

# The Use of Complementary and Alternative Medicine by Multiple Sclerosis Patients in Turkey

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## SUMMARY

The aim of this study is to identify the rates and types of complementary and alternative medicine (CAM) used by MS patients. The participants of the study are 67 MS patients. The data for the study were collected through a survey questionnaire developed by the authors. The data were analyzed through descriptive statistics and are given by frequency and percentage. It has been found that 38.8% of MS patients have used CAM, while 68.1% have not used it. Of those who reported the use of CAM, all employed prayer (100%; n = 39), 89.7% used herbal or botanical therapies (n = 35), and 48.7 % used amulets and talismans (n = 19). Prayer and herbal remedies are found to be the most commonly used forms of CAM in the sample. Patients should be encouraged to inform their physicians and other related medical professionals about any CAM they use because it is important for patient safety, especially with herbal remedies, as these can interact and affect the efficacy of pharmaceutical drugs a patient may be taking.

**Key Words:** *Complementary and alternative medicine, multiple sclerosis*

## ÖZET

### Multiple Sklerozlu Hastaların Tamamlayıcı ve Alternatif Tedavi Kullanma Durumları

Bu çalışma MS hastalarının, tamamlayıcı ve alternatif tedavi kullanım durumlarının belirlenmesi amacıyla yapılmıştır. Tanımlayıcı ve kesitsel özellikte olan çalışmanın örneklemini 67 MS hastası oluşturmuştur. Veriler; araştırmacılar tarafından geliştirilen anket formu kullanılarak toplanmıştır. İstatistiksel değerlendirmede sayı ve yüzde kullanılmıştır. MS hastaların %38.8'i TAT kullandığını belirtirken, %68.1'i kullanmamaktadır. Hastaların %100'ü (n=39) duayı, %89.7'si (n=35) bitkisel yöntemleri ve %48.7'si (n=19) muska/cevşen takma gibi tamamlayıcı/alternatif tedavi uygulamalarını kullanmaktadır. En sık kullanılan TAT yöntemleri dua ve bitkisel uygulamalardır. Hastaların kullandıkları bu yöntemler konusunda sağlık personelinin bilgilendirmesi konusunda cesaretlendirmelidir. Ayrıca sağlık personeli tarafından, MS hastaların kullandıkları TAT yöntemlerin bilinmesi hasta güvenliğinin sağlanması için önemlidir.

**Anahtar Kelimeler:** *Tamamlayıcı ve Alternatif Tedavi, Multipl Skleroz*

## Introduction

In recent years, therapies of complementary and alternative medicine (CAM) have begun to be used in many chronic diseases and also in multiple sclerosis (1,2). The concepts of complementary medicine and alternative medicine can easily be confused. Alternative medicine is defined as "all types of medical services used instead of medical treatment but not accepted by a modern medical approach." Complementary medicine, on the other hand, is defined as a system of treatment and care used in addition to conventional medical treatment (3). The frequency of CAM used by multiple sclerosis (MS) patients is a result of the nature of the disease. Since there is no established treatment for MS and the existing treatments have some side effects, MS patients tend to employ CAM (4).

Statistical data on CAM indicate that the use of these therapies varies from 34% to 77% (5). However, since many MS patients do not provide the correct information about their use of CAM, it is reported that these rates may be higher (6,7). Particularly chronic MS patients use both modern treatments and CAM or only CAM after or before the diagnosis or during both periods (6). Research suggests the frequency of the use of CAM by MS patients varies between 33% and 70% (8). The characteristics of the patients were also given in the related literature as follows: mostly women, higher levels of education, and poor health conditions (8). The rates of information given to health care professionals about the use of CAM is higher for those patients receiving comprehensive treatment and care services (53%) (9). Informed health care professionals ask about the use of CAM and may intervene if necessary (10).

The roles and functions of health care professionals have expanded as a result of technological advances and the increase in scientific knowledge. In regard to that they provide information and make recommendations about CAM therapies to patients and their families (11). Therefore, health care professionals are expected to improve their knowledge base, identify effective CAM therapies, and use these therapies correctly (12,13). Moreover health care professionals should be aware of the high rate of frequency of CAM use in the society and develop a communication link between the patient, and the family (14,15). Most people with MS use CAM therapies unconsciously but there may be risks of interactions and adverse effects as well as unknown benefits. This study aims to identify the rates and types of CAM therapies used by MS patients.

## Material and Methods

This study was carried out during the period from March to August 2012 in the neurology polyclinic and clinic of a university hospital. The study is a descriptive cross-sectional

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study. The participants of the study are 67 MS patients. The other characteristics of the participants are as follows: older than age 18 and with no communicative, mental, visual, or hearing problems. The patients who refused to participate in the research were excluded from the study. Ethical committee approval was obtained before beginning the study. The participants were informed about the aim of the study before the administration of the questionnaire. Data were obtained using data collection form which were developed by the researchers. The form included eleven items. The administration was carried out in the form of interviews. The waiting room in the polyclinic and patients' rooms in the clinic were used for administration. Each questionnaire was completed in ten to fifteen minutes. The data were evaluated by using the SPSS 17.0 statistics software. Frequencies and percentages were used in the descriptive analysis of the data.

## Results

This section provides the findings concerning the use of CAM by MS patients. Table I presents the socio-demographical characteristics of the participants. As can be seen in Table I, 84.6% of the patients are informed about CAM, and 38.8% of them use some form of CAM. On the other hand, over half reported that they do not believe in CAM (50.7%). The percentage of those who began to use CAM before their MS diagnosis is found to be 41.8%. The percentages of those MS patients who use and do not use CAM are found to be 38.8% and 68.1%, respectively. Of those using CAM, 46.2% are high school graduates and 38.5% are college or university graduates. Patients' sources of information about CAM are found to be the Internet (41.0%) and neighbors/friends (21.4%).

Table II shows the frequency of use of different types of CAM used by patients: prayer is used by all patients ( $n = 39$ , 100%), herbal therapies are used by 89.7% ( $n = 35$ ), and 48.7% used amulets and talismans ( $n = 19$ ).

Table III provides the participants' views about the effects of the type or types of CAM they are using. It is found that 53.85% of the MS patients regard it as useful to their health. However, 19.23% of them reported that it may have hazardous effects. Regarding expenditures for types of CAM, it is found that 42.31% of patients spend anywhere from 1 to 50 TL for CAM.

## Discussion

In the study, it is found that the majority of MS patients have information about CAM. However, they also reported that they do not believe in the positive effects of it. On the other hand, 38.8% of the patients use CAM (Table I). The worldwide use of CAM has been expanding (1). In the study by Araz et al. (2007) with a sample of 1,000 people from different age groups and socio-economics status, it is found that the majority of the participants have information about CAM (16). On the other hand, the rate of CAM use in the study by Tas et al. (2005) is found to be 47.7%. Koksoy (2008) suggests that patients who are using CAM or who want to use it need to be informed about it by health care professionals, and their family members should also be informed (10,17). Therefore, health care professionals should have enough information to guide patients.

In the study, the three most-frequent sources of information

about CAM are found to be the Internet, neighbors/friends, and printed media. When we examine the literature, we see that Page et al. (2003) found that 50% of participants are informed about CAM through the media and family members/friends (18). It is significant that health care professionals are not among the most-frequent sources of information concerning CAM for patients. As a result of technological advances, the Internet has become a widely employed source for information. Therefore, health care professionals should ask patients about their use of CAM. On the other hand, research suggests that 80.7% of physicians and 75% of other health care professionals ask patients questions about the use of CAM (5). It is significant for there to be an open line of communication between health care professionals and patients. If patients do not inform their health care professionals about their use of CAM in addition to conventional treatment, they could suffer undesirable side effects (2).

The first three common therapies of CAM used by the participants are found to be "prayer," "herbal therapies," and "amulets and talismans." This finding is partly consistent with the previous findings (1,16,19). Araz et al. (2007) found that prayer, herbal treatments, and music therapy are the most common CAM therapies used (16). Ni et al. (2002) argued that in the US, prayer and herbal therapies are common CAM therapies (20). Since all these studies cite prayer as the most frequently used technique, it is safe to argue that prayer reduces stress in patients and provides psychological and emotional comfort.

Ernst & White (2000) found that herbal remedies are the most commonly used types of CAM (19). Stoll et al. (2012) found that the most frequently preferred therapies of CAM were vitamins (vitamins B and D, 51.3%) and physical therapy (47.7%) (21). Shinto et al. (2004) reported that the most commonly used CAM therapies are diet (52.4%), essential fatty acid support (44.6%), and the use of vitamins and minerals (33.7%) (22). Tas et al. (2005) analyzed the use of herbal therapies in Turkey and found that 95% of them include herbal agents and 88% of these include stinging nettle (17). In Turkey, the dominant assumption is that herbs are free of hazardous side effects. Therefore, health care professionals in Turkey have enough information about herbs and their effects and inform patients about these topics.

The finding of the study that is different from the previous findings is that amulets and talismans are the third most often CAM technique used by patients. This reflects the religious beliefs of the Turkish people, who believe that using them will have beneficial effects.

It was found that most of the patients reported positive effects of CAM (Table 3). Sociocultural characteristics of a society have an effect on the common ways people in the society cope with disasters. Furthermore, since Islam reinforces a fatalistic approach, it positively affects the concession to disease. This is in line with the finding that the most frequently used CAM method is prayer.

In recent years, apitherapy has become one of the most commonly used CAM therapies for MS patients. It was found to be used by 7.8% of the participants in this study. It is reported that bee venom has positive effects on MS patients related to its apamin structure because apamin is reportedly related to the protein through which potassium is transported to the

nervous system. Apamin also offers preventive effects against infection and anti-rheumatic effects (23). Kelle (2007) reports that in the US, many MS patients have come to prefer bee venom or its constituents in regard to MS treatment in the last decade (24). The reasons for such a trend include the lack of effectiveness of the conventional treatments used today and their potential side effects, which can lead to reduced quality of life in some patients (24).

It was also found that energy therapy and manipulative and body-based treatments are less-often used by the participants. This may be related to the sociocultural patterns of Turkish society.

The participants of the study were found to spend little or no money for CAM. Similarly, Akgul (2009) concludes that 29.6% of patients do not have a budget for such therapies, while 27.2% of them reported that CAM is cheaper than conventional medical treatment (25).

## Conclusion

It is significant in terms of patient safety and security that health care professionals should be aware of the types of CAM used by MS patients. The findings of this study indicate that prayer and herbal therapies are the most commonly employed therapies of CAM by MS patients. However, other therapies are also searched for by the patients and their family members. Therefore, health care professionals should systematically update their information about CAM and assume a supervisory role for them.

## Limitations

The study deals only with the types of CAM used and the frequency of their use. The reasons for using these therapies were not analyzed in the study. Therefore, future studies that have these motivations can be investigated. Furthermore, the conclusions of this study cannot be generalized to all MS patients but must be limited to the participants of the study.

**Table I.** Socio demographical characteristic of the MS patients

	n	%
<b>Being informed about the CAM practices (n=67)</b>		
Yes	56	84.6
No	11	16.4
<b>Belief in the CAM (n=67)</b>		
Yes	32	47.8
No	34	50.7
I do not know	1	1.5
<b>Use of the CAM before the diagnosis of MS (n=67)</b>		
Yes and still using	12	17.9
Yes and quitted later	13	19.4
No	28	41.8
No, but now using	14	20.9
<b>Actual use of the CAM (n=67)</b>		
Yes	26	38.8
No	41	61.2
<b>Educational background of the participants using the CAM (n=26)</b>		
Illiterate	1	3.8
Basic education	3	11.5
High school	12	46.2
University	10	38.5
<b>Frequency of use (n=26)</b>		
Everyday	11	42.3
Two or three times per week	9	34.6
Once a month	6	23.1
<b>Information sources for CAM (n=56)</b>		
TV	4	7.2
Printed media	8	14.4
Internet	23	41.0
Health care professionals	2	3.5
Other MS patients	7	12.5
Neighbors/friends	12	21.4

**Table II.** Frequency of the CAM used by the participants

	n	%
Biological CAM		
Herbal therapies	35	<b>89.7</b>
Vitamins	10	25.6
Leech	3	7.8
Apitherapy	3	7.8
Body-mind training		
Yoga	1	2.6
Prayer/ amulets and talisman and other ways related to prayer	39	<b>100</b>
NLP (Neurolinguistic programme)	1	2.6
Energy treatments		
Magnetotherapy	1	2.6
Healing stone	2	5.2
Reiki	1	2.6
Manipulative and body-based treatments		
Hot spring	1	2.6
Massage	1	2.6
Ozone therapy	2	5.2

**Table III.** Views on effects of CAM

Effects on health (n=26)	n	%
Positive	14	<b>53.85</b>
Hazardous	5	19.23
No idea	7	26.92
Effects on economic status (expenditure) (n=26)		
1-50 TL	11	<b>42.31</b>
50-250 TL	7	26.92
250-500 TL	4	15.35
500-1000 TL	2	7.69
1000+ TL	2	7.69

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