

Determining Knowledge Levels, Attitudes Toward, and Use of Complementary and Alternative Medicine Among Individuals Applying to Family Health Centers

Aile Sağlığı Merkezine Başvuran Bireylerin Tamamlayıcı ve Alternatif Tıbbı Karşı Bilgi, Tutum Ve Davranışlarının Belirlenmesi

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ABSTRACT

Objective: The purpose of this study was to determine the knowledge, attitude and application status of CAM in a family health center.

Method: This descriptive cross-sectional study was conducted with 366 participants in Ankara that is Turkey's capital. The data were collected by using the descriptive information form developed by the researchers, the questionnaire containing the questions about CAM applications and the Holistic Complementary and Alternative Medicine Scale (HCAMQ).

Results:

According to the results of the study, 62.8(n=230) of the participants had knowledge about CAM and 53.3% (n = 195) of them applied CAM methods. 88.3% (n=323) of the participants stated that they believed in CAM activity. 47.0% (n = 172) of the participants stated that are close environment (family, friends, neighbors) as CAM information source. 80.6% (n=295)

prayer was the most preferred CAM method. There was a significant relationship between

CAM use and age, marital status, chronic disease and drug use (p <0.05). The mean total score of the Attitudes towards Complementary and Alternative Medicine Scale of the participants was 30.93 ± 5.58, the mean point of complementary and alternative medicine subscales was 18.06 ± 4.15 and the total health subscale mean score was 9.03 ± 2.93.

Conclusion: The consequently of this study revealed that the majority of the participants had knowledge about CAM and believed in the benefit of CAM. In addition, high scale scores of participants without chronic disease and having knowledge of CAM showed that CAM was used as a health protection behavior. As a result of this study, it was determined that both healthy and sick individuals frequently applied CAM methods and had a positive attitude towards CAM.

Keywords: Complementary and alternative medicine, nursing, attitude, knowledge

ÖZET

Amaç: Bu çalışmanın amacı, bir aile sağlığı merkezine başvuran bireylerin Tamamlayıcı ve Alternatif Tıp (TAT) ile ilgili bilgi, tutum ve uygulama durumlarını belirlemektir.

Yöntem: Tanımlayıcı tipteki cross-sectional araştırma 366 katılımcı ile Türkiye'nin başkenti Ankara'da yürütülmüştür. Veriler araştırmacıların geliştirdiği tanıtıcı bilgi formu, TAT uygulamalarına ait soruları içeren soru formu ve Bütüncül Tamamlayıcı ve Alternatif Tıp Ölçeği (BTATÖ) kullanılarak toplanmıştır.

Bulgular: Çalışma sonuçlarına göre katılımcıların %62,8'i (n=230) TAT hakkında bilgi sahibi olduğu ve % 53,3'ü (n=195) de TAT yöntemlerini uyguladığı belirlenmiştir. Katılımcıların %88,3' ü (n=323) TAT etkinliğine inandığını belirtmiştir. Katılımcıların %47,0 'ı (n=172) TAT bilgi kaynağı olarak yakın çevre (aile, arkadaş, komşu) olduğunu belirtmiştir. En çok tercih edilen TAT yöntemi olarak %80.6 (n=295) dua ilk sırada yer almıştır. TAT kullanım durumu ile yaş, medeni durum, kronik hastalığa sahip olma ve ilaç kullanma durumları arasında anlamlı ilişki saptanmıştır (p<0.05). Katılımcıların Tamamlayıcı ve Alternatif Tıbbı Karşı Tutum Ölçeği toplam puan ortalaması 30.93±5.58, tamamlayıcı ve alternatif tıp alt ölçek puan ortalaması 18.06±4.15 ve bütüncül sağlık alt ölçek puan ortalaması 9.03±2.93 olarak bulunmuştur.

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Sonuç: Bu çalışmanın sonuçları katılımcıların çoğunluğunun TAT hakkında bilgi sahibi olduklarını ve TAT'ın yararına inandıklarını ortaya çıkarmıştır. Ayrıca kronik hastalığı sahip olmayan ve TAT bilgisine sahip katılımcıların ölçek puanlarının yüksek olması sağlığı koruma davranışı olarak TAT kullanıldığını göstermiştir. Bu çalışma sonucunda, hem sağlıklı hem hasta bireylerin TAT yöntemlerine sıklıkla başvurdukları ve TAT' a karşı olumlu bir tutum içinde oldukları belirlenmiştir.

Anahtar Kelimeler: *Tamamlayıcı ve alternatif tıp, hemşirelik, tutum, bilgi*

INTRODUCTION

Complementary and alternative medicine (CAM) is a constantly expanding and widely used aspect of primary care services (Nottingham, 2012). The World Health Organization describes CAM as a “broad set of health care practices that are not part of that country’s own tradition and are not integrated into the effective health care system” (WHO). Despite having different meanings, the locutions complementary medicine and alternative medicine are often used interchangeably. More specifically, however, “complementary therapy refers to the support methods used to complete medical treatments,” while “methods applied other than medical interventions and therapies with effects that are not scientifically proven are called alternative treatments” (Nazik, Nazik, Api, Kale & Aksu, 2012). CAM methods include practices such as acupuncture, aromatherapy, prayer, herbal medicines, meditation, homeopathy, and movement therapies (López-Garrido, Gil-Pita, Francisco-Rey, Zapico-Goñi & Tena-Gómez, 2019). Further, such methods are continually influenced by developments and changes in health systems throughout the world, thus continuing to increase in popularity (Bilge, Uguryol, Dulgerler & Yıldız, 2018). Indeed, the World Health Organization reports that CAM usage is implemented among 80% of the total populations in Asia and Africa, 70% in Canada, 90% in Germany, and 50% in Sweden (Peksoy, Demirhan, Kaplan, Sahin & Duzgun, 2018), while one in three adults in the United States uses CAM in combination with medical treatments (NCCIH, 2018). However, although CAM is very popular in Turkey, there are currently no precise data on its usage due to inadequate related studies and a lack of information about both the specific CAM applications and professional settings in which CAM therapies are applied (Turan, Ozturk & Kaya, 2010). Nevertheless, one study conducted in Turkey found that 65.8% of participants used CAM methods (Cetin, 2007), while another conducted in the Eskisehir City center found 60%, with the rate of use reaching 98.3% among persons in İzmir aged over 60 (Oral, Ozturk, Balci & Sevinc, 2016). Finally, Sagkal and Ark (2013) reported a CAM usage rate of 98.3% (Sagkal, Demiral, Odabas & Altunok, 2013).

Further, growing life expectancy rates have presented a number of problems, including difficulties in care and treatment, increasing numbers of chronic, degenerative, and malignant diseases, high technology costs, difficulty accessing treatment opportunities, health team members with inadequate skills, doubts about current care and treatment methods, and the fear of possible side effects (Oral et al, 2016). Many people now prefer complementary therapies designed to promote longer and healthier lives, reduce drug side effects, strengthen the immune system, reduce feelings

of hopelessness, reinforce healthy lifestyle behaviors, and avoid both tension and loss of control (Ozcelik & Fadiloglu, 2009). Regardless of the reasons for choosing CAM, the largest issues of concern are that such therapies may be inappropriate for health, delay proper disease diagnosis and subsequent medical treatment, and result in harm or side effects due to non-specialist interventions and/or unprofessional methods (ACA).

However, many persons working outside the health profession are now trying to meet the increasing societal demand for CAM. As a result, it is increasingly necessary for health care professionals, nurses, and other health team members to address the health needs of individuals, families, and society as whole (Gungormus & Kiyak, 2012). As crucial members of the health system, nurses have important duties in the context of evaluating CAM methods; they must explain the aims, effects, usage methods, and associated risks to individual patients (Aktas, 2017). Nurses must therefore know the extent to which complementary and alternative practices are being used throughout society (Ulusoy, 1999). This study assessed the knowledge levels, attitudes, and behaviors of 366 total patients who applied for CAM at a family health center (FHC) in Turkey. As such, the following research questions were developed:

- What level of knowledge do participants have about CAM?
- What attitudes do participants hold toward CAM?
- What CAM practices relate to participants?

METHODS

Study design

This study employed descriptive and correlational designs. All research was conducted in the Turkish Ankara Province. The study period lasted from March 2019 to September 2019.

Study setting, population, and sample

As the study population consisted of 2,500 people, the sample size required to conduct the research was estimate at 397 using the Epi Info 2000 software package (prevalence rate of 50.0%, standard deviation of 5.0%, and confidence level of 97.0%). However, random sampling resulted in a final sample size of 366 people who applied to the investigated family health center (Ulusoy, 1999). The participation rate was 92.19%.

Study variables

The dependent variables were set as CAM and participant knowledge and attitudes about CAM, while the independent



variables were set as age, gender, marital status, education level, settlement living status, perceived income status, drug-use status, and the presence of chronic disease.

Questionnaire

The questionnaire contained three sections. The first consisted of eight items concerning participant sociodemographic characteristics, including age, gender, marital status, education level, settlement living status, perceived income status, drug-use status, and the presence of chronic disease. Next, the second section contained 10 items concerning the presence and prevalence of CAM usage, type of CAM usage, reasons for CAM usage, source of CAM knowledge, recommend CAM usage, CAM usage in conjunction with medications, benefits derived from CAM, and CAM side effects. Finally, the third section derived participant attitudes based on the Holistic Complementary and Alternative Medicines Questionnaire (HCAMQ), which consisted of 11 items that were answered on a six-point scale ranging from strongly agree (1), agree (2), mildly agree (3), mildly disagree (4), disagree (5), to strongly disagree (6) (including those on the Complementary and Alternative Medicine (CAM) and Holistic Health (BS) sub-scales). Items 2, 4, 6, and 9 were scored negatively, while the rest were scored positively. The minimum and maximum achievable scores were thus 11 and 66, respectively. Here, lower scores indicated more positive attitudes toward holistic, complementary, and alternative medicines. The HCAMQ was improved by Hyland et al. in 2003 (Hyland, Lewith & Westoby, 2003). Validity and reliability were previously established in the Turkish setting by Erci in 2007 (Erci, 2007). Finally, the questionnaire achieved a Cronbach's alpha value of 0.72 (Erci, 2007). However, this study revealed a Cronbach's alpha value of 0.48.

Data collection method

Before the main study, a pilot study was conducted among 15 participants. Data were thus collected for revising the questionnaire. All participants were given detailed knowledge about the study purpose and contents prior to obtaining verbal consent from each. Data were then collected using 29-item questionnaire improved by the researchers based on a literature review. All questionnaires were completed during face-to-face interviews lasting 10 minutes each.

Data analysis

All statistical analyzes were done using IBM SPSS Statistics v21.0 software (IBM, Armonk, NY). Descriptive statistics were describe using means \pm standard deviations (SDs) as well as minimum and maximum values. As a Kolmogorov-Smirnov test did not reveal normal data dispersion, Kruskal-Wallis and Mann-Whitney U tests were conducted (statistical significance was set at $P < .05$).

Ethics approval

The Ethics Committee of University approved of this study's protocol (code of ethical approval, 2019/06).

RESULTS

This section discusses the sociodemographic data forms completed by participants. Results showed that 80.6% ($n = 295$) were female (19.4% ($n = 71$) were male). Further, 16.9% ($n = 62$) were between 18-25 years of age, 54.1% ($n = 198$) were between 26-45, 20.8% were between 46-60, and 8.2% were over 60. A total of 75.4% ($n = 27$) were married. For education, the largest percentage (30.9%; $n = 113$) were senior high school graduates. Next, 94.0% ($n = 344$) lived in the city, while 70.8% ($n = 259$) had middle income levels, and 28.1% ($n = 103$) had chronic diseases. Finally, only 31.4% ($n = 115$) of all participants were on medications. Table 1 provides a breakdown of this information.

[Table 1 about here]

Next, it was found that 62.8% ($n = 230$) of participants had knowledge about CAM methods. Of these, 47% ($n = 172$) obtained TAT methods from their social environments (e.g., family, friends, and neighbors). Further, 53.3% ($n = 195$) used CAM methods, while 35.2% ($n = 129$) had implemented such procedures three or more times, and 88.3% ($n = 323$) believed in the effectiveness of CAM. Of those who used CAM, 80.1% ($n = 293$) experienced no side effects, while 77.0% ($n = 282$) said they would recommend it. Finally, the largest percentage (30.9%; $n = 113$) used CAM methods to improve their quality of life. Table 2 provides a breakdown of this information.

[Table 2 about here]

Regarding the best-known CAM methods, 80.6% ($n = 295$) of participants were familiar with prayer, followed by thermal water (72.7%; $n = 266$), hijamah (72.1%; $n = 264$), and herbal treatments (71.9%; $n = 263$) (Table 3).

[Table 3 about here]

Further, it was found that 44.3% ($n = 162$) of the participants who had applied or performed CAM had applied the prayer method (Table 4). However, no participants had ever used ayurveda, acupressure, or naturopathy.

[Table 4 about here]

Table 5 shows participant CAM usage based on sociodemographic characteristics. There were statistically significant differences between CAM application methods and age, marital status, the presence of chronic disease, and drug use factors ($p < 0.05$). However, no such differences were found based on factors such as gender, education, settlement status, and economic status ($p < 0.05$).

[Table 5 about here]

Table 6 shows the distribution of total scores for participant attitudes on the HCAMQ as well as those for the complementary and alternative medicine (CAM) and holistic health (HH) subscales. As shown, the mean score for the HCAMQ was 30.93 ± 5.58 , while the mean score for the CAM subscale was 18.06 ± 4.15 , and the mean HH subscale score was 9.03 ± 2.93 (Table 6).

[Table 6 about here]



DISCUSSION

It is very important for nurses to have appropriate knowledge, attitudes, and behaviors related to CAM methods before counseling patients and their relatives in this regard. As such, these professionals can more closely observe patients for possible CAM side effects, thus preventing harm in relation to both their general health and specific illness conditions (Amanak, Karaoz & Sevil, 2013). In this context, it is also important to understand individual attitudes and behaviors related to CAM usage situations.

In this study, 62.8% of all participants had knowledge of CAM methods. These results are similar to those from a 2013 study by Sagkal et al., in which 69.7% of participants over 60 years of age who lived in rural areas knew about CAM (Sagkal et al., 2013). Further, Oral et al. found that 72.3% had heard the terms “traditional medicine” or “alternative medicine” (Oral et al., 2016). Finally, a study conducted among adults Saudi Arabia found that 88.8% knew about traditional and alternative medicines (Elolimy & AlBedah, 2012). These results suggest that individuals require more information about CAM.

This study found that 47.0% of all participants who had knowledge of CAM methods obtained this information from their respective social environment (e.g., family, relatives, and neighbors). Ulusoy et al. similarly reported that participants obtained information about CAM from the same types of sources (Ulusoy, Gucer, Murat, Arslan & Habiboglu, 2012). Further, Guven et al. found that most participants obtained information about CAM methods from friends (48.8%) (Guven, Gamze, Erturk & Ozcan, 2013). Indeed, this study’s literature review generally revealed that family, relatives, and friends were the most widespread sources of knowledge about CAM applications (Araz, Tasdemir & Parlar, 2012; Ozer, Santas & Yildirim, 2013; Bozkaya, Akgun, Birgi, Cinkoglu, Gog & Karadeniz, 2008). In this respect, nurses and health professionals should attempt to promote increased professional awareness about CAM in their communities. In sum, health institutions should attempt to provide more information in this regard.

A total of 53.3% of this study’s participants applied/used CAM methods (Table 2). Similarly, a study by Dedeli et al. found that 54.3% of participants used CAM (Dedeli & Karadakovan, 2011). Indeed, Gungormus et al. found that 42.4% of participants who were living with pain had used TAT methods (Gungormus & Kiyak, 2012), while Kaynak et al. reported that 48.1% of diabetic participants were using CAM (Kaynak & Polat, 2017). Further, Hunt et al. found that 44% of their participants in the United Kingdom used CAM (Hunt, Coelho, Wider, Perry, Hung, Terry & Ernst, 2010). On the other hand, Cevik et al. found that 87.3% of participants implemented such methods (Cevik & Selcuk, 2019), while a study in Japan by Shumer et al. found that 78% used alternative medicines (Shumer, Warber, Motohara, Yajima, Plegue, Bialko & Fetters, 2014). This study’s results on CAM usage therefore support the current literature. As the world travels from West to East, it thus appears that the rate of CAM usage is increasing due to cultural elements and belief systems.

In this study, the most commonly used CAM method was prayer (44.3%). Dedeli and Karadakovan’s investigation into CAM methods and age found that 30% of elderly individuals used prayer (Dedeli & Karadakovan, 2011). Further, King et al. found that 80% of elderly individuals engaging in TAT used prayer (King & Pettigrew, 2004). Other studies similarly found that 84.4% of the elderly used prayer to cope with stress (Dunn & Horgas, 2000), while 92.5% of women in Thailand were found to use Buddhist prayer (Supoken, Chaisrisawatsuk & Chumworathayi, 2009). As such, this study’s findings support the existing literature. That is, prayer appears to be the most commonly used method for universally solving health problems. These findings demonstrate that nurses should support patients in meeting prayer needs designed to promote healing and health maintenance.

A total of 17.8% of this study’s participants had used a given CAM method only once, while 9% had used the same method twice, and 35.2% had done so three or more times. A similar study by Dag found that 24.2% of participants who used CAM methods had used the same application only once, while 32.8% had used the same application twice, and 43% had done so three or more times (Dag, 2018). Finally, Baltaci et al. found that 25% of participants who used CAM methods had done so only one time, while 49.4% had used the same method many times (Koc & Baltaci, 2018). These results may indicate that individuals continue to use CAM methods when they achieve positive results.

In this study, 80.1% of all participants who used CAM methods received benefits thereof, while only 2.2% experienced side effects. A study by Mountain similarly found that 90.3% benefitted from such applications, while only 9.7% received no such benefits (Dag, 2018). Further, Molassiotis et al. reported that 80.7% of patients benefitted from CAM, but only 6.9% experienced side effects (Molassiotis, Fernandez-Ortega, Pud, Ozden, Scott, Panteli & Madsen, 2005). In contrast to these studies, Ozturk et al. found that 42.8% of participants reported benefits from CAM methods, while 15.1% reported side effects (Cevik & Selcuk, 2019). Although many receive benefits from CAM applications, they may also believe that side effects can be reduced by increasing knowledge and awareness.

This study also found that 30.9% of participants used CAM methods to improve their quality of life, while 30.6% believed they would receive medical benefits, and 25.1% did so to relieve pain. Similarly, Ugurluer et al. found that 56.3% of participants used CAM to overcome disease, while 26.6% were attempting to increase physical vigor, and 17.2% did so to improve their psychological states (Ugurluer, Karahan, Edirne & Sahin, 2007). Kucukguclu et al. examined CAM usage among diabetes patients, thus findings that 71.5% implemented such measures in addition to medical methods (Kucukguclu, Kizilci & Mert et al., 2012). Further, Efe et al. investigated the most common CAM methods among individuals with hypertension, finding that 28.4% were trying to control their condition, while 16.9% believed it would enhance medical treatments when drugs were ineffective (Efe, Kilic, Akca, Kiper, Aydin & Gumus, 2012) and Oral et al. found that many patients used CAM due to



existing disease (44.6%) and pain (39.9%) (Oral et al., 2016). Both this study and the existing literature show that many individuals use CAM in addition to medical treatments in order to improve illnesses, support healing, and enhance their quality of life. As such, patients undergoing medical treatments should consult with health care personnel before implementing CAM methods.

This study also found a statistically significant difference in CAM usage methods among participants who were aged 26-45 years, married, without chronic disease, and did not use drugs ($p < 0.05$). Oral et al. also found that such usage was significantly higher among those aged 30 years and older, but that there were such no differences between participants of different education levels (Oral et al., 2016). Further, other studies have indicated that gender, age, marital status, educational status, economic status, and chronic disease were associated with CAM usage (Akyurek, Onal & Kurtman, 2005; Khorshid & Yapucu, 2005). This study shows that most individuals use CAM methods to improve health and prevent disease.

In sum, this study found that most participants held positive and moderate attitudes toward complementary and alternative medicine. Ozturk et al. similarly found that gynecological cancer patients held positive attitudes toward CAM (Ozturk, Satir & Sevil, 2016), while Aktas found that nursing students were positive and moderate toward such usage (Aktas, 2017). By contrast, however, Erci found that males and single individuals held negative attitudes toward CAM (Erci, 2007). As such, this study's findings generally support the current literature.

CONCLUSIONS

This study found that most participants had knowledge of CAM methods, while around half had applied/used at least one CAM method. Here, the most well-known and commonly used method was prayer. Participants tended to gain knowledge of known and applied CAM methods through their social environments (e.g., family, friends, and neighbors), while most were implemented to improve their quality of life. Further, most participants benefited from CAM methods and recommended their use to others. Statistically significant differences were also found among participants who were middle-aged, married, without chronic illness, and did not use drugs. That is, these individuals tended to hold positive and moderate attitudes toward CAM methods. Based on these results, nurses should determine the patterns of CAM usage among both healthy and diseased individuals in order to provide relevant training and counseling. These nurses should also develop their knowledge of complementary therapies in the practical sense. It is also important for health professionals to increase their awareness of how prevalent complementary therapies are in their communities by establishing proper communication with individuals and their families. For these reasons, nursing curricula and training methods should include information about complementary therapies and their uses.

CREDIT AUTHOR STATEMENT

Both authors have contributed significantly to the design of the article, the analysis and interpretation of the data, the review of the article, and the evaluation of the final article.

DECLARATION OF COMPETING INTERESTS

The authors declare no conflicts of interest.

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Table 1. Basic participant sociodemographic characteristics

Sociodemographic Characteristics	n	%
Age (years)		
18-25	62	16.9
26-45	198	54.1
46-60	76	20.8
60 and above	30	8.2
Gender		
Female	295	80.6
Male	71	19.4
Marital Status		
Married	276	75.4
Single/widow	90	24.6
Education Level		
Literate	8	2.2
Primary school	90	24.6
Junior high school	51	13.9
Senior high school	113	30.9
University and above	104	28.4
Place of residence		
City	344	26.0
District	16	4.4
Village	6	1.6
Perceived Financial Situation		
High income	95	26.0
Equal income	259	70.8
Low income	12	3.3
Presence of a chronic disease		
Yes	103	28.1
No	263	71.9
Use of medicine		
Yes	115	31.4
No	251	68.6



Table 2. Participant characteristics for CAM information and applications

	n	%
Information about CAM		
Yes	230	62.8
No	136	37.2
Sources of information on CAM methods		
Social environment (family, friends, neighbors)	172	47.0
Health workers (doctor, nurse)	49	13.4
Television, Internet	98	26.8
Books, newspapers	24	6.6
CAM medicine use		
Yes	195	53.3
No	171	46.7
Frequency of CAM medicine use		
Once	65	17.8
Twice	33	9.0
Three or more times	129	35.2
Benefitting from CAM medicine use		
Yes	323	88.3
No	32	8.7
Suffering from adverse effects of CAM medicine use		
Yes	8	2.2
No	293	80.1
Recommend CAM medicine use		
Yes	282	77.0
No	66	18.0
Purpose of using CAM		
Improve quality of life	113	30.9
Benefit in addition to medical methods (do believe)	112	30.6
Relieve pain	92	25.1
Relieve stress/fatigue	67	18.3

* In this study's questionnaire, participants were able to mark multiple options when answering items 10, 11, 13, and 18.

Table 3. Participant knowledge about CAM methods

Method	n	%
Pray	295	80.6
Thermal water	266	72.7
Hijamah	264	72.1
Herbal treatment	263	71.9
Hirudotherapy	252	68.9
Massage	244	66.7
Acupuncture	199	54.4
Yoga	131	35.8
Hypnosis	118	2.2
Bioenergy	105	28.7
Meditation	96	26.2
Light therapy	44	12.0
Aromatherapy	23	6.3
Reiki	13	3.6
Homeopathy	5	1.4
Acupressure	3	0.8
Ayurveda	3	0.8
Chiropractic	3	0.8
Naturopathy	2	0.5



Table 4. Participant applications of CAM methods

Method	Yes	
	n	%
Pray	162	44.3
Hijamah	82	22.4
Massage	52	14.2
Thermal water	50	13.7
Hirudotherapy	47	12.8
Herbal treatment	43	11.7
Acupuncture	17	4.6
Yoga	11	3.0
Meditation	10	2.7
Bioenergy	10	2.7
Hypnosis	7	1.9
Light therapy	4	1.1
Aromatherapy	2	0.5
Reiki	2	0.5
Chiropractic	1	0.3

Table 5. CAM use among participants based on sociodemographic characteristics

	YES		NO		TOTAL	X ²	Z	P
	n	%	n	%	n=366			
Sociodemographic Characteristics					N			
Age (years)								
18-25	23	37.1	39	62.9	62	13.787**	-1.013*	0.003***
26-45	102	51.5	96	48.5	198			
46-60	51	67.1	25	32.9	76			
60 and above	19	63.3	11	36.7	30			
Gender								
Female	161	54.6	134	45.4	295		-1.013*	0.311***
Male	34	47.9	37	52.1	71			
Marital Status								
Married	157	56.9	119	43.1	276		-2.418*	0.016***
Single/widow	38	42.2	52	57.8	90			
Education Level								
Literate	5	62.5	3	37.5	8	2.665**		0.615***
Primary School	53	58.9	37	41.1	90			
Junior high school	26	51.0	25	49.0	51			
Senior high school	61	54.0	52	46	113			
University and above	50	48.1	54	51.9	104			
Place								
City	180	52.3	164	4.7	344	2.090**		0.352***
District	11	68.8	5	31.3	16			
Village	4	66.7	2	33.3	6			
Perceived Financial Situation								
Good	51	53.7	44	46.3	95	0.058**		0.971***
Middle	138	53.3	121	46.7	259			
Bad	6	50.0	6	50.0	12			
Chronic disease								
Yes	70	68.0	33	32.0	103		-3.518*	0.000***
No	125	47.5	138	52.5	263			
Used medicine								
Yes	75	65.2	40	34.8	115		-3.094*	0.002***
No	120	47.8	131	52.2	251			

*Mann-Whitney U Test

** Kruskal-Wallis Test

*** P < 0.05



Table 6. Participant attitudes based on the Holistic Complementary and Alternative Medicines Questionnaire (HCAQ) and subscale distributions

Scale Score	Minimum	Maximum	X ± SD
CAM subscales	5	29	18.06 ± 4.15
HH subscales	5	25	9.03 ± 2.93
Total HCAQ	11	51	30.93 ± 5.58