Study of Patient Satisfaction with Persian Medicine in Referrals to Behesht Persian Medicine Clinic of Iran University of Medical Sciences in 2016

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Abstract

Background: Today, complementary and alternative medicine and a variety of traditional medicine, along with conventional medicine, are used to prevent and treat diseases. In Iran, Persian medicine is taught academically and its services are being provided to patients. The aim of this study is to evaluate the patient satisfaction with Persian medicine and the reasons for follow up or non-follow-up of treatment by patients referred to Behesht Persian medicine clinic of Iran University of Medical Sciences.

Methods: 394 cases were selected among patients who were treated by Persian medicine in the Behesht clinic in 2016. After extracting the data, a semi structured questionnaire regarding the degree of satisfaction with the treatment and the reasons for follow up or non-follow up of the patients was completed by making phone calls with participants. Data were then analyzed using software (Microsoft Excel 2016).

Results: Women were referred to the Persian medicine clinic more than men (72.5% versus 27.5%). The most common causes of referral were gastrointestinal diseases (15.1%) and musculoskeletal disorders (13.5%). 35% of the patients referred only once and did not follow the treatment. The most common causes of non-referral were the patient’s own lack of attention to taking medication and follow-up (24.2%), disease recovery (23%), lack of appropriate response to treatment (20.8%) and relocation of the therapist (11.6%). 91.4% of participants did not mention any complications and 95.84% were satisfied with the behavior of doctors. Overall, 82.6% of patients had a tendency to recurrent referral to the clinic.

Conclusion: Despite the problems with referral of patients to the Persian medicine clinic, there is a high inclining rate that reflects the satisfaction of the treatment. Therefore, planning to solve existing problems and facilitating the referral of patients can increase the satisfaction rate of Persian medicine. More studies are needed in other Persian medicine centers to evaluate patients’ satisfaction.

Keywords: Persian medicine; Patient satisfaction; Referral; Treatment issues

Introduction

Today, complementary and alternative medicine and a variety of traditional medicine, along with conventional medicine, are used to treat and restore health to sick people and prevent disease in healthy people or to enhance the quality of life, which is evidence of a promising future in this area [1,2]. Given that conventional therapies are based on traditional methods in health care systems, there is an increasing need to study and evaluate the effectiveness of these treatments [3]. On the other hand, since traditional medicine, complementary or alternative therapies have been formed in different cultures and different regions, their standards and methods of assessment, both at the national and international levels; have not been sufficiently developed [4].

Persian Medicine consists of the sum total of all the knowledge and practices used in diagnosis, prevention and elimination of diseases in Persia from ancient times to present. It seems that Persian scholars first conceived the theory of humors and then it became a world wide theme of medicine later. This theory was based on four humors including blood, phlegm, black bile and yellow bile which were the basis of diagnosis and treatment in that time [5]. Persian medicine is now provided in Iran by physicians who have passed the course of conventional medicine and can approach to the patient after considering his/her attitude and consent about the treatment method. Dealing with conventional medicine, Persian medicine can solve many health and medical problems, due to the history of several hundred years and high capacity of prevention and treatment [6].

In Persian medicine, in addition to abundant books containing valuable experiences of Iranian scholars that has been transmitted and used from generation to generation, in many references, examples of case reports or case series are available [7-9]. However, the important point in health systems is evidence gathering in certain frameworks and preferably randomized clinical trial studies. Unfortunately, the effects and responses to treatment in many cases of Persian medicine are not well understood in these frameworks, and research on their therapeutic effects is under development. Also, the limitations of the research method, such as low sample size, inappropriate control and...
non-specific interventions, prevent the extension of the results [10-12]. Critics of complementary medicine also insist on the lack of evidence to support these therapies [13,14].

In Iran, in recent years, there have been many studies about the impact and effectiveness of Persian medicine fundamentals and treatments, some of which have led to confirmation, and some have rejected these outlooks [15-32].

Since Persian medicine is nowadays academic in Iran, it is essential to validate, assess and evaluate what is presented. Since it has not been a long time that this course entered the university, research in this field requires guidance and prioritization for a variety of topics. Also, despite the significant development of the use of traditional medicine around the world, measuring the efficiency and benefits of traditional therapies is important for health care providers and health policymakers. In this article, which can initiate the next extensive studies, the patient satisfaction with Persian medicine and the reasons for follow up or non-follow-up of treatment by patients referred to Behesht Persian medicine clinic of Iran university of Medical Sciences is discussed.

Materials and Methods

This study was conducted at Behesht Persian Medicine clinic of Iran University of Medical Sciences in Tehran.

394 cases were randomly examined from patients who were visited in Behesht clinic in 2016. The first visit documents were reviewed for each patient and the following data were extracted:

- Demographic characteristics
- The patient's chief complaint
- Therapeutic protocols (including dietary, medication, lifestyle modification and manual treatments)

Then, a semi-structured questionnaire prepared by using the articles and previous experiences of Iranian professors, was fulfilled. Questions were asked from patients by telephone. Anyone who was not able to answer or was not available was excluded from the study. The questions were asked from the patient him/herself.

Each patient was followed up at least 6 months after the first visit. Causes of referral or non-referral of patients to the clinic for the second visit were asked by telephone. Then the collected data was analyzed using inferential statistics and Microsoft Excel 2016 software.

Results

In general, 393 cases of 5325 patients visited at Behesht Clinic in 2016 were randomly selected and studied. 317 of them were called by phone. In spite of repeated attempts to call with 76 patients, it was not possible. Of these, the mobile set of 20 patients were off, 30 of them did not cooperate with the researcher and did not answer the questions, the phone numbers of 15 were not registered in the file, and 11 had wrong phone numbers. The mean age of patients was 40.7% of which 27.5% were male and 72.5% were female (Table 1).

Of the 317 cases reviewed, 114 were new patients who had only one visit, 72 were visited twice, and 81 had three visits. Also, 50 participants were visited more than 3 times (Table 2).

In general, the patients presented various reasons for their lack of recurrence, the most common ones were the patient's own lack of attention to taking medication and follow-up (24.2%), disease recovery (23%), lack of appropriate response to treatment (20.8%), relocation of the therapist (11.6%), the intention of the patient to referral due to satisfaction with the treatment (10.09%), residence in a distant city from the clinic (3.1%) and treatment complications (2.2%) (Table 3). Chart 1 represents the most common causes of non-referral of patients to the clinic and chart 2 shows all of the factors reported by patients as the cause of non-referral.

In a survey of a total of 317 cases, the main complaint that led to referral to the Persian medicine clinic was digestive diseases (48 cases), musculoskeletal disorders (46 cases) and skin diseases (42 cases).

Of course, some complaints such as overweight or excessive weight loss or systemic diseases, such as diabetes and hypertension, etc. which was also categorized as general disorders, were the most common complaints with a total of 56 cases. Also, 10 cases were referred for cupping or massage therapy, as well as determination of the temperament which were categorized as miscellaneous diseases. Table 4 explains the patient complaints based on organ involvement.

Among the digestive disorders, flatulence with 73 cases and constipation with 66 cases were the most common complaints of patients (Figures 1 and 2). Among musculoskeletal diseases, various

| Participants | Amplitude | Percent |
|--------------|-----------|---------|
| Male         | 87        | 27.5    |
| Female       | 230       | 72.5    |
| Total        | 317       | 100     |

Table 1: Frequency of participants by gender.

| Visit time | Frequency | Percent |
|------------|-----------|---------|
| Once       | 114       | 36      |
| Twice      | 72        | Jul-22  |
| 3 times    | 81        | May-25  |
| More than 3 times | 50 | Jul-15 |

Table 2: Frequency of visit times of patients.

| Cause of non-referral | Percent |
|-----------------------|---------|
| 1 patient's own lack of attention to taking medication and follow-up | 24.2    |
| 2 disease recovery    | 23      |
| 3 lack of appropriate response to treatment | 20.8 |
| 4 relocation of the therapist | 11.6 |
| 5 satisfaction with the treatment (the patient intends to be visited again) | 10.09 |
| 6 Residence in a distant city from the clinic | 3.1 |
| 7 Treatment complications | 2.2 |

Table 3: The most common causes of non-referral of patients to the clinic.

| Chief complaint of the participants | Number | Percent |
|-------------------------------------|--------|---------|
| Skin, hair and nail diseases        | 42     | 13.2    |
| Eye diseases                        | 2      | 0.6     |
| Ear, nose and throat (ENT) diseases | 14     | 4.4     |
| Neurologic diseases                 | 22     | 6.9     |
| Psychiatric diseases                | 20     | 6.3     |
| Heart diseases                      | 4      | 1.2     |
| Disease of respiratory system       | 11     | 3.4     |
| Digestive diseases                  | 48     | 15.1    |
| Urogenital diseases                 | 8      | 2.5     |
| Musculoskeletal disorders           | 44     | 13.8    |
| Gynecologic diseases                | 36     | 11.3    |
| General disorders                   | 56     | 17.6    |
| Miscellaneous diseases              | 10     | 3.1     |

Table 4: Frequency of complaints of patients referring to the clinic.
The patient is satisfied with the treatment of Persian medicine and intends to visit again.

Figure 1: The columnar chart of the most common causes of non-referral of patients to the clinic.

Figure 2: The pie chart of all factors reported by patients as the cause of non-referral.

- Recurrence of illness after the end of treatment
- The difficulty of performing treatment recommendations
- personal problems
- satisfaction with the treatment, the patient intends to be visited again
- Interruption of the visit time with the time of attending school
- Patient dissatisfaction with treatment due to the number of prescribed drugs
- relocation of the therapist
- Residence in a distant city from the clinic
- Treatment complications
- lack of appropriate response to treatment
- disease recovery
- patient’s own lack of attention to taking medication and follow-up
- expensive drugs of Persian medicine
joint pains with 38 cases and muscle spasm with 12 cases were the most common complaints. The most prevalent complaints in skin diseases were skin dryness with 18 cases, itching and hair loss with 7 cases. Headache with 29 cases and stress disorders with 35 cases were the most common complaints among neurological and psychiatric diseases. Some of the most prevalent complaints related to each organ are listed in Table 5.

It was found out about compliance with the recommendations that 69 patients had better observance of lifestyle modification and dietary measures, 215 had a tendency to use drugs, 20 had better performed manual treatments, and 13 did not comply with any of the treatments (Table 6).

In reviewing the possible complications caused by measures and medications, no complication of lifestyle modification was reported. 24 participants believed that they had drug complications however the type of complication did not be revealed. 3 cases also believed that they were affected by the complications of cupping therapy or other manual treatments, and 290 reported no complications (Table 7).

Patients were also asked about satisfaction with the manner and behavior of physicians. 2 patients were dissatisfied with that while 11 reported tolerable behavior of physicians. The rest of the participants were satisfied with the manner of the physicians (Table 8).

### Measures of patient satisfaction

| Measures                      | Frequency | Percent |
|-------------------------------|-----------|---------|
| Lifestyle modification        | 69        | 21.7    |
| Drug therapy                  | 215       | 67.8    |
| manual treatments             | 20        | 6.3     |
| Failure to observe any measures | 13        | 4.1     |

### Table 6: Frequency of observance of therapeutic recommendations by patients.

| Complication                  | Frequency | Percent |
|-------------------------------|-----------|---------|
| No complications              | 290       | 91.4    |
| Drug complications            | 24        | 7.5     |
| Manual treatment complications | 3         | 0.9     |

### Table 7: Frequency of complications caused by Persian medicine treatments.

| Manner of physician | frequency | Percent |
|---------------------|-----------|---------|
| Too bad             | 1         | 0.3     |
| Bad                 | 1         | 0.3     |
| Tolerable           | 11        | 3.4     |
| Good                | 288       | 90.8    |
| Very good           | 16        | 5.04    |

### Table 8: Frequency of patient satisfaction with the manner and behavior of physicians.

| Patient tendency | frequency | Percent |
|------------------|-----------|---------|
| Yes              | 262       | 82.6    |
| abstainer        | 3         | 0.9     |

### Table 9: Frequency of patient tendency to referral to the clinic.

Patients were asked about the tendency to referral to the clinic and follow-up treatment of which 262 participants tended to referral, 52 were uninterested and 3 did not answer this question (Table 9).

### Discussion

In this study, 26.5% of participants were male and 72.5% were female which indicates that women are more likely to go to the Persian medicine clinic than men. Of course, this is not necessarily due to more incidence of disease in women or their more interest in Persian medicine, but since this study included reviewing the patient records of morning shift of the clinic, the educational shift, the referral of employed people to the clinic was less frequent at this time. The evidence is that several patients reported interruptions in the time of attendance at the clinic by working hours or school hours as a reason for not referring.

Regarding the frequency of visits, it should be noted that in Persian medicine, it is necessary for the patient to see his/her doctor several times. The purpose of those recurrent visits is to perform more diagnostic examinations and follow-up treatment. It means that sometimes, in the first visit, there are several distinct diagnoses requiring laboratory tests and medical imaging to achieve a definite diagnosis. Therefore, this should be considered in recurrent referrals. In many cases, it is necessary for the physician to assess the response to treatment within a certain period of time and based on this, he/she will make the necessary changes in approach to the patient. Therefore, in multi-stage therapies or in order to complete the logical follow-up of the treatment, referral is necessary and recommended. In these cases, recurrent referrals also increase the validity of treatment, however if the patient avoid referral to the doctor, misdiagnosis or incomplete treatment may occur which will lead to wasting of the cost and time of the patient, the doctor and the clinic, and unwanted complications may happen during this time. On the other hand, recurrent referrals may indicate that the patient has not been treated thoroughly and correctly.

### Table 5: Frequency of the most common complaints related to each system.

| System                        | Chief complaint | Frequency |
|-------------------------------|-----------------|-----------|
| nervous system                | Headache        | 29        |
|                               | Memory disorders | 9         |
|                               | Dizziness and true vertigo | 5 |
| Psychiatry                    | Stress disorders | 35        |
|                               | Depression       | 8         |
|                               | Obsessive compulsive disorder | 6 |
| Cardiovascular system         | Palpitation      | 17        |
|                               | Chest pain       | 3         |
| Digestive system              | Flatulence       | 73        |
|                               | Constipation     | 66        |
|                               | Stomach ache     | 11        |
|                               | Regurgitation    | 10        |
|                               | Excessive thirst | 13        |
|                               | Nausea           | 12        |
| Musculoskeletal system        | Arthralgia       | 38        |
|                               | Muscle spasm     | 12        |
|                               | Leg pain         | 7         |
| Gynecology                    | Menstrual disorders | 11   |
|                               | Ovarian cyst     | 7         |
|                               | Uterine fibroids | 7         |
| Urogenital system             | Urine frequency  | 9         |
|                               | Dysuria          | 4         |
| Skin and hair                 | Skin dryness     | 18        |
|                               | Itching          | 7         |
|                               | Hair drop        | 7         |
|                               | Acne             | 6         |
| Respiratory system            | Allergy          | 5         |
|                               | Cough            | 3         |
| ENT                           | Post nasal discharge (PND) | 50   |
|                               | Sinusitis        | 6         |
| Eye                           | Low vision       | 1         |
|                               | Xerophthalmia    | 1         |
| General                       | Chronic fatigue  | 26        |
|                               | Diabetes mellitus | 9      |
|                               | Anemia           | 12        |
In fact, there would be an error, a mistake or a problem in the treatment of the patient. Considering that the purpose of any medical activity is to reduce the incidence of disease and increase the outcome to the benefit of the patient, this kind of recapitulated referral means that capital, manpower, and equipment in the process of these activities are wasted without proper result. In addition, the patient will use the facilities that are considered for another patient when referring again [33]. Therefore, referral of patients should be targeted, i.e., useful and necessary referrals should be increased and referrals that are due to errors or mistakes or other problems should be reduced. Preventive factors should be identified to reduce the number of unwanted visits. Instead, we need to increase the number of referrals that are needed to follow-up and complete the treatment. In this study, 114 patients had only one visit, 21 of whom had been treated, and the rest were dissatisfied with the continuation of treatment for various reasons, which could lead to waste of time and energy for physicians and patients themselves. Therefore, recommendation and emphasis on referral by the doctor can be a useful way to encourage patients to continue their treatment. Other patients who did not have recurrence indicated various reasons such as lack of attention to taking medication, relocation of the physician, the cost of treatment, dissatisfaction with the type of treatment offered and long distance of clinic from the home, as a cause of non-attendance.

In general, the most prevalent chief complaints reported in this study were digestive problems and musculoskeletal disorders. In the study of Mohammadian et al. [6] in Isfahan, the most common cause for referral is low back pain and fatigue. In a study in Sweden, musculoskeletal disorders are the first cause of referral, followed by respiratory, cardiovascular and digestive disorders [34]. Therefore, it seems that the majority of patients referring to traditional medicine clinics in different regions are patients with musculoskeletal disorders as well as gastrointestinal problems. Perhaps one of the reasons of why gastrointestinal diseases are more common in traditional medicine clinics is the therapists’ emphasized attention to these problems and getting a more accurate digestive history. After gastrointestinal diseases, musculoskeletal disorders were just the most common complaints of patients that were consistent with the findings of conventional medicine. Arthritis is the second complaint of outpatient complaints in conventional medicine, and affects about 10% of the total human population as a result of chronic pain and inflammation of the joints [35-37]. Although this disease is not fatal, most patients, if left untreated, would suffer from chronic pain and complicated problems until the end of their life [24]. The most important remedy for this disease is prevention and lifestyle changes. Considering that there is currently no definitive treatment for this condition in conventional medicine and the pyramid of the population is also indicative of population aging, it seems that the use of preventive and therapeutic methods of Persian medicine are helpful for reducing the rate and severity of pain and symptoms of patients. This issue should be further investigated in future studies. Appropriate diet and healthy lifestyle are needed for every individual at any time of life. In this study, despite the fact that nobody had any problem or complication from the lifestyle modification, the rate of welcoming patients was lower and they tended to take drugs and pills. Because compliance with diet and lifestyle measures was difficult for patients due to the widespread of invalid lifestyle and even some who fully complied with the orders complained about it. Therefore, it is better to emphasize the patients that their current lifestyle is harmful to the health, and they need to change their lifestyle habits forever. In this case, patients will be less likely to complain of the difficulty of observing the measures.

The reason that some patients reported adverse drug reactions without knowing the type of complication was a defect in our questionnaire. Because from the Persian medicine point of view, the complications noted by patients can sometimes be part of the effects of the drug and is not a complication, such as disposal of waste substance through the intestines as diarrhea that patients mistakenly interpret it as a drug side effect. Such a defect must be corrected in future questionnaires.

In this study, it was found that satisfaction with the behavior of physicians was also desirable.

The following results are found from the review of various articles about patients’ satisfaction with traditional and complementary therapies:

In a study conducted in Italy, the satisfaction of those who used the complementary method was evaluated and it was shown that the most of referrals are middle-aged women with higher education and social status and the most satisfaction is seen in this group [38]. In evaluating the satisfaction of referrals to traditional Chinese medicine in Switzerland, the satisfaction of those who used both conventional medicine and complementary therapies is higher than those who used only conventional medicine. This difference is due to fewer side effects of traditional Chinese medicine, better doctor-patient relationship, longer care times, and a variety of patient-facing therapies [39]. In a study in Isfahan, the satisfaction of patients with acupuncture is also good [40]. In the study of Rossi et al. the effectiveness of complementary therapies on cluster headaches was observed, and satisfactory patient satisfaction is observed with complementary therapies and treatment costs [41]. A study in Germany reported that complementary medicine has been effective in preventing many diseases, including cardiovascular disorders, migraine and Alzheimer [42]. A review article by Furlan et al. [43] about the effectiveness of complementary medicine on neck and low back pain has confirmed its real impact. Of course, complementary medicine and alternative medicine did not reduce the relative disability compared to the control group. In our study, the majority of patients tended to refer to the clinic and follow up treatment, which indicates the satisfactory patient satisfaction with Persian therapies in the Beheshti Clinic.

As previously stated, long distance of the clinic from the patient’s residence was one of the reasons for not referring patients to the clinic, which could lead to a lack of re-prescription of the drug and discontinuing the treatment. Therefore, development of Persian medicine clinics and the fair distribution of drugs in the city or even at the national level is necessary. Reliable and extensive research on Persian medicine drugs will validate these drugs and pharmacies will be more likely to sell them. Also, the number of people who are reluctant to use Persian therapies due to uncertainty about them will be reduced.

Another problem that some people complained about was the high cost of treatment. Especially those who fully complied with the treatments were dissatisfied with the cost of providing medications. Therefore, given the long duration of treatment in Persian medicine, it is imperative that policy makers of the health system and Persian medical managers provide certain solutions to insure the Persian medicine services and herbal drugs.

Because of dissimilarity of the treatments, evaluation of the treatment efficacy could not be verified, which should be investigated in subsequent studies in specialized and categorized groups.

References
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