



Assessment of the Tendency to Use Complementary and Alternative Medicine in Patients Referring to Ahvaz Urban Pharmacies



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ABSTRACT

Background: Complementary and alternative medicine is defined as “diagnosis, prevention, and treatment, which complements mainstream medicine by contributing to a common whole, by satisfying a demand not met by belief or by diversifying the conceptual frameworks of medicine”. Alternative medicine may include acupuncture, homeopathy, phytotherapy, leech therapy, and other methods. According to the public popularity of these methods, we conducted this study to investigate the views of the public about these treatments.

Methods: To perform this study, we designed a questionnaire scoring on a 10 five-point Likert scale. The goal of the study was explained to patients before filling out the questionnaire.

Results: In this research, 100 cases with an average age of 30±8.47 years were studied. One percent of the studied population was uneducated, 41% had a diploma, and 58% had a university degree. Respectively, 28%, 10%, 40%, 15% of the participants expressed their confidence in Iranian traditional medicine as follows: very high, high, medium, and low, and 7% did not believe in alternative medicine. Also, 24% of respondents had used at least one of the methods of alternative medicine, like leech therapy. In addition, 33% usually and 42% sometimes used herbal tea for relieving their physical and mental illness without consulting the physician, and 25% never used it without consulting. According to the opinion of respondents, 69% believed that both modern and traditional medicine is effective, 10% expressed that modern medicine is more effective than traditional medicine, 9% were not familiar with traditional medicine, and 7% stated that traditional medicine is more effective than modern medicine.

Conclusion: According to the results, most of the participants believed in alternative methods, especially along with modern medicine. For this reason, accurate and scientific education about alternative methods seems necessary for the healthcare team and the public.

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1. Introduction

Complementary and Alternative Medicine (CAM) is a broad domain of healing resources that exist mostly outside the institutions where conventional health care is taught and provided. It also encompasses all health systems, modalities, and practices and their accompanying theories and beliefs. CAM is an increasing feature of healthcare practice. However, considerable confusion remains about what exactly it is and what position the disciplines included under this term should hold about conventional medicine [1].

Some standard methods of CAM are acupuncture, homeopathy, phytotherapy, and leech therapy [1, 2]. Acupuncture is a traditional Chinese alternative medicine that its effectiveness has been studied and proved in several studies [3, 4]. Homeopathy is based on the idea that “like cures like”. Homeopathy uses highly diluted substances to heal a wide range of disorders, and it is a popular complementary therapy today so that 200 million people take homeopathy drugs worldwide daily [5]. Phytotherapy, the use of plant-derived medications in the treatment and prevention of disease, has been used for a long time; thus, the World Health Organization (WHO) accredited it as an essential factor in primary health care [6].

Leech therapy is a traditional medical procedure that is frequently employed for the treatment of chronic pain syndromes in European, Arabian, and Asian naturopathy [7]. Leech therapy is useful in promoting the revascularization of skin grafts [8].

According to the results of studies, the prevalence rate of CAM therapy has increased worldwide; for example, CAM users in the European Union (EU) were mainly women. They have widely used it for musculoskeletal problems [9]. In Sweden, a study on cancer showed that more than half of all participants thought that cancer care providers should be able to discuss (58%) and consider (54%) the use of CAM modalities in cancer care [10]. In the US (38%), Britain (26%), France (68.9%), Australia 48%, and Canada (17%) people have used at least one method of CAM [11].

In a study in Shiraz (south of Iran), it was found that patients (31.3%) had used one of the CAM methods, of which using herbal medicine (89.9%) was the most commonly used method [12].

A study at the Tehran University of Medical Sciences showed that more than 70% of students are not aware of

traditional medicine, and only 37% had a positive attitude toward CAM [12]. A study in the US showed that 75% of physicians had never referred a patient to a CAM practitioner, and in 63% of patients initiated discussions about the benefits and risks of CAM therapy [13]. The high prevalence rate of CAM therapy among patients and the need for increasing the knowledge about CAM led to the examination of the prevalence of this method in Ahvaz.

2. Methods

To perform this study, we designed a questionnaire consisting of 10 questions scoring on a five-point Likert scale. The questionnaire was distributed to patients in 7 urban pharmacies in Ahvaz from January to March 2018. These pharmacies were selected from different parts of the city in terms of socioeconomic status. The goal of the study was explained to patients before filling out the questionnaire and they were informed about volunteer participation. The data were analyzed using IBM SPSS 20.0 software, and the proportion and percentages were used to describe the data.

3. Results

In this research, 100 people participated and had an average age of 30 ± 8.47 years. The youngest participant was 15 years old, and the oldest was 61 years old. Thirty-three percent of the study population were men, and 67% were women. Regarding education, 1% of the studied population was illiterate, 41% had a diploma, and 58% had a university degree, and 27% were University students. Respectively, 33%, 4%, 45%, 11%, and 7% of participants stated that they have used Iranian traditional medicine to control their illnesses as follows: almost, often, sometimes, seldom, and never.

About 41% strongly agreed or agreed with the efficacy of different methods of CAM, like leech therapy, acupuncture, medicinal herbs, homeopathy, specific diets (such as vegetarians) to control or treat diseases (Figure 1). According to the opinion of respondents, 38% believed that both conventional and CAM are effective, 15% did not have acquaintance with traditional medicine, and 12% stated that CAM is more effective than modern medicine (Table 1). About 52% believed that CAM has fewer adverse effects than conventional medicine (Figure 2).

4. Discussion

What comes out of the results of this article and other papers was the propensity of the high number of people

Table 1. Opinion of respondents regarding the tendency to use complementary and alternative medicine

Items	%				
	Almost Always/ Strongly Agree	Often/ Agree	Sometimes/ Undecided	Seldom/ Disagree	Never/Strongly Disagree
1. I am familiar with alternative medicine	26	9	50	12	3
2. I use Iranian traditional medicine to control my illnesses	33	4	45	11	7
3. Iranian traditional medicine is more effective than modern medicine	7	5	69	9	10
4. Leech therapy can be helpful in controlling diseases	34	6	30	20	10
5. Acupuncture can be effective in treating diseases	38	10	33	15	4
6. I consider the use of medicinal herbs to be effective in the prevention and treatment of diseases	36	16	24	16	8
7. I am familiar with homeopathy and I find this treatment effective in treating some diseases	21	11	31	22	15
8. I find the use of specific diets (such as vegetarians) to be useful without the need for conventional medicine to treat some diseases	32	0	53	11	4
9. In my opinion, complementary and alternative medicine is effective along with conventional medicine	27	11	39	18	5
10. In my opinion, complementary and alternative medicine has less adverse effects than conventional medicine	26	28	26	16	4



using complementary medicine. Differences in the rate of public use of complementary medicine in various studies are directly associated with cultural differences, nature, and people’s access to health services [14].

This increase in the use of complementary medicine has created an independent, out-of-control system with a massive financial cycle. For example, estimates have shown that only in the US, 13 billion \$ annually is spent on complementary medicine [15]. This increase in the

prevalence of the use of complementary medicine has several causes, including lower side effects, the inefficiency of conventional medicine in the treatment of diseases, concerns about the side effects of traditional medicine, a weak relationship between physician and patient, and the easy access to various types of CAM [16].

It has also been shown that most doctors (87%) believe that the use of complementary medicine between their patients is common, and many (42%) reported that they

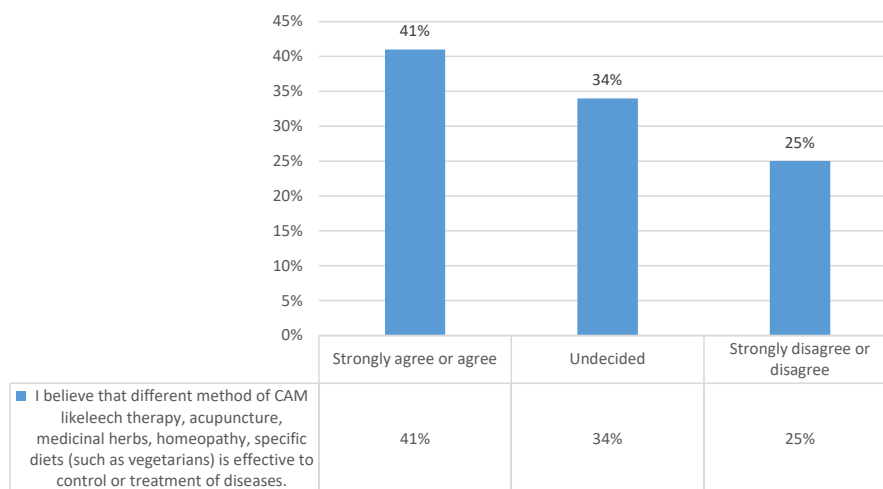


Figure 1. The subjects’ opinion about the efficacy of different methods of Complementary and Alternative Medicine (CAM).



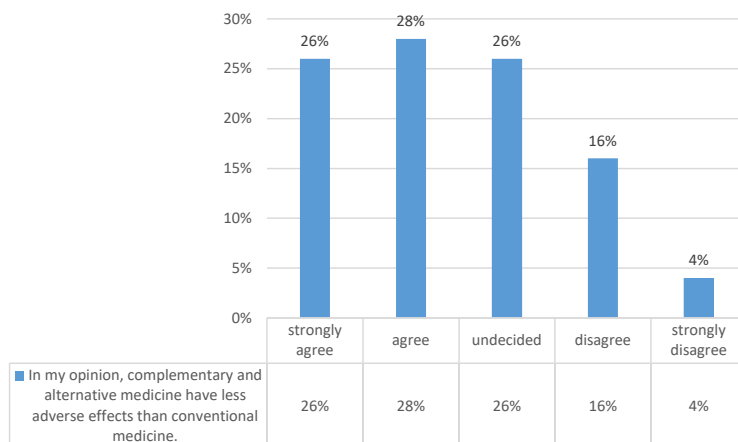


Figure 2. The subjects' opinion about the adverse effects of Complementary and Alternative Medicine (CAM) and conventional medicine.

inquire about CAM use at <20% of their patient encounters [17]. On the other hand, the knowledge of doctors about CAM is not similar in different countries that this difference is dependent on different educational supports. For example, in Singapore, medical students have argued that a lack of adequate education has prevented the full implementation of complementary medicine [18] but in Hawaii, physicians reported that they had good knowledge of acupuncture, massage therapy, treatment based on spirituality, chiropractic, hypnosis, and meditation [19]. However, the lack of dosing and the uncertainty of interactions and complications are challenging regarding the use of complementary medicine [14].

5. Conclusion

The undeniable role of education is decisive in all studies. However, the use of complementary medicine is increasing. For better management of these conditions, training the healthcare team and the general public and also raising awareness about the terms of using this medicine, its adverse effect, and the method of receiving scientific services validated by scientific evidence are necessary.

Ethical Considerations

Compliance with ethical guidelines

There were no ethical considerations to be considered in this research.

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Authors contributions

Conceptualization, Methodology: Mohammadamin Abtahi, Mandana Izadpanah; Maryam Aghakouchakzadeh, Sepideh Sayadi; Validation: Mandana Izadpanah, Mohammadamin Abtahi, Maryam Aghakouchakzadeh, Sepideh Sayadi; Formal Analysis: Maryam Aghakouchakzadeh, Sepideh Sayadi; Investigation, Writing – original draft, and Funding acquisition: Mohammadamin Abtahi; Resources, Project administration: Mandana Izadpanah, Mohammadamin Abtahi; Data Curation: Mandana Izadpanah, Maryam Aghakouchakzadeh, Sepideh Sayadi; Writing – review & editing: Mohammadamin Abtahi, Mandana Izadpanah; Visualization: Mandana Izadpanah; Supervision: Mandana Izadpanah, Mohammadamin Abtahi.

Conflict of interest

The authors declared no conflict of interest.

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