

## Investigation of The Relationship Between The Religious Orientation of Elderly Dividuals and Their Attitude to Complementary and Alternative Medicine

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### ABSTRACT:

**Purpose:** This study was conducted to examine the relationship between the religious orientation of elderly people and their attitudes towards complementary and alternative medicine.

**Material and Methods:** This study, which adopted a descriptive and relational screening model, was conducted with the participation of 271 individuals aged 65 and over who were registered in Family Health Centers in the eastern part of Turkey between October - December 2019. Mann Whitney U test was used for binary groups in not normally distributed data. Kruskall Wallis test was also used for data with more than two continuous variables and not normally distributed.

**Results:** The mean score of Holistic Complementary and Alternative Medicine Attitude Scale scores of the elderly individuals participating in the study was  $28.23 \pm 7.2$ ; The total mean score of the Religious Orientation Scale was  $62.10 \pm 5.72$ . A significant difference was found between the elderly individuals' attitudes towards complementary and alternative medicine and their educational status. In addition, a statistically significant negative correlation was found between the religious orientation of the elderly and their attitudes towards complementary and alternative medicine ( $p < 0.05$ ).

**Conclusion:** It was found that elderly individuals with higher education have lower attitudes towards complementary and alternative medicine. The high religious orientation of the elderly increases their positive attitude towards complementary and alternative medicine. In line with these results, awareness on the subject can be increased by educating elderly individuals in primary health care by public health nurses. In addition, it is recommended to conduct the study in different regions and in larger groups.

**Keywords:** Attitude, Complementary and Alternative Medicine, Elderly Individual, Religious Orientation

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### INTRODUCTION

Old age is a developmental period that includes psychological, biological and social dimensions (Yildiz, 2012). It is reported that it is affected by factors such as genetic, biochemical, physiological, economic, social, spiritual and lifestyle, which are interdependent and affect each other (Akdeniz et al., 2019). Individuals who face physical and mental characteristics as well as loss of role and other losses in their old age generally have an anxiety state and religion has important effects on the search for meaning (Hökelekli, 2008). Religion has effects

ranging from the diet of people to their decisions about diseases and deaths. People have arranged their treatments according to their religious beliefs for centuries (Hökelekli, 2008). Although the relationship between religion and health was discarded with the paradigmatic change in the acquisition of knowledge at the beginning of the 19th century, it more or less continued to be up-to-date and functional in the eyes of the public (Tecim, 2018). Because religious life requires a person to value himself physically and spiritually and to stay away from things that threaten his life. Faith,

whether it is a belief in healing or a belief on which religious arguments are based, has a significant influence on the view of individuals and societies on both traditional and complementary medicine practices and modern medical practices (Mollahaliloglu et al., 2015). In recent years, the use of CAM in the elderly has increased in parallel with the increase in the use of complementary and alternative therapy (CAM) methods in the general population. Many elderly people do not seem to share CAM use with healthcare professionals. However, some CAM methods used by the elderly may require intervention or negatively affect the results that individuals aim with traditional treatments. Therefore, health care professionals have important duties in following this issue and raising awareness (Sackett et al., 2014).

At the beginning of the reasons for choosing CAM methods in the elderly; side effects of drugs or treatments, high treatment and drug fees, relief from feeling of despair, strengthening healthy behaviors (Sağkal et al., 2013).

In the study, Dedeli et al. (Dedeli and Karadakovan, 2011) examined the CAM methods of elderly individuals; 30.0% of older individuals prefer to pray. The use of CAM methods of the elderly varies according to their beliefs, religions, lifestyles and cultures (Kav, 2009; Turan et al., 2010). Due to the limited number of studies on this subject, it is thought that our study will contribute to the literature. It is thought that this study will be a source for studies on the elderly in the future. This study was conducted to examine the relationship between the religious orientation of elderly people and their attitudes towards complementary and alternative medicine.

## **MATERIAL AND METHODS**

### **Purpose and Type of the Study**

This descriptive and relational study was conducted in the Family Health Centers in Agri city Center between October and December 2019.

### **Sampling and participant**

The population of the research consisted of 923 elderly individuals living in Ağrı, 65 years of age and over, registered in this Family Health Center in the

city center. It was calculated that 271 individuals should be included in the study with the sampling formula known to the population. The sample of the study consisted of individuals (271 people) who applied to the Family Health Center for any reason between the dates of the study determined by random sampling method and agreed to participate in the study.

### **Data Collection Tools**

In order to collect the research data, Descriptive Characteristics Information Form, Holistic Complementary and Alternative Medicine Attitude Scale (HCAMAS) and Religious Orientation Scale were used. Data were collected by the researchers by face to face interviews with elderly individuals. Data collection took about 15 to 20 minutes.

### **Introductory Information Form**

The form prepared by the researchers in line with the literature, consists of questions including information such as age, gender, marital status, income status (Sağkal et al., 2013).

### **Holistic Complementary and Alternative Medicine Attitude Scale (HCAMAS)**

It was developed in 2003 by Hyland et al. (Hyland et al., 2003). Validity reliability for our country was made by Erci in 2007 (Erci, 2007). Cronbach's alpha, which is the reliability coefficient of the scale, is 0.72. In our study, it was found to be 0.70. The scale has two subscales: Complementary and Alternative Medicine (CAM) and Holistic Health (HH). The scale is a Likert type scale consisting of 11 questions. At least 11 points and at most 66 points can be obtained from the scale. As the score of the scale decreases, positive attitude towards complementary and alternative medicine increases.

### **Religious Orientation Scale**

It was developed by Onay (2000) to determine the extent of religion in people's thoughts, behaviors and emotions (Onay, 2000). The scale has 18 likert type items, of which 12 are straight and 6 are reverse coded. The scale has three sub-dimensions: thought, behavior and emotion. The scale is answered in the form of Never, Sometimes, Usually, Always. The

upper and lower limits of the scale, the lowest is 18; the highest is 72. If the score obtained from the scale increases to 72, it shows the rising religious orientation level. If the score obtained from the scale decreases to 18, it shows the decreasing level of religious orientation. The Cronbach's alpha reliability coefficient of the scale was 95. In our study, it was found to be 0,74.

### Statistical Analysis

IBM SPSS V-25 program was used in the statistical analysis of the study. Analyzed is made with SPSS-25 program installed in a university in Turkey. In the research, descriptive features are presented with number (n) and percentage (%). Continuous variables are specified with their mean, standard deviation, minimum and maximum values. The Kolmogorov-Smirnov test was conducted to determine whether the data were normally distributed. Mann Whitney U test was used for binary groups in not normally distributed data. Kruskal Wallis test was also used for data with more than two continuous variables and not normally distributed. In paired comparisons of multiple groups, one of the post-hoc tests, Dunn test was used for data. Spearman correlation test was used to determine the linear relationship between variables and severity of the relationship. P value of <0.05 was considered statistically significant.

### Limitations

The fact that this study was conducted in a single region is a limitation of the study.

### Ethical Principles

Approval from the Scientific Research Ethics Committee of the relevant University (Date: 18.11.2019, Number: 62) and written permission from the institution where the study will be conducted (from the Provincial Health Directorate) was obtained. The necessary explanations were made to the individuals included in the study, and written permission was obtained from those who wanted to participate in the study.

### RESULTS

It was found that 62.4% of the participants were male, 88.6% were married and 41.3% were illiterate. It was found that 71.6% of them are equal to the expenses of their income, 86.3% had social security, 64.9% lived in extended families and the mean age of the group was  $71.24 \pm 7.1$  (Table 1).

According to the findings of the study, the mean score of the Holistic Complementary and Alternative Medicine Attitude Scale score of the elderly individuals was  $28.23 \pm 7.2$  and the lowest score was 11 and the highest score was 49. The total average score of the Religious Orientation Scale was  $62.10 \pm 5.72$ . The lowest score obtained from the Religious Orientation Scale was 38 and the highest score was 49 (Table 2).

There was no significant difference between the groups in terms of religious orientation scale score, gender, marital status, educational status, monthly income status, health insurance status, and family type ( $p > 0.05$ ) (Table 3).

A statistically significant difference was found between the mean score of the Holistic Complementary and Alternative Medicine Attitude Scale and education level ( $p < 0.05$ ). In the post-hoc (Dunn) analysis conducted to determine the group originating from the difference between the total score average of the Holistic Complementary and Alternative Medicine Attitude Scale and education level, it was found that the mean score of individuals with higher education graduates was higher than the mean score of all groups. This situation shows that higher education graduates have lower attitudes (Table 3).

There was a statistically significant negative correlation between total score of Holistic Complementary and Alternative Medicine Scale and total score of Religious Orientation Scale ( $p < 0.05$ ). No significant relationship was found between age and attitude towards holistic complement and alternative medicine and religious orientation ( $p > 0.05$ ) (Table 4).

**Table 1.** Descriptive Characteristics of Individuals Aged 65 and Over (N = 271)

		n	%
<b>Gender</b>	Female	102	37.6
	Male	169	62.4
<b>Marital status</b>	Single	31	11.4
	Married	240	88.6
<b>Education Level</b>	Illiterate	112	41.3
	Primary School	113	41.7
	High School	21	7.7
	University and above	25	9.2
<b>Monthly income status</b>	My income is less than my expense	41	15.1
	My income equals my expense	194	71.6
	My income is more than my expense	36	13.3
<b>Health Assurance Status</b>	Yes	234	86.3
	No	37	13.7
<b>Family Type</b>	Nuclear family	86	31.7
	Extended family	176	64.9
	Broken family	9	3.3
		<i>X ±SD</i>	
<b>Age (years)</b>	71.24±7.1 (min. 65 - max. 112)		

**Table 2.** Mean Scores of Holistic Complementary and Alternative Medicine Attitude Scale and Religious Orientation Scale and Sub-Dimension of Individuals Aged 65 and Over (N = 271)

Scales	<i>X ±SD</i>	Min	Max
<b>Holistic Complementary and Alternative Medicine Attitude Scale</b>	28.23 ± 7.2	11	49
<b>Religious Orientation Scale</b>	62.10 ± 5.72	38	72

**Table 3.** Distribution of the Scale Score Means According to the Descriptive Characteristics of Individuals Aged 65 and Over (N = 271)

		Religious Orientation Scale			Holistic Complementary and Alternative Medicine Attitude Scale	
		n	<i>X ± SD</i>	Test and Significance	<i>X ± SD</i>	Test and Significance
<b>Gender</b>	Female	102	62.36±5.70	U: 8310.5	27.91±7.05	U: 8021.0
	Male	169	61.94±5.75	p=.621	28.43±7.30	p=.338
<b>Marital status</b>	Single	31	63.35±5.03	U: 3229.5	28.03±6.97	U: 3522.5
	Married	240	61.94±5.80	p=.231	28.26±7.24	p=.630
<b>Education Level</b>	Illiterate	112	62.75±5.56	KW:3.044 p=.385	28.00±7.98	KW:12.055 p=.007
	Primary School	113	61.78±5.68		27.91±6.50	
	High School	21	61.90±5.57		26.57±5.97	
	University and above	25	60.76±6.72		32.16±6.52	
<b>Monthly income status</b>	My income is less than my expense	41	62.73±4.65	KW:..206 p=.902	27.85±7.89	KW:..727 p=.695
	My income equals my expense	194	62.09±5.56		28.04±7.11	
	My income is more than my expense	36	61.44±7.52		29.72±6.87	
<b>Health Assurance Status</b>	Yes	234	62.03±5.81	U: 4129.0	28.20±7.21	U: 3979.0
	No	37	62.54±5.18	p=.651	28.40±7.17	p=.429
<b>Family Type</b>	Nuclear family	86	61.74±6.66	KW:..858	29.30±5.66	KW:4.90
	Extended family	176	62.40±5.13	p=.651	27.53±7.60	p=.086
	Broken family	9	59.66±6.92		31.66±10.28	

**Table 4.** The Correlation Between Age and Total Scores of Holistic Complementary and Alternative Medicine Attitude Scale and Religious Orientation Scale

		Total Score of Holistic Complementary and Alternative Medicine Attitude Scale	Total Score of Religious Orientation Scale	Age
Total Score of Holistic Complementary and Alternative Medicine Attitude Scale	r	1		
	p			
Total Score of Religious Orientation Scale	r	-.121	1	
	p	<b>.047</b>		
Age	r	-.038	.009	1
	p	.536	.878	

**DISCUSSION**

In recent years, the attitudes of the elderly towards holistic complementary and alternative medicine have increased (Kav, 2009; Turan et al., 2010). The attitudes of the elderly towards holistic complementary and alternative medicine are shaped according to their cultures, religions and lifestyles (Kav, 2009; Turan et al., 2010). In this section, the findings are discussed in the light of the literature.

According to the findings obtained from the study, the mean score of religious orientation level of the elderly individuals was found to be  $62.10 \pm 5.72$ . Higher scores on the scale mean higher religious orientation. We can say that the individuals participating in our study have a high religious orientation. We can explain this situation by being a country that is devoted to religious beliefs. In studies conducted in Turkey, scores of the religious orientation was found close to high (Bulut and Kuşat, 2018; Kurtulan Halici and Karairmak, 2016). Similarly, studies conducted in different regions showed that the religious tendency of the elderly was high (Amjad, 2014; Bengtson et al., 2015; Tiliouine, Cummins, and Davern, 2009; Wen, 2010). The increase in religious orientation in the elderly can be explained by the strengthening of their beliefs as a result of their religious experiences, the fact that religion can be a compensatory support against physiological and psychological limitations in the old age when there is a lot of free time, and the elderly can easily attach to religious values by feeling the reality of death (Arslan, 2009; İnce, 2013).

According to the findings obtained from the study, it was determined that the mean score of the Holistic Complementary and Alternative Medicine Attitude Scale was above the average ( $28.23 \pm 7.2$ ). The higher the score, the higher the negative attitude

towards complementary and alternative medicine. Similar results were found in the studies conducted (Barrenberg and Garbe, 2015; Goh et al., 2009; Maggiore et al., 2012; Ozera et al., 2013).

In our study, the mean score of the Holistic Complementary and Alternative Medicine Attitude Scale was found to be statistically significantly higher in those with a university or higher education compared to all other groups ( $p < 0.05$ ). This situation shows that University and above individuals have a negative attitude towards complementary and alternative medicine. Similarly, according to the studies conducted, it was found that those with a high level of education had a negative attitude towards holistic complementary and alternative medicine (Algier et al., 2005; Sjöberg and Wåhlberg, 2002).

In our study, a weak negative correlation was found between the religious orientation of the elderly and their attitudes towards complementary and alternative medicine ( $p < 0.05$ ). As the mean score for religious orientation increases, the mean score for attitude towards complementary and alternative medicine decreases. In other words, the high religious orientation of the elderly increases their positive attitude towards complementary and alternative medicine. Looking at the one study conducted, it was found that there was a similar relationship between them (Mollahaliloglu et al., 2015).

**CONCLUSION**

It was found that elderly individuals with higher education have lower attitudes towards complementary and alternative medicine. It was determined that there is a negative relationship between the religious orientation of individuals and

their attitudes towards complementary and alternative medicine. The high religious orientation of the elderly increases their positive attitude towards complementary and alternative medicine. In line with these results, elderly individuals can be given continuous education by public health nurses in primary health care to increase their awareness on the subject. In addition, it is recommended to conduct the study in different regions and in larger groups.

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### Conflict of Interest

None.

### REFERENCES

- Akdeniz, M., Kavukcu, E., Teksan, A. (2019). Yaşlanmaya bağlı fizyolojik değişiklikler ve kliniğe yansımaları. *Türkiye Klinikleri Family Medicine-Special Topics*, 10(3), 1-15.
- Algier, L. A., Hanoglu, Z., Özden, G., et al. (2005). The use of complementary and alternative (non-conventional) medicine in cancer patients in Turkey. *European Journal of Oncology Nursing*, 9(2), 138-146. doi: 10.1016/j.ejon.2005.03.010.
- Amjad, A. (2014). Death anxiety as a function of age and religiosity. *Journal of Applied Environmental and Biological Sciences*, 4(9), 333-341.
- Arslan, M. (2009). Geleneksellik ve yaşlı dindarlığı: Tasrada sosyal hizmet alamayan yaşlıların dindarlık durumları üzerine uygulamalı bir inceleme. *Yaşlı Sorunları Araştırma Dergisi*, 2(2), 112-125.
- Barrenberg, E., Garbe, E. (2015). Use of over-the-counter (OTC) drugs and perceptions of OTC drug safety among German adults. *European journal of clinical pharmacology*, 71(11), 1389-1396. doi: 10.1007/s00228-015-1929-5.
- Bengtson, V. L., Silverstein, M., Putney, N. M., et al. (2015). Does religiousness increase with age? Age changes and generational differences over 35 years. *Journal for the Scientific Study of Religion*, 54(2), 363-379.
- Bulut, M. B., Kuşat, A. (2018). Benlik saygısı, dini dünya görüşleri ve hayatın amacının ölüm kaygısı üzerine etkisinin incelenmesi. *Bilimname*, 2018(35), 145-173.
- Dedeli, Ö., Karadakovan, A. (2011). Yaşlı bireylerde ilaç kullanımı, tamamlayıcı ve alternatif tedavi uygulamalarının incelenmesi. *Spatula Dd*, 1(1), 23-32.
- Erci, B. (2007). Attitudes towards holistic complementary and alternative medicine: a sample of healthy people in Turkey. *Journal of Clinical Nursing*, 16(4), 761-768. doi: 10.1111/j.1365-2702.2006.01655.x.
- Goh, L. Y., Vitry, A. I., Semple, S. J., et al. (2009). Self-medication with over-the-counter drugs and complementary medications in South Australia's elderly population. *BMC Complementary and Alternative Medicine*, 9(1), 1-10. doi: 10.1186/1472-6882-9-42.
- Hökelekli, H. (2008). Ölüm, ölüm ötesi psikolojisi ve din. İstanbul: Dem Yayınları.
- Hyland, M., Lewith, G., Westoby, C. (2003). Developing a measure of attitudes: the holistic complementary and alternative medicine questionnaire. *Complementary Therapies in Medicine*, 11(1), 33-38. doi: 10.1016/s0965-2299(02)00113-9.
- İnce, A. (2013). Elli ve üzeri yaş grubundaki üniversite mezunlarında dini hayat. *Toplum Bilimleri Dergisi*, 211-238.
- Kav, T. (2009). Use of complementary and alternative medicine: a survey in Turkish gastroenterology patients. *BMC Complementary and Alternative Medicine*, 9(1), 1-9. doi: 10.1186/1472-6882-9-41.
- Kurtulan Halıcı, M., & Kararımak, Ö. (2016). Ölüm kaygısı, tinsellik, dindarlık eğilimi ve varoluş kaygısı arasındaki ilişkilerin incelenmesi. *Spiritual Psychology and Counseling*, 1(2), 163-187.
- Maggiore, R. J., Gross, C. P., Togawa, K., et al. (2012). Use of complementary medications among older adults with cancer. *Cancer*, 118(19), 4815-4823. doi: 10.1002/cncr.27427.
- Mollahaliloğlu, S., Uğurlu, F. G., Kalaycı, M., et al. (2015). Geleneksel ve tamamlayıcı tıp uygulamalarında yeni dönem. *Ankara Medical Journal*, 15(2). doi: 10.17098/amj.44789.
- Onay, A. (2000). Religious attitudes and Muslim identity, with reference to Turkish university students. (PhD thesis). University of Leeds.
- Özera, Ö., Şantaşa, F., Yıldırıma, H. H. (2013). An evaluation on levels of knowledge, attitude and behavior of people at 65 years and above using alternative medicine living in Ankara. *African Journal of Traditional, Complementary and Alternative Medicines*, 10(1), 134-141.
- Sackett, K., Carter, M., Stanton, M. (2014). Elders' use of folk medicine and complementary and alternative therapies: An integrative review with implications for case managers. *Professional Case Management*, 19(3), 113-123. doi: 10.1097/NCM.000000000000025.
- Sağkal, T., Demiral, S., Odabaş, H., et al. (2013). Kırsal kesimde yaşayan yaşlı bireylerin tamamlayıcı ve alternatif tedavi yöntemlerini kullanma durumları. *Fırat Üniversitesi Sağlık Bilimleri Tıp Dergisi*, 27(1), 19-26.
- Sjöberg, L., Wählberg, A. a. (2002). Risk perception and new age beliefs. *Risk Analysis: An International Journal*, 22(4), 751-764.
- Tecim, E. (2018). Sağlık sosyolojisi. Konya: Çizgi Kitabevi.
- Tiliouine, H., Cummins, R. A., & Davern, M. (2009). Islamic religiosity, subjective well-being, and health. *Mental Health, Religion & Culture*, 12(1), 55-74. doi: 10.1080/13674670802118099.

- Turan, N., Öztürk, A., Kaya, N. (2010). Hemşirelikte yeni bir sorumluluk alanı: Tamamlayıcı terapi. Maltepe Üniversitesi Hemşirelik Bilim ve Sanatı Dergisi, 3(1), 103-108.
- Wen, Y.H. (2010). Religiosity and death anxiety. The Journal of Human Resource and Adult Learning, 6(2), 31.
- Yıldız, M. (2012). Bağlanma kuramı açısından yaşlılık dönemine genel bir bakış. Cumhuriyet Üniversitesi Edebiyat Fakültesi Sosyal Bilimler Dergisi, 36(1), 1-30.