

Lessons Learned in the Eastern Mediterranean Region from Integration of Mental Health Within Primary Health care in I.R. Iran

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1- General Facts about Iran:

Iran is a relatively vast country located in southwestern Asia. The country is a member State of Eastern Mediterranean Region of World Health Organization. The area it covers is about 1,600,000 square kilometers. Iran has a diverse landscape and climate. Over half of the area is covered by mountains, a quarter is desert, and only less than one fourth arable land. The arrangement of the great mountain ranges of Alborz in the North and Zagross in the West and the South is believed to be pivotal in shaping the country's diverse climate.¹ This variety in the environment has entailed dramatic variations in the socio-economic and cultural state of the people. Extremes of such variations can be seen from the prosperous, fertile green fields and forests of the humid North; to the dry, unfriendly desert sands of the center and parts of the South

According to the last national census of 1996,² the population of the country is roughly 60'000'000 of which 60.4 per cent live in urban and 39.6 per cent in rural areas. The average size of the family is just less than five persons. The best description for today's Iranian family is a family in transition from extended structure to nuclear arrangement, therefore prone to many stresses. The population is quite young and the average age is just less than 20 years. Recent efforts for population control have been quite successful and annual population increase has dropped from over 3.5 in 1986 to 1.4 in 1996. Overall literacy rate is 80 per cent, representing 85 per cent of the population in urban and 74 per cent in rural areas. Literacy rate among women is 74.2 per cent. There are close to 1'000'000 university students in the country. Ninety-six per cent of children reaching school age,

enroll in schools. Until recently, the country's economy has been oil dependent, but during the last decade, both agricultural and industrial sectors have been gaining share in the overall economy. As will be discussed later, the health system has also been going through a great improvement. The official language and script is Persian (Farsi). Persian script is Arabic writing plus some extra characters. More than 99% of the people are Muslims (91 per cent Shiite and 8.5% Sunni), 0.2% are Christian, 0.07% Zoroastrian and 0.05% Jewish. Since 1979 revolution the country's political system has changed from a kingdom to an Islamic Republic.

Iran is administratively divided to 28 Provinces (*Ostan*). Each province is divided to a number of Districts and the country has about 250 districts, more than 500 cities, 600 townships and over 66'000 villages. The capital city of Iran, Tehran, is also the center of a province with the same name. More than 10 out of 36 millions urban Iranians live in Greater Tehran Area, therefore making it a major urban center, or a so called mega city.

2- The Health System

A brief but adequate description of Iran's general health system is imperative. It would serve as an introduction to country's mental health system, that is built upon this rather extensive network in both rural and urban areas.

Iran is a signatory to the World Health Organization sponsored Alma-Ata declaration of 1978, aiming at Health for All by the Year 2000. Moving in this direction, during the past two decades, the country's health system and indicators have been improving steadily. This has been achieved through a network of Primary Health Care System in rural and urban areas³, and at the national level is being coordinated by the "Ministry of Health and Medical Education." This ministry is responsible for all aspects of planning, leadership, supervision and evaluation of health services in the country, including training of human resources for health at all levels.

At the provincial level, there are 32 "*Universities of Medical Sciences and Health Services.*" In addition to all scientific functions and responsibilities of a university, they are in charge of provision of necessary services to address all the health needs of a certain geographic area of the country. They function independently under the general rules and policies set by the ministry. In each province the health affairs are run by one of these universities. Only Tehran province is divided among three major universities. The executive authority of the chancellor of the university is being exercised through his different deputies, including the deputy for health affairs.

Each one of such universities oversees the activities of the next level that is the *District Level*. The district is the smallest autonomous unit in Iran's Primary Health Care networks. District is the most natural administrative level promoted by World Health Organization for health delivery. "Each district is small enough for the staff to understand the major problems and constraints of socio-economic and health development...yet large enough a unit for developing the technical and managerial skills essential for planning and management..."⁴ In Iranian health network, the executive units at district level are The Health House, Rural and Urban Health Centers, Rural Health Worker (Behvarz) Training Center, District Health Center, and District Hospital. All of these function under the directorate of the *District Health Network*.

The next level (or two levels,) in rural areas is (are)* *Rural Health Center* and *Health House*. The Rural Health Center (*Markaz e Behdaasht e Roostaeej*), is a village-based facility that supervises the health affairs in its own and a number of other Health Houses in the neighboring villages. On average, each Rural Health Center covers for the health needs of about 9000 people and there are about 2000 functioning Rural Health Centers in the country. Apart from a physician, the staff of a fully established Rural Health Center includes technicians for family health, disease control, environmental health, oral health, laboratory, nurse aid(s) and administrative personal. All the staff function under the doctor's leadership. The Rural Health Centers provide out-patient care and case finding among patients referred from Health Houses. They advise Health Houses on monitoring and follow-up. They supervise activities in the areas of family health, disease control and environmental health. They offer oral health services, participate in health projects and support their assigned health houses in their needs. They also have certain mental health responsibilities that will be discussed later.

Health House (*Khaneh e Behdasht*) is the first level and gross root health facility in the rural areas. Each health house is capable of serving about 1500 people, though it is by no means an inflexible limit. There are about 15'500 of such Health Houses in the country with about 30'000 Behvarzes working in them. Many Iranian villages have populations of less than 1500. Therefore, to ensure cost-effectiveness, each Health House covers one or more satellite villages as well as its main village.³ The distance between the main village and each satellite village is defined to be no more than one hour's walk. Each Health House has one (or more) male and one (or more) female Health Workers (*Behvarz*.) Each Behvarz comes from the same village he/she will be stationed later. The main function of a Health House is to offer primary health care services to the community it serves. A well-established Health House has some other tasks. These include annual health census, public

education, a wide range of family health activities including immunization, family planning, disease control services. Environmental services and collection and reporting of health information are among the other tasks. As will be discussed later, Health Houses have well-defined responsibilities in the area of mental health. The following is how one of the people who has devised the Iranian health system has summarized the important role of Health Houses. "The Health House... effectively bridges a serious gap that persisted in Iran right up to the expansion of Primary Health Care (PHC) networks. Before this versatile health care facility was created, the provision of services to the most deprived rural communities on the scale and of the quality now attained, was neither feasible, nor conceivable."³

As it is true in many other parts of the world, provision of health services to the urban areas has not been as easy and straightforward. There are different and competing private, semi private and governmental health providers in the city and bringing all of them under one umbrella like the one in rural areas is impossible. Even in the government sponsored networks, urban areas lack a gross root facility like Health Houses. It is only recently that some innovative ideas are being developed to find a replacement for this community based system. These include the use of different volunteer neighborhood groups, among which the ones connected to *Healthy City* projects are gaining importance. The official equivalent of Rural Health Center in the cities is *Urban Health Center (Markaz e Behdaasht e Shahri)*, and performs the same type of functions for a population of 12'000. There are about 2000 of such centers in the country. All medical students spend a part of their training in different levels of PRIMARY HEALTH CARE (PHC) fields.

As a result of the implementation of the above health system in Iran Infant Mortality Rate has dropped from 145 per thousand live births in 1960⁵ and 91 per thousand live births in 1974,³ to 28 per thousand live births in 1997,⁶ and is steadily decreasing. Major infectious and nutritional diseases are controlled. The rate of vaccination for common childhood infections (designated by WHO as *Extended Programme of Immunization (EPI) target diseases*) is above 95 per cent⁵. Overall life expectancy is 69 years,² compared with 57 years in 1979, and Total Fertility Rate is down from 6 in 1974 to 1.6 in 1999.³⁻⁶

3- Mental Health:

3-1 General considerations:

Mental Health and care of psychiatric patients were until late seventies provided through traditional psychiatric hospitals. A few of such facilities existed in different parts of the country and offered traditional, mainly in-patient services to the those who could reach them. No concept of comprehensive mental health services existed and no facility could be found outside a few large cities and metropolitan areas. The first university psychiatric ward was opened in a general hospital belonging to Tehran university in the decade of forties. In early fifties this ward was moved to "*Roozbeh Hospital*" and it became the first teaching psychiatric hospital in the country. The idea of "Community Mental Health" introduced for the first time in mid seventies. Then, the newly established "Society for Rehabilitation of the Disabled" started to designate catchment areas and develop outpatient treatment through community mental health centers. Simultaneously, new comprehensive mental health centers were built in different parts of the country and returning of the treated patients to the community started. Many of these efforts continued after 1979 through a newly established "Tehran Psychiatric Institute." This institute was the main technical adviser of the ministry of health when the implementation of "Iranian National Mental Health Programme" started in mid eighties.

The country has about 600 psychiatrists.⁸ The distribution of these psychiatrists is not still desirable. Tehran and a number of other large cities get a disproportionate number of psychiatrists. This uneven distribution was worse in the past. However, in recent years, through a series of regulations and also introduction of certain incentives, more specialists including psychiatrists are being attracted to work in deprived areas of the country. Therefore, nowadays, psychiatrists practice in all the provinces and many districts. Psychiatry is being thought as an independent subject in all medical schools, and all the students have mandatory clinical psychiatric training. Policies regarding internship in psychiatry differ in different universities, but only in some universities it is mandatory for one month. Curriculums of medical schools contain mental health and community psychiatry subjects, but still there is resistance for more changes. There are 10 psychiatric residency programmes in the country. Together, they have a total of more than 100 resident physicians under training. Three programmes offer subspecialty in child psychiatry. Certification in both adult and child psychiatry is done by a national board through an examination consisting of written, verbal and clinical parts.

The utilization of general (Bachelor of Science) psychologists in mental health services started before the revolution and during the time that psychiatric services were being reformed by "Society for Rehabilitation of the Disabled." Postgraduate training in clinical psychology started in early seventies and first degrees of (Master of Science in Clinical Psychology) were awarded by Tehran university. The MS degree programme of Tehran University stopped for a while after the revolution and a new program started in Tehran Psychiatric Institute. At present there are 4 programmes awarding the degree of Master of Science in clinical psychology. The first Ph.D. Programme in clinical psychology has also been recently opened in Tehran Psychiatric Institute followed by two other programmes. Training in MSc. degree for psychiatric nursing exists and mental health subjects are included in the curriculum of all nursing schools. The country has schools for occupational therapy and social work. Recently MS degree for psychiatric occupational therapy has been introduced.

In the area of research, the first serious epidemiological studies were done by Bash and Bash⁹ during the fifties. Other research activities were initiated by Davidian¹⁰. A major epidemiological study was also being undertaken before the revolution that stopped afterwards. During the 8 years' war with Iraq also a number of studies were undertaken on different aspects of war related mental health problems¹¹ and PTSD. During recent years a qualitatively new era in research has started. This is characterized by institutionalization of research in the work of an increasing number of post-graduate students. This is shown in better quality of thesis's written by them and improved supervision. However, research still has a long way to go and one major obstacle is low degree of familiarity and emphasis on foreign language and low level of access to major global centers of research.

3-1 National Mental Health Programme:

The drafting of National mental Health Programme of Iran was done in 1985. Then the programme was offered for approval and approved in 1986. It was the product of a technical collaborative activity with World Health Organization. It was also the result of a joint effort, in which Ministry of Health and three universities of Iran, Mash'had and Tehran were involved. The group was convened by Tehran Psychiatric Institute.¹²

The objectives of the programme are as follows:

(I) To make basic mental health services available to all the people in the Islamic Republic of Iran in near future. The emphasis would be on the most vulnerable and deprived groups in urban and rural areas who, so far, have not received any services, especially ones living in remote areas.

(II) To produce a model of mental health services compatible with social and cultural structure of Iranian society and encourage community participation in building mental health services.

(III) To increase people's knowledge and skills of mental health in the service of improving general health. To encourage the people in the direction of wider use of mental health principles in order to promote health. To accelerate socio-economic development and improve the quality of life.

(IV) To appropriately plan for provision of necessary mental health care for all who have in one way or another suffered mentally during the current war.** (I.e.: The refugees, the homeless, the disabled, the bereaved and the mentally ill), and to plan for long term services needed to face the consequences of this war in the future.

The main strategy of this national programme is "Integration of mental health into primary health care system" through a set of strategic actions in the areas of Services, Training and Administra

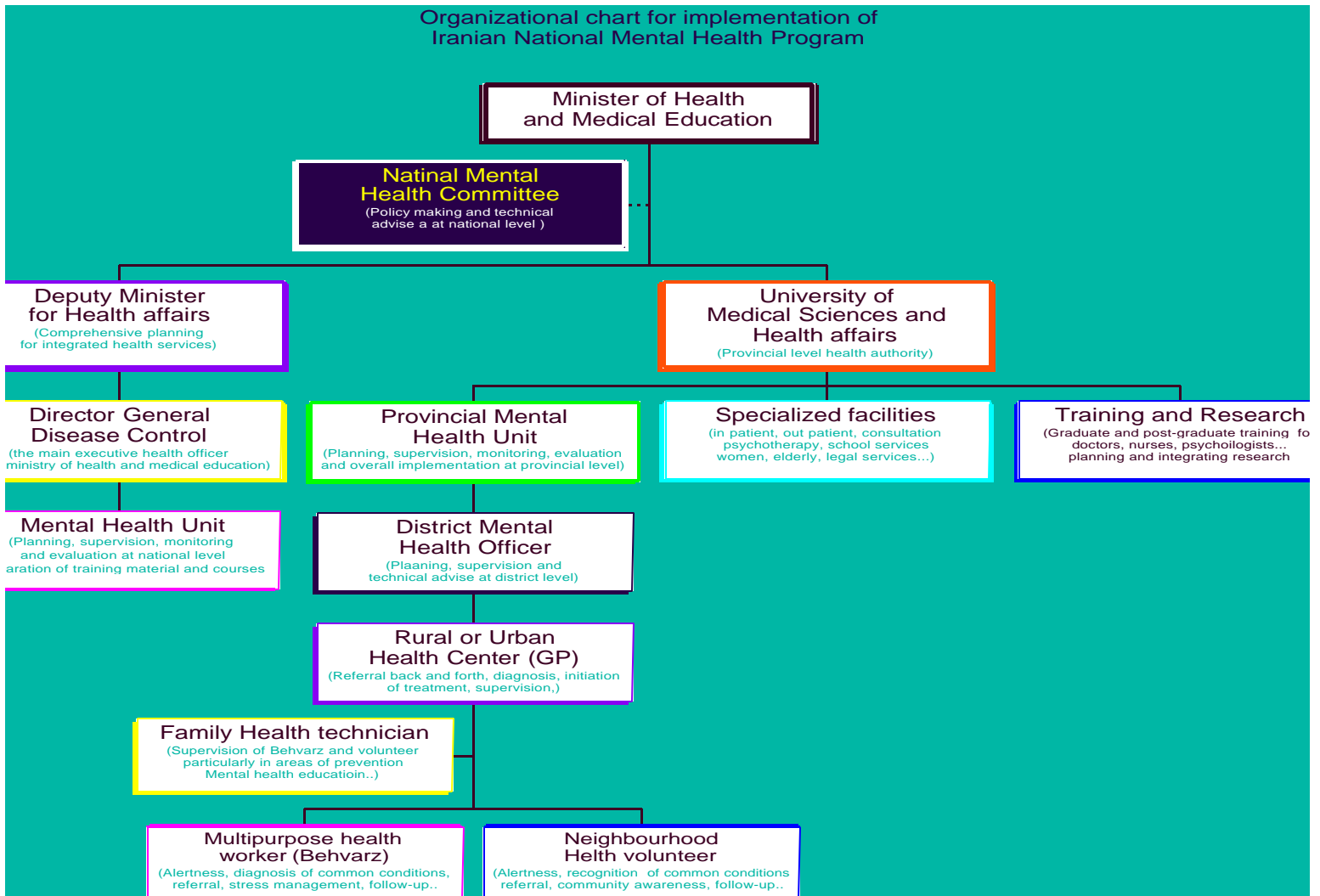
tion. *Division of labour* based on a clear understanding and definition of *Levels* is another principle of this programme.

Char No. 1: Administration of National mental Health in I.R. Iran

At the level of health house (health post in the cities), the multipurpose health worker (Behvarz in the villages and volunteer in the cities) is given the following tasks:

- Alertness to the presence of mental and psychological symptoms and complaints as health problems.

Organizational chart for implementation of Iranian National Mental Health Program



- Understanding and ability to diagnose four common conditions of minor mental illness, major mental illness, mental retardation and epilepsy.
- Referral to the general practitioner and receiving back referrals for follow-up.
- Enough familiarity with psychiatric treatments (i.e., medications and their major side effects), for the purpose of follow up.
- Common understanding of stress related conditions and simple stress reduction methods. Also having some knowledge regarding the effects of psychological factors on physical illnesses and vice versa particularly in vulnerable groups like adolescent, children, pregnant women and the elderly.

At the level of health center, the general practitioner is in charge of the following tasks:

- Receiving referrals from the health houses and/or volunteers.

- Familiarity with major psychiatric conditions and their treatments with particular emphasis on common psychiatric illnesses. Initiation of drug and supportive treatment for psychosis, epilepsy, depression and severe anxiety states with required knowledge of the drugs and their effects and side effects.
- Referring those cases that need specialist's intervention to clinics and hospitals.
- Supervision of the work of family health and disease control technicians.

Disease control technician of the health center supervises the health workers (*Behvarz*) in case finding and referral. She or he also helps the general practitioner regarding referrals and back referrals and keeps the statistics.

The duties of family health technician are:

- Supervision of the health workers in establishing supportive relation with the families and the community
- Training of the *Behvarz* in areas of school mental health, problems of mothers and children and simple preventive measures.
- Mental health education for the community and family alone with the *Behvarz*.

Supervision for the work of rural and urban health centers is provided by the psychiatrist or a specially trained general practitioner who is connected to the District Health Center. The programme foresees that each district general hospital would at least have 5 psychiatric beds. This aim has not been achieved in most hospitals.

Higher level supervision is being provided at provincial level through universities of medical sciences and at national level through directorate general for disease control. Technical guidance for this directorate comes from the national Mental Health Advisory Committee.

The Integration of Mental Health into Primary Health Care System started as two pilot projects in districts of *Shahreza* and *Shahr i Kurd*¹³ in 1987. Since then it has been continuously going on and growing¹⁴⁻¹⁵⁻¹⁶⁻¹⁷ in all parts of the country. At present the programme is active at least in one district in each of the country's 28 provinces. In a number of provinces such activities exist in all districts. Throughout the country, 9200 out of a total of 15'500 Health Houses and 1689 out of about 3'000 Rural Health Centers and 494 out of about 2000 Urban or mixed health centers are active in this area. 18'200 out of 30'000 *Behvarzes* and 5'500 General Practitioners have been trained.¹⁸ Although, the integration in urban areas lags behind, it is hoped that with approaches like the use of

volunteers and innovative programmes like inclusion of a mental health element to Healthy City projects¹⁴ it will improve. The above numbers are compared with similar numbers since 1990 when the programme had just begun. Tables 1 to 4 show this progress. Data on these tables is taken from the official statistics received from the mental health unit of the ministry of health and medical education in Iran, WHO/EMRO reports¹⁶⁻¹⁷⁻¹⁸ and the report of independent evaluation²⁰. This official, independent evaluation was done in 1995 by world level experts. The and its results have clearly shown the success of the program in general. The evaluation also is mindful of the shortcomings and the problems.

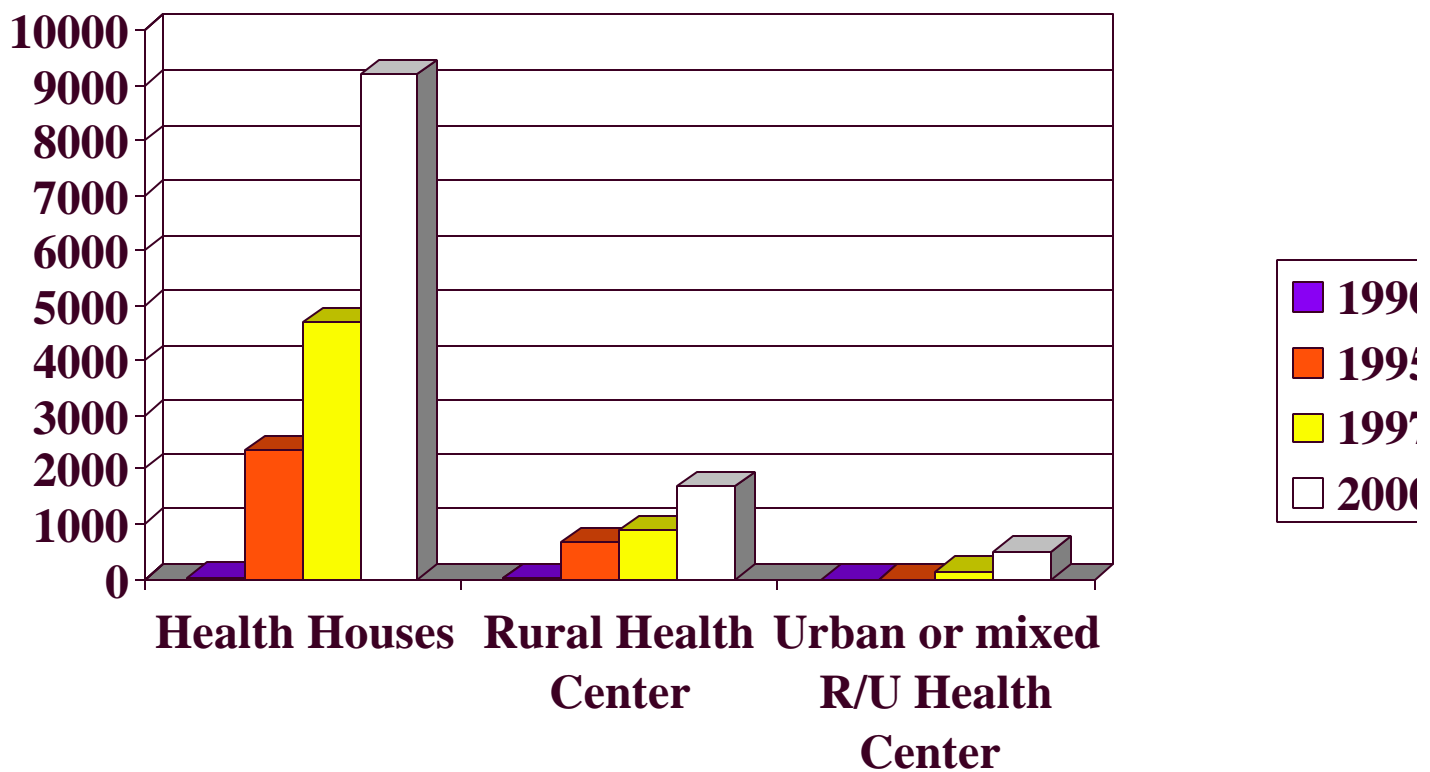


Table No.1: Comparison of the number of facilities where mental health is integrated 1990-2000

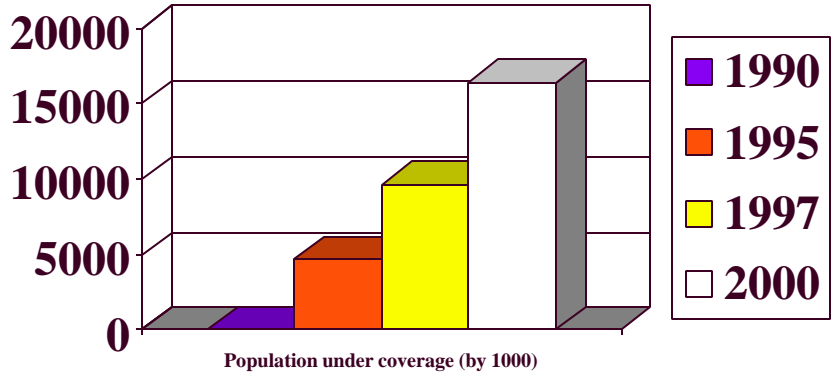


Table No. 2: Comparison of total population covered by the programme 1990-2000

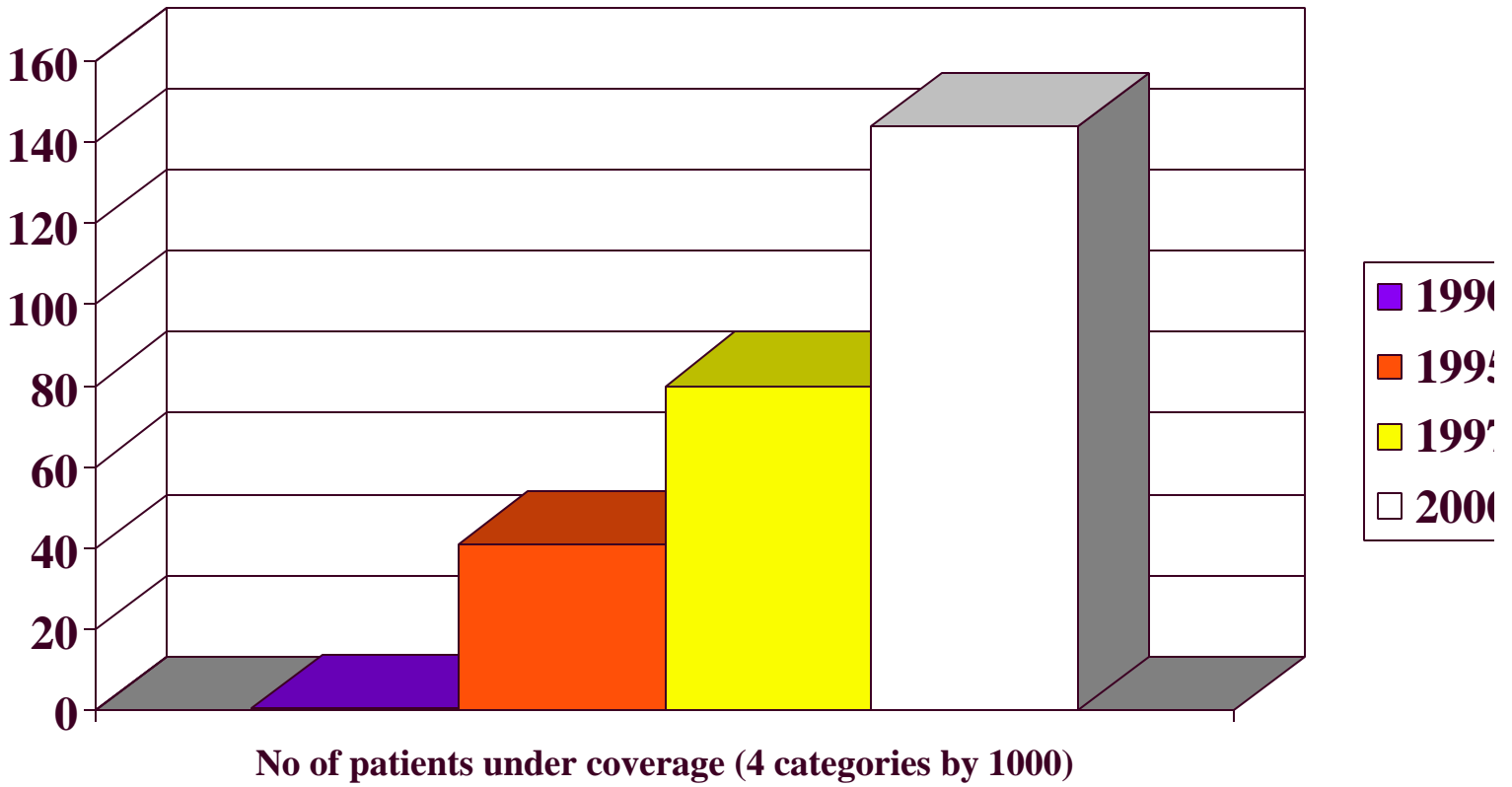


Table No.3: Comparison of the number of patients (four categories) under the care of the Programme, 1990-2000.

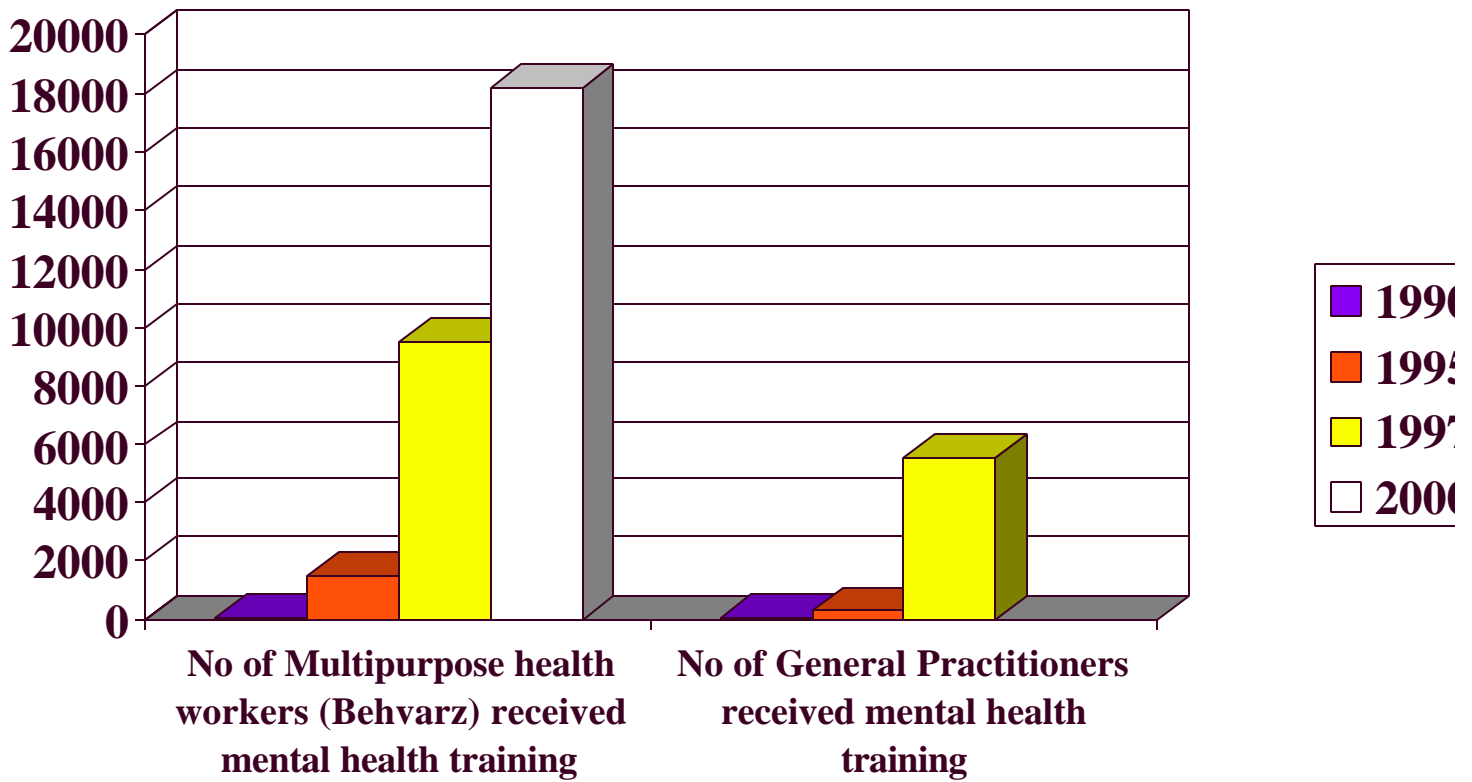


Table No.4: Comparison of human resources development in two categories connected to PHC, 1990-2000

the program may face in the future. It has given a set of recommendations for the future expansion. It cautions against burnt out syndrome of field personnel and questions related to sustainability.

6- Discussion:

In this paper an effort has been made to demonstrate the development of mental health services in Iran. This discussion deals with issues related to the "National programme of Mental Health", its successes and shortcomings and the need to learn from it for development of similar services elsewhere in the world.

6-1- National Programme of Mental Health:

The important feature of Mental Health Programme in Iran is the realization of "Integration of Mental Health into Primary Health Care System" in a national scale. The experience of Iran started as one of the pioneer experiments of its kind in The Eastern Mediterranean Region of World Health Organization and with continued technical support from the organization. However, this programme was not by any means the first of its kind. Outside the region, India had started such a programme many years ago.²¹ Pakistan and Egypt** also started the programme earlier than Iran. Why could it become a nationwide programme in Iran? In this connection, it is notable that World Health Organization published the landmark publication of "Introduction of a Mental Health Component into Primary Health Care"²² years after most of these experiences, and it was undoubtedly influenced by them.

The main factor in favor of national level expansion of the Iranian programme has been the existence of a very well supported, culturally acceptable Primary Health Care System. The fact that basic human resources (*Behvarzes*) of this system are chosen from the village people is a very important factor. Other reasons may be found in true political will behind the whole health network. Undoubtedly, the existence of a number of mental health professionals willing and ready to challenge the old system with the idea of integration of mental health into primary health care has also played a role. The support and understanding of a considerable part of the psychiatric community have also played an important role. The formal WHO evaluation has shown that the success of this programme in Iran is real.²⁰ The same group has also cautioned about the need to safeguard the sustainability of this programme. Continuous supervision, training and research are needed to ensure the realization of such an objective. In order to safeguard the continuation of such a success

there is also a need to ensure that all levels get some kind of incentive and compensation for their interest and labour. Continued support from psychiatric community is also necessary.

* There is a difference of opinion regarding Health House being a separate level or an extension of the Rural Health Center. The present author sees merits in each argument and therefore prefers to reflect both here.

** At the time of drafting and approval of the National Programme of Mental Health, Iran-Iraq war was fiercely being fought and war related issues had highest priority. In a revision of the national programme that is scheduled to take place in 1998-99, such emphasis could be placed on provision of care for victims of all stressful conditions and disasters.

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