

AN EVALUATION ON LEVELS OF KNOWLEDGE, ATTITUDE AND BEHAVIOR OF PEOPLE AT 65 YEARS AND ABOVE ABOUT ALTERNATIVE MEDICINE LIVING IN ANKARA

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The aim was to determine the knowledge, attitude and behavioral levels of people at and above 65 years of age, living in Ankara (Turkey) about alternative medicine. The study was carried out between March – April 2010 through survey application of 200 participants by selective random sampling from the population. Data obtained as a result of the survey were analyzed by SPSS program. The study revealed that 83.5% of the participants believed in alternative therapy methods but 16.5% of them did not. It is concluded that herbal therapy methods are the most frequently used methods with a 63% rate among other alternative therapy methods. When status of the participants was analyzed it was found that it was found that 69% received the information about alternative medicines from their family while 53.5% received it from television This study revealed that alternative medicine is profoundly used by people above 65 years of age in Ankara.

Key Words: Alternative – Complementary Medicine, Herbal Therapy, 65 years and above, Turkey**Introduction**

From the middle of the twentieth century, rapid developments have been observed in the diagnosis and therapy of diseases associated with the increase in the use of complementary and alternative therapies (Muslu and Öztürk, 2008). The applications of diagnosis, therapy and protection from diseases which contribute to general medicine methodology as complementary and do not take place as conception under the name of classical medicine are often referred to as complementary – alternative medicine (CAM). CAM consists of special medical methods using natural substances and specific solutions, different therapy and exercise techniques in order to ensure the individual is at peace with him/herself, family and social environment and to recognize him/herself in a better way towards protecting his/her physical and mental health (Dıraçoğlu, 2007).

The use of CAM varies according to patients' faith, religion, life-style and culture (mostly because certain vegetations growing in certain geographical areas are known better) (Tokem, 2006). Use of CAM is based on various reasons such as (i) aversion felt against medical therapy; (ii) mechanism to overcome the disease actively; (iii) to save oneself from remaining passive and demoralization, tension, and also (iv) to avoid losing control. Other reasons why the use of CAM seemed attractive may be stated as follows; cultural values shared inside and strengthening the patient, being authentic, giving the feeling that patient is connected and interacting with the world in the case of being ill (Çetin, 2007). It is possible to specify the main CAM methods as explained in the following; (1) Alternative medical systems: Homeopathy, naturopathic medicine, ayurveda. (2) Mental – Physical Methods: Meditation, prayer, mental healing, music, art, dance. (3) Biological based therapies: Herbals, foods, vitamins. (4) Manipulative body – based methods: massage, manipulation, chiropractics. (5) Energetic therapies: Bio-field therapies (reiki, therapeutic touch) and bio-electromagnetic based therapies (use of electromagnetic field) (Durmaz, 2011).

Complementary medicine applications are used as a type of therapy which is affordable and easy to get across to developing and underdeveloped countries and preferred by the overall population. In the WHO Malaria Reduction Program carried out in 1998; it is reported that 60% of children with high – fevers are cured at home with medications made of herbs in Ghana, Mali, Nigeria and Zambia (Özdemir, 2009). Today, 80% of the population in Asian and African countries and approximately 70% of the population in most developed countries are using at least one of these alternative therapy methods. In a study done in 1991, it is found that 1400 different types of herbal medicines are used in EU member states. Furthermore, a study done by the Pacoe firm in Germany, it was found that people trust in alternative medicine at an 80% rate and only 12% of them rely on Orthodox medicine (<http://www.duyurucu.com/k43114-almanya-da-alternatif-tip.html>).

MacLennan et. al. (1996), conducted a survey of about 3004 people at and above 15 years of age, living in southern Australia. 48.5% of the people used at least one of the alternative therapy methods. In the interviews conducted by Barnes et. al. (2004) using about 31,044 people at and above 18 years of age, living in America; 62% of them have used at least one of the alternative therapy methods throughout the last 12 months. The results of a survey applied by Foster et. al. (2000) with about 2,055 people, showed that in order to determine the status of people at and above 65 years of age using alternative medicine methods, 30% of the participants used at least one of the alternative therapy methods. Cohen et. al. (2002) determined the rate of using alternative and complementary medicine among 182 people at and above 65 years of age at a hospital in New York between 1998 and 1999 as 64%. Hanssen et.al. (2005) investigated the use of complementary and alternative medicine in Scandinavian countries. To do this, 16690 face to face interviews have been done in Denmark while 1000 and 1001 interviews have been performed on the phone in Norway and Stocholm respectively. It is found that 34% ,

<http://dx.doi.org/10.4314/ajtcam.v10i1.18>

45% and 49% of randomly selected samples in Norway, Denmark and Stockholm respectively, use alternative and complementary medical methods. Lim et al. (2005) concluded that 76% of 393 people at and above 18 years of age in Singapore have used at least one CAM method within the last 12 months, and women appeared to use these methods 2.1% higher than men do. In the study performed by Huillet et al. (2011) for the determination of complementary and alternative therapy methods used on children at military pediatric clinics, it is revealed that the most commonly used CAM method is herbal therapy. In the study performed by Onyapat et al. (2011) in Nigeria on 732 people whose ages ranged from 18 to 65, the rate of those using CAM is found to be 84.7%. The most commonly used CAM product was biological products. See et al. (2010) concluded that 25.7% of 855 hospitalized patients at dermatology clinic use CAM methods and patients often expect recommendations from dermatologists about CAM methods. In the study performed by Hall et al. (2011) for the determination of CAM among pregnant women, it was found that many women use complementary and alternative medical methods in the course of their pregnancy. In the study performed by Neto et al. (2009), it was concluded that use of complementary and alternative medicine had a positive relationship with gender, territory, income, educational and marital status. In the study performed by Khalaf and Whitford (2010) concerning the use of CAM among patients with diabetes, it was found that in the two diabetes clinics in Bahrain, the use of CAM among patients with diabetes was profoundly high. In the study performed by Richmond et al. (2010) regarding the use of CAM among patients with hepatitis C, it is found that patients mostly use prayer, multivitamin and herbal methods, respectively. Herrera – Arellano et al. (2009) investigated the use of CAM among/across the patients with HIV and found that 73.4% of them use CAM. Moreover/Furthermore it is found that the most commonly used methods are multivitamins and herbal products.

Within the Turkish territory, there are few studies in the literature about complementary and alternative medicine. As a result of the study performed by Tan et al. (2004) at two university hospitals within eastern Turkey in order to determine the tendency of using complementary and alternative therapy, it is concluded that 70% of participants use CAM and the most commonly used methods are herbal methods at 41%. As a result of the survey applied by Araz et al. (2007) in Izmir on 1000 people, whose ages ranging from 18 and 80, in order to reveal attitude of health and use of alternative therapy, it is concluded that half of them prefer only to consult a doctor for a cure in case of an illness. However, one – third of them seeks any other way of cure besides consulting a doctor. In addition, it is found that the most appealing CAM method is prayer. As a result of a survey applied by Çetin (2007) of 300 people living in Eskisehir downtown, regarding the examination of the levels and variety of using complementary and alternative therapy and the factors affecting CAM use in Eskisehir; it is concluded that 60% of the respondents use various CAM methods and there is no significant effect of socio-demographic characteristics on overall use of CAM. In his study named as use of complementary and alternative medicine on patients with asthma, Tokem (2006) ascertained that the most commonly used CAM methods preferred by parents of children with asthma are massage, relaxation techniques, regime and vitamins. For adults with asthma, its nutrition, regime supplementary products, herbal therapies, meditation and homeopathy.

Methodology

The aim of this study is to determine the knowledge, attitude and behavioral levels of the people at and above 65 years of age, living in Ankara about alternative medicine. In the study performed between March and April in 2010, a survey was applied to 200 randomly selected samples from the population. The Ankara metropolitan area, which is the population of the study, is composed of 16 towns. These towns create clusters. Due to research limitations such as costs, two of those clusters were selected by a simple random sampling method. The questionnaire was administered to 200 randomly selected samples at and above 65 years of age, residing in those two districts among 2000 people. The questionnaire is made of three sections. In the first section, the socio-demographical characteristics of participants such as gender, age, marital status, educational status, occupational status, number of household and type of family have been asked. In the second section, some questions take place regarding participants' status of believing alternative therapy, reasons of preferring alternative therapy methods and in which diseases they use alternative and complementary therapy most frequently. In the third section, the data is obtained regarding the methods of therapies applied for various diseases and their recipes. The data obtained were analyzed by a statistical software (SPSS program version 11.5). The Constraints of the study are that; the samples with no education were not able to answer the questions. They hardly understood the questions due to old – age and some participants with prejudice to alternative medicine.

Results and Discussion

The demographical characteristics of 200 people who participated in the survey are shown in Table 1. According to Table 1. 30.5% of participants are men and 69.5% of them are women; 68.5% of them are married, 2% of them are single, 6% of them are divorced and 23.5% of them are widowed. As for their educational status; 5.5% of them are illiterate, 12% of them are literate. 34.5% of them have graduated from primary school, 16% of them from secondary school or an equivalent, 17.5% of them from high school or equivalent and 14.5% of them from university.

The distribution according to employment status and household characteristics of participants are shown in Table 2. 5% of the participants are employed, 95% of them are retired; 71.5% of them have a nuclear family, 22.5% of them have large family; 5% of them have patriarchal family, and 1% of them have a separated family.

Table 1: Distribution of Participants According to Their Demographical Characteristics

Variables	Number (n)	Percentage (%)
Age		
65-70	145	72.5
71-75	42	21
76-80	11	5.5
81 and above	2	1
Total	200	100
Gender		
Male	61	30.5
Female	139	69.5
Total	200	100
Marital Status		
Married	137	68.5
Single	4	2
Divorced	12	6
Widowed	47	23.5
Total	200	100
Educational Status		
Illiterate	11	5.5
Literate	24	12
Primary school	69	34.5
Secondary school or equivalent	32	16
High school or equivalent	35	17.5
University	29	14.5
Total	200	100

Table 2: Distribution of Participants According to Their Employment Status and Household Characteristics

Employment Status	Number (n)	Percentage (%)
Employed	10	5
Retired	190	95
Total	200	100
Number of people living in the household		
1	15	7.53
2	52	26.13
3	30	15.07
4	46	23.11
5	23	11.55
6	14	7.0
7	6	3.01
8	6	3.01
9	4	2.01
10	2	1.0
12	2	1.0
Total	200	100
Type of Family		
Nuclear family	143	71.5
Large family	45	22.5
Patriarchal family	10	5
Separated family	2	1
Total	200	100

Attitudes and behaviors of those participated to the survey about alternative therapy methods are examined in Table 3. It is revealed that 83.5% of participants believe in alternative therapy methods, 16.5% of them do not so; 65% of them have appealed to alternative therapy methods in the past, 35% never have. It is revealed that participants mostly believe in herbal therapy with a 63% rate. The reason why alternative therapy methods are mostly preferred, is with 56.5% the status of conviction that it would be fructuous when combined with traditional therapy. It is determined that those who believe that alternative therapy methods are used consciously in our country are 14%, those who do not believe are 43.5% and those who don't have any idea about that issue are 42.5%.

Table 3: Attitudes of Participants about Alternative Therapy Methods

Status of conviction to alternative therapy methods	Number (n)	Percentage (%)
Yes	167	83.5
No	33	16.5
Total	200	100
Status of appealing to alternative therapy methods in the past		
Yes	130	65
No	70	35
Total	200	100
Status of conviction to alternative therapy methods		
Acupuncture, Herbal	1	0.5
Herbal Theory	126	63
Bio – energy	1	0.5
Massage	1	0.5
No answer	71	35.5
Total	200	100
Status of preferring alternative therapy methods		
Whereas it would be fructuous combined with traditional therapy	113	56.5
Whereas it would be interesting to try these methods	5	2.5
Whereas traditional medicine would not help my health problems	15	7.5
Whereas I found traditional medicine expensive	14	7
No answer	53	26.5
Total	200	100
Status of conviction that alternative therapy methods are being used in our country consciously.		
Yes	28	14
No	87	43,5
No idea	85	42,5
Total	200	100
Status of conviction to what the alternative medicine is		
Sports	3	1.5
Herbal therapies	112	56
Healthy life	13	6.5
Supplementary cure	56	28
Healthy diet	9	4.5
Healing	7	3.5
Total	200	100

Status of how participants access the information on alternative medicine is examined in Table 4 and it is revealed that 69% of the information is obtained from family and 53.5% from television.

Table 4: Status of Participants Access to the Information about Alternative Medicine

Status of accessing the information about alternative medicine	Number (n)	Percentage (%)
Family	138	69
Radio	12	6
Newspaper – Magazine	76	38
Internet	14	7
Television	107	53.5
Posters - billboards	1	0.5
No idea	12	6
Other	38	19
Environment	6	3

The status of participants using alternative and modern medicine methods is examined in Table 5 and it is determined that those who believe that natural medicines are more effective than modern medicine is 11.5% and those who don't believe are 27%. Those who believe they are effective in occasional situations is at 61.5%. It is also revealed that in case an illness occurred which cannot be remedied by modern medicine, those who would use alternative therapy methods are 66.5%; those who stated that they would not think of using alternative therapy methods even in such case are 7%.

Table 5: Distribution of Participants According to Use of Modern Medicine and Alternative Medicine

State of natural medications being more effective than modern medicine	Number (n)	Percentage (%)
Yes	23	11.5
No	54	27
In some cases	123	61.5
Total	200	100
State of modern medicine and alternative medicine being effective on healing		
Modern medicine	74	37
Alternative medicine	20	10
Both	106	53
Total	200	100
State of using alternative therapy methods in case of an illness which cannot be remedied by modern medicine		
Yes	133	66.5
No	14	7
No Idea	53	26.5
Total	200	100

State of participants using herbal drugs is examined in Table 6 and it is found that 26% of participants think that physicians' false attitudes mostly lead to the use of herbal drugs which is called alternative medicine gaining wide currency. It is revealed that those who deem prayer as an alternative medicine are 67%, those who do not so are 33%.

Table 6: Distribution of Participants According to Their Status of Using Herbal Drugs

Reasons why use of herbal drugs gains wide currency	Number (n)	Percentage (%)
Drug prices	49	24.5
False attitudes of physicians	52	26
Ads of drug firms	10	5
No idea	85	42.5
No answer	4	2
Total	200	100
Reasons why people use herbal drugs		
Due to lack of education	31	15.5
Due to being remediless	118	59
Due to having economic difficulties	30	15
Due to lack of trust on modern medicine	21	10.5
Total	200	100
Status of considering pray as an alternative therapy method when get sick		
Yes	134	67
No	66	33
Total	200	100

On Table 7, the question asked to participants for which diseases they most frequently use alternative and complementary therapy methods and on the top with 43%, it is found they use them for lumbar and back pains.

Conclusion

In recent years, the use of alternative therapy methods and the status of people believing in these methods has increased. Those who participated to the survey believe that alternative therapy methods would be more fructuous when combined with modern medicine and they might use alternative therapy methods when they catch an illness that modern medicine fails to remedy. Alternative therapy methods are mostly learnt from family and television. The therapy method in which the majority of participants believe in is herbal therapy. The reason why people use herbal therapy results mostly from believing that they are desperate. However, many people count prayer as an alternative therapy method when they get sick. It is observed that vegetation and/or methods used in diseases, though there are little differences according to the territory, are generally identical. Those who participated in the survey think that alternative medicine's methods they use are often

<http://dx.doi.org/10.4314/ajtcam.v10i1.18>

effective. With this study, it is concluded that the use of alternative medicine among people at and above 65 years of age, living in Ankara is significantly high.

Table 7: Use of Alternative and Complementary Therapy Methods According to Diseases

	Number (n)	Percentage (%)
Lumbar and back pains	86	43
Rheumatism	59	29.5
Influenza	56	28
Depression	11	5.5
Headache	62	31
Insomnia	47	23.5
Diarrhoea	1	0.5
Cancer	7	3.5
Stomach-ache	1	0.5
Cholesterol	1	0.5
Cough	1	0.5
Prostate	1	0.5
Total	200	100

Table 8 shows some alternative therapy methods used by participants for some diseases.

Table 8: Alternative Therapy Methods Used by Participants

Inflammatory diseases	Applying vinegar – water cure, linden, stinger, rose hip, taking a warm bath.
Sore throat	Boiling apple and/or quince then bandaging them to neck, linden, garden sage, rose hip, daisy tea, bay leaf, milk – starch, water - lemon, thymus oil, mint oil.
Dyspnea	Ginger, aniseed, mixture of flaxseed & honey, thymus extract, blackberry, black mulberry, quince leaf, daisy tea.
Gingival bleeding	Mouthwash with carbonated or salty water
Stomach gas	Aniseed tea, fennel tea, veronica, daisy tea
Ulcer, stomach - ache	Warm milk with honey, Turkish delight, sorbet, sesame oil
Dyspepsia	Mustard seed, mineral water, carbonated water, parsley, ginger, linden
Headache	Bandaging raw potato slices around the head by using a cheesecloth, placing peelings of cucumber on the head, daisy tea, stinger tea
Lumbar pain	Bandaging trout, cupping, dressing, belting, bandaging warm blanket made of mat, bandaging black pepper pounded with honey, bandaging resin.
Back pain	Cupping, dressing, massage with olive oil or balsam.
Ear pain	Dropping warm breast milk or olive oil into the ear, bandaging ear with garlic or onion, dropping almond oil or thymus oil, dropping apple juice or leek juice into ear.
Diarrhoea	Boiled potato, rice mush, mixture of coffee – lemonade, coke, banana, peach, starch, wild pear, apple, yellow chickpeas.
Constipation	Apricot (dried, jam or compote), fig, plum, flaxseed, cassia, olive oil, honey with hot water.
Hypertension	Water – lemon, garlic, mistletoe, sugared water, thorn apple.
Hypotension	Buttermilk, lemon, salty buttermilk, chocolate, cube sugar, garlic, mistletoe, lemonade, sugared water.
Dizziness	Spleen, buttermilk, water – lemon, rosemary, mixture of mint and basil leaves.
Itchiness	Taking shower with salty water, green tea, eating powder sugar and sulphur, applying wet soil
Diabetes	Bitter almond, sour apple, grapefruit, locust, thymus extract, rose hip, grenadine extract, myrtle leaf, pomegranate syrup, cortex cinnamon, olive leaf, alchemilla, laurel seed, blackberry jam, euonymus.
Evil eye	Prayer against evil eye, harmful seed, smoking flour, pouring molten lead into a cup over one's head who is affected by evil eye, charm, evil eye bead, fumigation, putting garlic or wild chestnut into pocket.
Wound	Applying honey and tail fat, pine resin, mixture of soap and butter, bandaging grated apple, not pounded flesh, crumb, cooked onion, and garlic, sweet dough, applying

	flaxseed oil, rubbing cigarette ash or tobacco into wound.
Fraction	Drinking sheep's head and foot soup, securing mixture of egg, soap and flour to the fractured area with a splint, bandaging with pounded grape and olive, bandaging with sweet dough or oily fabric, massage with suds.
Inflammatory burns	Ice or cold water cure, applying yogurt or paste, tomato paste, bandaging with mixture of egg – white, olive oil, wax and starch.
Dislocation	Applying honey, olive oil, flesh, massage with soap, bandaging with onion.
Insomnia	Garden sage, milk, yogurt, aniseed, buttermilk, herbal teas, warm milk, thymus tea, daisy tea, fennel tea, poppy.
Pregnancy	Mandrake, parsley, milfoil, natural trout, date, rose hip, daisy tea, milk, yogurt, cheese, ginger, cardamom, coconut milk, cinnamon, mesir paste.
Puerperium	Royal jelly, cracked wheat soup, sugar beet, linden, slabs of sugar flavoured with spices and dyed red, compote, mistletoe, molasses, milky soap, scallion.
Whooping cough	Quince leaf, juniper root, milk with honey, honey, lemon, linden, thymus, rose hip, clove, molasses, daisy extract, cinnamon, ginger root, olive leaf, veronica, onion extract.
Measles	Measles candy (as known in public, same as slabs of sugar flavoured with spices and dyed red), molasses, bath with salty water.
Aphtha	Mulberry syrup, carbonated water, black mulberry, parsley, sugared cotton, salt, pomegranate syrup.
Haemorrhoid	Black sesame, aniseed, hibiscus, olive oil, boiled cabbage, rose hip, pumpkin seed, apricot compote, sitting on hot bracket, sparrow meat, cirrus, harmal seed, gentian.
Intestinal worms	Eating apricot on an empty stomach, garlic, pumpkin seed, gasoline, carrot, strawberry, fig, vinegar – yogurt, cassia.
Hepatitis	A small cut on forehead with knife, juniper syrup, artichoke, compote, drinking pee, bandaging onion, wearing yellow cloths, grape juice, apricot, lemon.
Anaemia	Royal jelly, molasses, black grapes, spleen, kidney, apple, tomato, fig, locust, liver, red lentil, sesame oil, walnut, apricot.
Subconjunctival hemorrhage	Putting cotton wetted with tea pot onto eyes, putting raw potato onto eyes, dropping lemon squash, dropping milk, bandaging the eye with egg – white, dropping breast milk taken from puerperant woman.
Burn due to hot water	Barley meal, olive oil, wax, applying ice, apple peeling, paste, fish oil, melted wax, olive oil, cream of lime, onion, balsam pear, oil from boiled egg, potato extract, applying tomato paste, cold water, yogurt, flesh, toothpaste, applying egg – white.
Bleeding	Applying ice, adding tobacco ash/salt onto the wound, applying olive oil, boiling santolina, cinnamon, grape juice, vinegar.

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