility determination and the system of work for members is done by Counseling Psychology and Organization of the Islamic Republic of Iran. Psychologists and counselors are required to attend retraining courses conducted in the organization[263].

At present many psychological counseling centers in the country have emerged. They offer services via telephone, face to face or even write to respond to people with mental and emotional problems. The psychiatrists and psychologists are also important references for people to discuss their problems[264].

The report by Statistical Centre of Islamic Republic of Iran in 2005 on availability of hospital

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[260] Davidian, Haratoon. 2009, *op cit*

[261] Sadeghi, Mohammad. 2005, "Psychiatry in Islamic Republic of Iran"; *International Psychiatry Journal*, 1: pp 10-12

[262] Vahid Dastjerdi, Marzieh. 2009, *op cit*

[263] Tehrani, Hassan. 2008, "The Psychology and Counseling Organization of Islamic Republic of Iran"; *Arman*, 4: pp 22-25

[264] Yasamy, M.T. et. al. 2001,*op cit*

beds for treatment purposes showed that there are 8423 psychiatric beds in the country[265]. This translates to the fact that there is less than one psychiatric bed for every 10,000 people. Regarding the distribution of the beds, while Tehran comprises of 18% of the population, almost 30 % of the total psychiatric beds are available in this province[266].

While, psychiatric beds allocated in general hospitals consist about 23 percent of the total beds available. Some general hospitals do not have a single bed dedicated for psychiatric patients. The availability of psychiatric beds needs an immediate reorganization for effective programming and implementation of the National Mental Health Programme[267].

The numbers of psychiatric beds available in mental health institution in 2005 were 6489 beds in 34 institutions. Nine provinces do not have any specialized psychiatric hospitals. Although some provinces as Tehran (2158), East Azarbayejan (668) and Fars (616) have the highest number of beds. Tehran has 9 mental health hospitals holding 33% of beds for psychiatric treatments[268].

1.3- Iranian Clinical Psychology Association

In 2000, a thought of establishing an Iranian Clinical Psychology Association was introduced by a group of clinical psychologists. In 2001, the Association of Clinical Psychology founded by Ministry of Health and Medical Education. The general objectives of Iranian Clinical Association were (i) planning to promote application of scientific methods in the field of psychology, (ii) support and promote trade in professional clinical psychology, and (iii) promoting community health and offer quality mental health services[269].

Psychiatric Beds in General Hospitals in Islamic Republic of Iran

A total of 74 psychiatric wards are operating in general hospitals with the capacity of 1934

[265] Azizi, Ebrahim. 2010, *op cit*

[266] Vahid Dastjerdi, Marzieh. 2009, *op cit*

[267] Madad, Mohammad. 2005, *op cit*

[268] *ibid*

[269] Hashemian, Kianoosh. 2001, "*Iranian Clinical Psychology Association*"; Journal of Iranian Psychologists, 2, pp 7-10

beds which amounts to1 psychiatric bed available 32,000 populations (0.32 per 10,000) as per 2005 data. Tehran after Esfahan province has the highest number of psychiatric wards in general hospitals[270].

The total number of emergency psychiatric bed available in Iran as per the 2004 data is about 285, a single emergency psychiatric bed available for every 274,000 population (0.04 per 10,000). Interestingly, 17 out of total 30 provinces have no emergency psychiatric beds. Among the other 13, Mazandaran (0.01 beds in per 10,000) and Tehran (0.01 beds in per 10,000) provinces show the lowest, Kerman (0.29 in per 10,000), and Semnan (0.29 in per 10,000) provinces have had the highest proportion[271].

According to last statestic by Statistical Centre of Islamic Republic of Iran, in 2004, there have been 229 child psychiatry beds operational in the country. This would mean that one psychiatry child bed available for every 710,000 population. It's important to note that 23 out of 30 provinces have no child psychiatry beds. Among the seven provinces with operational child psychiatric beds, Khorasan-e Razavi had the highest proportion with number of 104 beds[272].

There have been 404 psychiatric beds for drug addiction treatment in the country in 2004, which makes one psychiatry bed dedicated for drug addiction treatment for 175,000 populations (0.06 per 10,000). Excluding the provinces with no psychiatry beds for treating drug addiction (15 provinces), Mazandaran and Sistan & Blochestan provinces stand as the two provinces with the lowest, and Charmahal & Bakhtiari and Semnan provinces stand for the highest proportions of psychiatry beds available for drug addiction treatment[273]. Most mental health hospitals and all community-based inpatient units are run by the medical universities[274].

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[270] Madad, Mohammad. 2005, *op cit*

[271] *ibid*

[272] *ibid*

[273] *ibid*

[274] Razzaghi, E.M. et. al. 2006, *op cit*

Specialized Human Resources in Islamic Republic of Iran

In Islamic Republic of Iran all psychiatrists and clinical psychologists evaluation by Ministry of Health and Medical Education and psychologist should registered with Psychology & Counseling Organization.

Psychiatrists:

There have been 680 registered psychiatrists in the country in 2004[275]. This means a ratio of 1 psychiatrist per 139,000 populations (0.72 per 100,000). Inhabitants of Lorestan province have had the least access to local psychiatrists. The only province with more than 1.5 psychiatrists per 100,000 populations is Tehran (2.36) which has 41.3 percent of the total psychiatrists of the country[276,277].

Clinical psychologists with PhD degree

According to 2004 data[278], there are 47 registered clinical psychologists with PhD degree. On average, there is clinical psychologist with doctorate degree per 2,055,000 populations (0.05 per 100,000). While there has been no PhD holder of clinical psychology in half of the provinces, Semnan (0.34 in per 100,000) and South Khorasan (0.24 in per 100,000) provinces have had the highest proportion of senior psychologists. However, about 50% of the clinical psychologists with PhD qualifications reside in Tehran[279,280].

Clinical psychologists with MSc degree

There have been 124 registered MSc diplomas of clinical psychology in the databases of the

[275] Madad, Mohammad. 2005, *op cit*

[276] Rahimi, Afarin. et. al. 2008, *op cit*

[277] Madad, Mohammad. 2005, *op cit*

[278] *ibid*

[279] Rahimi, Afarin. et. al. 2008, *op cit*

[280] Madad, Mohammad. 2005, *op cit*

Ministry of Health and Medical Education in 2004; making a ratio of 1 per 564,000 population (0.18 per 10,000). While six provinces (north Khorasan, west Azarbayejan, Qom, Markazi, Golestan and Semnan provinces) had no such practitioner, Ilam and Kerman have had the highest proportion of clinical psychology MSc holders[281].

The World Health Organization reported in 2008, for 100 thousand people 15 psychologists were employed. However as per 2010 dates in 2010, in United State of America 42, Canada 40, and France 33 and in Iran 6 psychologists are working per 100,000 people.

Summary

The main focus in this chapter was on the history of Mental Health Services in Islamic Republic of Iran. It contains the history of mental health services in Iran over four different periods of time. It gives us an idea about evolution in mental health services such as training, special mental health programmes and other such initiatives adopted by the government. It also contains differentiated governmental data on mental health in rural and urban areas, the different types of mental illnesses and programs for birth control planned by the government. The data shows the rate of prevalence of mental disorders; mental health issues amongst children and adolescents such as substance abuse; mental health problems due to natural disasters and programs for the promotion of mental health in Islamic Republic of Iran.

We also looked into the facilities of Mental Health Education through a brief overview of the Tehran Psychiatric Institute, the premier mental health institute under the Ministry of Health and Medical Education and Tehran University. Psychology and Counseling Organization of Islamic Republic of Iran is another organization that can certify and issue identification card for qualified professionals who want to work in the field of mental health. This includes psychology, counseling and Iranian clinical psychology association.

This chapter also reviews the niche facilities for mental health within the larger health facilities such as the number of psychiatric beds in general hospitals and specialized human resources for psychiatric and psychological cases. A total of 74 psychiatric wards are operating in general hospitals with the capacity of 1934 beds which amounts to1 psychiatric

[281] Rahimi, Afarin. et. al. 2008, *op cit*

bed available for 32,000 populations[282]. The total number of emergency psychiatric bed available in Iran per person according to the 2004 data is about 285, a single emergency psychiatric bed available for every 274,000 of the population[283].

Although there are additional facilities for children in need of psychiatric help. About 229 child psychiatry beds are operational in the country. This would mean that one psychiatry child bed is available for every 710,000 of the population[284]. Owing to its greater prevalence, special provision is made under the health plans for 404 psychiatric beds for drug addiction treatment in 2004, which makes one psychiatry bed dedicated for drug addiction treatment for 175,000 of the populations[285].

According to the government reports, there are 680 registered psychiatrists in the country[286], 47 registered clinical psychologists with doctorate degree and 124 registered clinical psychologists with master degree in 2004[287]. According to Dr Afrooz, Head of Psychology & Counseling Organization, although Iran needs 17000 psychologists and counselors in 2010 to cater to its population, only 2000 were working. Thus, we found out some of the trends of mental health issues such as substance abuse amongst young adolescents, mental health problems due to disasters and a distinct lack of number of professionals, hospital beds and facilities for mental health issues[288].

Health Care Services in Islamic Republic of Iran in general perception with regards to mental health care is described in this chapter. After defining major traits of Iran's geography and society, the mental health care system and facilities which is suitable in this situation is referred to. The history of mental health care system in Iran and the division of this system like "urban and rural" areas and "children and adolescents" and the existent facilities are discussed. In the next chapter, the data available for mental health services, according to the

[282] Madad, Mohammad. 2005, *op cit*

[283] *ibid*

[284] Vahid Dastjerdi, Marzieh. 2009, *op cit*

[285] Madad, Mohammad. 2005, *op cit*

[286] *ibid*

[287] Vahid Dastjerdi, Marzieh. 2009, *op cit*

[288] Tehrani, Hassan. 2008, *op cit*

Ministry of Health and Medical Education and Statistical Center, will be clarified.

CHAPTER THREE

MENTAL HEALTH FACILITIES AVAILABLE IN ISLAMIC REPUBLIC OF IRAN

MENTAL HEALTH FACILITIES IN ISLAMIC REPUBLIC OF IRAN

This chapter largely deals with the data related to mental health facilities in Islamic Republic of Iran. For the purpose of convenience in comparing the data across a country as large as having thirty two Provinces, the country has been divided into five geographic regions. Moreover, since the secondary data used to compare mental health facilities in Iran dates back to the year 2005, the five regions comprised of 30 Provinces at that time (Map). Alborz is a new province since the year 2010.

3.1: Map of Islamic Republic of Iran

Source: National Geographical Organization of Iran, 2009

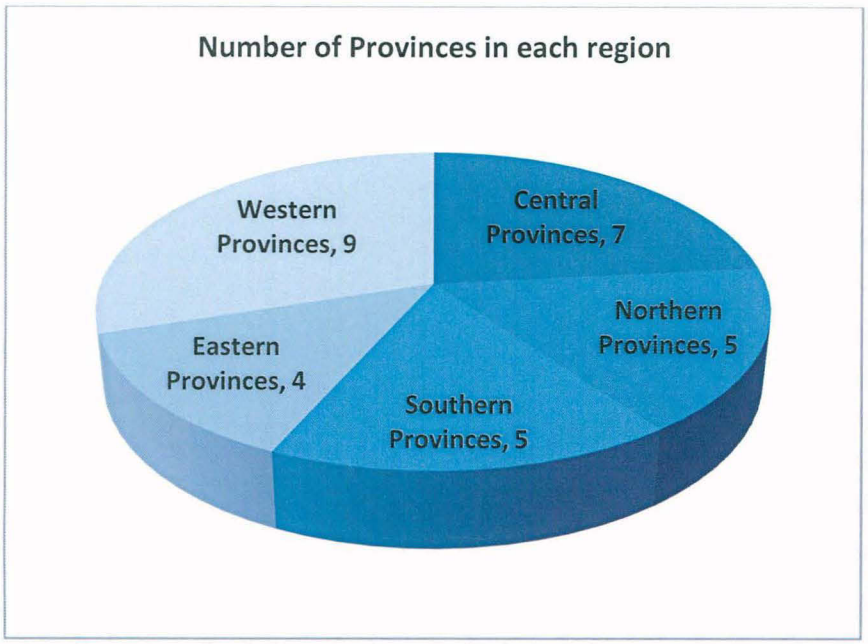
All the provinces of Islamic Republic of Iran are categorized as: Central Region; Northern Region; Southern Region; Eastern Region; and Western Region (Table 3.1).

Table 3.1: Provinces of Islamic Republic of Iran

Sr. No.	Geographic Location	Provinces	Number of Provinces in each region
1	Central Region	Esfahan, Markazi, Qazvin, Qom, Semnan, Tehran and Yazd	7
2	Northern Region	Ardebil, Gilan, Golestan, Mazandatan and North Khorasan	5
3	Southern Region	Bushehr, Fars, Hormozgan, Khuzestan and Kohgiloyeh& Buyerahmad	5
4	Eastern Region	South Khorasan, Khorasane Razavi, Sistan & Balochestan and Kerman	4
5	Western Region	Charmahal & Bakhtiari, East Azarbayejan, Hamedan, Ilam, Kermanshah, Kordestan, Lorestan, West Azarbayejan and Zanjan	9

Source: Adapted data from the Statistic Organization of Islamic Republic of Iran report, 2005

Graph3.1: Number of provinces in each region of Islamic Republic of Iran



Source: Adapted data from the Statistic Organization of Islamic Republic of Iran report, 2005

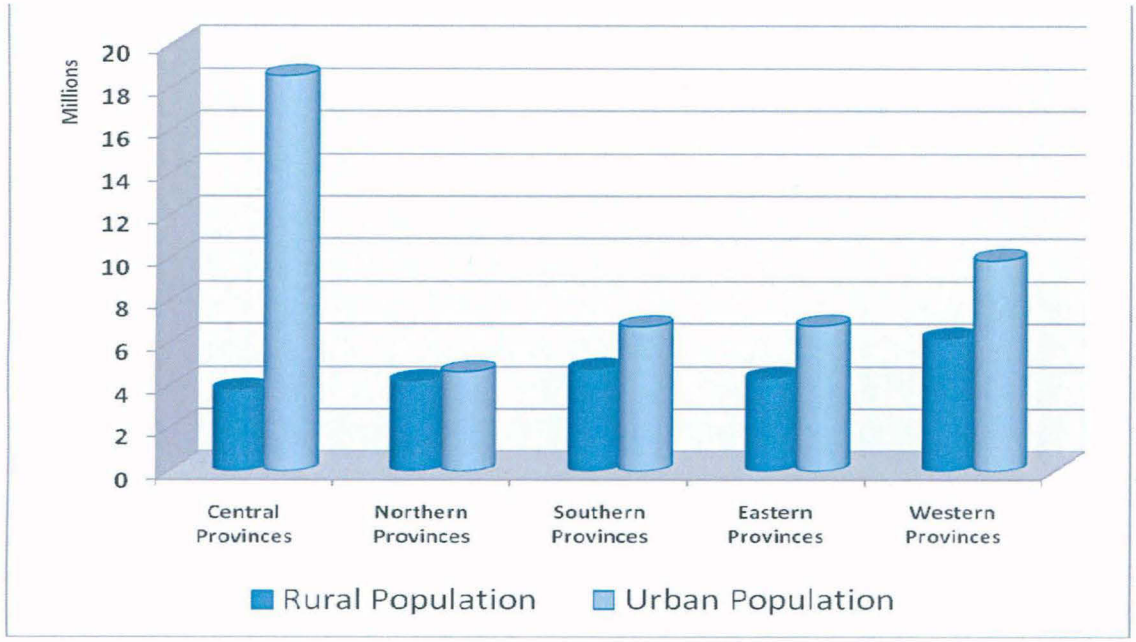
The total population of all the provinces falling under each of the geographic region and their division into rural and urban population is given in Table 3.2. The total population of Islamic Republic of Iran as in year 2005 was it is evident from the table that provinces that fall under the Central Region of Iran constitute as high as approximately thirty two percent of the total population in Iran. Moreover, the urban population constitutes approximately eighty three percent of the total population. The Central Region of Iran has better facilities for education, work, and health services. That could be one of the reasons for highest population in this region of the country. In terms of total population, Western Region constitutes approximately twenty three percent populations. Southern and Eastern Regions constitute approximately sixteen percent each of the total population while Northern Region constitute approximately thirteen percent of the total population. Among all the provinces, Northern Region have the highest rural population. However, urban population constitutes a larger proportion of the population over rural population invariably in all he region (Table 3.2). The population composition of all the provinces falling under each region has been discussed further. Also, the important features of certain provinces under various regions are mentioned.

Table 3.2: Population composition of Islamic Republic of Iran

Sr. No.	Geographic Location	Number of districts	Rural Population	Urban Population	Total Population
1	Central Region	64	3815653 (17.05)	18560407 (82.94))	22376060 (31.95)
2	Northern Region	57	4233886 (47.63)	4654291 (52.36)	8888177 (12.69)
3	Southern Region	66	4784522 (41.47)	6752777 (58.52)	11537299 (16.47)
4	Eastern Region	46	4348379 (39.04)	6787669 (60.95)	11136048 (15.90)
5	Western Region	91	6194255 (38.52)	9885360 (61.47)	16079615 (22.96)
Total	Islamic Republic of Iran	324	23376695 (33.38)	46640504 (66.61)	70017199

Source: Adapted data from the Statistic Organization of Islamic Republic of Iran report, 2005

Graph3.2: Number of rural and urban population in each part of Islamic Republic of Iran



Source: Adapted data from the Statistic Organization of Islamic Republic of Iran report, 2005

The numbers of urban population in Central Region are much different with other parts because the main cities of Iran such as Tehran and Esfahan are in this part.

Central Region:

The number of districts within each province falling under the Central Region of Iran is given in Table 3.3. The total population of each of the region and its break up into rural and urban population is also given. Tehran, the capital of Islamic Republic of Iran falls under the Province Tehran. The total population of the Tehran Province is 12,902,956 in thirteen districts. The biggest city in the Esfahan Province is named Esfahan. There are 22 districts in Esfahan Province and it has a total population of 42,971,231. Markazi is the third biggest province regarding the concentration of population. Yazd has 10 districts. The population in the Province Yazd is less than that in Markazi. Qazvin and Seman Provinves have the same number of districts but the population concentration is higher in west rather than east of Tehran. Qom is the central city of Qom Province. The City of Qom is considered as a holy

city with the shrine of *Hazrate Masomeh* located in this city which attracts a number of visitors to this holy city. The city also has a centre for religious studies in a University of Philosophy and Religion.

Table 3.3: Provincial population, Central region of Islamic Republic of Iran in 2005

Provinces	No of districts	Rural population	Urban population	Total
Esfahan	22	949032	3342199	4291231
Markazi	10	452047	950677	1402724
Qazvin	4	362673	804189	1166862
Qom	1	58973	1005484	1064457
Semnan	4	144763	444749	589512
Tehran	13	1650865	11252091	12902956
Yazd	10	197300	761018	958318
Total	64	3815653	18560407	22376060

Source: Statistic Organization of Islamic Republic of Iran report, 2005

Northern Region

There are five provinces in the Northern Region of Iran namely Ardabil, Gilan, Golestan, Mazandatan and North Khorasan. Mazandatan is the biggest province in the Northern Region of the country and the city of Sari is the central city of this province. Mazandatan has 15 districts with a total population of 2,818,832. The geographic location, closeness to Caspian Sea, the rich forests and availability of agricultural land are the main reasons for high concentration of population in this province. Gilan is the second big province with 16 districts, and a population of 2,343,754. Gollestan has 11 districts and a population of 1,637,062. Golestan is one of the states in the north of Islamic Republic of Iran where people

find a lot of employment opportunities due to the geographic location and green farm lands. The stretch of Ardebil is longer towards the north-west. The language and culture of Ardebil is quite different from other Northern Region. It has 9 districts. The centre of the province is Ardebil with the total population of 125,762. North Khorasan province has 6 districts and Bojnoord is the centre of it. The total population of this province is 830903 (Table 3.4).

Table 3.4: Provincial populations, North of Islamic Republic of Iran in 2005

Provinces	Number of districts	Rural population	Urban population	Total
Ardebil	9	551019	706607	1257626
Gilan	16	1023717	1320037	2343754
Golestan	11	884564	752498	1637062
Mazandatan	15	1349528	1469304	2818832
North Khorasan	6	425058	405845	830903
Total	57	4233886	4654291	8888177

Source: Statistic Organization of Islamic Republic of Iran report, 2005

Southern Region

Fars is one of the big provinces in the southern Region of the country. The city of Shiraz is the centre of the province with 23 districts and a population of 4,425,678. Khuzestan has 20 districts and the total population of the province is 4,314,596. This is the richest region of Islamic Republic of Iran in terms of oil and gas wells. This region leads in export of oil, gas and petro-chemical products. Ahwaz is the central city of this province. Hormozogan has 9 districts with a population of 1,279,631. Bander Abbas is the centre of this province. It is the biggest port of export and import of all kind of commodities in the Islamic Republic of Iran. Bushehr is located south to the Fars Province. The centre of this province is Bushehr and the place is very well known for the nuclear power plant established in this region of country.

The province has nine districts and a population of 821,695. Kohkiloyeh and Buyerahmad Province is located west of Fars Province. It has 5 districts and a population of 695,099 (Table 3.5).

Table 3.5: Provincial populations, South of Islamic Republic of Iran in 2005

Provinces	No of districts	Rural population	Urban population	Total
Bushehr	9	314979	506716	821695
Fars	23	1806992	2618686	4425678
Hormozogan	9	712613	567018	1279631
Khuzestan	20	1619464	2695732	4314596
Kohgiloye & Buyerahmad	5	330474	364625	695099
Total	66	4784522	6752777	11536699

Source: Statistic Organization of Islamic Republic of Iran report, 2005

Eastern Region

The Eastern Region of Islamic Republic of Iran comprises of four provinces. Among all the provinces in Eastern Region of the country, Khorasan Razavii Province is very famous because of the holy shrine of *Imam Reza* in Mashhad located in the central city of Khorasan Razavi. Every year, millions of visitors come to this city from all over the world. This province has 20 districts, with a lot of sugar factories, and a lot of farms for different products. The saffron plantation is unique to this province and is rarely seen in other provinces. The total population of this province is 5,790,491. Kerman is located in the South West of Khorasan. This province has 13 districts with a population of 2,585,651. Sistan & Balochestan Province is a very large but has only eight districts. The most part of the land is desert, and because of this reason the concentration of the population is mostly concentrated

in cities. The total population of this province is 2,339,815. South Khorasan Province is located between Khorasan Razavi and Sistan& Balochestan. Since it is a dry area and has a border with the desert, it has certain special and famous commodities meant largely for export like saffron and zereshek (a kind of berry). This province has 5 districts and a population of 420,091 (Table 3.6).

Table 3.6: Provincial populations, East of Islamic Republic of Iran in 2005

Provinces	Number of districts	Rural population	Urban population	Total Population
South Khorasan	5	194831	225260	420091
Khorasane Razavi	20	1998155	3792336	5790491
Sistan & Balochestan	8	1150519	1189296	2339815
Kerman	13	1004874	1580777	2585651
Total	46	4348379	6787669	11136048

Source: Statistic Organization of Islamic Republic of Iran report, 2005

Western Region

The Western Region of Islamic Republic of Iran has the highest number of provinces when compared with other regions in the country. There are a total of nine provinces in this region of the country. East Azarbayejan Province has 19 districts. The language is Azari. A salty lake separates East Azarbayejan from West Azarbayejan. East Azerbayijan has a population of 3,378,183. Tabriz is the centre of East Azarbayejan. West Azarbayejan has 14 districts and a population of 3,251,116. The centre of this province is Uruomieh. Kermanshah is the centre of the province called Kermanshah. It has twelve districts. The total population of this province is 1,944,236. Language and culture is very different in the entire provinces of Western Region. The province named Kordestan is located in the South West of Azarbayejean and has its own language. The total population of province is 1,628,540. This province is known for a rebellious culture and inhabitants of this province. Lorestan is a province

between Kordestan and Kermanshah. This province is located in mountains. It has districts and a population of 1,758,630. The centre of this province is a city called Khorramabad (Table 3.7).

Table 3.7 Provincial populations, West of Islamic Republic of Iran in 2005

Provinces	Number of districts	Rural population	Urban population	Total
Charmahal & Bakhtiari	6	410131	431873	842004
East Azarbayejan	19	1173396	2204878	3378183
Hamedan	8	730270	1003504	1733774
Ilam	7	224248	342027	566275
Kermanshah	12	645589	1298467	1944236
Kordestan	9	668778	965768	1628540
Lorestan	9	706381	1052243	1758630
West Azarbayejan	14	1212208	2038908	3251116
Zanjan	7	423254	547692	910946
Total	91	6194255	9885360	16013704

Source; Report by Statistic Organization of Islamic Republic of Iran report, 2005

A brief description of various region of Islamic Republic of Iran is given above. We will now discuss the availability of mental health facilities in various regions of Iran in terms of number of specialists educated to provide services to mental health patients, mental health care infrastructure, and availability of care for rural and urban populations in general and in instances of emergency. The data related to each of above mentioned facilities is given for the regions in Central, Northern, And Southern, And Eastern and Western Iran in the next section.

Mental Health Care Facilities in Islamic Republic of Iran

The mental health care facilities in Iran will be discussed under the following heads:

(a) Number of Specialists available for health care facilities

(b) Availability of Infrastructure for care

(c) Infrastructure for various categories of patients

(d) Prevalence of Mental disorders

(e)Coverage under PHC integrated Mental Health Programme

(f) Percentage of Population covered under PHC integrated MHP in rural and urban areas

(g)Care available to Rural Population

(h)Availability of care for urban population

(a) Number of specialist available for care

The data is given for the number of psychiatrists, the number psychiatrists per 50,000 of the general population, the number of persons with PhD in clinical psychology, the number of persons with PhD in clinical psychology per 50,000 of the general population, the number of persons with Masters in clinical psychology and the number of persons with Masters in clinical psychology per 50,000 of the general population in 2005 in different Provinces of Iran according to Ministry of Health in Islamic Republic of Iran.

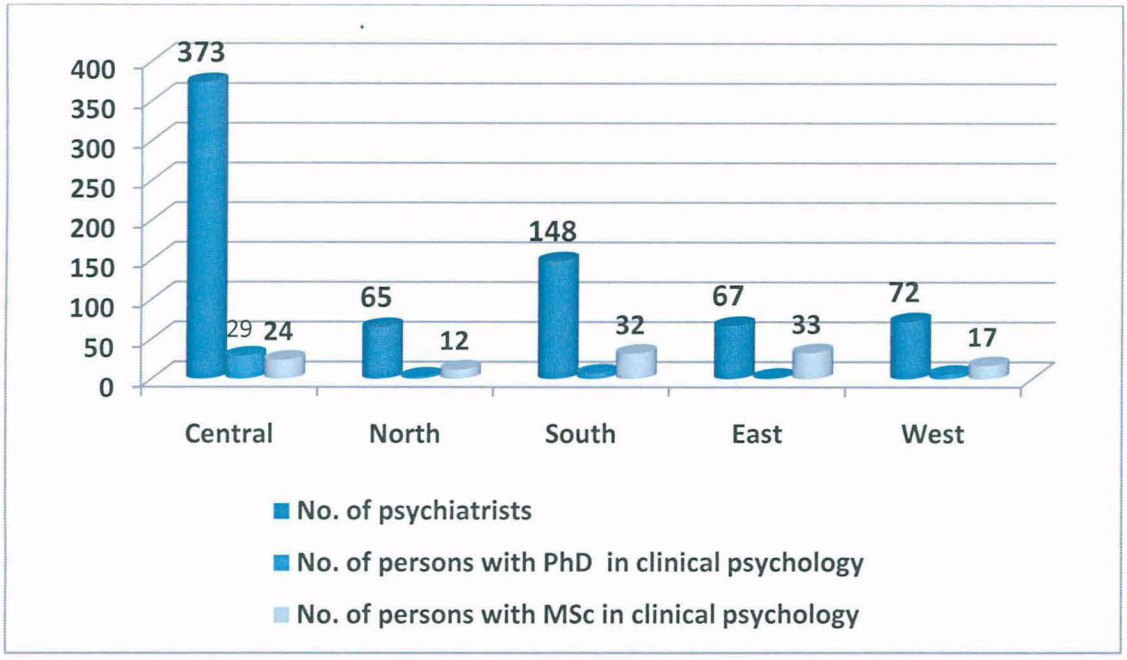
Table 3.8 Number of Specialists available for mental health care facilities

Region	No. of psychiatrists	No. of psychiatrists per 50,000 general population	No. of persons with PhD in clinical psychology	No. of persons with PhD in clinical psychology per 50,000 general population	No. of persons with MSc in clinical psychology	No. of persons with Msc in clinical psychology per 50,000 general population
Central	373	10	29	2	24	3
North	65	6	3	0	12	1
South	148	14	7	1	32	3
East	67	4	2	1	33	2
West	72	9	6	1	17	3

Source: Adapted data from the Statistic Organization of Islamic Republic of Iran report, 2005

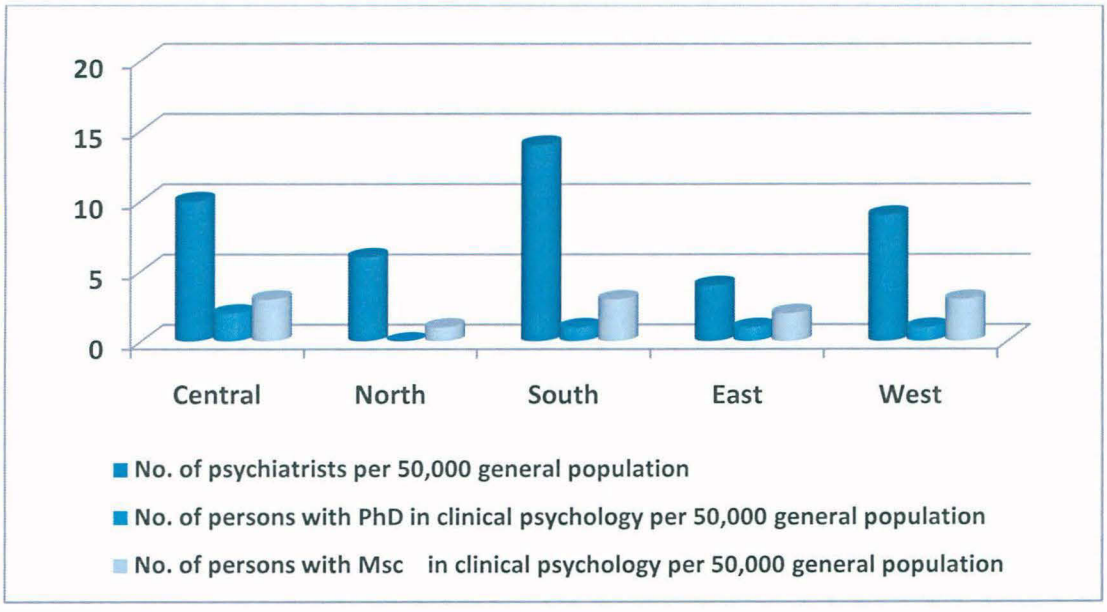
The number of psychiatrists in central territory is significantly higher when compared with other areas. The number of persons with PhD in clinical psychology is also highest in the central area. The main city such as capital is in central parts and the facilities available are there higher compared to the other parts. On the other hand, the number of persons with PhD in clinical psychology is lowest in Eastern Region. The table also shows that the number of persons with PhD in clinical psychology per 50,000 of the general population is 1 in Southern, Eastern and Western Regions, 2 in Central Region and 0 in Northern Region This refers to very low number of persons with PhD in clinical Psychology per 50,000 general populations.

Graph3.3: Number of psychiatrists and clinical psychologist in each part of Islamic Republic of Iran



Source: Adapted data from the Statistic Organization of Islamic Republic of Iran report, 2005

Graph3.4: Number of psychiatrists and clinical psychologist per 50000 general populations in each part of Islamic Republic of Iran



Source: Adapted data from the Statistic Organization of Islamic Republic of Iran report, 2005

Most of the industries and oil refineries as well as heavy industries are located in the west and south of the country[289]. The people who work in these areas or similar industries have a lot of stress in addition to pollution and stack gases which may deficiently cause some mental effect[290]. The civilization and industrial revolutionary may help to make people's lives easy and bring more comfort but the side effect is damnify [291]. Most of the oil products and the production of similar stuff are in the west and south- west areas. That might be a reason that the number of hospitals and beds in these areas are higher than the other parts.[292]

(b) Availability of Infrastructure for care

While discussing the availability of infrastructure for providing health care facilities, number of psychiatric hospitals, the number of beds for patients seeking psychiatric treatment, the number of beds for patients seeking psychiatric treatment per 3,000 of the general population, the number of psychiatric wards, the number of beds for patients seeking psychiatric treatment in general hospitals and number of such beds per 2500 of the general population is taken into consideration. The data for each of the above mentioned infrastructure is taken from the report of Ministry of Health in Islamic Republic of Iran and is shown in Table 3.9

[289] Vahid dastjerdi, Marzieh. 2009, *op cit*

[290] Karami, Mostafa. 2009, Safety and the health in occupation. [امنیت و سلامت محیط کار], Tehran, Omidmehr

[291] *ibid*

[292] Vahid dastjerdi, Marzieh. 2009, *op cit*

Table 3.9: Infrastructure available for patients seeking care

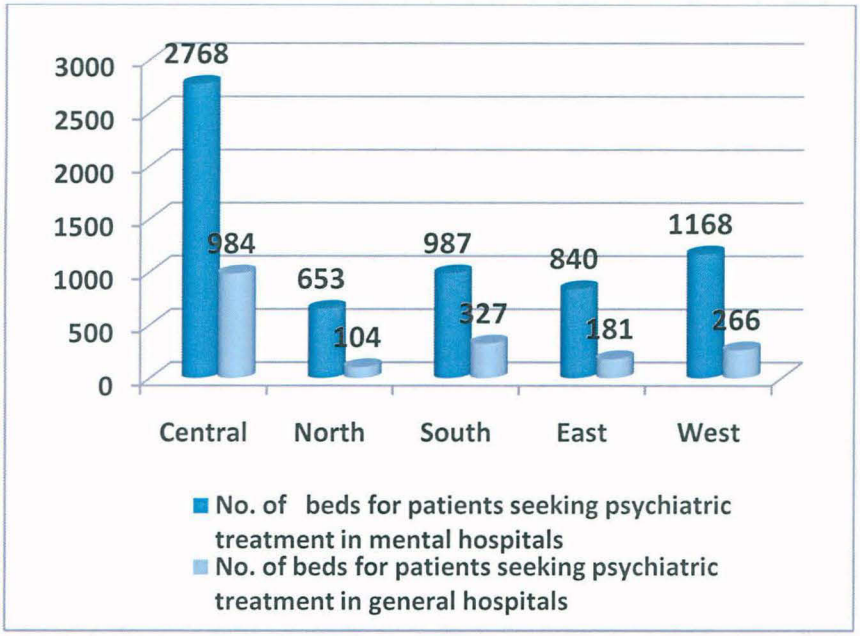
Region	No. of Psychiatric Hospitals	No. of beds for patients seeking psychiatric treatment in mental hospitals	No. of beds for patients seeking psychiatric treatment per 3,000 of the general population	No. of psychiatric wards	No. of beds for patients seeking psychiatric treatment in general hospitals	No. of beds for patients seeking psychiatric treatment in general hospitals per 2500 general population
Central	13	2768	1,01	29	984	1
North	3	653	1	5	104	3
South	6	987	292	15	327	5
East	4	840	2.15	10	181	6
West	8	1168	5.27	15	266	12

Source: Adapted data from the Statistic Organization of Islamic Republic of Iran report, 2005

By this comparison, it easily can be seen that the number of hospitals in the west part of Islamic Republic of Iran in which the most oil refineries' petro-chemicals industrial have 8 psychiatric hospitals. It means those parts like central and west has more experts from other countries and the government provides these big cities better equipments and facilities. The number of wards in the central parts is 29 and the south and west parts are 15. Earlier we have also seen the population in the central parts which are nearly 3 times bigger than the west but the number of wards is just 2 times more. What has been tried to be said is that the cultural, lifestyle and effect of industrialization in these areas are a reason that due to some special cases like higher rates of suicide, higher mental health disorder reported. Sometimes those who really needed help may not be registered because of lack of information or insurance facilities through government or a private company may not be available to cover the high expenses, therefore people refuse to take private accommodation because of its cost. A number of people may also be involved with rebel groups, and naturally they have to move from one spot to other place, or are subject to seasonal displacement; which in this case they

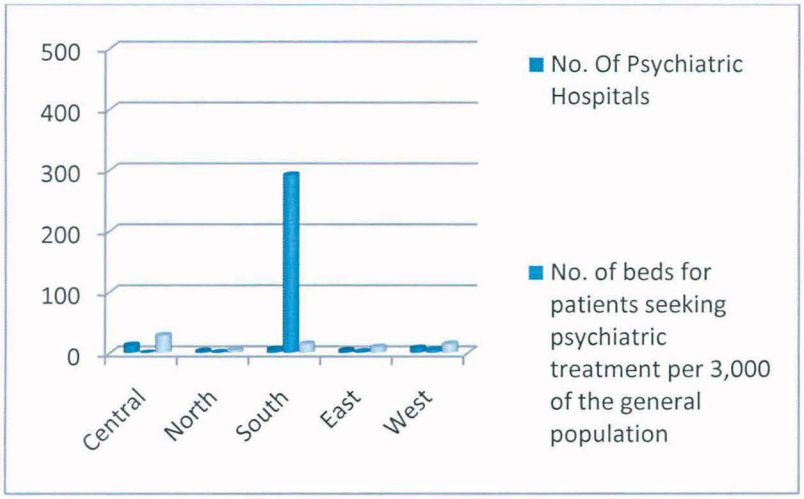
also would not be able to get any facility[293]

Graph3.5: Number of beds for mental patients in general and mental hospitals in each part of Islamic Republic of Iran



Source: Adapted data from the Statistic Organization of Islamic Republic of Iran report, 2005

Graph3.6: Number of psychiatric hospitals, beds in psychiatric hospitals and psychiatric wards in each part of Islamic Republic of Iran



Source: Adapted information from report of Statistic Organization of Islamic Republic of Iran, 2005

[293] Karami, Mostafa. 2009, *op cit*

(c)Infrastructure for various categories of patients

The below table shows compares the number of psychiatric bed available for different groups as in absolute number and also per 5000 population.

Table 3.10: Infrastructure for various categories of patients

Region	No. of emergency psychiatric beds	No.of emergency psychiatric beds per 5000 general population	No. of child psychiatric beds	No. of child psychiatric beds per 5,000 general population	No. of addiction psychiatric beds	No. of addiction psychiatric beds per 5000 general population	No. of geriatric psychiatric beds
Central	59	3	91	1	138	4	225
North	24	2	9	1	34	1	0
South	16	0	0	0	31	1	0
East	69	1	104	1	73	3	307
west	4	0	0	0	76	4	0

Source: Adapted data from the Statistic Organization of Islamic Republic of report Iran, 2005

The table shows that the number of emergency psychiatric beds is very low in Central Region. The number of emergency psychiatric beds available is even lower in Northern and Southern Regions. Further, this number is lowest for Western Region. For child psychiatric beds in every 5000 population, only 1 bed could be found in most of the provinces but in Khorasan Razavi 104 beds available for child with psychiatric problem. Thus, one finds that for certain categories of patients, not even a single bed is available for 5000 members of the population. This refers to low level of health care facilities in the country and infrastructure specifically. The situation in Iran is worse than many countries where in despite war and destruction, one finds a reasonable level of infrastructure[294]. The war between Iran and Iraq has not only led to deformation of life or economy, unemployment and thus resulting mental health problems but also substance abuse and drug addiction by some. Keeping in mind the tragic history of the country, one expects a better health infrastructure for patients suffering

[294] Vahid dastjerdi, Marzieh. 2010, *op cit*

from mental health problems[295].

(d) Prevalence of Mental disorders

For assessing the general prevalence of mental disorders in Iran, the prevalence of mental disorders in general population over 15 years of age and the suicide rate in general population has been compared across all the five regions in the country. The data on number of prevalence of mental disorders in the general population over 15 years old dates back to 1999 while the suicide incidence rate in general population as in 2005 in different territories in Islamic Republic of Iran according to the ministry of health of Islamic Republic of Iran's Reports. Table 3.11 shows the prevalence of mental disorders in Islamic Republic of Iran. The data on suicide rate is not giving a true picture of the situation as data on suicide rate is not available for some provinces including Tehran, North Khorasan, and South Khorasan.

Table 3.11: shows the prevalence of mental disorders and suicide rate

Region	Total Population	The prevalence of mental disorders in the general population over 15 years old	The suicide incidence rate in general population
Central	22376060	138	14*
North	8888177	91	26*
South	11537299	112	31
East	11136048	65	16*
West	16079615	207	95

Source: Adapted data from the Statistic Organization of Islamic Republic of report Iran, 2005

In the above table indicates that data is not available for som provinces in each of the region.

As mentioned earlier, the tragic history of Iran as a consequence of war, of bombings,

[295] ZareNejad, A & Akbari, Majid. 2009, *op cit*

reunions and destruction, death and War Affected Families, etc., have deeply affected the people of the country, and such traumatic conditions in the lack of care, peace and medicine have made the lives of people very different[296]. Stress and mental weakness may push the people to suicide[297]. The data on suicide rates is not available for a few provinces. However, one finds from the table that the suicide rate is still highest in Western Region of the country which was worst affected by war. However, the result of war comes upon all the people who live in a country. The war has not only led to economic crisis and market fluctuation but it also has affected health and daily lives of people around the world[298].

The state of mental health and the extent of mental stress determines as to who approaches the hospital. Moreover, it does matter as to who gets the treatment or not on approaching the hospital. Furthermore, the stigma associated with mental illness prohibits people not to approach the hospital at first place[299].

(e)Coverage under PHC integrated Mental Health Programme

The coverage of PHC integrated Mental Health Programme (MHP) has been discussed under this section in terms of comparison of urban and rural coverage. Table 3.12 shows the rural, urban and total population under the coverage of PHC-integrated MHP, the number of districts under the coverage of PHC-integrated MHP in rural and urban areas as in year 2005 in different territories in Islamic Republic of Iran.

[296] Mesri, A.R. 2006, *op cit*

[297] Mofidi, Naser. 2009, *op cit*

[298] Marandi, Alireza. et. al. 1998, *op cit*

[299] Vahid dastjerdi, Marzieh. 2010, *op cit*

Table 3.12: Coverage of PHC integrated MHP

Region	Rural population under coverage of PHC-integrated Mental health programme (MHP)	Urban population under coverage of PHC-integrated MHP	Total populations under coverage of PHC-integrated MHP	No. of districts under coverage of PHC-integrated in rural areas	No. of districts under coverage of PHC-integrated MHP in urban area
Central	2,564,550	4,388,626	5,642,646	62	42
North	3,885,658	1,477,522	5,363,180	54	31
South	3,440,067	724,134	4,184,101	61	27
East	2,126,133	2,263,040	5,256,683	41	23
West	10,644,259	4,394,130	9,977,635	89	62

Source: Adapted data from the Statistic Organization of Islamic Republic of report Iran, 2005

The table shows that the rural population under the coverage of PHC integrated mental health programme in east area of Iran is less than the other areas. As it can be seen from the above table, west part of Iran with 10,644,259 has the most rural population under the coverage of PHC- integrated mental health programme while the eastern region has lowest population. Also the Western Region has 4,394,130 of the urban population under the coverage of PHC-integrated MHP and thus takes the lead over all other Regions. The Southern Region have the lowest urban population coverage under PHC integrated MHP. The total population under the coverage of PHC-integrated MHP in the Western Region is highest with 9,977,635 whereas the Southern Region have only 4,184,101 as the total population under PHC integrated MHP. There are 89 districts in the Western Region under the coverage of PHC- integrated in rural areas while there are only 41 districts in the eastern territories. And again the west, by having 62 districts under the coverage of PHC- integrated MHP in the urban areas takes the lead from the other territories.

The government policies of Islamic republic of Iran focus to give facilities to rural area and the health houses in rural areas give free treatment facilities to people.

(f) Percentage of Population covered under PHC integrated MHP in rural and urban areas

The percentage of rural population under the coverage of PHC-integrated mental health program (MHP), the percentage of rural health centers under the coverage of PHC-integrated MHP, the percentage of rural health houses under the coverage of PHC-integrated MHP, the percentage of urban population under the coverage of PHC-integrated MHP & the percentage of urban health centers under the coverage of PHC-integrated MHP in 2005 in different territories in Islamic Republic of Iran is discussed in Table 3.13

Table 3.13: Percentage of Population covered under PHC integrated MHP in rural and urban areas

Region	Percentage of rural population under coverage of PHC-integrated MHP	Percentage of rural health centers under coverage of PHC-integrated MHP	Percentage of rural health houses under coverage of PHC-integrated MHP	Percentage of urban population under coverage of PHC-integrated MHP	Percentage of urban health centers under coverage of PHC-integrated MHP
Central	81.4	99.1	98.8	21	41.8
North	98.4	97	97.8	29	39.4
South	71.2	91.4	93.8	17.6	55.3
East	60.25	79	74	38	40.25
West	88.7	99	99.2	59.7	63.8

Source: Adapted data from the Statistic Organization of Islamic Republic of report Iran, 2005

As the number shows the rural population under the coverage of integrated mental health program in the west is higher than the other parts. This could be due to higher number of persons employed as government workers in the oil resources and mines, the ports for exports, etc. However, one finds that the lack of specialized and expertise is a severe problem in rural areas. The urban population under the coverage of PHC integrated MHP in different

regions are different.

The geographic location, culture and socio-economic situation play an important role in mental health..The people who live in the desert parts of Iran are less sociable and they have small community. Those in North or South Regions are more sociable.

(g)Care available to Rural Population

The care available to rural population is discussed in terms of percentage of rural population receiving care for severe mental disorders in PHC, the Percentage of rural population receiving care for mild mental disorders in PHC, the Percentage of rural population receiving care for other mental disorder in PHC & the Percentage of rural population receiving for any mental disorder in PHC in 2005 (Table 3.14).

Table 3.14: Availability of care for rural population for different kinds of mental disorder

Region	Percentage of rural population receiving care for severe mental disorders in PHC	Percentage of rural population receiving care for mild mental disorders in PHC	Percentage of rural population receiving care for other mental disorder in PHC	Percentage of rural population receiving for any mental disorder in PHC
Central	1.45	1.45	2.08	7.8
North	0.64	0.64	0.97	4.01
South	0.37	0.37	0.76	2.93
East	0.68	0.68	1.26	5.8
West	3.61	3.61	2.28	9.37

Source: Adapted data from the Statistic Organization of Islamic Republic of report Iran, 2005

The percentage of the rural population under the coverage of PHC-integrated mental health

program MHP is in the same or almost in the same range: because those that have been registered have been taken into account. The percentage of rural health centers under the coverage of PHC-integrated MHP shows a uniformity because in rural areas and villages one cannot find any private insurance that helps and gives services to upper country's people, while the other side has a lack of sufficient information of private health service and other possibilities. The percentage of urban population under the coverage of PHC-integrated MHP and the percentage of urban health centers under the coverage of PHC-integrated MHP represent a society in which the accommodation provided for these area is poor, because on the one side, the information and presentation to people are not enough to encourage one to participate in the system of health, and on the other side health care places might have a lack of personnel who can bring people to have intension to go through the process. The lack of awareness in rural areas in recognizing mental health disorders makes it very difficult to estimate and plan mental health services in rural areas.

(h)Availability of care for urban population

The care available to urban population is discussed in terms of the percentage of urban population receiving care for severe mental disorders in PHC, the percentage of urban population receiving care for mild mental disorders in PHC, the percentage of urban population receiving care for other mental disorders in PHC & the percentage of urban population receiving care for any mental disorder in PHC as in year 2005 (Table 3.15).

Table 3.15: Availability of care for urban population for different kinds of mental disorder

Region	Percentage of urban population receiving care for severe mental disorders in PHC	Percentage of urban population receiving care for mild mental disorders in PHC	Percentage of urban population receiving care for other mental disorders in PHC	Percentage of urban population receiving care for any mental disorder in PHC
Central	0.78	1.47	6.23	13.8
North	0.23	0.4	0.11	1.28
South	0.35	0.94	0.21	2.52
East	0.15	1.4	0.27	1.73
West	0.41	2.26	0.24	2.87

Source: Adapted data from the Statistic Organization of Islamic Republic of report Iran, 2005

As the table 3.15 shows, there are not so many significant differences in the number of facilities available of care for urban population. The numbers shows in this table are percentage of urban population receiving care for other mental disorders in PHC (6.23) and percentage of urban population receiving care for any mental disorder in PHC (13.8) both in central part. The other numbers range from around 0.10 to 3. Percentage of urban population receiving care for severe mental disorders in PHC is poor in all parts of Iran, while in case of percentage of urban population receiving care for mild mental disorders in PHC, central and western divisions have better situation. The only division that has a better situation is central while the other divisions' percentage is not more than 0.27. The percentage of urban population receiving care for other mental disorders in PHC as well as percentage of urban population receiving care for any mental disorder in PHC is very various. Nevertheless in both of subjects central region is not comparable with the other regions of the country and this difference is based on locating capital (Tehran) in this division.

Summary

The third chapter contains the data available on mental health issues for the entire of Iran as well as its 5 geographical divisions. The five different geographical divisions are: Central (7 Provinces), Northern (5 Provinces), Southern (5 Provinces), Eastern (4 Provinces) and Western (9 Provinces). This was done to make data compilation and comparison. The data used here is sourced from The Ministry of Health and Medical Education and the Statistical Centre of Islamic Republic of Iran.

The population of Islamic Republic of Iran for all purposes in this research has been sourced from the data is released by government, as the whole population is 70017199 with a rural population of 23376695 (33.38%) and an urban population of 46640504 (66.62%).

In the description of the mental health care facilities in Iran, one of the indicators used was the number of specialists available for mental health care facilities such as psychiatrists and clinical psychologists for each 50 000 person of general population. It was found that the number of psychiatrists and persons hold doctorate in clinical psychology in central part is significantly higher compare with other but the number of clinical psychologist hold master degree is same in central, south and west (see graph3.3).

The indicator for Infrastructure for care in mental health facilities in Islamic Republic of Iran was the number of hospitals with psychiatric wards and psychiatric hospitals. It was found from the data that the Infrastructure for mental health care in the central division was best, with 13 psychiatric hospitals in service for the public. This was followed by the western division of Islamic Republic of Iran, which houses most of the oil refineries and petro-chemical industries. Western division has 8 psychiatric hospitals. The number of wards in the central parts is 29 and in the south and west parts are 15[300]. The number of beds for patients seeking psychiatric treatment in general hospitals, 984[301] was also highest in the central division as compared to the other four parts.

According to the date the central and eastern divisions also fare better in the care for children, geriatric and addiction psychiatric cases. This is indicated by the special provisions made for these cases. The numbers of beds available for child with psychiatric problem are 104 in

[300] Madad, Mohammad. 2005, *op cit*

[301] Vahid Dastjerdi, Marzieh. 2009, *op cit*

eastern part of Iran and there are no such special beds in west and south divisions. The number of addiction psychiatric beds in central is 138 and highest compare with other parts. The numbers of geriatric psychiatric beds are 225 in central and 307 in east part. But there is not any geriatric psychiatric bed in other parts.

At the same time facilities for psychiatric emergencies is lacking even in the Central Provinces. The number of emergency psychiatric beds available is 69 and more than the other parts and lower in Northern and Southern Provinces.

A part of the chapter also compares the prevalence of mental disorders in the various divisions to relate it to the facilities available. The prevalence of mental disorders in the general population over 15 years old in a population of 16079615 is 207 in the west division of Iran. There was no significant difference in the prevalence of mental disorder amongst the five divisions. The suicide incidence rate in general population data is not available for certain provinces in each of the region but in west it has a high rate, 95 cases for the year 2005.

The coverage of the integrated Mental Health Programme under the primary health care is also not uniform. The coverage of the integrated mental health programme with the PHC in east area of Iran is less than the other areas. This includes the coverage of rural population. There are 89 districts in the western territories under the coverage of PHC- integrated MHP in rural areas while there are only 41 districts in the eastern territories under the same coverage. And again the west, by having 62 districts under the coverage of PHC- integrated MHP in the urban areas takes the lead from the other territories.

Thus, the percentage of population covered under PHC integrated MHP in rural and urban areas became another indicator for the study of mental health facilities. As the number shows the rural population under the coverage of integrated mental health program in the west is higher than the other parts. The percentage of rural health centers under coverage of PHC-integrated MHP is 99.1 in central division and 99.2 in the west part. The percentage of urban population under coverage of PHC-integrated MHP is 59.7 in west area and only 21in central. Percentage of urban health centers under coverage of PHC-integrated MHP is 39.4 in north and 63.8 in west. Thus, we found out that the coverage of PHC-integrated MHP is better in the rural than the urban areas and better in the central and western divisions.

Care available to rural population was compared through the percentage of rural population

receiving care for severe mental disorders in PHC. It is 3.61 in west (highest) and 0.37 in south (lowest) and the percentage of rural population receiving care for mild mental disorders in PHC also same. The Percentage of rural population receiving care for other mental disorder in PHC is 2.28 in west (highest), and 0.76 in south (lowest). The percentage of rural population receiving care for any mental disorder in PHC is 9.37 in west (highest) followed by 7.8 in Central, East 5.8, north 4.01 and 2.93 in south (lowest).

The final indicators check the availability of care for urban population- the percentage of urban population receiving care for severe mental disorders in PHC is in 0.15 in east (lowest), and 0.78 in central (highest); the percentage of urban population receiving care for mild mental disorder in PHC is 2.26 in west (highest) and 0.4 in north (lowest); the percentage of urban population receiving care for other mental disorders in PHC are in central 6.23 (highest) and 0.11 in north area (lowest). The percentage of urban population receiving care for any mental disorder in PHC is 13.8 in central (highest), followed by 2.87 in west, 2.52 in south, 1.73 in east and 1.28 in north (lowest).

CONCLUSION

CONCLUSION

This research work is an ongoing process. However, what makes this research work on Mental Health Services in Islamic Republic of Iran unique is that such a widespread research on mental health facilities has not been done earlier in Islamic Republic of Iran. As a result of which finding pan Iran data was difficult. Data for this research had been collected from various government sources.

In this research, five sections of the Iranian province have been selected and the analysis is based on the data collected from these five divisions. Some data reveal a big gap between urban and the rural areas in terms of mental health services, and there is not enough facilities depends of population. Although, according to the government of Islamic Republic of Iran the rural areas are under the health insurance which is up to 99% in some areas[302,303]. The insurance services mostly do not included mental health care facilities. The rural inhabitants have to come to the big cities in order to use public hospitals services where usually proficient and notable psychiatrists are not available in these hospitals and sometimes the incorrect and defective diagnosis and treatment have cause more acute mental disorders. Tehran as the capital city, situated in the central part has more facility; and patients usually may travel to the capital city from all the other parts for treatment.

The budget that was given to the Ministry of Health and Medical Education by Islamic Republic of Iran in 2010 was around 5% of the GDP (Iran's Government)[304]. However, it has been observed that the government fails to have a focused plan including the provisioning for insurance for mental disorders to improve the facilities in the health services and especially in the mental health services. It is observed that the policies and programmes are well formulated but at the level of implementation it has not been a success.

According to the research concluded, one can claim that mental health care system/services in Islamic Republic of Iran is not well organized despite of the variant plans and many efforts

[302] Vahid dastjerdi, Marzieh. 2009, *op cit*

[303] Madad, Mohammad. 2005, *op cit*

[304] Vahid dastjerdi, Marzieh. 2009, *op cit*

of different ministries and organizations in public as well as private sectors in this case.

The primary health care services have mainly been provided to rural population, and because of poor development of the Mental Health program, 70% of the population residing in major cities and rural areas have been significantly deprived of primary mental health care[305]. Therefore one can conclude that services and resources can not cover the index of equity, and are based neither on the pattern of the prevalence of the disorders nor on the pattern of the population's distribution.

The study observes that there is a need for in depth analysis of all these factors and more development of a programme in order to address the new conditions focusing on like the effects of unplanned urbanization, drug abuse, family issues like divorce and also changing character, and symptomatology of diseases are important.

The special geographical situation and therefore, the variety of culture, required a comprehensive program which considers this trait. The variation in structure of families, per-capita income and social systems in different provinces if incorporated into the mental health program will help improve mental health status as assessment of the equity in the health indicators requires knowledge about various other socio – economic indicators.

Another important observation of the study was the affect of man-made disasters on the mental health scenario. It was found that the 8 years war between Iran and Iraq, had led to an increased prevalence of mental health issues in west of Iran. The rate of suicide is also high in the region and the facility available is not enough to cater to the needs of the population. One of the mental health problems that are manifested in the western part of Iran more than any other part is the number of suicides. This shows that mental health program has not been successful, and the lack of emergency mental health services would be related to this high rate of committing suicide.

As evident from the study, each division have different patterns of mental health issues, prevalence and services, for example- high number of suicide in Ilam province by women (71.5) by self immolation[306], availability of better services in the oil-rich western provinces,

[305] Madad, Mohammad. 2005, *op cit*

[306] Janghorbani, Mohsen. & Sharifirad, Gh. 2005, *op cit*

marked rise in substance abuse in the areas bordering Afghanistan. The present study has been to identify some of the mental health issues and patterns of facilities available which can act as a precursor for further research.

The most of graduates with PhD and Msc degree in clinical psychology are doing some counseling jobs and lesser member is engaged in research occupations[307]. Also the number of general physicians and psychiatrics from 1992 to 2007 announced by Ministry of Health and Medical Education shows that number of general physicians increased from 8000 to 13000 while psychiatrics reach from 240 to 509[308]. It shows that the importance of mental health is not recognized in the same way as physical health.

It was found that the distribution of the psychiatric services and resources are not proportionate to the pattern of prevalence of the disorder. Further research on factors in the distribution of services and coverage of facilities can be done to make the mental health services more efficient.

Owing to the increasing prevalence of mental health problems and an increased need of services, we need to look wider and deeper into the issues like public-private partnership in mental health programs.

This study has just scratched the surface of a large problem of mental health that exists within Iran which needs more focused intervention and further research.

[307] Tehrani, Hassan. 2008, *op cit*

[308] Vahid dastjerdi, Marzieh. 2009, *op cit*

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