

# Viewpoints of Patients in Qazvin Towards Complementary and Alternative Medicine

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## Abstract

**Background:** We have little information on the degree of individuals' in Iran and their use of complementary and alternative medicine, its variations and the causes of people's tendency towards the treatments used in the methods mentioned above.

**Objectives:** In 2012, we set out to study the viewpoints of patients in Qazvin, Iran, examining how they feel about complementary and alternative medicine.

**Patients and Methods:** In a cross-sectional study, data were collected through the use of a questionnaire. A total of 293 patients who had been referred to the complementary and alternative medicine centers were surveyed. These centers practice methods such as cupping, homeopathy and acupuncture. The questionnaire was divided in two parts, demographic questions and main questions, in this particular study. The data were analyzed using SPSS software version 19 with  $P < 0.05$ .

**Results:** The mean age of the participants was  $37.2 \pm 13.3$ , and 60.8 percent of them were men. In all, 70.6 percent and 24.4 percent of respondents were married and single, respectively. About 58 percent had completed their undergraduate education. The cause of 31.3 percent of the participants' visits was mental sicknesses, 20.2 percent attended due to rheumatologic diseases, and 8.2 percent applied to the mentioned treatment centers seeking relief from skin-related diseases. Ninety-one percent of the participants reported using alternative and complementary medicine for its efficiency. The levels of high satisfaction they reported gaining from the center's homeopathy, acupuncture, and phlebotomy services were 17.2%, 16.5%, and 18.2%, respectively. In addition, 70 percent of the patients found the new treatment method to be quite successful, while 27 percent found it to be less effective than other approaches they had tried.

**Conclusions:** The people were receptive to the use of alternative and complementary medicine and their satisfaction level was high.

**Keywords:** Homeopathy, Acupuncture, Phlebotomy

## 1. Background

Today's medicine has undergone fundamental changes due to a mass of newly emerged hygienic issues, sanitary developments, cultural and philosophical developments, modern medicine's gaps in covering chronic illness, and a recognition of the emotional needs of patients (1). The growth in doctors' and patients' approaches to complementary and alternative medicine (CAM) is one of the most visible manifestations of the undergoing change in the structure of the health care system (1-3). This tendency in various cultures is based on different causes (4). The attention paid to holistic treatment, lifestyles, and patients' emotional and spiritual aspects are considered one of the most supportive ways (5). Currently, the growth of CAM services has no fundamental link to medical services, but this is considered a transitory situation and will soon lead to a philo-

sophical and scientific discussion of a unified structure (6, 7). In many great universities, the coordinated system of health services and treatment in the form of integrative medicine is currently being studied and taught (6). While modern medicine has focused on the matter of intervening in the treatment of special diseases and is missing the concept of self-healing, the integration of modern medicine and complementary medicine, known as "integrative medicine," seems to be the future of medicine (8, 9).

Many authentic research centers are active in this field, and a number of rules have also been set regarding the current field of medicine. CAM, especially in recent years, and in all scientific aspects, including methodological, economic, and legal ones, has experienced tremendous growth (9, 10). Various censuses have reported patients'

relative frequency of using these services as being between 40 and 69 percent by 1998, while this amount had been reported as just 34 percent in 1990 (11).

The application of CAM was reported in Australia at 52 percent in 2004, and at 38 percent in the US in 2007 (12). In developing countries, the deep connection between people's beliefs, holistic medicine, and their lack of regular access to essential drugs have been linked together. More than a third of world's population, and half of those living in poorer countries in Africa, do not have regular access to essential drugs. The low cost and the availability of traditional healers who employ complementary and alternative approaches are the main reasons for people's tendency towards these services (1, 13). In a study by Astin conducted in 1998, a suggestion is made that the main reasons for the growth of CAM application among patients are: their lack of trust in regular doctors, their hope to achieve better health, dissatisfaction with conventional therapies and the belief of these methods in the immortality of the soul and the link between the soul body and mind (14). Complementary medicine considers the human body a holistic organism with dynamic processes, one charged with trying to keep balance in the human body. Every part of the human body is connected to every other part, so an infection in one area may have been caused by an imbalance in another part of the body (6, 15).

The most recently emerging category of CAMs is full systems for health recovery that include acupuncture, chiropractic, herbal medicine, homeopathy, osteopathy and special healing methods (9, 12). Posadzki et al. (16) has reported that acupuncture, homeopathy, and relaxation therapy were the most popular methods of CAM used by physicians between 1 January 1995 and 7 December 2011. In the UK, CAM is most marked by patients' and consumers' use of herbal medicine.

The national center of complementary medicine (NC-CAM) divides CAM into five groups: alternative medicine systems, mental-physical interventions, biological based treatment, manipulative body-based methods and energy therapy (17). Acupuncture is the main and possibly the most important part of traditional Chinese medicine (18).

According to the ancient Chinese belief, important energy flows through every person. On the other hand, there are two opposite forces that exist in the human body, yin and yang. These are normally balanced and ultimately lead to a healthy human body. If this equilibrium is disrupted, the body's biotic flow is damaged and disease results (19, 20).

In a similar manner, phlebotomy is referred to as a traditional Arabic treatment, or as a form of traditional Persian medicine or Islamic medicine (9). It is derived from an older cupping method used in traditional medicine. In traditional medicine, Cupping refers to vacuuming certain parts of the human skin with instruments, such as a cupping tool, in order to achieve certain healing re-

sults (21). These traditional medical services are widely offered in Iran and the variety of these traditional methods are due to the presence of deeply rooted eastern and western traditional medicines in Iran. This is due, in part, to Iran's topology, as it is located between the great eastern and western civilizations (22).

Iran's health care system needs certainly accurate and precise field studies to identify the quantitative and qualitative aspects of its customers' needs and requests, in order to cover and guide these needs with an accurate plan and a clear philosophy.

## 2. Objectives

In 2012, we set out to study the viewpoints of patients in Qazvin, Iran, examining how they feel about complementary and alternative medicine.

## 3. Patients and Methods

By using a cross-sectional approach and questionnaires as the main tools for data gathering in this study, information was collected from 293 patients who had been referred to three treatment centers, including those focused on homeopathy, acupuncture, and traditional medicine. The questionnaire was prepared considering the currently existing data on the conducted research and experts' opinions on the reasons why patients turn to complementary and alternative medicine. During the pre-test, the errors that existed in the questionnaire were corrected and the instrument was ultimately approved. The validity of the questionnaire was also confirmed by using the content-validity and reliability test of Cronbach's alpha (0.82).

The questionnaire consisted of two parts. Demographic questions, such as respondents' age, gender, level of education and marital status, were asked. The main questions included the patient's reason for visiting the center, the patient's history of using common and conventional medicine, the level of satisfaction with their past use of conventional medicine, the causes for their tendency towards using complementary medicine, the used method's level of effect and satisfaction. Approximately 100 individuals from each medical center were randomly selected and, based on the gathered information from the participants, questionnaires were completed. A total of 293 questionnaires were collected. Ultimately, by collecting the information provided from the questionnaires filled out by patients who attended the above-mentioned treatment centers, the data were uploaded for analysis using SPSS software version 19 (Statistical Package for the Social Sciences, Chicago, Illinois). The final processed information, for the purposes of discussion and drawing conclusions, was obtained. The descriptive results were calculated as frequency, mean, and standard deviation and the analytical results were analyzed using the chi-square and Fisher exact test with  $P < 0.05$ .

## 4. Results

Among patients in this study who had been referred to complementary and alternative medical centers, 178 were women (60.8 %) and 115 were men (39.2 %). Their mean age was  $37 \pm 13.3$  years-old. The majority of patients in this study (30.4%) were between 20 and 30 years-old. According to the findings of this study, the most common reason for patients (31.1 %) visiting the treatment centers was due to mental and psychological (neurology-psychology) disorders, including: obsessive diseases, migraine headaches, lack of concentration (lack of confidence), sleeping disorders, irritability, anxiety, depression, excessive sleepiness, schizophrenia, epilepsy, multiple sclerosis, the necessity to quit smoking, the left side of the face paresis, anesthesia, immobilization of the limbs and curiosity (Table 1).

The most common reason why patients were referred

to the three medical centers mentioned above was the selected treatment effectiveness (42.8%). The second reason those patients had presented themselves to the three medical centers was their lack of response to conventional treatments (19.4%) (Table 2).

As is shown in Table 2, patients who attended the homeopathy centers were less satisfied with conventional treatment methods, and thus, the center was selected more frequently among these patients.

Patients at the acupuncture center were also less satisfied (20.5% of the time) with conventional treatments. Patients who attended the phlebotomy center had moderate satisfaction with conventional treatments (14.9%), and thus it was selected more than the other options presented in (Table 3).

**Table 1** The Total Frequency of Patients Visiting the Complementary and Alternative Treatment Centers (n = 293)<sup>a</sup>

Variables	Homeopathy	Phlebotomy	Acupuncture	Total	P value
<b>Gender</b>					0.001
Female	26.7(78)	11 (32)	23.3 (68)	61 (178)	
Male	7.5(22)	21.2 (62)	10.3 (30)	39 (114)	
<b>Marital status</b>					0.2
Married	24(70)	19.9 (58)	26.7 (78)	70.5 (206)	
Single	10.3(30)	12.3 (36)	6.8 (20)		
<b>Level of education</b>					0.1
Below high school diploma and diploma	16.4(48)	18.8 (55)	22.9 (67)	58.2 (170)	
Above diploma	17.8 (52)	13.4 (39)	10.6 (31)	41.8 (122)	
<b>Age, y</b>					0.1
Below 20	2.2 (6)	2.9 (8)	1.8 (5)	7 (19)	
20-30	12.4 (34)	11.9 (32)	8.4 (23)	32.6 (89)	
30-40	9.5 (26)	7.7 (21)	9.5 (26)	26.7 (73)	
40-50	6.6 (18)	4.1 (11)	5.3 (15)	16.1 (44)	
Above 50	3.3 (9)	5.1 (15)	9.2 (25)	17.6 (48)	
<b>The duration of illness</b>					0.1
Less than one year	4.9 (10)	6.3 (13)	6.8 (14)	18 (37)	
1-5	17 (35)	9.2 (19)	18 (37)	44.2 (91)	
5-10	12.6 (26)	3.9 (8)	9.2 (19)	25.7 (53)	
More than 10	3.4 (7)	2.4 (5)	6.3 (13)	12.1 (25)	
<b>The duration using conventional treatment</b>					0.1
Less than a year	10.7 (15)	4.3 (6)	12.9 (18)	27.9 (39)	
1-5	18.6 (26)	9.3 (13)	20.7 (29)	48.6 (68)	
More than 5	4.3 (6)	2.9 (4)	16.4 (23)	23.6 (33)	

<sup>a</sup>According to gender, marital Status, level of education, age, duration of illness, and the duration of using conventional treatments, by percent.

**Table 2.** The Total Frequency of Patients Visits (n = 293)<sup>a</sup>

Variables	Homeopathy	Phlebotomy	Acupuncture	Total	P value
<b>The reason of tendency towards using the treatment methods</b>					0.001
Effectiveness	26.7 (78)	11 (32)	23.3 (68)	61 (178)	
The lack of response to conventional treatments	7.5 (22)	21.2 (62)	10.3 (30)	39 (114)	
The cost of conventional treatments The side effects of conventional treatments	0	0	1.1 (3)	1.1 (3)	
The side effects of conventional treatments	2.5 (7)	3.6 (10)	5.8 (16)	1.4 (4)	
Misc.	1.4 (5)	0	0	11.9 (33)	
More than two reasons	10.2 (28)	3.3 (9)	10.2 (28)	23.5 (65)	
<b>The method of introduction</b>					0.001
Media	24 (70)	19.9 (58)	26.7 (78)	70.5 (206)	
Doctors	10.3 (30)	12.3 (36)	6.8 (20)	54.2 (156)	
Relatives	23.3 (67)	20.5 (59)	10.4 (30)	15.3 (44)	
Research	2.8 (8)	5.6 (16)	6.9 (20)	8.7 (28)	
More than one method	1.7 (5)	2.9 (11)	4.1 (12)	8.3 (24)	
<b>The reason for visiting</b>					0.1
Neurological and psychological	16.4 (48)	18.8 (55)	22.9 (67)	58.2 (170)	
Rheumatology	17.8 (52)	13.4 (39)	10.6 (31)	41.8 (122)	
Cutaneous	2.5 (6)	7.5 (18)	0	10 (24)	
Obesity	0	0.4 (1)	7.9 (19)	8.3 (20)	
Vascular and hematology	0.4 (1)	5.8 (14)	0	6.2 (15)	
Misc	4 (10)	0	2.1 (5)	6.2 (15)	
More than one reason	5.2 (13)	1.2 (3)	0.8 (2)	7.2 (18)	
<b>Previous use of conventional methods</b>					0.03
Yes	20.2 (57)	14.2 (40)	28.7 (81)	63.1 (178)	
No	14.5 (41)	16.7 (47)	5.7 (16)	36.9 (104)	

<sup>a</sup>According to the reason for their tendencies towards the used method; the method of introduction; the reason for visiting the medical centers; and the previous use of conventional methods.

**Table 3.** The Frequency of Patients Who Attended the CAM Centers (n = 293)<sup>a</sup>

Variables	Homeopathy	Phlebotomy	Acupuncture	Total	P value
<b>The level of satisfaction from conventional treatments</b>					0.001
None	26.7 (78)	11 (32)	23.3 (68)	61 (178)	
Low	7.5 (22)	21.2 (62)	10.3 (30)	39 (114)	
Average	30.1 (75)	0.8 (2)	5.2 (13)	30.1 (75)	
High	5.2 (13)	8.8 (22)	0.8 (2)	12.9 (32)	
<b>Previous use of existing methods</b>					0.001
No	24 (70)	19.9 (58)	26.7 (78)	70.5 (206)	
Yes	10.3 (30)	12.3 (36)	6.8 (20)		
<b>Receiving services from doctors and non-doctors</b>					0.001
Doctors	16.4 (48)	18.8 (55)	22.9 (67)	58.2 (170)	
Non-doctors	17.8 (52)	13.4 (39)	10.6 (31)	41.8 (122)	
Both	0	0.7 (2)	0	0.7 (2)	
<b>The efficiency level of the method</b>					0.005
Low	2.2 (6)	2.9 (8)	1.8 (5)	7 (19)	
High	12.4 (34)	11.9 (32)	8.4 (23)	32.6 (89)	
<b>Recommending the existing method to others</b>					0.7
Yes	4.9 (10)	6.3 (13)	6.8 (14)	18 (37)	
No	17 (35)	9.2 (19)	18 (37)	44.2 (91)	
<b>The level of satisfaction from the used method</b>					0.001
Low	10.7 (15)	4.3 (6)	12.9 (18)	27.9 (39)	
Medium	18.6 (26)	9.3 (13)	20.7 (29)	48.6 (68)	
High	4.3 (6)	2.9 (4)	16.4 (23)	23.6 (33)	

<sup>a</sup>According to their level of satisfaction with conventional treatments, previous uses of existing methods, receiving medical services from doctors and non-professionals, the method's level of efficiency, recommending the existing method to others, and their level of satisfaction with the used method.



## 5. Discussion

This study, conducted in 2012, examined 293 patients in the city of Qazvin, Iran who had been referred to CAM centers for homeopathy, acupuncture, and phlebotomy with the aim of examining the causes of patients' attendance the centers.

It was reported in previous studies the prevalence of CAM use among women between the ages of 34-35 years-old, with 16 years of education and above, is high (16, 23). Posadzki and Ernst (23) reported that more than 50% of climacteric women used CAM treatments. In our study, women were among the greater percentage of the patients who had presented themselves to the mentioned treatment centers. All were between 16 and 82 years-old, while the majority of patients were between 20 and 30 years-old. The women we spoke with applied more readily and willingly to homeopathy centers, while men applied to phlebotomy clinics for treatment. One of the social reasons seems to be that women prefer to use less aggressive treatment methods (22). In our study, the number of educated participants was greater than uneducated ones, and people who applied to homeopathy clinics had higher education levels than those attending elsewhere. Perhaps this indicates that people are less informed about homeopathy, and this causes those who wish to use this kind of treatment method to become well-informed about it.

In Rolniak et al. (21) research there is no evidence leading to a significant difference between people who use CAM's individual-social traits and those who do not use it. According to a study conducted at Iran University, it was reported that, with the increase in people's level of education, their clearly positive attitude towards complementary and alternative medicine decreased (24).

In our study, the most common reason for patients to be referred to the clinics was neurological and psychological illnesses, and homeopathy centers were the most applied places for treatment among patients. Rheumatic diseases ranked second and in that case, acupuncture clinics were the most referred places among patients. Skin disorders were ranked next according to the frequency survey and phlebotomy clinics saw most of these referrals. Obesity was the next reason why patients visited acupuncture centers, while homeopathy clinics had no referrals and only one case applied to the acupuncture center. Patients who suffered from hematological diseases such as polycythemia and anemia were referred to the phlebotomy center. In a study in Tehran, the most common diseases among patients using phlebotomy as a means of treatment were: coagulation disorders (blood concentration), back pain, other skeletal disorders, acne, and other skin diseases. In this research, Tehrani (24) showed that complementary and traditional medicine were often used for the prevention and treatment of musculoskeletal and psychiatric problems (migraines and anxiety), in which the results were similar to our own study. In Malaysia,

the use of CAM has a growing interest among cancer patients (3). In another study, the historic use of traditional medicine among patients who suffer from cancer was reported (25). In our study, the reason for patients' approach to complementary and alternative medicine in the three treatment centers was due to the treatments' high levels of efficiency, compared with conventional treatment methods, in the participants' views. The next reason was the lack of proper response to conventional treatments and the side effects of those treatments. In our study, 63 percent of the patients had used conventional treatments for one to five years, and 36 percent of them were less satisfied with using conventional medicine. In the research conducted by Herman, lower costs were one of the most important reasons why patients sought out complementary medicine and treatment, compared with conventional treatments. Other reasons, such as having faith in and satisfaction with CAM and the time consuming nature of conventional treatments were among common reasons for this approach (26). In our research, the costs of conventional treatments were the least-cited reason for seeking CAM treatment.

In research conducted on patients who had been diagnosed with cancer, the most important reason for their tendency towards complementary medicine was for pain relief, immune system boosts, symptom management, increases in the feeling of physical well-being and the desire to lead a life without any danger (27). In our study, the most familiar procedure in all three centers was made familiar through the relatives of the patient and then his or her doctor. The media played the most significant role in patients' familiarity with acupuncture, and was also the most noticeable in introducing this method, in comparison with homeopathy and phlebotomy. Similarly, 72 percent of individuals in our study said that the used method was effective. In a study conducted by Rosenberg et al. (28) at the University of Florida, 52 percent of CAM users reported a recovery from chronic pain and 54 percent also unanimously agreed that CAM treatments helped to relieve their pain.

This study was conducted for the first time in Qazvin, Iran. This study considered common CAM approaches, but there is no comparison group of patients referred to medical centers with an allopathic approach. The study relies solely on the responses of patients, without the use of other tools to prove the effectiveness of complementary medicine.

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## Footnote

**Authors' Contribution:** Study design and data analysis: Ameneh Barikani; Manuscript design: Akram Beheshti; writing: Maryam Javadi; data collection: Sepideh Farahani; manuscript design: Firooz Barikani.

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