



Investigating the Rate of the Use of Persian Traditional Medicine Services in Tehran

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Abstract

Background: Despite all the advancements and publicity made in regard to classical medicine, every day more and more people are interested in complementary medicine. This study was designed and conducted to determine the relative frequency of the use of Persian traditional medicine services by the people of Tehran.

Methods: This cross-sectional study was conducted using the telephone survey method in Tehran. A total of 1824 samples were included in the study based on Cochran's formula. At first, by searching databases, including Google Scholar, PubMed, Embase, and internal sources, including the Iran Medex database, numerous medical texts and articles were reviewed in the field of using traditional medicine services. Then, interview guide questions were designed and asked over the phone. Finally, the data were extracted and subjected to quantitative analysis. Frequency and percentage of relative frequency were used to describe the study data.

Results: In the study, 62% (n = 1131) of the participants were women, and 60.5% (n = 1103) of the participants have turned to modern medicine for treatment and have also used traditional medical treatments. Also, 43.5% (n = 864) of the participants have used herbal medicines and their products; 43% (n = 616) of the participants have used Persian traditional medicine treatments as self-treatment based on their personal information; and only 46.5% (n = 666) have evaluated the therapeutic effect of Persian traditional medicine methods as "good."

Conclusion: The results of the study indicate the need for more emphasis on Persian traditional medicine alongside modern medicine, more organization and supervision of traditional medicine service providers in the country, and the creation of coherent and integrated management in this field.

Keywords: Traditional Medicine, Iranian Medicine, Use of Services

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Introduction

Nowadays, scientists have come to the conclusion that there is no absolute method to treat all diseases and that it is necessary for different schools and leaders of all medical schools to join hands without prejudice and make the patients and their treatments their main goal (1, 2). Ac-

ording to the definition of the World Health Organization, traditional medicine is a set of theoretical and practical sciences that are used in medical diagnosis, prevention, and treatment of physical and mental diseases, and social abnormalities and have been transmitted from one

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↑What is "already known" in this topic:

Researches show the satisfaction and acceptance of patients with traditional medicine. Despite all the advancements and publicity made about classical medicine, every day more and more people are interested in complementary medicine.

→What this article adds:

Although we have seen significant progress in the field of traditional medicine in recent years in the country, the special position of this type of medicine is still not clear, and education should be provided at the academic level and at the community level, relying on the creation of effective infrastructure in this regard, and this requires detailed planning, macropolicy and integrated management of all elements of medicine in the country.

generation to another in the form of speech or writing (3). Studies conducted in other countries indicate the significance of the use of these methods. Despite all the advancements and publicity made in regard to classical medicine, every day more and more people are interested in complementary medicine (4). Various research shows the satisfaction and acceptance of patients with traditional medicine. Studies in different parts of the world, including Russia, Sweden, Italy, Malaysia, South Korea, Australia, the United States, and Germany, have shown acceptance and satisfaction regarding traditional medicine (5-12). Researches in Iran have also confirmed this issue. According to the findings of this study, the studied population had a good level of satisfaction (9, 13).

Different studies conducted in 2013 also confirm the previous findings; so that a large part of the population of different countries such as 48% of the population of Australia, 70% of the population of Canada, 42% of the population of the United States, 38% of the people of Belgium, 75% of the people of France, 76% of the people of Singapore, and 50% of the people of Japan have used complementary medicine at least 1 a year, and it is noteworthy that in some countries, such as Canada, modern medicine services are free, while a fee must be paid to receive complementary medicine services (3, 12, 14-17). In Iran, the general statistics of the use of traditional medicine and complementary medicine are not known, but the growing trend towards traditional medicine is a topic that has been mentioned in the country's official reports (18).

According to the World Health Organization, every person is allowed to determine their own treatment method, and no group is allowed to directly or indirectly impose a method or methods to treat others, and its violation is actually a violation of human rights. Those in charge of this issue should be held accountable in front of human conscience if a method is made illegal without reasonable, rational justification, without going through study and research procedures, and if patients are indirectly denied the opportunity to use that way. It goes without saying that the opposite is also true (3, 18).

The important issue is how far the people's desire to use traditional medicine and the satisfaction created in them will go. One of the reasons for people's tendency toward traditional medicine is the growing dissatisfaction with the existing health and treatment services (17). Therefore, if traditional medicine cannot meet the expectations of clients, people will be inclined to another path. In Iran, for the realistic, correct, and useful use of traditional medicine, to prevent dangerous and even irreparable side effects, and to prevent the abuse of unqualified people in traditional medicine treatments, it is necessary to train physicians in the field of traditional medicine (18). Given that health is the most essential requirement that people have and that traditional complementary medicine is generally popular with people, especially in Iran where this interest is deeply ingrained in the culture, there is an excellent opportunity to revive the growth of Iranian complementary medicine. Knowing the trend of people's desire toward traditional medicine and the rea-

sons for their tendency toward this science helps medical universities in planning targeted services to people in this regard (19, 20).

Common treatment methods in traditional medicine include diet therapy, phytotherapy, bloodletting, wet cupping, leech therapy, dry cupping, and massage therapy (21-26). The purpose of this study was to determine the degree to which Persian traditional medicine services were beneficial to Iranians.

Methods

This was a cross-sectional study using the telephone survey method with the list-assisted sampling method and the computer-aided telephone interview method (CATI) in Tehran, Iran. To achieve the objectives of the study, at first, by searching the world's reliable databases, including Google scholar, PubMed, Embase, and internal sources, including the Iran medex database, numerous medical texts and articles were reviewed in the field of benefiting from traditional medicine services.

Statistical Population and Sampling Method

Based on the spatial pattern of development inequality in the 22 regions of Tehran metropolis, the regions were classified into 5 development zones in terms of economic and social development: developed, relatively developed, medium developed, less developed, and undeveloped. The metropolis of Tehran is divided into 8 regions and each region is divided into subgroups in terms of telecommunications. By correspondence and coordination with the General Department of Telecommunications of Tehran province, the landline numbers of 22 regions were counted and based on that, the landline numbers of the target areas were determined. Then, sampling was done from 5 areas of Tehran by stratified sampling and considering the dimension of the household of 4 people. The sample size was calculated through the descriptive sample size formula (Considering $P = 5\%$ and $d = 20\%$ P and $\alpha = 0.05$, the needed sample size was calculated to be 1824 people).

In cases where the participants did not answer the phone, the target number was called twice with an interval of 1 week, and if they did not answer again, they were registered in the list of non-answering numbers.

If the phone belonged to an establishment such as an office or business, it would be registered on a different list, and sampling from that number would be halted. Additionally, if the desired number declined to engage in the study, it would be added to the list of numbers that declined to participate.

To member check the correct location of the samples in the desired area, in addition to the information received from the General Directorate of Telecommunications, in the interview, the location of the residence in the 22 regions was also asked.

In this study, data collection was done by the main researcher who personally conducted a telephone interview. Since making calls to people's homes over the phone raises ethical questions, a female interviewer who was knowledgeable about Persian traditional medicine

was initially trained and used. If the interviewee gave their consent, provided a positive general response to the question, had no restrictions on the interview, and had no objections, the researcher conducted the interview after scheduling a time in advance. First, the study's purpose was explained to the participants, who were then questioned about their consent to participate in the study while being assured of the confidentiality of the information. If they gave their consent, participants were then asked to respond to questions about the use of Persian traditional medicine services (Appendix). To ensure the validity of the study, member check was used and 0.5% of the samples were contacted again.

Inclusion Criteria

- 1- The person was able to answer the phone and consented to participate in the study.
- 2- Regarding people younger than 18 years, one of the parents can could inform the interviewer if they were satisfied.

Exclusion Criteria

- 1- If the respondent did not agree to participate in the study, the desired number was recorded in the list of numbers that did not agree to participate.
- 2- If the phone was not answered, the desired number would be called twice with a gap of 1 week, and if there was no answer, they would be registered in the list of unanswered numbers.
- 3- If the phone belonged to offices, companies and the like, it would be recorded in a separate list and sampling from that number would be stopped.

Data Analysis

Finally, the data were extracted and subjected to quantitative analysis. To analyze the data, SPSS Version 26

was used. To describe the data, frequency and percentage of relative frequency were used.

Results

The demographic characteristics of the study participants are shown in Table 1.

The studied sample included 1131 women (62%) and 693 men (38%), and a large number of patients were in the age group of 21-30 years (24.8%). The mean age of patients was 37.28 years (SD, 14.9). Also, 19% of the patients had a high school diploma and 26% lived in medium or semi-developed areas.

The findings of the study show that 60.5% (n = 1103) of the participants in the study have referred to modern medicine for treatment and also used traditional medical treatments. Moreover, 18% (n = 329) of the participants used only traditional medicine and 21.5% (n = 392) used only modern medicine.

The findings of the study show that 37.7% of the study participants have used traditional medical treatments to treat back pain (Table 2).

The findings of the study show that 43% (n = 616) of the study participants have used Persian traditional medicine treatments as self-treatment based on their personal information. Also, 28% (n = 401) have been referred to a traditional medicine specialist, and 14% (n = 200) have been referred to a general practitioner (Figure 1).

The findings of the study show that 43.5% of the participants have used medicinal plants and their products as traditional medical treatment methods (Table 3). Meanwhile, 32.8% (n = 470) of the participants believed that their condition worsened after using Persian traditional medicine treatment methods, and 20.7% (n = 296) believed that it had no effect. This is while 46.5% (n = 666) of the participants acknowledged the therapeutic effect of Persian traditional medicine methods as "good."

Table 1. Distribution of Absolute Frequency and Percentage of the Relative Frequency of the Demographic Characteristics of the Participants in the Study (n = 1824)

Variable	Group	Number	Percent %
Gender	Female	1131	62.0
	Male	693	38.0
Age	<10	31	1.7
	11-20	202	11.1
	21-30	453	24.8
	31-40	418	22.9
	41-50	354	19.4
	51-60	205	11.2
	61-70	110	6.1
	>71	51	2.8
Education	Mean		37/28 years
	less than High school diploma	368	20.2
	High school diploma	348	19.1
	Associate degree	228	12.5
	Bachelor level	264	14.5
	Master level	308	16.9
	PhD and above	308	16.9
Residential development area	Developed	371	20.3
	Relatively developed	245	13.4
	Medium development	475	26.0
	Less Developed	342	18.8
	Undeveloped	391	21.4
Total		1824	100

Table 2. Absolute Frequency Distribution and Relative Frequency Percentage of the Problem or Complaint that Caused the use of Persian Traditional Medicine Services (n = 1432)

Problem	Number	Percent
Low back pain	540	37.7
Treatment of obesity	380	26.5
Indigestion-digestive problems	251	17.5
Hair Loss	30	2.1
Obstetrics and gynecology problems	43	3.0
Insomnia	56	3.9
Headache	44	3.1
Acne	27	1.9
Other	61	4.3
Total	1432	100

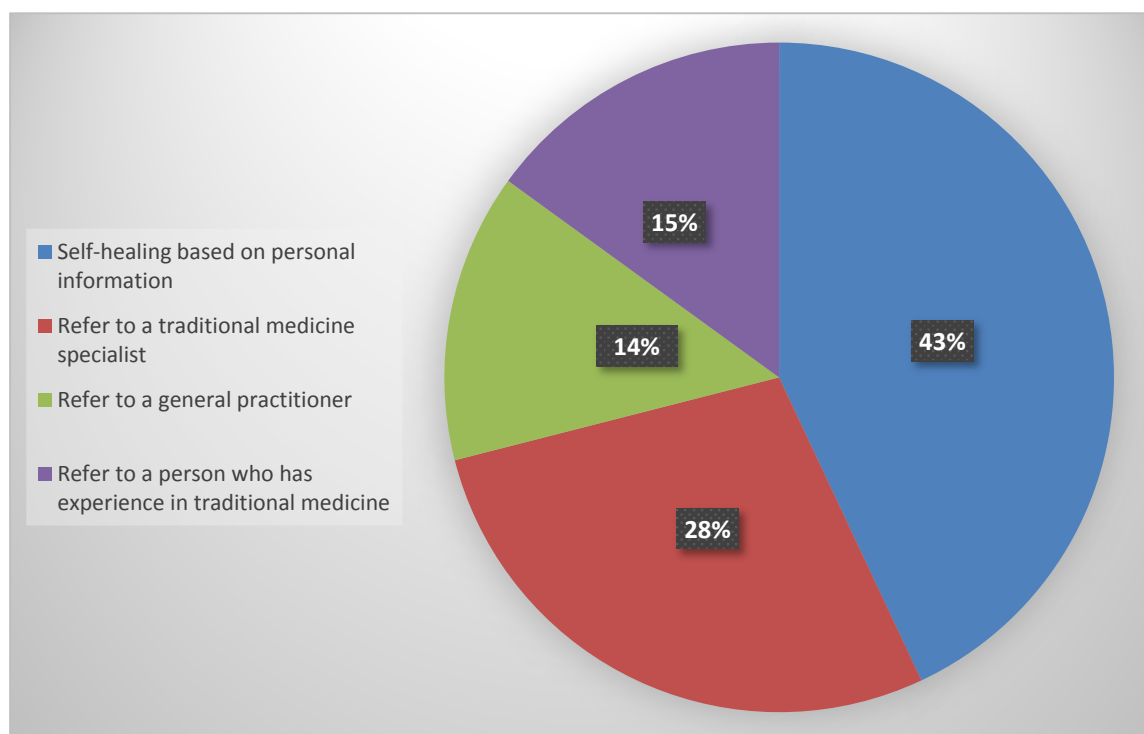


Figure 1. Distribution of the relative frequency (percentage) of the method of using Persian traditional medicine services

Table 3. Distribution of Absolute Frequency and Percentage of the Relative Frequency of Treatment Methods of Persian Traditional Medicine (n = 1432)

Persian Traditional Medicine Treatment Method	Number	Percent
Dietary recommendations	661	33.3
Medicinal plants and their products	864	43.5
Bloodletting	32	1.6
Wet cupping	183	9.2
Leech therapy	120	6.1
Dry cupping	67	3.4
Massage therapy	58	2.9
Total	1985**	100

**Some people have also used several methods at the same time.

Discussion

A total of 1131 women (62%) and 693 men (38%) participated in the study, and a large number of patients were in the age group of 21-30 years (24.8%). The mean age of patients was 37.28 years (SD, 14.9). Of the patients, 19% had a high school diploma and 26% lived in medium or semi-developed areas. In a study by Mahmoudian et al conducted in Isfahan, Iran, in 2013, 65% of the participants were women (9) and in a study by Hozni et al conducted in Rasht, Iran, in 2013, 63% of the participants

were women (27). The findings of the present study are consistent with these studies.

Of the participants in the study, 60.5% used both modern medicine and traditional medical treatments, 18% used only Persian traditional medicine for treatment, and 21.5% exclusively used modern medicine. In a study conducted by Penguin and Peltzer in 2019 in Indonesia to assess the prevalence of traditional medicine and traditional healer use in children based on a national population-based survey in Indonesia, the prevalence of traditional medicine

used as treatment was 6.2%, vitamins and supplements 19.9%, and modern medicine 61.1% (28). The findings of the above study are consistent with the findings of the present study.

The findings of the present study show that 32.8% of the participants in the study believed that their condition worsened after using Persian traditional medicine treatment methods and 20.7% believed that it had no effect. This is while 46.5% of the participants in the study acknowledged the therapeutic effect of Persian traditional medicine methods as “good.”

In a study conducted by Kaur et al in 2018 in Malaysia, the level of satisfaction of patients using traditional and complementary medicine services in public hospitals in Malaysia was determined. The results of the study showed that 99.4% of patients were satisfied with the services and most patients (91.8%) felt that traditional treatment had a positive effect on their health (29). Also, in a study conducted by Maqshoodi and Tavakolian, to investigate factors affecting patients' satisfaction with traditional medicine in Kerman, Iran, in 2013, the research findings show that the satisfaction rate was high (78%) and appropriate (30). Other national and international studies have also evaluated the level of satisfaction with traditional medicine as “well” (31-48). This difference in the findings indicates the increase in society's expectations of traditional medicine in recent years.

Also, the difference in the level of satisfaction in some foreign studies with the findings of the present study can be due to the lack of integrated management in the care of patients who are treated with traditional medicine in the country. Meanwhile, in a study conducted by Shrestha et al in 2012 in Nepal, the results show that most of the respondents (74.7%) had a low level of satisfaction (49). The results of this study are somewhat consistent with the present study.

The findings of the present study showed that 37.7% of the study participants used Persian traditional medicine to treat low back pain and 26.5% used it to treat obesity. A study was conducted by Nuridatulakma et al in 2018 in Malaysia to identify factors of using traditional medicine for public health and to determine elements related to the use of different types of traditional medicine after the diagnosis of chronic diseases. It was found that 62.8% of cancer patients, 53.3% of hypercholesterolemia patients, 49.4% of hypertensive patients, and 48.6% of diabetic patients use complementary medicine in their treatment (50).

Also, in a study conducted by Alwindi in Sweden in 2004, the first reason people went to a traditional medicine doctor was skeletal-muscular discomfort, followed by respiratory, cardiovascular, and digestive discomforts (5). This difference can be due to the various and common uses of traditional medicine in different countries. In a study by Maghsoodi and Tavakolian in 2013 to determine the elements influencing patients' satisfaction with traditional medicine in Kerman, Iran, joint pain emerged as the primary reason for patient referrals, followed by skin conditions and migraines (30). In a study conducted by Mahmoudian et al regarding the reasons for the referral

and the level of satisfaction of users of traditional medical treatment in Isfahan, Iran, in 2013, the most common reason for referral was back pain (9), which is consistent with the findings of the present study.

The findings of the present study showed that 43.5% of the participants in the study used medicinal plants and their products as traditional medical treatment methods. In a study conducted by Al-Windi in Sweden in 2004, the most used treatment method for massage was traditional medicine followed by acupuncture, chiropractic, and non-parapathy (5). Also, a study conducted by Pengpid and Peltzer in Indonesia in 2019, which assessed the prevalence of the use of traditional medicines and traditional healers in children based on a national population-based survey in Indonesia was 8.8%. The purpose of consultation with a traditional doctor was mainly massage (86.8%) and disease treatment (14.8%) (28). The difference between the findings of the present study and the above studies can be due to many social factors, poor health status, and lack of access to herbal medicines. Also, this difference in the findings can be due to the progress made in traditional medicine in recent years and the diversity of using different methods of traditional medicine in different countries.

The present study's findings show that 43% of the study participants have used Persian traditional medicine treatments as self-treatment based on their personal information. Also, 28% have consulted a traditional medicine specialist and 14% have consulted a general practitioner. A 2012 study in Ghana by Sato et al found that traditional medicine is common in sub-Saharan Africa, where more than 80% reported using it. It is claimed to be readily available, affordable, and acceptable. This study shows that while people are very satisfied with traditional medicine, it is often the second treatment solution (51). The results of this study are somewhat consistent with the present study.

Conclusion

These valuable results indicate the need for more emphasis on Persian traditional medicine alongside modern medicine as well as the need for culture building, provision of information regarding the Persian traditional medicine services, organizing and monitoring more traditional medicine service providers in the country, and creating a coherent and integrated management. This area is covered by the insurance of some common and effective services of Persian traditional medicine. In the meantime, educating society about Persian traditional medicine and training doctors in this field have a unique role. Finally, although significant progress in the field of Persian traditional medicine has been observed in recent years in the country, the special place of this medicine is still not clear, and education should be provided at academic and community levels, relying on the creation of effective infrastructure in this regard. Nevertheless, this requires detailed planning, macropolicy, and integrated management of all elements of medicine in the country.

Ethical Considerations

The permission of the ethics committee of the university was obtained before conducting the research, with the ethics code IR.SHAHED.REC.1398.106 approved on 23/12/2019. In all stages of the research, the principles of ethics in research announced by the Ministry of Health's Research Vice-Chancellor were observed. For the telephone interview, the oral consent of the participants was obtained after providing sufficient information about the necessity and objectives of the study, and the respondents were free to refuse or accept participation in the study. In this study, data collection was done by the main researcher and they conducted a telephone interview. Since telephone calls to homes have ethical considerations, therefore, at first, a female interviewer familiar with Persian traditional medicine was trained, and if the interviewee consented to participate in the interview, answered the questions positively, and had no restrictions for the interview, by setting a time in advance, the researcher would interview them. The questionnaires were completed without mentioning the names of the patients and the principle of anonymity and confidentiality of the patients' information was observed.

Authors Contributions

All the authors contributed to the study, D.T. and A.D.: Idea, data collection, and manuscript preparation. D.T, and E.E.: data analysis. R.M. Manuscript editing. All activities were supervised by A.D.

Conflict of Interests

The authors declare that they have no competing interests.

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Appendix

The interview guide questionnaire was attached and its questions are as follows:

At first, the participants were asked a general question: Did they need to use health services including prevention and treatment in the last 6 months? (Yes / No)

And if yes, has it been more than a month since they used the service?

And if the answer to the above question is positive, the following question will be asked. Have they used traditional medicine services to meet their needs?

And if the answer is positive, the following questions were asked.

- 1- What was the problem or complaint that caused the use of traditional medicine services?
- 2- To treat this problem, have they exclusively used traditional medicine or have they used traditional medicine along with modern medicine treatments?
- 3- Which of the following methods have been used for Persian traditional medicine?
 - A- Self-treatment based on your personal information
 - B- Refer to a traditional medicine specialist
 - C - See a general practitioner
 - D - Refer to a person who has experience in traditional medicine.
- 4- Which of the Persian traditional medicine treatments did you use to meet the above needs?
 - A- Dietary recommendations
 - B- Medicinal plants and their products
 - C- Bloodletting
 - D- Wet Cupping
 - E- Leech Therapy
 - F- Dry Cupping
 - G- Massage Therapy
- 5- How do you evaluate the therapeutic effect of referring to traditional medicine in that case?
 - A - It got much worse.
 - B - It got a little worse.
 - C - It had no effect.
 - D - There was a slight recovery.
 - E - He completely recovered.