Policies and laws related to the integration of traditional and complementary medicine into the Iranian health system based on the WHO definition: A document analysis

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Abstract:

INTRODUCTION: The World Health Organization (WHO) recommends the integration of traditional medicine into each country's health systems by formulating and implementing national policies and laws in accordance with the country's own situation. This study aims to examine and analyze the national laws and regulations in Iran concerning the integration of traditional medicine into the health system of the country based on the WHO definition.

METHODS: Policy document analysis was performed through content analysis according to the WHO components for the integration of traditional and complementary medicine (T&CM) into health systems. All government and state websites were explored to locate policy-associated documents and laws. Only documents were ultimately included in the study that had been approved by a senior official of a ministry.

RESULTS: Nine policy documents related to T&CM were found. In these documents, reference was made to the availability of education (26 cases), regulation (20 cases), availability of therapies (17 cases), research (15 cases), and insurance coverage (7 items).

CONCLUSIONS: While policies and laws on the integration of T&CM in Iran have been formulated, this research showed that these policies have been implemented slowly or, in cases, not implemented at all. The government and the Ministry of Health and Medical Education need to take measures in this regard after they have evaluated the policies and programs. Given the tendency of the Iranian people to T&CM, the insurance of T&CM and the development of clinics and hospitals should be prioritized.

Keywords: Document analysis, health system, integration, Iran, traditional and complementary medicine

Introduction

The World Health Organization (WHO) categorizes health systems into three groups in terms of the way they treat with traditional and complementary medicine (T&CM). Integrative systems recognize T&CM and employ them in all areas of health-care provision (including national drug policy, education, research, regulation, provision of therapies, and insurance of treatment). Examples include China and South Korea. Inclusive systems recognize T&CM but have not incorporated them into all aspects of health care. Countries in this category are Japan, Germany, the United States, and England, among others. In countries with a tolerant system, the national health-care system is entirely based on allopathic medicine but has accepted
some of the traditional and complementary therapies in accordance with the law.\textsuperscript{[1]}

Some of the underlying contributors to the emergence of integrative care are the use of complementary and alternative medicine (the United States, 38.3%; Australia, 68.9%; Japan, 76%; Malaysia, 55.6%; and Singapore, 44.6%),\textsuperscript{[2]} inefficiency of allopathic medicine,\textsuperscript{[3]} and fewer complications found in complementary medicine than in allopathic medicine.\textsuperscript{[4]}

Regarding the high welcome to T&CM in some regions of Iran\textsuperscript{[5]} and given that the Iranian health system is described as inclusive by the WHO,\textsuperscript{[6]} it seems that the integration of this medicine into the health system of the country is one of the critical steps in order for people to enjoy T&CM services in Iran.

The Iranian government has focused on traditional medicine and has made efforts in this regard.\textsuperscript{[7]} The National Office of Traditional Medicine was established in Iran in 1981, and national policies for traditional, complementary, and alternative medicine were developed in 1996 with laws and regulations being passed in the same year.\textsuperscript{[8]}

The WHO recommends integrating traditional medicine in any country’s health system by formulating and implementing national policies and laws in accordance with the country’s own situation.\textsuperscript{[9]} As we require a proper policy-making for appropriate integration of conventional medicine and traditional medicine in Iran,\textsuperscript{[10]} our goal in this study was to examine and analyze the country’s documents and laws for the integration of traditional medicine in Iran based on the elements contained in the WHO-presented definition. In this study, we seek to answer the following questions:

1. Are there any national policy documents and laws related to T&CM formulated in Iran?
2. Is there any reference given in the documents and laws to the elements of regulation, education, research, insurance, and therapy availability, which are related to the integration of T&CM in the health system?

**Methods**

This study aimed to analyze the documents and policy formulations through content analysis and based on the WHO components for the integration of T&CM into the health system.

**Identification of policy documents**

To collect the required data, we searched the websites affiliated with the Supreme Leader, Presidency, Presidential Science and Technology Vice-Chancellor, Expediency Council, Islamic Consultative Assembly, Ministry of Health, and the National Office of Traditional Medicine. Moreover, Internet search was done to access the accuracy of information received in some cases.

Overall, the policies selected for analysis comprised of (1) policies and programs published in written form by official and governmental institutions on T&CM TandCM by the end of 2018, (2) policies that existed under the title of traditional medicine, Persian medicine, and traditional medicine and traditional Persian medicine, and (3) policies and laws that were generally related to health, but in the text, they referred to T&CM.

All policies are available on the official websites. All documents searched were approved by a senior official of the Ministry of Health.

**Policy document content analysis**

The documents were examined through content analysis. First, the documents were studied to see if there are any documents and laws related to T&CM incorporation into the Iranian health system. In the second phase, the documents and regulations were analyzed with a focus on any reference given to the elements of availability of education, regulation, availability of therapies, research on T&CM, and insurance coverage for T&CM products and services in line with the WHO definition. The documents and laws were reviewed several times, and the elements associated with each code were extracted. Two researchers analyzed the data. For further precision, the codes related to the integration of traditional medicine and the codes associated with the WHO elements were analyzed separately.

**Results**

A summary of the findings of the study is presented in Table 1.

**National policies**

There were ten policies and programs that referred to the T&CM. However, only nine policy documents were included in the study. One of the documents (i.e., the National Document for the Development of Strategic Technology of Herbs and Persian Medicine) was excluded, considering that it was edited and eventually approved as a national document of medicinal herbs and traditional medicine [Table 2]. In the context of these policies and laws, references were made to the integration of T&CM into the health system [Table 3].

**Regulation**

In the documents and laws of traditional medicine, twenty cases were identified to refer to regulation.
The cases concerned with updating, simplifying, and modifying the rules, for example, “revising, modifying, simplifying, and updating the relevant laws, regulations, and standards in the field of medicinal plants and herbal products;” monitoring T&CM, for example, “supervision of the Ministry of Health and Medical Education on the provision of traditional medicine services and herbal medicines;” and standardization, for example, “standardization and updating of diagnostic and therapeutic methods of traditional medicine and related products.”

Table 1: Summary of findings related to the integration of traditional and complementary medicine into the Iranian health system

| Number of policies and laws regarding traditional and complementary (herbal) medicine | Number of text phrases regarding availability of education | Number of text phrases regarding research | Number of text phrases regarding availability of therapies | Number of text phrases regarding regulation | Number of text phrases regarding insurance |
|---|---|---|---|---|---|
| 9 | 26 | 15 | 17 | 20 | 7 |

Table 2: Overview of the documents and laws related to traditional and complementary medicine

| Row based on the year of approval | Title of the document | Year of approval | Mention of the document to TM or CM | Availability of education | Regulation | Availability of therapy | Research | Insurance |
|---|---|---|---|---|---|---|---|---|
| 1 | The Law for the Establishment of the Ministry of Health and Medical Education | 1985 | X | X |
| 2 | Law on the Organization and Duties of the Ministry of Health and Medical Education | 1988 | X | X | X | X | X | X |
| 3 | Document of the Comprehensive Health Map of the Country | 2010 | X |
| 4 | Document of the Comprehensive Scientific Map of the Country | 2010 | X |
| 5 | The Fifth Five-Year Development Plan of the Islamic Republic of Iran | 2011 | X | X |
| 6 | The National Document of Medicinal Herbs and Traditional Medicine | 2013 | X | X | X | X | X | X |
| 7 | General Health Policies Announced by the Leader of the Revolution | 2014 | X | X | X |
| 8 | Approvals of the Expediency Council in the General Health Policy Section | 2014 | X | X | X | X | X |
| 9 | The Sixth Five-Year Development Plan of the Islamic Republic of Iran | 2017 | X | X | X |

TM or CM=Traditional medicine or complementary medicine

Table 3: Codes related to the integration of traditional and complementary medicine into the health system

| Code | Phrase from policy |
|---|---|
| Integration | The Ministry of Health and Medical Education is committed to taking measures for the integration of the approved Persian-Islamic traditional health services into the health system |
| | Development of traditional medicine in urban and rural health networks |
| | Drafting, approval, and implementation of the manual for the integration of traditional medicine and pharmacy in the health service provision system |
| | To support the use of traditional medicine services at all levels of referral and family physician system |

Availability of therapies

In the policies and laws of Iran, seventeen cases referred to the issue of availability of services. The documents emphasized the development of traditional medicine in service centers. Extracts from the documents were “the development of traditional medicine in urban and rural health networks” and “The Ministry of Health and Medical Education is committed to providing the necessary ground for the development of traditional medicine and the use of drugs and natural and herbal products.” To support, organize, and facilitate the establishment of traditional medicine therapy centers was one of the other issues mentioned in policy documents, for example, “supporting the establishment of standard and accredited institutions of traditional medicine and traditional pharmacy services.”

Health insurance coverage

Seven of the documents referred to the issue of insurance. The documents emphasized the insurance coverage for traditional medicine services and the protection of insurance companies from traditional medical services and products. Examples include “to expand the insurance coverage for traditional medicine services with an emphasis on the principle of social justice” and
“to prioritize the purchase of products of traditional medicine by the public sector and the insurance services for these products.”

Research
In the documents and laws, fifteen cases were identified to be concerned with T&CM. Emphasis was on the organization and launch of research centers, for example, “launching the National Research Institute and the International Center for Research and Development on Medicinal Herbs and Herbal Products;” support of research on traditional medicine, for example, “supporting effectively the prioritized basic, developmental, and applied research works in the field of traditional medicine and pharmacy;” and evidence-based traditional medicine services.

Availability of traditional and complementary medicine education
There were twenty six items on the topic of education in traditional and herbal medicine in the documents. The importance of educating health forces was highlighted, for example, “training of expert human forces by establishing tendency, courses, disciplines, and specialized interdisciplinary fields in various areas of traditional medicine.” Another issue emphasized in the documents and laws was to organize information resources concerning complementary and traditional medicine, for example, “establishing a database of herbs and herbal products in the country” and “establishing a database of available traditional drugs.”

Discussion
This study shows that national policies and laws related to T&CM have been formulated in Iran. The WHO elements for integrating traditional medicine into health systems are mentioned in the policies. The elements include regulation, research, insurance coverage, education, and availability of therapies, which have been considered in the context of policies and featured in high-level national programs.

National policy formulation
Among the main elements of the integration of T&CM into the health system is the issue of national policy formulation. In 1954, the Chinese central government began to support the Chinese medicine and founded the Chinese Medicine Hospital and University. In 1976, once again, the post-Cold War Chinese central government introduced a policy of “equal focus on traditional Chinese medicine and Western medicine,” and in 2008, the integration of Chinese medicine with Western medicine and the comprehensive Chinese medicine development were among the policies of the Chinese national government. In 1948, the first-order policy of the North Korean government was the integration of Koryo medicine with modern medicine in order to develop national medicine. The integration of traditional medicine with the national health system in Cuba, especially in the early 1990s, was strengthened because of the need for traditional medicine as a result of trade sanctions on drug imports in the country. In Iran, this issue has been included in the Sixth Development Plan and has been mentioned in the National Documentation of Medicinal Herbs and Traditional Medicine where the integration of traditional medicine into the health system is mentioned. The Ministry of Health and Medical Education took a preliminary pilot step in 2016 for integrating traditional medicine into primary health care.

Regulation
One of the main elements of T&CM policy is to legislate laws for service providers, and this is on the agenda of policy-makers in many advanced countries, including England, Australia, Canada, and the United States. In the European Union, the Herbal Medicinal Product Committee regulates the use of herbs from the European herbal collections. The committee publishes a monograph and a list of herbs along with scientific documentation on the safety and efficacy of herbal materials and their preparation for pharmaceutical use.

In 2006, the Office of Natural Medicine approved a regulation on the procurement and delivery of Persian medicine products. In 2007, the registration of herbal medicines and herbal medicine packaging regulations were passed, and in 2010, a regulation on the preparation of traditional medicine drugs was formulated. In Iran, the law has not yet defined how to use traditional and herbal medicine, and no proper information has been provided to the public. Expert practitioners without an academic degree still do not do their job legally.

Research related to traditional and complementary medicine
Research on T&CM is another element pointed out by the WHO for the integration of T&CM into the health system. Research institutes were set up in China in the 1950s. With the support of the Ministry of Science and Technology, the Ministry of Health, and 16 other ministries, China has consistently increased its investment in research and development on traditional medicine and has enhanced international diplomacy and cooperation since the late 2000s.

In 1998, the United States National Institute of Health established the National Center for Complementary and Alternative Medicine and provided funding for research
on complementary and alternative medicine.\cite{19} In 2007, the National Institute of Complementary Medicine was established to provide leadership and support for strategic research on complementary medicine and its translation into clinical and health policy.\cite{20}

As concerns with the research element, the Office of Persian Medicine has performed certain activities, for example, designing a research plan for T&CM, identifying research priorities in Persian medicine, organizing Persian medicine research workgroups, and setting up a system for recording unwanted complications or interactions of Persian medicine products to monitor safety. However, no substantive support has been provided for research projects, and there is a need for further coordination with the vice-chancellorery of research of the Ministry of Health, as well as training and justification of individuals in terms of the importance of research on Persian medicine.

**Availability of therapies**

Available services, both in hospitals and public (governmental) clinics and in the private sector, are among issues emphasized in the definition of the WHO for the integration of T&CM into the health system.

In the early 1980s, the number of Chinese hospital beds increased in traditional medicine hospitals, rising from 84,625 in 1949 to 2,412,362 in 1984 (about 28.5 times).\cite{21}

By 1990s, there were nearly 3000 Chinese hospitals devoted to traditional Chinese medicine in China, and >95% of Western medicine hospitals had traditional Chinese medicine departments and outpatient wards.\cite{22} According to a WHO report, in South Korea, there were 107 hospitals of Eastern medicine and 6590 clinics of Eastern medicine by the beginning of the 2000s\cite{23} (2002–2005).

In Iran, the number of public clinics providing traditional medicine services was 20 by the end of 2015, which is planned to amount to 150 by 2020, according to the plans made by the Ministry of Health and Medical Education.\cite{24} The number of hospitals in Iran that admit patients for hospitalization for traditional medicine therapy is two (Imam Reza Hospital in Mashhad and Shahid Rahnamoun Hospital in Yazd).

Given the tendency of Iranians to receive T&CM therapies, the development of hospitals and clinics of T&CM in the country seems to need to accelerate.

**Insurance coverage for traditional and complementary medicine**

The insurance coverage for T&CM services is another element of integration according to the WHO guidelines. Traditional therapies have been covered by insurance in China since 1951 and in South Korea since 1987. Acupuncture and cupping are usually fully covered by medical insurance in China, Taiwan, and Korea.\cite{25}

Even though Iran’s policies have highlighted the provision of traditional and complementary medical services, the medical visits made even by traditional medicine specialists are not covered by health insurance organizations and the welfare ministry.

**Availability of education**

Another element defined by the WHO for the integration of traditional medicine into the health system is the availability of T&CM education.

Chinese medicine higher education programs began in China in 1954. By 2013, according to the Chinese medicine governmental department, 45 Chinese universities and 215 other institutes provided Chinese medicine educational programs. Between 2012 and 2015, at the Beijing Traditional Medicine University, about 1010 students were majoring in Chinese medicine, Chinese pharmacy, and acupuncture at master and PhD levels.\cite{25}

There are 12 Korean medicine universities throughout Korea, and since 2013, 4632 students have been enrolled at the national university or one of the 11 private universities.\cite{26}

Iran is among the 30% countries worldwide that offers traditional medicine programs at the college level.\cite{27} To date, eight faculties of Persian medicine have been established. From 2007 to the end of the academic year of 2017, 615 students were enrolled at different levels in the field of Persian medicine. The number of admitted students in Persian medicine was 429, 71 were Ph.D. students in Persian medicine pharmacy, and 115 in history of medicine at master and doctoral levels.

There are few students with a doctoral degree in Persian medicine in Iran. Thus, an increase in the number of students in T&CM should be taken into consideration in educational planning, while the quality of education should not be overlooked.

**Strength and weaknesses of the study**

The presence of a senior official of the Ministry of Health and Medical Education, who is involved with the policy-making processes at the ministry, in this research team is one of the strengths of the study. In this article, no interview was conducted with the stakeholders in the integration of traditional medicine into the health system, which can be considered in later studies. Moreover, national and state policy documents were included in
the study, while the scientific organizations’ documents were not included.

Conclusions

The study shows that policies on the integration of T&CM in the health system have been formulated in Iran. The government and the Ministry of Health and Medical Education must prioritize their policies and programs of traditional medicine, and then evaluate these policies and programs to implement them. Regarding the tendency toward T&CM services in Iran, policy-makers need to insure traditional medicine services and products and establish clinics and hospitals for traditional medicine. To increase the efficacy of policies and programs, experts in T&CM need to pay attention to the quality of education and the increase in the number of T&CM students in universities.

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Conflicts of interest

There are no conflicts of interest.

References

1. World Health Organization. World Health Organization Traditional Medicine Strategy: 2002–2005. Geneva: World Health Organization; 2002.
2. Harris PE, Cooper KL, Relton C, Thomas KJ. Prevalence of complementary and alternative medicine (CAM) use by the general population: A systematic review and update. Int J Clin Pract 2012;66:924-39.
3. Ahmed S, Lawal S, Shaikh F, Ogugua F, Al-Hafeiti K, Saeed S, et al. Factors influencing the use of complementary and alternative medicine (CAM) for musculoskeletal disorders in the UAE. Gulf Med J 2013;2:84-91.
4. Menniti-Ippolito F, Gargiulo L, Bologna E, Forcella E, Raschetti R. Use of unconventional medicine in Italy: A nation-wide survey. Eur J Clin Pharmacol 2002;58:61-4.
5. Lotfi MS, Adib-Hajbaghery M, Shahsavaroop ZR, Gandomani HS. The prevalence of traditional and complementary medicine in the general population in Kashan, Iran, 2014. Eur J Integr Med 2016;8:661-9.
6. World Health Organization. Guidelines on Developing Consumer Information on Proper use of Traditional, Complementary and Alternative Medicine. Geneva: World Health Organization; 2004.
7. World Health Organization. Legal Status of Traditional Medicine and Complementary/Alternative Medicine: A Worldwide Review. Geneva: World Health Organization; 2001.
8. World Health Organization. National Policy on Traditional Medicine and Regulation of Herbal Medicines: Report of a World Health Organization Global Survey. Geneva: World Health Organization; 2005.
9. World Health Organization. World Health Organization Medicines Strategy 2004-2007: Countries at the Core. Geneva: World Health Organization; 2004.
10. Naseri M. Iranian Traditional Medicine and its Development Using World Health Organization Guidelines. Daneshvar 2004;11:53-66.
11. He K. Traditional Chinese and thai medicine in a comparative perspective. Complement Ther Med 2015;23:821-6.
12. Canaway R. Integration of traditional and ‘modern’medicine: Reflections on a visit to DPR Korea. Eur J Integr Med 2017;15:32-8.
13. Kadetz P. Challenging a universal approach to health care integration: China, Cuba, and the Philippines. Eur J Integr Med 2013;5:54-61.
14. Ministry of Health and Medical Education of Iran. Integration of Certified Iranian Traditional Medicine Services in Iran’s Primary Health Care System; 2016. Available from: http://behdasht.gov.ir/news/news/148251/. [Last accessed on 2019 May 22].
15. Griffiths S, Chung V. Development and regulation of traditional Chinese medicine practitioners in Hong Kong. Perspect Public Health 2009;129:64-7.
16. Vlietinck A, Pieters L, Apers S. Legal requirements for the quality of herbal substances and herbal preparations for the manufacturing of herbal medicinal products in the European union. Planta Med 2009;75:683-8.
17. Niromand MC, Abbassian A. The Status of Traditional and Complementary Medicine in the World. 1st ed. Tehran: Almame Publisher; 2015. p. 33-4.
18. Qiu J. China plans to modernize traditional medicine. Nature 2007;446:590-1.
19. Pearson NJ, Chesney MA. The national center for complementary and alternative medicine. Acad Med 2007;82:967.
20. Xu Q, Bauer R, Hendry BM, Fan TP, Zhao Z, Duez P, et al. The quest for modernisation of traditional Chinese medicine. BMC Complement Altern Med 2013;13:132.
21. Cai JF. Integration of traditional Chinese medicine with Western medicine – Right or wrong? Soc Sci Med 1988;27:521-9.
22. Scheid V. The globalization of Chinese medicine. Lancet 1999;354 Suppl 4:SIV10.
23. Qazvin University of Medical Sciences: Overall Goals and Objectives of the Health Sector in the Sixth Country Development Plan; c2019. Available from: http://file.qums.ac.ir/repository/Objectives of the Health Sector in the Sixth Country Development Plan.pdf. [Last accessed on 2019 May 24].
24. Park HL, Lee HS, Shin BC, Liu JP, Shang Q, Yamashita H, et al. Traditional medicine in China, Korea, and Japan: A brief introduction and comparison. Evid Based Complement Altern Med 2012;2012:429103.
25. Xue P, Zhan T, Yang G, Farella GM, Robinson N, Yang AW, et al. Comparison of Chinese medicine higher education programs in China and five Western countries. J Tradit Chin Med Sci 2015;2:227-34.
26. Han SY, Kim HY, Lim JH, Cheon J, Kwon YK, Kim H, et al. The past, present, and future of traditional medicine education in Korea. Integr Med Res 2016;5:73-82.
27. World Health Organization. World Health Organization Traditional Medicine Strategy: 2014-2023. Geneva: World Health Organization; 2013.