



REVIEW ARTICLE

Mental Health Policies: Comparative Analysis of Mental Health Systems in Iran and Six Selected Countries

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ABSTRACT

Background: Mental disorders are recognized as the main cause of disability in the world. It is estimated that mental disorders will be the second leading cause of disabilities in the world by the year 2020. Nowadays, the importance of mental health and its vast effect on the other sections of health (including physical, social, and spiritual health) is not deniable.

Methods: This comparative-descriptive study intends to compare mental health systems of Iran and the selected countries in the year 2019. In order to achieve this goal, two groups of countries were selected to be compared with Iran. The first group consisted of countries similar to Iran in terms of context and texture specifications, including Turkey, Iraq, and Lebanon. Moreover, the second group included countries that are known to be successful in managing and providing health services, including Norway, Canada and Australia. In order to evaluate and compare mental health systems, the authors used the WHO Assessment Instrument for Mental Health Systems (WHO-AIMS). A summarized version of the WHO-AIMS form was implemented for collecting the data.

Results: After evaluation of the data obtained by mental health assessment tool, the results for each country were summarized and presented in comparative tables. Comparing mental health systems in the selected countries and Iran showed that there are a number of differences between countries in different aspects.

Conclusion: While Iran has specific mental health policies, these policies are not implemented desirably because of the lack of executive guarantees in this manner.

Keywords: Mental Health, Policy, Health System, Iran

Introduction

Mental disorders are recognized as the main cause of disability in the world (1) which imposes heavy costs on the countries (2). 14% of the disease load in the world is due to psychological and nervous conditions (1). Today, more than 450 million people are dealing with psychological disorders, most of which are living in poor and developing countries (3). It is estimated that mental disorders will be the second leading cause of disabilities in the world by the year 2020 (4). Providing mental

health services to society requires precise estimation of the quality of mental health system efficacy, as well as the mental health status of the society members (5). Mental health is an essential and indispensable component of public health; and therefore, there is no doubt that public health is not complete without mental health (6, 7).

Despite the increasing trend of the burden of mental disorders and the presence of a high level of psychological pain and suffering for people and the society, efforts to meet this need do not seem to

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be desirable, and a significant gap is seen between the need for mental health and access to high-quality services to meet this need in the world (8). This matter is more particularly visible in the developing countries due to budget issues (9), the presence of conflicting and competitive needs in the health system, lack of mental health care providers, and social stigma due to referral to psychiatry (10). Today, the importance of mental health and its vast effect on the other sections of health (including physical, social, and spiritual health) is not deniable. Besides the definition of health, considering the close relationship between this section of health with public health and the social factors affecting health, it can be argued that public health cannot be maintained without reaching mental health in society (11). Policies and programs regarding mental health are considered essential tools for determining the strategic priorities, coordinating measures, and reducing the fragmentation of services and resources. It seems that the patients of mental disorders will be treated ineffectively and unstable without using these coordinators. These policies will be effective in case the governments have a clear commitment to them, in addition to being consistent with international evidence and standards. The policies of mental health must also reflect the agreement of a large portion of key stakeholders (12).

The results from the study of Dlouhy on the assessment and comparison of mental health systems in Western European countries indicated that the differences between countries should be considered at the execution of mental health policies (13). Another study by Omar evaluated the process of policymaking in mental health in African countries. The results showed that the development of mental health policies has a variation in the studied countries. In addition, lack of consultation and sufficient evidence to understand the progress of policies was a basic issue in these countries. In addition, these policies were poorly executed because of insufficient publication of policies and a lack of resources (14).

Iran is the 18th country in the world in terms of

area with an area of 1648195 square kilometers and a population of 79.9 million people with a combined health system (15). Iran's health system is organized in three levels of country, province and city. At the national level, the Ministry of Health and Medical Education is responsible for policy-making, planning, directing operations, and overseeing the work of health care organizations (16). Fair distribution of health and medical facilities in the country, development of health services, provision of medical services to members of the community, issuance or revocation of licenses of health care institutions, preparation and development of health and medical standards, and provision of medical services and human resources carrying out medical and therapeutic measures is one of the important duties of the Ministry of Health, Treatment and Medical Education of Iran (17). According to the latest studies, the prevalence of mental disorders in Iran has been 31.03% (18).

So far, numerous studies have been conducted regarding the evaluation of mental health services management, the prevalence of mental disorders, and mental health challenges, as well as the assessment of mental health programs in Iran. However, no study has compared mental health system of Iran with similar and successful countries in the context of mental health. Considering that providing an appropriate mental health service to society needs a suitable and strong structure, this study was conducted with the objective of describing and comparing mental health systems in Iran and the six selected countries.

Materials and Methods

This comparative-descriptive study intends to compare mental health systems of Iran and the selected countries in the year 2019. The countries were purposively selected to represent both developed and developing countries and tried to collect some diverse examples from across the world. At the time of the selection of countries, the authors tried to consider the variety of health systems. In addition, the experiences of experts

were used in the selection process. Other criteria that were taken into account in selecting countries included having successful policies and experiences in providing mental health services, the presence of credible evidence, and the similarity of countries in terms of social, economic and cultural issues with Iran. In order to achieve this goal, two groups of countries were selected to be compared with Iran. The first group included countries similar to Iran in terms of context and texture specifications, including Turkey, Iraq, and Lebanon. Moreover, the second group included countries that are known to be successful in managing and providing health services, including Norway, Canada and Australia. In order to collect the required data, the statistics and survey results of WHO, results of the surveys conducted in the country, statistics of the Ministry of Health and Medical Education, Medical and Psychological Council of the Islamic Republic of Iran, the statistics of the World Bank, and published papers were used. In addition, numerous sources of WHO in health services were reviewed (1, 15-18). In order to evaluate and compare mental health systems of the world, several methods have been introduced. Nevertheless, one method is specifically designed for the evaluation of mental health by the World Health Organization (WHO) under the name of the WHO Assessment Instrument for Mental Health Systems (WHO-AIMS). This tool is designed as a comprehensive instrument to compare national mental health systems. This tool consists of a complete complex of input and process indicators. WHO-AIMS is recognized as a tool for gathering the necessary information on mental health system status of a country or region (19). The aim of gathering the data was to help the progress of mental health systems. The validity and reliability of the tool were calculated according to the opinions of experts. On that account, the content validity of the tool was calculated to be 87.6. In addition, the reliability of the tool was calculated based on homogeneity evaluation for the entire tool, which was calculated to be 0.87 (20). In order to collect the data, a summarized version of WHO-AIMS

form was implemented. This form was completed for each country according to the data of that country by searching for valid sources. These sources included: PubMed and Scopus databases, Google search engine, Google scholar, website of the Ministry of Health and the countries' Department of Health, the WHO and the World Bank, and the OECD library website, national health statistics, public health laws, and documents of strategic health policy. The data collection form included several aspects of mental health policies in the following dimensions:

1. Background information (demographics, health, and economic indicators) about the countries;
2. financing health services (financing privately or by governments);
3. mental health services (capacities and benefits, ownership);
4. purchasing health services (purchaser organizations, contracts, repayment methods);
5. mental health policies (the presence of policy documents, mental health law, the role of research, and civil society).

After evaluation of data by mental health assessment tool, the results for each country were summarized and presented in comparative tables.

Results

The authors first reported findings on the wider country contexts. They then discussed each mental health system.

Context

Australia, Canada, and Norway are recognized as high-income countries. The economy of Australia relies on commerce and agriculture. The GDP per capita value for Australia was 45270 dollars, of which 9.45% was spent on health care. Canada is known to be another high-income country. The GDP per capita value for Canada was 46070 dollars, of which 10.44% was spent on health care. Norway, which has reservoirs of crude oil, natural gas, mining and freshwater, is another high-income country. The GDP per capita value for Norway was 63980 dollars, of which 9.98% was spent on health care. Iran, Iraq, Lebanon and Turkey are recognized as countries with a middle income. Turkey is among the top 20 industrialized

countries in the world. The economy of turkey relies on textile and food industry, as well as chemical and tourism industries. The GDP per capita value for turkey was 26160 dollars, of which 4.4% was spent on healthcare. The incidence of civil war in Lebanon was a highlight of Lebanese people and had an effect on all sectors of the country. Today, Lebanon is known as a developed country with a GDP per capita value of 14690

dollars, of which 7.4% is spent on health. Iraq is another country with a middle-income rate. The economy of Iraq relies on oil. The GDP per capita value for Iraq was 17010 dollars, of which 3.4% was spent on health care. In addition, the economy of Iran relies on oil. The GDP per capita value for Iran was 21010 dollars, of which 7.59% was spent on health care (Table 1).

Table 1. Context information about the countries (2017)

	Population (2017)	Income group	Health expenditure as % of GDP	Per capita total expenditure on health (PPP int. \$)	Mental health budget as % total government health budget
Turkey	80,750,000	Upper middle-income	4.14	455	1.73%
Australia	24,600,000	High income	9.45	4,934	7.64%
Canada	36,710,000	High income	10.44	4,507	7.2%
Norway	5,285,000	High income	9.98	7,464	UN
Lebanon	6,080,000	Upper middle-income	7.4	645	4.8%
Iraq	38,270,000	Upper middle-income	3.4	154	UN
Iran	81,160,000	Upper middle-income	7.59	366	3%

* Unknow

Financing health services

Providing finance for health services in Australia, Canada and Norway are mainly relied on tax. Private insurance is present in Australia in addition to public income and income tax. In Canada, the main sources of health care finance include taxes, individual payments, private health insurances, and other sources of financing. In Norway, individual payments are known as a part of health care service financing, in addition to taxes. In Turkey, the costs of health care services are provided from several sources, such as social health insurance, public resources, individual payments, and other private sources. It should be considered that in Turkey, public resources cover a large portion of health care costs, and most of the resources come from social health insurance. In Iraq, 21% of the financing of health care services is provided by the government, and 79% is provided by the private sector. Private insurance nearly does not exist in Iraq, and all private costs are paid individually. There is almost no social insurance present in this country, and no subsidy is dedicated to the health

care section. In Lebanon, financing of health care services is provided by work insurance, private insurance, and individual payments. In Iran, sources for health care services financing include public budget, individual payments of families, social insurance, private insurance, and other sources.

Mental health services (capacities and benefit, ownership):

In Australia, Turkey, Norway, and Iran, the private and public sectors provide mental health care services. In Australia, several private and public managers maintain the flow of mental health care services. Non-specialist services are provided by general practitioners, and specialized services are provided by psychologists, psychiatrists, and social-based mental health care services in psychiatry hospitals, psychiatric sections of critical care hospitals, and home care centers. In Norway, mental health care services are provided by general practitioners and other providers including psychologists, psychiatric nurses, and social care sections in municipalities. In addition, general

practitioners may refer their patients to psychologists or private psychiatrists for specialist care services. In Iran, mental health care services are integrated into primary care. In addition, public hospitals and non-governmental clinics provide mental health care services. In Turkey, public and private centers play a major role in providing mental health care services. In Canada, the major part of primary mental care is provided by family physicians. More than 60% of the practitioners manage the treatment plan of their patients in accordance with specialists (psychiatrists), which does not bring much satisfaction for the family physicians. Providing mental health care services in Iraq is the responsibility of the public health sector, which is done in hospitals and health care clinics. In Lebanon, providing health care services is done in psychiatric clinics. In addition, mental health care services are provided by family physicians, internal specialists, or other specialists in rural areas.

The reports show that there are 19 psychiatric hospitals in Norway, 20 in Canada, 5 in Lebanon, 17 in Australia, 39 in Iran, 9 in Turkey, and 2 in Iraq. The highest number of psychiatric beds in a

public hospital belongs to Australia with a number of 21.76 per 100000 population. This amount is 4.67 in Turkey, 1.45 in Lebanon, 1.01 in Iraq, 4.66 in Iran, and 14.50 in Canada. In addition, this value is unknown for Norway. Moreover, the number of health care providers (psychiatrists) per 100000 population in the countries was 30.77 in Norway, 13.53 in Australia, 14.7 in Canada, 1.64 in Turkey, 2.02 in Iran, 1.21 in Lebanon, and 0.34 in Iraq. Associations for providing support for patients and their families during mental treatment are present in Turkey, Australia, Canada, Norway, and Iran. However, the presence of such associations is unknown in Lebanon and Iraq. In addition, the number of daycare institutes per 100000 population was 0.12 in Iran, 0.01 in Turkey, 0.003 in Iraq, none in Lebanon and not known in Australia, Canada and Norway. Moreover, facilities for outpatient treatment of mental patients per 100000 population was 4.65 in Australia, 3.6 in Norway, 1.43 in Iran, 0.24 in Lebanon, 0.1 in Iraq, and not known in Turkey and Canada. The reset of data on capacities and facilities in the countries under study are presented in Table 2.

Table 2. Mental health services (2017)

	Mental hospitals	Psychiatric units in general hospitals	Mental hospital beds*	General hospital psychiatric unit beds*	Mental health outpatient facilities*	Day treatment facilities*	Community residential facilities*
turkey	9	356	5.16	4.67	UN	0.01	0.001
Australia	17	143	7.21	21.76	4.65	NR	0.66
Canada	20	141	11.09	14.50	NR	NR	NR
Norway	19	NR	84.5	NR	3.6	NR	NR
Lebanon	5	8	27.51	1.45	0.24	0.00	0.16
Iraq	2	22	3.49	1.01	0.108	0.003	0.0
Iran	39	159	8.49	4.66	1.43	0.12	0.11

NR= Not Reported

*rate per 100,000 population

Mental health policies

Between the countries under study, all but Norway had a policy document on mental health. The findings showed that all the countries have addressed mental health issues in their public

health policy. According to the reports, mental health policy document of Australia has been reviewed in 2009. These policies were changed in a way to ensure empowering patients to gain earlier rehabilitation, prevention measures and early diagnosis of the disorders, as well as to

ensure that every Australian citizen suffering from mental health disorders has efficient access to social-based treatment facilities and is supported by the community. In addition, mental health policy document of Turkey has been reviewed in 2011. The content of the revised health policy includes mobilizing the resources required for establishing efficient and accessible facilities for psychiatric patients in the country.

In 2006, mental health policy document of Norway was reviewed, and the same happened in Iran in

2015. The content of mental health document in Iran consists of an integration of mental health programs into primary health care. In addition, mental health policy document was reviewed in Canada in 2012, in Iraq in 2014, and in Lebanon in 2015. The reports showed that no specific laws are present for mental health in Turkey, Australia, and Norway. However, Iran, Iraq, Canada, and Lebanon have specific laws for mental health care (table 3).

Table 3. Mental health policies in the countries under study

	Stand-alone policy or plan for mental health	Stand-alone law for mental health	Financing of mental health services
turkey	Yes, revised in 2011	No	not available
Australia	Yes, revised in 2009	No	Government health department/ ministry are 7.64% of the total health budget and mental hospital expenditures are 8.70% of the total mental health budget.
Norway	No	No	not available
Canada	Yes, revised in 2012	Yes	Government health department/ minister are 7.2%1 of the total health budget. Mental hospital expenditures are unknown.
Lebanon	Yes, revised in 2015	Yes, revised in 1983	Government health department/ ministry are 4.8% of the total health budget. Mental hospital expenditures are 54.17% of the total mental health budget. Note: The main financing for mental health is from out-of-pocket expenses by service users.
Iraq	Yes, revised in 2014	Yes, revised in 2005	not available. Note: Mental health expenditures are part of the general state public health expenditures.
Iran	Yes, revised in 2015	Yes, revised 2017	Government health department/ ministr are 3.6% of the total health budget. Mental hospital expenditures are 16.69% of the total mental health budget.

Discussion

At the moment, health care systems in the whole world have not yet identified patients with mental disorders completely; therefore, the complete treatment of these disorders is still to be achieved. In the best situation, one-third of patients suffering from mental disorders are treated in a number of high-income countries, and in the worst situation, less than 5% of patients are treated in low and middle-income countries (LMICs) (21, 22). This huge discrepancy between the real need for treatment and the real rate of treatment is known as the "treatment gap". A part of this gap is because of insufficient finances dedicated to mental health

care, which leads to a lack in human resources available to provide mental health services. In addition, it leads to a lack in available hospital beds for patients suffering from mental disorders (23). In every country, health care systems are influenced by several factors. One of these factors is the context information including cultural, social, economic and political factors (24). Today, numerous alternations have happened in the countries around the world, which have resulted in vast changes in the social, economic and cultural structures. Industrialization, the rapid growth of the population, increased urban inhabitance, decreased household, increased migration, increased marriage

age, etc. are among these alternations. On that account, mental health status of the societies has been changed because of the mentioned factors. For instance, unemployment and economic status are among the factors that affect mental health status of people (25).

The results from Table 1 showed that difference is observed in the context information of the studied countries. According to the findings, the highest number of populations belonged to Iran, Turkey, Iraq, Canada, Australia, Lebanon, and Norway, respectively. Australia, Canada and Norway are recognized as countries with high incomes. Therefore, these countries finance more of their gross domestic product on health care in comparison with low-income and middle-income countries. Considering the advanced economy of the mentioned countries, as well as their higher GDP compared with low-income and middle-income countries, financing in health care per capita is observed more in these countries. Among the countries, Norway had the highest GDP per capita according to the monetary value of purchasing power. Despite the fact that Iran is among the low-income and middle-income countries, it spends more than its share of gross domestic product (7.59) compared with Lebanon and Turkey. In addition, the share of the mental health care budget from the overall health budget is different in each country. Australia has the highest share (7.69%). Canada, in the next place, spent 7.2% of the overall budget on mental health care. Moreover, Iran spends 3% of the budget on mental health care, and this value is unknown in Iraq. Experts believe that the reason for the low share of budget in Iran is the presence of an unscientific management over mental health care system, lack of strong will, and a positive perspective for managing mental health services, as well as the presence of non-expert macro decisions which have prevented the budget increase, so a problem has emerged in policymaking and reviewing the laws of mental health services management in the country (26). Considering the mentioned factors, it seems that the prevalence of mental disorders is

lower in countries with more financing of their GDP regarding mental health care, as well as more spending on mental health budget from the overall health budget. Reports indicated that the prevalence of mental disorders in Australia is 12.2% (27), while the prevalence of mental disorders is 18.8% in Iraq (28). On the other hand, the economy of a country is affected by the political system (29). Iran, Lebanon, Turkey and Iraq are republic countries, while Canada, Australia and Norway have a royal constitution political system. Moreover, the management of health care system is centralized in Iran, Turkey, Lebanon and Iraq, while in Norway and Australia it is semi-centralized, and in Canada it is decentralized. The findings of this study indicated that countries with semi-decentralized and decentralized health management systems with a desirable socio-economic situation have created semi-decentralized structures in health care service. In addition, these countries have financed health care with an emphasis on local service management (the key role of municipalities and local organizations), which have led to a better mental health care status compared with countries with centralized management. In the following, the different dimensions of mental health policies in the countries will be discussed.

Financing health care services

Evidence shows that the financing system causes the emergence of several challenges in health care system (30). Financing in the countries under study includes a variety of taxation in Australia, Canada and Norway to individual payment in Iraq. In countries with a financing system based on taxes, it is possible for all patients to use mental health services at an affordable cost. However, the risk of low-quality service is present in those countries (31). As a part of the financing, there is private insurance in Canada, Australia, Turkey, Lebanon and Iran. However, there is no private insurance present in Norway and Iraq. Private insurance can provide coverage for patients who are not covered by public insurance or for people seeking complimentary services who are not covered by

the basic plan. It should be noted about the plans of mental health care that since public health plans provide comprehensive and costless coverage, there is little need for private insurance in this section. For instance, in Iran, integration of mental health care plans in primary health care plan, which is totally costless, has limited the need for private insurance in this section. Nevertheless, the presence of private insurance is considered a positive point because it lowers the need for individual payments of the patients which can sometimes be catastrophic. Social insurance is present in Iran, Lebanon, and Turkey. This mechanism integrates the financial support for health issues of their members, and on the other hand, it runs on donations of organizations, families, and government (32). Benefits of this system include high quality in provided services; however, there is no guarantee of providing care for everyone with a payable cost in this system. While the mechanism of individual payment is common in developed and developing countries, it is considered as the most inefficient method of financing in health care system. In addition, it is an incomplete system for risk integration (33) which can have negative effects on accessing health care services and benefiting from them (34). Among the countries of the study in Iraq, approximately 79% of costs are paid by individual payment of patients, which makes people suffer from huge payments. In Iran, this value was 59.7% in 2013 (35), which decreased to 10% since the execution of health system reform in the country (36). Countries in which budgets are based on tax-paying have provided more cost per capita to their citizens compared with countries with other methods of financing. Iraq has the highest individual payment of patients between the countries under study, making it the lowest per capita spending on health care.

Mental health care services (capacities and benefit, ownership)

Several types of private and public providers manage mental health care services in the countries under study. These institutes provide

different services of mental health care at different levels. Reports showed that there is a shortage in the number of human resources (psychiatrists) per 100000 population in all the countries. The severe shortage of human resources in the countries, especially in low-income and middle-income countries is totally proven; therefore, if effective actions are not done in this area, this shortage will be intensified (37). Evidence shows that the integration of mental health services into primary health care services and the development of social-based services can decrease the need for specialist human resources in the health care system (37). In recent years, there has been an increase in the number of personnel in mental health care system in high-income countries. However, in countries with low income, the number of personnel has not increased along with the population, and the number has even proportionally decreased (37). Overall, a shortage of personnel is present in all low-income countries and approximately two-thirds of high-income countries in the section of mental health care (37). Moreover, reports demonstrated that the distribution of hospital beds is uneven in all countries. The findings of this study showed that an insufficient distribution of hospital beds in large cities is seen in middle-income countries. Iran has a more favorable situation among similar countries in terms of facilities for outpatient mental health care. Research on the pathway of referral of psychiatric patients in the country shows that these patients refer to practitioners and treatment centers first, and a few of patients refer to traditional therapists or alternative therapies (38). Considering the high prevalence of psychiatric disorders in Iran (39) and the low number of hospital beds, the health care system fails to provide the required services to several patients (40). Regarding outpatient mental health services, the highest rate of services is seen in Australia and Norway, and Iraq has the lowest rate of facilities. Iran has 1.14 facilities for outpatient services per 100.000 mental patients. Outpatient facilities prevent unnecessary referral of the patient to hospitals and prevent the related

costs on the health system. In addition, these facilities provide services to patients based on their needs, which help them to be treated and save their time and money (41). It can be stated that Iran has a good status between the countries under study in terms of the number of social-based beds. In recent decades, different methods are introduced to provide social-based psychiatric health services. One of these methods is providing comprehensive services in social-based health centers. One feature of these centers is that they provide comprehensive facilities for prevention, diagnosis, treatment, and rehabilitation to patients. These facilities are independent of psychiatric hospitals (41). Several challenges and barriers are present in the path of development of mental health services in the countries around the world including neglect and violation of the rights of patients with psychiatric disorders, low priority of government for mental health, the need to design, monitor and regulate the health system, and need for leadership (42). These centers are recognized as the frontline of providing mental health services to patients of psychiatric disorders (37). In addition, considering the high cost-effectiveness of providing these services to psychiatric patients (46-43), all countries ought to remove the barriers in the way of developing these centers in their own country. The findings showed that all countries have a shortage in the number of psychiatric hospitals and psychiatric beds. In Iran, the low cost of bed per day in the psychiatric ward regardless of the high costs of this section in comparison with the other medical units has become challenging. Considering the fact that patients with psychiatric disorders need to be under surveillance for the whole life and the fact that this disease has a lifelong prevalence, the number of beds dedicated to the psychiatric section is not in line with the requirements of the society. On the other hand, the number of beds in psychiatric wards in public hospitals has increased by 60% between the years 2011 and 2014 in the world. Particularly, the number of psychiatric beds in public hospitals has increased more than eight times since 2011 in the Western

Pacific region (42). Meanwhile, based on the regulations of the Ministry of Health in Iran, 10% of hospital beds in public hospitals should be dedicated to psychiatric beds. This law has not been implemented since the costs of this ward are high (47).

Considering the crucial role of treatment and follow-up in individuals with mental disorders, it is essential to address the issue of stigma with particular attention in this patient group (48). In this regard, different countries use different methods. For example, Iran's solutions in this regard are: "emphasis on education and changing attitudes", "raising awareness", "promoting supportive services", "role of various organizations and institutions", "integrated reform of structures and policies to improve the performance of custodians", and "evidence-based actions" (49). The survey of public attitudes towards mental illness in Iraq has shown that community's opinion about the etiology of mental illness is broadly compatible with scientific evidence, but understanding the nature of mental illness, its implications for social participation and management remains negative in general (51).

Conclusion

Comparing mental health systems in the selected countries and Iran showed that there are a number of differences between countries in different aspects. While Iran has specific mental health policies, these policies are not implemented desirably because of the lack of executive guarantees such as methods of encouragement and punishment and the use of force. Therefore, it is suggested to take measures to ensure the executive guarantee of these policies and make sure that these policies are implemented practically. Since mental health care plan is integrated with primary health care plans in Iran, holding training and retraining courses for health care personnel and comprehensive health care centers seems to be necessary. During the implementation of this project, data were collected based on available and present library sources, and it is possible that a number of features of mental

health services in the countries under study have failed to be reviewed. This issue was one of the limitations of the present project.

Ethical Considerations

Ethical issues (including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancy) were thoroughly observed by the authors.

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Authors' contributions

M.T and Z.F designed research; R.T and Z.F, conducted the research; M.T analyzed data; R.T wrote the paper; and M.T had primary responsibility for final content. All authors read and approved the final manuscript.

Conflict of interests

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References

- World Health Organization. The World Health Report 2001: Mental health: new understanding, new hope: World Health Organization; 2001.
- Continue of the 10th Consecutive Annual Meeting of the Iranian Psychiatric Association Abstracts. Iranian Journal of Psychiatry and Clinical Psychology. 2010; 16(3):398-405.
- Saxena S, Sharan P, GARRIDO M, Saraceno B. World Health Organization's mental health atlas 2005: implications for policy development. World psychiatry. 2006; 5(3):179.
- Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. PLoS medicine. 2006; 3(11): e442.
- mohamadi k, Ahmadi K, Fathi Ashtiani A, Azad Fallah p, Ebadi A. Development of Mental Health Indicators in Iran. Iranian Journal of Health Education and Health Promotion. 2014; 2(1):37-48.
- Friedli L, World Health Organization. Mental health, resilience and inequalities. 2009.
- Patel V, Lund C, Hatherill S, Plagerson S, Corrigan J, Funk M, et al. Mental disorders: equity and social determinants. Equity, social determinants and public health programmes. 2010; 115.
- Faydi E, Funk M, Kleintjes S, Ofori-Atta A, Ssbunnya J, Mwanza J, et al. An assessment of mental health policy in Ghana, South Africa, Uganda and Zambia. Health Research Policy and Systems. 2011; 9(1):17.
- Saxena S, Thornicroft G, Knapp M, Whiteford H. Resources for mental health: scarcity, inequity, and inefficiency. The lancet. 2007; 370(9590):878-89.
- Verhaeghe M, Bracke P, Bruynooghe K. Stigmatization in different mental health services: a comparison of psychiatric and general hospitals. The journal of behavioral health services & research. 2007; 34(2):186-97.
- Prince M, Patel V, Saxena S, Maj M, Maselko J, Phillips MR, et al. No health without mental health. Lancet (London, England). 2007; 370(9590):859-77.
- Funk M. Mental health policy, plans and programmes: World Health Organization; 2005.
- Dlouhy M. Mental health policy in Eastern Europe: a comparative analysis of seven mental health systems. BMC Health Services Research. 2014; 14(1):42.
- Omar MA, Green AT, Bird PK, Mirzoev T, Flisher AJ, Kigozi F, et al. Mental health policy process: a comparative study of Ghana, South Africa, Uganda and Zambia. International Journal of Mental Health Systems. 2010; 4(1):24.
- Kassebaum NJ, Arora M, Barber RM, Bhutta ZA, Brown J, Carter A, et al. Global, regional, and national disability-adjusted life-years (DALYs) for 315 diseases and injuries and healthy life expectancy (HALE), 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. The Lancet. 2016; 388(10053):1603-58.
- Saraceno B, van Ommeren M, Batniji R, Cohen A, Gureje O, Mahoney J, et al. Barriers to improvement of mental health services in low-income and middle-income countries. The Lancet. 2007; 370(9593):1164-74.
- World Health Organization. WHO-AIMS Report on mental health system in the Islamic Republic of Iran.

- Tehran. Iran: WHO; 2007.
18. Taheri Mirghaed, M., Abolghasem Gorji, H., & Panahi, S. (2020). Prevalence of Psychiatric Disorders in Iran: A Systematic Review and Meta-analysis. *International journal of preventive medicine*, 11, 21. https://doi.org/10.4103/ijpvm.IJPVM_510_18
 19. World Health Organization. Mental health systems in selected low- and middle-income countries: a WHO-AIMS cross-national analysis. WHO; 2009.
 20. Organization WH. Mental health systems in selected low- and middle-income countries: WHO-AIMS cross-national analysis. WHO; 2010.
 21. Alonso J, Liu Z, Evans-Lacko S, Sadikova E, Sampson N, Chatterji S, et al. Treatment gap for anxiety disorders is global: Results of the World Mental Health Surveys in 21 countries. *Depression and anxiety*. 2018; 35(3):195-208.
 22. Degenhardt L, Glantz M, Evans-Lacko S, Sadikova E, Sampson N, Thornicroft G, et al. Estimating treatment coverage for people with substance use disorders: an analysis of data from the World Mental Health Surveys. *World Psychiatry*. 2017; 16(3):299-307.
 23. Thornicroft G, Semrau M. Health system strengthening for mental health in low- and middle-income countries: introduction to the Emerald programme. *BJPsych Open*. 2019; 5(5): e66.
 24. Coon D, Mitterer JO, Talbot S, Vanchella CM. Introduction to psychology gateways to mind and behavior. 12th ed: Belmont, Calif Wadsworth Cengage Learning; 2010.
 25. Nayebi H, Rameshgar H. Sociological explanation of the employment's impact upon mental health (an empirical study of employed and unemployed in Tehran). *Journal of Social Problems of Iran*. 2017; 8(1):51-78.
 26. Yasami mt, hajebi a, bagheri yazdi a. Qualitative analysis of mental hospitals problems from view point of their managers. *Social welfare*. 2006; 5(20):83-100.
 27. Harvey SB, Deady M, Wang M-J, Mykletun A, Butterworth P, Christensen H, et al. Is the prevalence of mental illness increasing in Australia? Evidence from national health surveys and administrative data, 2001-2014. *Med J Aust*. 2017; 206(11):490-3.
 28. Alhasnawi S, Sadik S, Rasheed M, Baban A, Al-Alak MM, Othman AY, et al. The prevalence and correlates of DSM-IV disorders in the Iraq Mental Health Survey (IMHS). *World Psychiatry*. 2009; 8(2):97-109.
 29. Porter D. *Health, Civilization and the State: A history of public health from ancient to modern times*: Routledge London; 1999.
 30. Organization WH. *The world health report 2000: health systems: improving performance*: World Health Organization; 2000.
 31. Saadati M, Rezapour R, Derakhshani N, Naghshi M. Comparative study of fair financing in the health insurance. *Journal of healthcare management*. 2017; 7(no 4):65-73.
 32. Organization WH. *Regional overview of social health insurance in South-East Asia*. WHO Regional Office for South-East Asia; 2004.
 33. Correa-Burrows P. Out-of-pocket health care spending by the chronically ill in Chile. *Procedia economics and finance*. 2012; 1:88-97.
 34. Hotchkiss DR, Hutchinson PL, Malaj A, Berruti AA. Out-of-pocket payments and utilization of health care services in Albania: Evidence from three districts. *Health policy*. 2005; 75(1):18-39.
 35. Keshavarz A, Kalhor R, Javadi A, Asefzadeh S. Estimating out of Pocket payments (oop) for medical cares in Qazvin province in 2009. *Hospital*. 2012; 10(4):71-7.
 36. Zarei E, Pouragha B, Khodakarim S, moosazadeh nasrabadi a. Out of pocket payment by inpatients of public hospitals after health sector evolution plan a cross-sectional study in tehran city. *Hospital*. 2017; 16(3):9-17.
 37. Kakuma R, Minas H, van Ginneken N, Dal Poz MR, Desiraju K, Morris JE, et al. Human resources for mental health care: current situation and strategies for action. *Lancet (London, England)*. 2011; 378(9803):1654-63.
 38. Sharifi V, Abolhasani F, Farhoudian A, Amin-Esmaeili M. Community mental health centers in Iran: Planning evidence-based services. *Iranian journal of psychiatry and clinical psychology*. 2014; 19(3):163-76.
 39. Noorbala AA, Bagheri Yazdi SA, Yasamy MT, Mohammad K. Mental health survey of the adult population in Iran. *The British journal of psychiatry: the journal of mental science*. 2004; 184:70-3.
 40. Bolhari J, Kabir K, Hajebi A, Bagheri Yazdi SA, Rafiei H, Ahmadzad Asl M, et al. Revision of the Integration of Mental Health into Primary Healthcare Program and the Family Physician Program. *Iranian Journal of*

- Psychiatry and Clinical Psychology. 2016; 22(2):134-46.
41. Sharifi V, Abolhasani F, Farhoudian A, Amin-Esmaeili M. Which of community-based services are effective for people with psychiatric disorders? A review of evidence. *Iranian Journal of Psychiatry and Clinical Psychology*. 2013; 19(2):79-96.
 42. Thornicroft G, Deb T, Henderson C. Community mental health care worldwide: current status and further developments. *World psychiatry: official journal of the World Psychiatric Association (WPA)*. 2016; 15(3):276-86.
 43. Patel V, Weiss HA, Chowdhary N, Naik S, Pednekar S, Chatterjee S, et al. Effectiveness of an intervention led by lay health counsellors for depressive and anxiety disorders in primary care in Goa, India (MANAS): a cluster randomised controlled trial. *Lancet (London, England)*. 2010; 376(9758):2086-95.
 44. Labhardt ND, Balo J-R, Ndam M, Grimm J-J, Manga E. Task shifting to non-physician clinicians for integrated management of hypertension and diabetes in rural Cameroon: a programme assessment at two years. *BMC health services research*. 2010; 10:339-.
 45. Chatterjee S, Leese M, Koschorke M, McCrone P, Naik S, John S, et al. Collaborative community-based care for people and their families living with schizophrenia in India: protocol for a randomised controlled trial. *Trials*. 2011; 12:12-.
 46. Chatterjee S, Naik S, John S, Dabholkar H, Balaji M, Koschorke M, et al. Effectiveness of a community-based intervention for people with schizophrenia and their caregivers in India (COPSI): a randomised controlled trial. *Lancet (London, England)*. 2014; 383(9926):1385-94.
 47. Saberi Zafarghandi M. Some of the challenges of mental health and addiction in Iran. *Iranian journal of psychiatry and clinical psychology*. 2011; 17(2):161-57.
 48. Mohamadi M, Mohtashami J, Arab Khangholi Z. Stigma towards patients with mental disorders. 3. 2020; 1 (1):61-72.
 49. Taghva, A., Farsi, Z., Javanmard, Y. et al. Strategies to reduce the stigma toward people with mental disorders in Iran: stakeholders' perspectives. *BMC Psychiatry* 17, 17 (2017).
 50. Tharaldsen KB, Stallard P, Cuijpers P, Bru E, Bjaastad JF. 'It's a bit taboo': a qualitative study of Norwegian adolescents' perceptions of mental healthcare services. *Emotional and Behavioural Difficulties*. 2017 Apr 3; 22(2):111-26.
 51. Sadik S, Bradley M, Al-Hasoon S, Jenkins R. Public perception of mental health in Iraq. *Int J Ment Health Syst*. 2010 Oct 11; 4:26. doi: 10.1186/1752-4458-4-26.